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R1AT

Rubberslang - 1 staalinlaag volgens SAE 100 R1 AT – EN 853 1sn- niet schillen

Kenmerken: Lage/midden druk slang voor hydraulische toepassingen
 Temperatuur : -40°C tot +100°C (incidenteel 125°C)
 Drukdrager : 1 laag gevlochten staaldraden
 Type pershuls : HXT1..



Artikelnummer	DN	ID Inw. ø	ID Inw. ø	OD Uitw.ø	Werk-druk	Barst-druk	Buig-Radius	Gewicht
		inch	mm	mm	bar	bar	Mm	Kg/m
R1AT 3/16	05	3/16	4.8	11.5	250	1000	90	0.180
R1AT 1/4	06	1/4	6.4	13.1	225	900	100	0.230
R1AT 5/16	08	5/16	7.9	14.7	215	850	115	0.265
R1AT 3/8	10	3/8	9.5	17.1	180	720	130	0.325
R1AT 1/2	12	1/2	12.7	20.4	160	640	180	0.410
R1AT 5/8	16	5/8	15.9	23.5	130	520	200	0.475
R1AT 3/4	19	3/4	19.0	27.5	105	420	240	0.610
R1AT 1	25	1	25.4	35.4	88	350	300	0.940
R1AT 1 1/4	31	1 1/4	31.8	43.1	63	250	420	1.190
R1AT 1 1/2	38	1 1/2	38.1	50.4	50	200	500	1.600
R1AT 2	51	2	50.8	63.9	40	160	630	2.200

R2AT

Rubberslang - 2 staalinlagen volgens SAE 100 R2 AT – EN 853 2sn- niet schillen

Kenmerken: Midden/hoge druk slang voor hydraulische toepassingen
 Temperatuur : -40°C tot +100°C (incidenteel 125°C)
 Drukdrager : twee lagen gevlochten staaldraden
 Type pershuls : HXT..



Artikelnummer	DN	ID Inw.ø	ID Inw.ø	OD Uitw.ø	Werk-druk	Barst-druk	Buig-Radius	Gewicht
		Inch	Mm	mm	bar	bar	Mm	Kg/m
R2AT 3/16	05	3/16	4.8	13.1	415	1650	90	0.300
R2AT 1/4	06	1/4	6.4	14.7	400	1600	100	0.360
R2AT 5/16	08	5/16	7.9	16.3	350	1400	115	0.450
R2AT 3/8	10	3/8	9.5	18.7	330	1320	130	0.530
R2AT 1/2	12	1/2	12.7	21.9	275	1100	180	0.625
R2AT 5/8	16	5/8	15.9	25.1	250	1000	200	0.735
R2AT 3/4	19	3/4	19.0	29.1	215	850	240	0.920
R2AT 1	25	1	25.4	37.5	165	650	300	1.380
R2AT 1 1/4	31	1 1/4	31.8	47.7	125	500	420	1.670
R2AT 1 1/2	38	1 1/2	38.1	54.5	90	360	500	2.300
R2AT 2	51	2	50.8	67.0	80	320	630	3.160

R1A

Rubberslang - 1 staalinlaag volgens SAE 100 R1 A – DIN EN 853 1st- schillen

Kenmerken: Lage/midden druk slang voor hydraulische toepassingen
 Temperatuur : -40°C tot +100°C (incidenteel 125°C)
 Drukdrager : 1 laag gevlochten staaldraden
 Type pershuls : H1..



Artikelnummer	DN	ID Inw. Ø	ID Inw. ø	OD Uitw.ø	Werk-druk	Barst-druk	Buig-Radius	Gewicht
		inch	mm	mm	bar	bar	Mm	Kg/m
R1A 3/16	05	3/16	4.8	12.7	250	1000	90	0.200
R1A 1/4	06	1/4	6.4	15.9	225	900	100	0.300
R1A 5/16	08	5/16	7.9	17.5	215	850	115	0.360
R1A 3/8	10	3/8	9.5	19.8	180	720	130	0.425
R1A 1/2	12	1/2	12.7	23.0	160	640	180	0.520
R1A 5/8	16	5/8	15.9	26.2	130	520	200	0.610
R1A 3/4	19	3/4	19.0	30.2	105	420	240	0.760
R1A 1	25	1	25.4	38.1	88	350	300	1.005
R1A 1 1/4	31	1 1/4	31.8	46.0	63	250	420	1.420
R1A 1 1/2	38	1 1/2	38.1	52.4	50	200	500	1.720
R1A 2	51	2	50.8	66.7	40	160	630	2.450

R2A

Rubberslang - 2 staalinlagen volgens SAE 100 R2 A – DIN EN 853 2st- schillen

Kenmerken: Midden/hoge druk slang voor hydraulische toepassingen
 Temperatuur : -40°C tot +100°C (incidenteel 125°C)
 Drukdrager : twee lagen gevlochten staaldraden
 Type pershuls : H1..



Artikelnummer	DN	ID Inw.ø	ID Inw.ø	OD Uitw.ø	Werk-druk	Barst-druk	Buig-Radius	Gewicht
		inch	mm	mm	bar	bar	Mm	Kg/m
R2A 3/16	05	3/16	4.8	15.9	415	1650	90	0.380
R2A 1/4	06	1/4	6.4	17.5	400	1600	100	0.440
R2A 5/16	08	5/16	7.9	19.1	350	1400	115	0.530
R2A 3/8	10	3/8	9.5	21.4	330	1320	130	0.615
R2A 1/2	12	1/2	12.7	24.6	275	1100	180	0.645
R2A 5/8	16	5/8	15.9	27.8	250	1000	200	0.750
R2A 3/4	19	3/4	19.0	31.8	215	850	240	1.080
R2A 1	25	1	25.4	39.7	165	650	300	1.510
R2A 1 1/4	31	1 1/4	31.8	50.8	125	500	420	2.370
R2A 1 1/2	38	1 1/2	38.1	57.2	90	360	500	2.800

1-SC

Rubberslang - 1 staalinlaag volgens SAE 100 1SC – DIN EN 857 1sc- niet schillen

Kenmerken: Lage/midden druk slang voor hydraulische toepassingen
 Eigenschap : zeer flexibel met kleine buigradius
 Temperatuur : -40°C tot +100°C (incidenteel 125°C)
 Drukdrager : 1 laag gevlochten staaldraden
 Type pershuls : HSC1..



Artikelnummer	DN	ID Inw. ø	ID Inw. ø	OD Uitw.ø	Werk- druk	Barst- druk	Buig- Radius	Gewicht
		inch	mm	Mm	bar	bar	Mm	Kg/m
1-SC 1/4	06	1/4	6.4	12.1	275	1100	45	0.200
1-SC 5/16	08	5/16	7.9	13.8	255	1020	55	0.220
1-SC 3/8	10	3/8	9.5	16.1	215	860	60	0.285
1-SC 1/2	12	1/2	12.7	19.3	170	680	70	0.345
1-SC 5/8	16	5/8	15.9	22.4	150	600	90	0.425
1-SC 3/4	19	3/4	19.0	26.0	125	500	100	0.505
1-SC 1	25	1	25.4	33.3	100	400	160	0.735
1-SC 1 1/4	31	1 1/4	31.8	41.0	90	300	210	1.050

2-SC

Rubberslang - 2 staalinlagen volgens SAE 100 2SC – DIN EN 857 2sc- niet schillen

Kenmerken: Midden/hoge druk slang voor hydraulische toepassingen
 Eigenschap : zeer flexibel met kleine buigradius
 Temperatuur : -40°C tot +100°C (incidenteel 125°C)
 Drukdrager : twee lagen gevlochten staaldraden
 Type pershuls : HXT1..



Artikelnummer	DN	ID Inw.ø	ID Inw.ø	OD Uitw.ø	Werk- druk	Barst- druk	Buig- Radius	Gewicht
		inch	Mm	Mm	bar	bar	Mm	Kg/m
2-SC 1/4	06	1/4	6.4	13.5	420	1680	45	0.295
2-SC 5/16	08	5/16	7.9	15.0	380	1520	55	0.335
2-SC 3/8	10	3/8	9.5	17.2	350	1400	65	0.420
2-SC 1/2	12	1/2	12.7	20.8	310	1240	80	0.520
2-SC 5/8	16	5/8	15.9	24.0	280	1120	90	0.675
2-SC 3/4	19	3/4	19.0	27.7	240	960	120	0.800
2-SC 1	25	1	25.4	35.1	185	740	160	1.150
2-SC 1 1/4	31	1 1/4	31.8	43.6	165	660	250	1.660
2-SC 1 1/2	38	1 1/2	38.1	50.5	135	540	300	2.120

Overmaster

Rubberslang 2 staalinlagen - schillen

Kenmerken: Zeer hogedruk slang met 2 staalinlagen voor hydraulische toepassingen
 Temperatuur : -40°C tot +100°C (incidenteel 125°C)
 Drukdrager : twee lagen gevlochten staaldraden
 Type pershuls : H1..



Artikelnummer	DN	ID Inw. Ø	ID Inw. ø	OD Uitw. ø	Werk-druk	Barst-druk	Buig-Radius	Gewicht
		inch	mm	mm	bar	bar	Mm	Kg/m
OVERMASTER 1/4	06	1/4	6.4	14.5	490	1960	100	0.320
OVERMASTER 5/16	08	5/16	7.9	15.8	480	1920	115	0.410
OVERMASTER 3/8	10	3/8	9.5	18.0	450	1800	130	0.520
OVERMASTER 1/2	12	1/2	12.7	21.4	400	1600	180	0.660
OVERMASTER 5/8	16	5/8	15.9	24.6	350	1400	200	0.800
OVERMASTER 3/4	19	3/4	19.0	28.3	320	1280	240	0.970
OVERMASTER 1	25	1	25.4	36.7	250	1000	300	1.580

4SP

Rubberslang - 4 staalinlagen volgens SAE 100 – DIN EN 856 4sp- schillen

Kenmerken: Hoge druk slang voor hydraulische toepassingen
 Temperatuur : -40°C tot +100°C (incidenteel 125°C)
 Drukdrager : vier lagen gevlochten staaldraden
 Type pershuls : H4..



Artikelnummer	DN	ID Inw. ø	ID Inw. ø	OD Uitw. ø	Werk-druk	Barst-druk	Buig-Radius	Gewicht
		inch	Mm	mm	bar	bar	Mm	Kg/m
4SP 1/4	06	1/4	6.4	17.9	500	2000	150	0.630
4SP 5/16	10	3/8	9.5	19.9	460	1840	180	0.800
4SP 1/2	12	1/2	12.7	24.5	440	1760	230	0.960
4SP 5/8	16	5/8	15.9	28.1	400	1600	250	1.170
4SP 3/4	19	3/4	19.0	32.0	380	1520	300	1.600
4SP 1	25	1	25.4	39.7	325	1300	340	2.030
4SP 1 1/4	31	1 1/4	31.8	50.8	240	960	460	3.150
4SP 1 1/2	38	1 1/2	38.1	57.2	210	840	560	3.650
4SP 2	51	2	50.8	69.8	165	660	660	4.950

4SH

Rubberslang - 4 staalinlagen volgens DIN EN 856 4sh- schillen

Kenmerken: Hoge druk slang voor hydraulische toepassingen
 Temperatuur : -40°C tot +100°C (incidenteel 125°C)
 Drukdrager : vier lagen gevlochten staaldraden
 Type pershuls : H6SH..



Artikelnummer	DN	ID Inw. ø	ID Inw. ø	OD Uitw.ø	Werk- druk	Barst- druk	Buig- Radius	Gewicht
		inch	mm	mm	bar	bar	Mm	Kg/m
4SH 3/4	19	3/4	19.0	31.5	425	1700	280	1.600
4SH 1	25	1	25.4	38.2	400	1600	340	2.060
4SH 1 1/4	31	1 1/4	31.8	45.2	350	1400	460	2.560
4SH 1 1/2	38	1 1/2	38.1	53.5	300	1200	560	3.420
4SH 2	51	2	50.8	68.1	250	1000	700	4.500

R15

Rubberslang - 4/6 staalinlagen volgens SAE 100 R15 - schillen

Kenmerken: Zeer hoge druk slang voor hydraulische toepassingen
 Temperatuur : -40°C tot +121°C (incidenteel 125°C)
 Drukdrager : t/m 1" 4 lagen, vanaf 1 1/4" 6 staaldraadlagen
 Type pershuls : H6SH.. en H6 ..



Artikelnummer	DN	ID Inw. ø	ID Inw. ø	OD Uitw.ø	Werk- druk	Barst- druk	Buig- Radius	Gewicht
		inch	mm	mm	bar	bar	Mm	Kg/m
R15 3/4	19	3/4	19.0	32.0	420	1680	267	1.550
R15 1	25	1	25.4	38.2	420	1680	300	2.080
R15 1 1/4	31	1 1/4	31.8	49.8	420	1680	320	3.700
R15 1 1/2	38	1 1/2	38.1	57.2	420	1680	350	4.900

R4

Aanzuigslang met spiraal volgens SAE 100 R4

Kenmerken: Drukloze retourslang of aanzuigslang voor hydraulische toepassingen
 Temperatuur : -40°C tot +100°C (incidenteel 125°C)
 Drukdrager : twee canvaslagen en 1 stalen spiraal



Artikelnummer	DN	ID Inw. Ø	ID Inw. ø	OD Uitw.ø	Werk-druk	Barst-druk	Buig-Radius	Gewicht
		inch	mm	mm	bar	bar	Mm	Kg/m
R4 3/4	19	3/4	19.0	32.0	21	84	125	0.750
R4 1	25	1	25.4	38.0	17	69	152	0.950
R4 1 1/4	31	1 1/4	31.8	43.0	14	55	200	1.000
R4 1 1/2	38	1 1/2	38.1	50.0	10	41	250	1.300
R4 1 3/4	45	1 3/4	45.0	57.0	8	36	280	1.570
R4 2	51	2	50.8	65.0	7	28	305	2.000

R6

Rubberslang – 1 canvaslinlage volgens SAE 100 R6 – DIN EN 854 r 6 - niet schillen

Kenmerken: Lage druk slang voor hydraulische toepassingen
 Temperatuur : -40°C tot +100°C (incidenteel 125°C)
 Drukdrager : 1 laag gevlochten canvasdraad
 Type pershuls : H7..



Artikelnummer	DN	ID Inw. Ø	ID Inw. ø	OD Uitw.ø	Werk-druk	Barst-druk	Buig-Radius	Gewicht
		inch	mm	mm	bar	bar	Mm	Kg/m
R6 1/4	06	1/4	6.4	112.6	28	112	65	0.125
R6 5/16	08	5/16	7.9	14.2	28	112	75	0.150
R6 3/8	10	3/8	9.5	15.8	28	112	75	0.180
R6 1/2	12	1/2	12.7	19.8	28	112	100	0.230
R6 5/8	16	5/8	15.9	23.1	24	97	125	0.280
R6 3/4	19	3/4	19.0	26.5	21	84	150	0.360
R6 1	25	1	25.4	32.5	21	84	165	0.450

WH2

Waterslang met spiraal volgens SAE 100 R4

Kenmerken: Cleanerslang bestendig tegen water en reiniger
 Temperatuur : -40°C tot +150°C)
 Drukdrager : twee lagen gevlochten staaldraden
 Type pershuls : HXT1..



Artikelnummer	DN	ID Inw. Ø	ID Inw. ø	OD Uitw.ø	Werk- druk	Barst- druk	Buig- Radius	Gewicht
		inch	mm	mm	bar	bar	Mm	Kg/m
WH2 BLU 1/4	6	1/4	12.7	15.0	400	1600	100	0.370
WH2 BLU 5/16	8	5/16	14.3	16.6	400	1600	110	0.435
WH2 BLU 3/8	10	3/8	16.7	19.0	400	1600	120	0.560
WH2 BLU 1/2	12	1/2	19.8	22.2	300	1200	160	0.645

TJ561

Waterslang Trelleborg TJ561



Kenmerken: Cleanerslang bestendig tegen water en reiniger
 Temperatuur : -40°C tot +150°C)
 Drukdrager : 1 laag gevlochten staaldraden
 Type pershuls : HXT1..



Artikelnummer	DN	ID Inw. Ø	OD Uitw.ø	Werk- druk	Barst- druk	Buig- Radius	Gewicht
		inch	mm	bar	bar	Mm	Kg/m
TJ561 3/8	10	3/8	15.5	400	1000	70	0.250
TJ561 1/2	13	1/2	18.7	350	900	80	0.300

TJ581

Waterslang Trelleborg TJ581



Kenmerken: Cleanerslang bestendig tegen water en reiniger
 Temperatuur : -40°C tot +150°C)
 Drukdrager : 1 laag gevlochten staaldraden
 Type pershuls : HXT1..



Artikelnummer	DN	ID Inw. Ø	OD Uitw.ø	Werk- druk	Barst- druk	Buig- Radius	Gewicht
		inch	mm	bar	bar	Mm	Kg/m
TJ581 3/8	10	3/8	15.5	400	1000	70	0.250
TJ581 1/2	13	1/2	18.7	350	900	80	0.300

Tabel geschikte vloeistoffen

FLUID COMPATIBILITY CHART			BRAIDED HOSES ACCORDING TO THE NORM		
Fluids	All hoses	Only DS7 / DS8	Fluids	All hoses	Only DS7 / DS8
ACETIC ACID	Green	Green	HYDROGER PEROXIDE (DIL.)	Green	Green
ACETIC ACID (30%)	Yellow	Green	HYDROGER PEROXIDE (CONC.)	Yellow	Green
ACETONE	Green	Green	IRUS 902 (hydraulic fluid/water/oil emulsion)	Green	Green
ACETYLENE	Green	Green	ISOCYANATES	Green	Yellow
AMMONIA, GAS (HOT)	Yellow	Green	ISOPROPIL ALCOHOL	Green	Green
AMMONIA, LIQUID	Green	Green	KEROSENE	Green	Green
AMMONIUMCHLORIDE	Green	Orange	LIQUID OXYGEN	Orange	Green
AMYL ACETATE	Orange	Green	LPG	Yellow	Green
ANILINE	Orange	Yellow	LUBRICATING OILS	Green	Green
ANIMAL OILS	Green	Green	MERCURY	Green	Green
BENZOL/BENZENE	Orange	Green	METHYL ALCOHOL/METHANOL	Green	Yellow
BUTANE	Yellow	Green	METHYL CHLORIDE (COLD)	Orange	Green
BUTYL ACETATE	Orange	Green	METHYL ETHYL KETONE	Orange	Green
BUTYL ALCOHOL/BUTANOL	Green	Green	MINERAL OILS	Green	Green
CALCIUM CHLORIDE SOLUTIONS	Green	Green	NAPHTHA	Green	Green
CARBON DIOXIDE	Green	Green	NAPHTHALENE	Orange	Green
CARBON DISULFIDE	Orange	Green	NATURAL GAS	Green	Green
CARBONATES	Yellow	Green	NITRIC ACID (DIL.)	Orange	Orange
CAUSTIC SODA	Orange	Green	NITRIC ACID (CONC.)	Orange	Orange
CHLORINATED SOLVENTS	Orange	Green	NITROBENZEN	Orange	Green
CHLORINE	Orange	Orange	OIL OF TURPENTINE	Green	Green
CHLOROFORM	Orange	Green	OLEIC ACID	Orange	Green
CITRIC ACID SOLUTIONS	Green	Green	OXALIC ACID	Orange	Green
COMPRESSED AIR	Green	Green	PERCHLOROETHYLENE	Orange	Yellow
CYCLOHEXANE	Yellow	Green	PHENOL	Orange	Orange
CRUDE PETROLEUM OIL	Green	Green	PHOSPHORIC ACID (10%)	Green	Green
DIOCTYL PHTHALATE	Green	Green	PHOSPHORIC ACID (20%)	Orange	Green
ETHERS	Yellow	Green	PHOSPHATE ESTER BASE OIL	Orange	Green
ETHYL ACETATE	Orange	Green	SATURATED STEAM	Green	Green
ETHYL ALCOHOL	Green	Yellow	SEA WATER	Green	Green
ETHYL CELLULOSE	Green	Green	SILICONE OILS	Green	Green
ETHYL CHLORIDE	Orange	Green	SOAP SOLUTIONS	Yellow	Green
ETHYLENE GLYCOL	Green	Green	SODA	Green	Green
ETHYLENEOXIDE	Orange	Green	SODIUM CHLORIDE SOLUTIONS	Green	Green
FLUORINE	Orange	Orange	SODIUM HYDROXIDE 20%	Yellow	Green
FORMALDEHYDE	Green	Green	SODIUM HYPOCHLORIDE 10%	Yellow	Green
FORMALDEHYDE 40%	Green	Yellow	SULPHUR	Green	Green
FUEL OIL	Green	Green	SULPHUR DIOXIDE	Orange	Green
GASEOUS HYDROGEN	Yellow	Green	SULPHURIC ACID UP TO 50%	Orange	Yellow
GASOLINE	Green	Green	SULPHURIC ACID ABOVE 50%	Orange	Yellow
GLYCERIN/GLYCEROL	Green	Green	TOLUENE	Orange	Green
GLYCOL TO 66°C	Green	Green	TRICHLOROETHYLENE	Orange	Yellow
HEXANE	Green	Green	VEGETABLE GREASES	Green	Green
HYDRAULIC OIL	Green	Green	WATER	Green	Green
HYDROCHLORIC ACID 37%	Orange	Orange	XYLENE	Orange	Green

Legenda

- Green: It corresponds to an excellent chemical resistance, with minimum or no properties change
- Yellow: It corresponds to a limited chemical resistance, with moderately acceptable properties changes
- Orange: It corresponds to an inadequate behaviour, with drastic collapse of all the characteristics

This chart is intended as a guide only and is not a guarantee. Final selection of the proper material or components is further dependent on many factors including pressure, fluid, ambient temperature, concentration, duration of exposure, etc.



HYDRAULIEK SLANGEN



R7

Kunststofslang – 2 kunststofvezel inlagen volgens SAE 100 R7 – DIN EN855

Kenmerken: Lage/midden druk slang voor hydraulische en pneumatische toepassingen type OL7...
 Temperatuur : -40°C tot +65°C (incidenteel 100°C)
 Drukdrager : twee lagen geweven kunststof vezel
 Type pershuls : H7..



Artikelnummer	DN	ID Inw. Ø	ID Inw. ø	OD Uitw.ø	Werk-Druk	Barst-druk	Buig-Radius	Gewicht
		inch	mm	mm	Bar	bar	Mm	Kg/m
R7 3/16	05	3/16	4.8	10.0	210	840	35	0.073
R7 1/4	06	1/4	6.4	11.8	200	800	50	0.090
R7 5/16	08	5/16	8.0	14.3	190	760	55	0.128
R7 3/8	10	3/8	9.7	16.0	175	700	75	0.155
R7 1/2	12	1/2	13.0	20.3	140	560	95	0.224

R8

Kunststofslang - 2 kevlar inlagen volgens SAE 100 R8 – DIN EN855

Kenmerken: Hoge druk slang voor hydraulische en pneumatische toepassingen type OL8...
 Temperatuur : -40°C tot +65°C (incidenteel 125°C)
 Drukdrager : twee lagen geweven Kevlar draden
 Type pershuls : H7..



Artikelnummer	DN	ID Inw. Ø	ID Inw. ø	OD Uitw.ø	Werk-druk	Barst-druk	Buig-Radius	Gewicht
		inch	mm	mm	bar	bar	Mm	Kg/m
R8 3/16	05	3/16	4.8	10.0	350	1400	35	0.072
R8 1/4	06	1/4	6.4	11.8	350	1400	50	0.086
R8 5/16	08	5/16	8.0	14.3	325	1300	60	0.126
R8 3/8	10	3/8	9.7	16.0	280	1120	80	0.149
R8 1/2	12	1/2	13.0	20.3	245	980	95	0.225



HYDRAULIEK SLANGEN



R7-2

Kunststof Twinslang – 2 kunststofvezel inlagen volgens SAE 100 R7 – DIN EN855

Kenmerken: Lage/midden druk slang voor hydraulische en pneumatische toepassingen type OL7..B
 Temperatuur : -40°C tot +65°C (incidenteel 100°C)
 Drukdrager : 2 lagen geweven kunststof vezel
 Type pershuls : H7..



Artikelnummer	DN	ID Inw. Ø	ID Inw. ø	OD Uitw. ø	Werk-Druk	Barst-druk	Buig-Radius	Gewicht
		inch	mm	mm	Bar	bar	Mm	Kg/m
R7 -2-3/16	05	3/16	4.8	10.0	210	840	35	0.146
R7 -2-1/4	06	1/4	6.4	11.8	200	800	50	0.180
R7 -2-5/16	08	5/16	8.0	14.3	190	760	55	0.256
R7 -2-3/8	10	3/8	9.7	16.0	175	700	75	0.330
R7 -2-1/2	12	1/2	13.0	20.3	140	560	95	0.448

R8-2

Kunststof Twinslang - 2 kevlar inlagen volgens SAE 100 R8 – DIN EN855

Kenmerken: Hoge druk slang voor hydraulische en pneumatische en toepassingen type OL8...B
 Temperatuur : -40°C tot +65°C (incidenteel 125°C)
 Drukdrager : twee lagen geweven Kevlar draden
 Type pershuls : H7..



Artikelnummer	DN	ID Inw. ø	ID Inw. ø	OD Uitw. ø	Werk-druk	Barst-druk	Buig-Radius	Gewicht
		inch	mm	Mm	bar	bar	Mm	Kg/m
R8-2-3/16	05	3/16	4.8	10.0	350	1400	35	0.144
R8-2-1/4	06	1/4	6.4	11.8	350	1400	50	0.172
R8-2-5/16	08	5/16	8.0	14.3	325	1300	60	0.256
R8-2-3/8	10	3/8	9.7	16.0	280	1120	80	0.300
R8-2-1/2	12	1/2	13.0	20.3	245	980	95	0.450



HYDRAULIEK SLANGEN

1

R8

**Kunststof slang – 2 aramidic fiber
inlagen volgens SAE 100 R8 – DIN
EN855**



Kenmerken: hoge druk slang voor hydraulische en pneumatische toepassingen type OL8
 Temperatuur : -40°C tot +65°C (incidenteel 100°C)
 Drukdrager : 2 lagen geweven aramidic fiber
 Type pershuls : ...

Artikelnummer	DN	ID Inw. ø	ID Inw. ø	OD Uitw.ø	Werk- Druk	Barst- druk	Buig- Radius	Gewicht
		inch	mm	mm	Bar	bar	Mm	Kg/m
R8M-1/4 f	04	1/4	6.4	14.8	700	2800	50	0.159

TS8

Kunststof slang



Kenmerken: Minimes slang voor hydraulische en pneumatische toepassingen type TS8...
 Temperatuur : -40°C tot +65°C (incidenteel 100°C)
 Drukdrager : aramidic fiber
 Type pershuls : HMP..

Artikelnummer	ID Inw.ø	ID Inw.ø	OD Uitw.ø	Werk- Druk	Barst- druk	Buig- Radius	Gewicht
	inch	mm	mm	Bar	bar	Mm	Kg/m
TS8 1/12	1/12	2.1	5.0	630	1890	20	0.019
TS8 1/12A	1/12	2.1	5.5	630	1890	20	0.023
TS8 1/10	1/10	2.6	5.5	630	1890	20	0.023
TS8 5/64	5/64	1.8	4.5	425	1700	15	0.016
TS8 1/10A	1/10	2.7	5.5	630	1890	20	0.022
TS8 5/32	5/32	4.0	8.0	500	1500	35	0.044



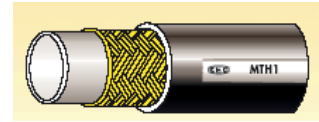
HYDRAULIEK SLANGEN



SA1

Kunststof slang – 1 staal inlage

Kenmerken: Hoge druk slang voor hydraulische en pneumatische toepassingen type MTH1...
Temperatuur : -40°C tot +65°C (incidenteel 100°C)
Drukdrager : 1 laag gevlochten staalraad
Type pershuls : H7..



Artikelnummer	DN	ID Inw.ø	ID Inw.ø	OD Uitw.ø	Werk- druk	Barst- druk	Buig- Radius	Gewicht
		inch	mm	mm	Bar	bar	Mm	Kg/m
SA1-3/16	05	3/16	4.8	10.0	325	1300	30	0.133
SA1-1/4	06	1/4	6.4	11.9	300	1200	40	0.170
SA1-5/16	08	5/16	8.0	14.0	240	960	50	0.221
SA1-3/8	10	3/8	9.7	16.0	225	900	60	0.260
SA1-1/2	12	1/2	13.0	20.5	175	700	75	0.390

SA2

Kunststofslang - 2 staal inlagen

Kenmerken: Hoge druk slang voor hydraulische en pneumatische toepassingen type MTH2
Temperatuur : -40°C tot +65°C (incidenteel 125°C)
Drukdrager : twee lagen gevlochten staalraden
Type pershuls : op aanvraag leverbaar



Artikelnummer	DN	ID Inw.ø	ID Inw.ø	OD Uitw.ø	Werk- druk	Barst- druk	Buig- Radius	Gewicht
		inch	mm	mm	bar	bar	Mm	Kg/m
SA2-1/4	06	1/4	6.4	13.5	375	1500	40	0.290
SA2-5/16	08	5/16	8.0	15.1	310	1240	50	0.340
SA2-3/8	10	3/8	9.7	17.0	300	1200	60	0.404
SA2-1/2	12	1/2	13.0	22.0	250	1000	75	0.568



HYDRAULIEK SLANGEN

1

SA1-2

Kunststof Twinslang – 1 staal inlage

Kenmerken: Hoge druk slang voor hydraulische en pneumatische toepassingen type MTH1...
Temperatuur : -40°C tot +65°C (incidenteel 100°C)
Drukdrager : 1 laag gevlochten staaldraad
Type pershuls : H7..



Artikelnummer	DN	ID Inw.ø inch	ID Inw.ø mm	OD Uitw.ø mm	Werk- druk Bar	Barst- druk bar	Buig- Radius Mm	Gewicht Kg/m
SA1-2-3/16	05	3/16	4.8	10.0	325	1300	30	0.266
SA1-2-1/4	06	1/4	6.4	11.9	300	1200	40	0.340
SA1-2-5/16	08	5/16	8.0	14.0	240	960	50	0.442
SA1-2-3/8	10	3/8	9.7	16.0	225	900	60	0.520
SA1-2-1/2	12	1/2	13.0	20.5	175	700	75	0.790

SA2-2

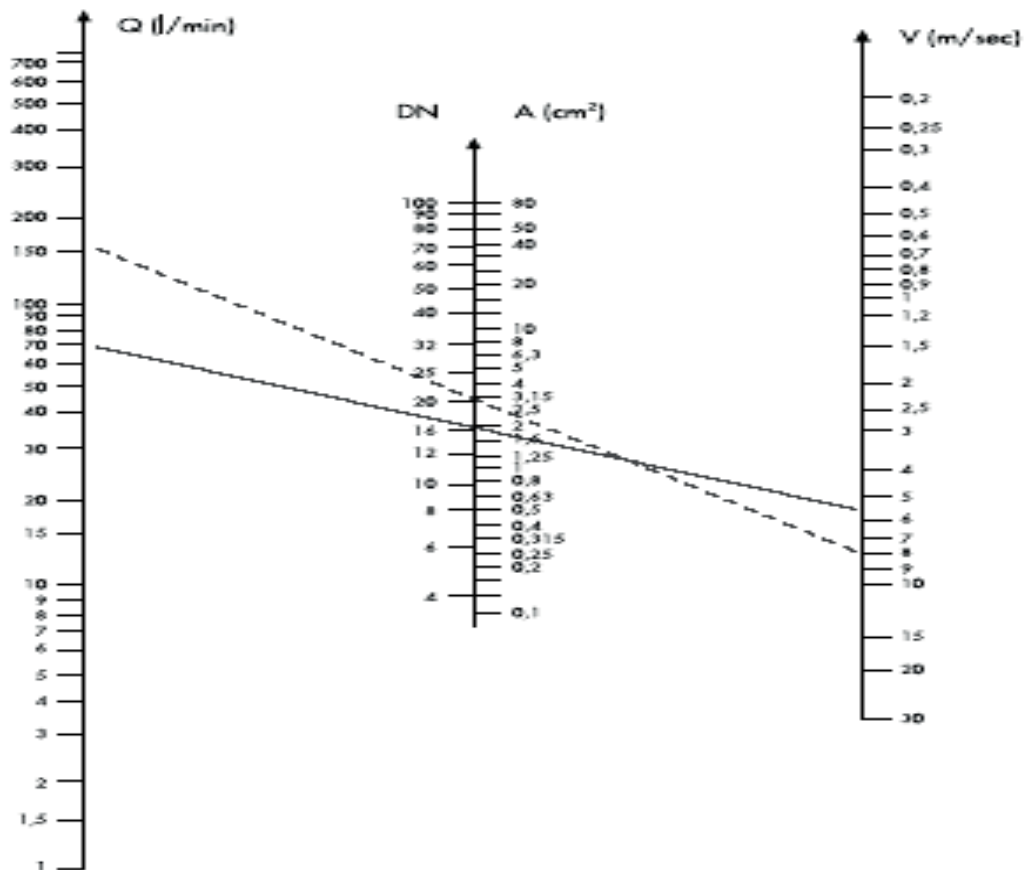
Kunststof Twinslang - 2 staal inlagen

Kenmerken: Hoge druk slang voor hydraulische en pneumatische toepassingen type MTH2
Temperatuur : -40°C tot +65°C (incidenteel 125°C)
Drukdrager : twee lagen gevlochten staaldraden
Type pershuls : op aanvraag leverbaar



Artikelnummer	DN	ID Inw.ø inch	ID Inw.ø mm	OD Uitw.ø mm	Werk- druk bar	Barst- druk bar	Buig- Radius Mm	Gewicht Kg/m
SA2-2-1/4	06	1/4	6.4	13.5	375	1500	40	0.580
SA2-2-5/16	08	5/16	8.0	15.1	310	1240	50	0.680
SA2-2-3/8	10	3/8	9.7	17.0	300	1200	60	0.808
SA2-2-1/2	12	1/2	13.0	22.0	250	1000	75	1.136

Berekening oliedoorlaat bij hydraulische leidingen



Bij het bepalen van de leidingdoorlaat is het van belang dat U de hydraulische opbrengst weet. (opbrengst in liters per minuut) Door het gebruik van de tabel, kunt U met behulp van deze opbrengst de juiste leidingdoorlaat bepalen.

Voorbeeld:

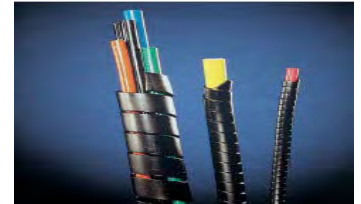
Welke leidingdoorlaat is vereist bij een opbrengst van 70 l/min?

Vanuit de linker kolom (70 l/min) trekt U een rechte lijn naar de rechter kolom. Er is een opbrengst nodig van +/- 6 m/sec. De lijn gaat dus naar de 6m/sec. De lijn doorsnijdt kolom B op DN16. Dit verwijst naar 5/8" slang.

R..SSG

Kunststof beschermSPIraal

Kenmerken: Simpel en makkelijk aan te brengen
 Materiaal : Polyethyleen
 Temperatuur : +70°C
 Eigenschap : goed bestand tegen UV straling
 Kleur : zwart, andere kleuren op aanvraag



Artikelnummer	ID	OD	ROL LENGTE	Gewicht
	Inw.ø	Uitw.ø	In meters	
	mm	mm	Type	Kg/m
R12SSG	8	12	50	0.046
R16SSG	12	16	50	0.060
R20SSG	16	20	50	0.073
R25SSG	20	25	50	0.112
R32SSG	27	32	50	0.143
R40SSG	36	40	50	0.217
R50SSG	44	50	50	0.278
R63SSG	56	63	20	0.588
R75SSG	67	75	20	0.813
R90SSG	80	90	20	1.033
R110SSG	100	110	12	1.200

Artikelnr.	Keuze	Tabel	Slang/	Spiraal type
	R1AT	R2AT	4SP	4SH/R15
R12SSG	3/16			
R16SSG	1/4 – 5/16	3/16 - 1/4		
R20SSG	3/8	5/16 - 3/8	1/4	
R25SSG	1/2 – 5/8	1/2 - 5/8	3/8 – 1/2	
R32SSG	3/4	3/4	5/8 – 3/4	3/4
R40SSG	1 – 1 1/4	1	1	1
R50SSG	1 1/2	1 1/4	1 1/4	1 1/4 – 1 1/2
R63SSG	2	1 1/2	1 1/2	
R75SSG		2	2	2
R90SSG				
R110SSG				

NHV..x..

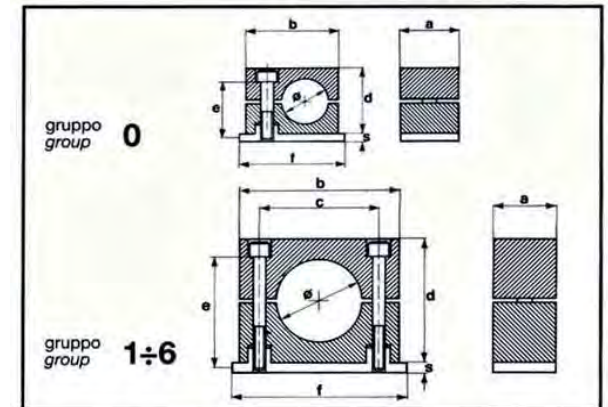
Hydrauliekbuis geel gepassiveerd of Cr6 vrij

Kenmerken: Naadloze koudgetrokken stalen hogedrukbuizen volgens EN 10305-4, materiaal E235 + N gegloeid, wervelstroom beproeft, uitwendig electrolitisch verzinkt en geel gepassiveerd of uitwendig wit/blauw verzinkt in Cr6 vrij. Uiteinden afgedopt, ingeolied, in handelslengten van +/- 6 meter.

Artikelnummer	OD Uitw.ø	wand- dikte	gewicht	werkdruk	Barstdruk
	mm	mm	Kg/m	bar	Bar
NHV 6x1	6	1	0.12	377	1320
NHV 6x1.5	6	1.5	0.17	565	2145
NHV 8x1	8	1	0.17	282	953
NHV 8x1.5	8	1.5	0.24	424	1514
NHV 8x2	8	2	0.31	565	2145
NHV10x1	10	1	0.22	239	746
NHV10x1.5	10	1.5	0.31	359	1170
NHV10x2	10	2	0.39	479	1634
NHV12x1	12	1	0.27	199	612
NHV12x1.5	12	1.5	0.39	299	953
NHV12x2	12	2	0.49	399	1320
NHV14x1.5	14	1.5	0.46	256	804
NHV14x2	14	2	0.59	342	1107
NHV15x1.5	15	1.5	0.50	239	746
NHV15x2	15	2	0.64	319	1024
NHV16x1.5	16	1.5	0.54	224	695
NHV16x2	16	2	0.69	299	953
NHV16x3	16	3	0.96	449	1514
NHV18x1.5	18	1.5	0.61	199	612
NHV18x2	18	2	0.79	266	837
NHV20x2	20	2	0.89	239	746
NHV20x3	20	3	1.26	359	1170
NHV22x2	22	2	0.99	217	673
NHV25x2	25	2	1.13	191	586
NHV25x2.5	25	2.5	1.39	239	746
NHV25x3	25	3	1.63	287	911
NHV28x2	28	2	1.28	171	520
NHV28x3	28	3	1.99	256	804
NHV30x3	30	3	1.99	239	746
NHV35x2	35	2	1.63	142	411
NHV35x3	35	3	2.37	214	631
NHV38x4	38	4	3.35	263	789
NHV42x2	42	2	1.97	119	339
NHV42x3	42	3	2.88	178	520

PC..L

Enkele pijpklem

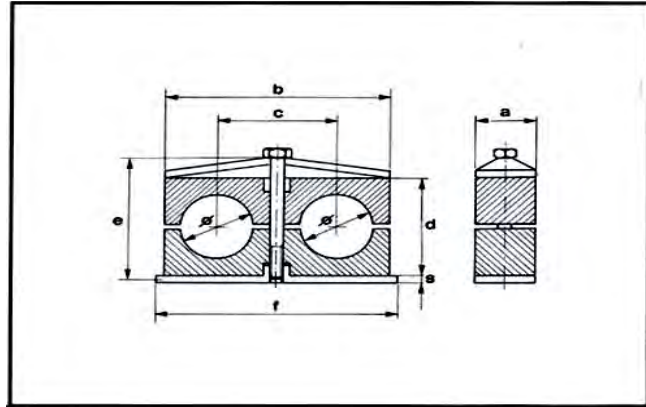


Kenmerken: De losse klemblokjes zijn standaard gemaakt van polypropyleen.
Deze blokjes zijn, op aanvraag, ook leverbaar in rubber of aluminium.
De pijpklemmen worden standaard geleverd met grondplaat en boutjes,
maar zonder dekplaat.

Artikelnummer	Groep	Ø	A	b	c	d	f	s	E	aantal per zak	Art.nr. set blokjes
		mm	Mm	mm	mm	mm	mm	mm			
PC6L	1	6	30	34	20	27	42	3	m6x20	50	PC6L1
PC8L	1	8	30	34	20	27	42	3	m6x20	50	PC8L1
PC10L	1	10	30	34	20	27	42	3	m6x20	50	PC10L1
PC12L0	0	12	30	28	-	-	32	3	m6x20	50	
PC12L	1	12	30	34	20	27	42	3	m6x20	50	PC12L1
PC14L	2	14	30	40	26	33	48	3	m6x25	50	PC14L1
PC15L	2	15	30	40	26	33	48	3	m6x25	50	PC15L1
PC16L	2	16	30	40	26	33	48	3	m6x25	50	PC16L1
PC18L	2	18	30	40	26	33	48	3	m6x25	50	PC18L1
PC20L	3	20	30	48	33	35	55	3	m6x30	50	PC20L1
PC22L	3	22	30	48	33	35	55	3	m6x30	50	PC22L1
PC25L	3	25	30	48	33	35	55	3	m6x30	50	PC25L1
PC28L	4	28	30	57	40	42	62	3	m6x35	25	PC28L1
PC30L	4	30	30	57	40	42	62	3	m6x35	25	PC30L1
PC32L GR4	4	32	30	57	40	42	62	3	m6x35	25	
PC32L	5	32	30	68	52	58	74	3	m6x50	25	PC32L1
PC35L	5	35	30	68	52	58	74	3	m6x50	25	PC35L1
PC38L	5	38	30	68	52	58	74	3	m6x50	25	PC38L1
PC40L	5	40	30	68	52	58	74	3	m6x50	25	PC40L1
PC42L	5	42	30	68	52	58	74	3	m6x50	25	PC42L1

PC2/..-..L

Dubbele pijpklem volgens DIN 3015



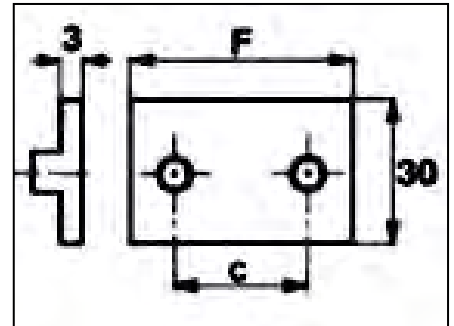
Kenmerken: De losse klemblokjes zijn standaard gemaakt van polypropyleen.
Deze blokjes zijn, op aanvraag, ook leverbaar in rubber of polyamide.
De pijpklemmen worden standaard geleverd met dekplaat, grondplaat en bout.

Artikelnummer	Groep	Ø	A	b	c	d	f	s	e	aantal per zak	Art.nr. set blokjes
		mm	Mm	mm	mm	mm	mm	mm			
PC2/6-6L	1	6	30	37	20	25	37	3	m6x35	50	PC2/6-6L1
PC2/8-8L	1	8	30	37	20	25	37	3	m6x35	50	PC2/8-8L1
PC2/10-10L	1	10	30	37	20	25	37	3	m6x35	50	PC2/10-10L1
PC2/12-12L	1	12	30	37	20	25	37	3	m6x35	50	PC2/12-12L1
PC2/14-14L	2	14	30	53	29	26	55	5	m8x35	50	PC2/14-14L1
PC2/15-15L	2	15	30	53	29	26	55	3	m8x35	50	PC2/15-15L1
PC2/16-16L	2	16	30	53	29	26	55	3	m8x35	50	PC2/16-16L1
PC2/18-18L	2	18	30	53	29	26	55	3	m8x35	50	PC2/18-18L1
PC2/20-20L	3	20	30	67	36	37	70	3	m8x45	50	PC2/20-20L1
PC2/22-22L	3	22	30	67	36	37	70	3	m8x45	50	PC2/22-22L1
PC2/25-25L	3	25	30	48	33	35	55	3	m8x45	50	PC2/25-25L1
PC2/28-28L	4	28	30	82	45	42	85	3	m8x50	25	PC2/28-28L1
PC2/30-30L	4	30	30	82	45	42	85	3	m8x50	25	PC2/30-30L1
PC2/32-32L	5	32	30	106	56	54	110	3	m8x60	25	PC2/32-32L1
PC2/35-35L	5	35	30	106	56	54	110	3	m8x60	25	PC2/35-35L1
PC2/38-38L	5	38	30	106	56	54	110	3	m8x60	25	PC2/38-38L1
PC2/40-40L	5	40	30	106	56	54	110	3	m8x60	25	PC2/40-40L1
PC2/42-42L	5	42	30	106	56	54	110	3	m8x60	25	PC2/42-42L1

PC..L2

Lasplaat enkele pijpkl

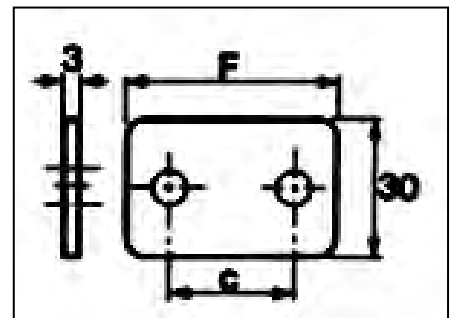
Artikelnummer	Groep	F	c
		mm	mm
PC 6-12L2	1	42	20
PC14-18L2	2	48	26
PC20-25L2	3	55	33
PC28-32L2	4	62	40
PC32-45L2	5	74	52



PC..UL3

Dekplaat enkele pijpkl

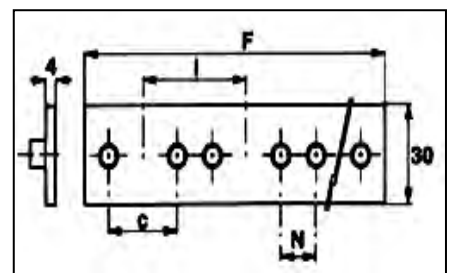
Artikelnummer	Groep	F	c
		mm	mm
PC 6-12UL3	1	37	20
PC14-18UL3	2	43	26
PC20-25UL3	3	50	33
PC28-32UL3	4	57	40
PC32-45UL3	5	69	52



PC..ML2

Meervoudige lasplaat enkele pijpkl

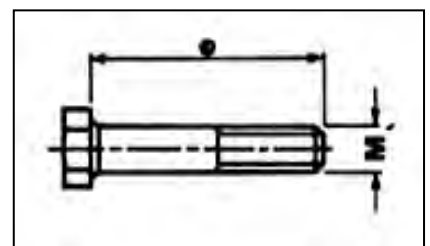
Artikelnummer	Groep	F	C	N	I	aantal per zak
				mm	mm	
PC 6-12ML2	1	404	20	20	40	10
PC14-18ML2	2	447	26	18	44	10
PC20-25ML2	3	525	33	19	52	10
PC28-32ML2	4	303	40	20	60	5
PC32-45ML2	5	375	52	23	75	5



PC..L3U

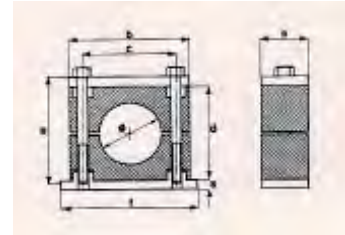
Bout voor enkele pijpkl met dekplaat

Artikelnummer	Groep	M	e
		mm	mm
PC 6-12L3U	1	M6	30
PC14-18L3U	2	M6	35
PC20-25L3U	3	M6	40
PC28-32L3U	4	M6	45
PC32-45L3U	5	M6	60



PCH

Zware serie pijpklem

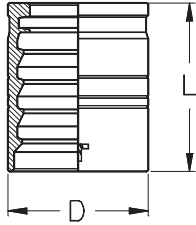


Kenmerken: De losse klemblokjes zijn standaard gemaakt van polypropyleen.
Deze blokjes zijn, op aanvraag, ook leverbaar in aluminium of polyamide.

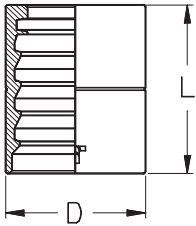
De pijpklemmen worden standaard geleverd met dekplaat, grondplaat en bout.

Artikelnummer	Groep	Ø	A	b	c	d	f	s	e	aantal per zak
		mm	mm	mm	mm	mm	mm	mm		
PCH 6S	1	6	30	55	33	32	73	8	M10x45	50
PCH 8S	1	8	30	55	33	32	73	8	M10x45	50
PCH10S	1	10	30	55	33	32	73	8	M10x45	50
PCH12S	1	12	30	55	33	32	73	8	M10x45	50
PCH14S	1	14	30	55	33	32	73	8	M10x45	50
PCH15S	1	15	30	55	33	32	73	8	M10x45	50
PCH16S	1	16	30	55	33	32	73	8	M10x45	50
PCH18S	1	18	30	55	33	32	73	8	M10x45	50
PCH20S	2	20	30	70	45	48	85	8	M10x60	50
PCH22S	2	22	30	70	45	48	85	8	M10x60	50
PCH25S	2	25	30	70	45	48	85	8	M10x60	50
PCH28S	2	28	30	70	45	48	85	8	M10x60	50
PCH30S	2	30	30	70	45	48	85	8	M10x60	50
PCH35S	3	35	30	85	60	60	100	8	M10x70	25
PCH38S	3	38	30	85	60	60	100	8	M10x70	25
PCH40S	3	40	30	85	60	60	100	8	M10x70	25
PCH42S	3	42	30	85	60	60	100	8	M10x70	25
PCH48S	4	48	45	120	90	90	140	10	M12x100	25
PCH50S	4	50	45	120	90	90	140	10	M12x100	25
PCH55S	4	55	45	120	90	90	140	10	M12x100	25
PCH60S	4	60	45	120	90	90	140	10	M12x100	25
PCH65S	4	65	45	120	90	90	140	10	M12x100	25
PCH70S	4	70	45	120	90	90	140	10	M12x100	25
PCH80S	5	80	60	152	122	120	180	10	M12x130	25
PCH85S	5	85	60	152	122	120	180	10	M12x130	25
PCH90S	5	90	60	152	122	120	180	10	M12x130	25

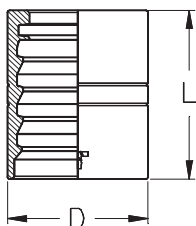
SCHILLEN		H1		SWAGED SKIVE FERRULE PERSHULS SCHILLEN							
TIEFFE Part. N°	Hose I.D. Ø Interno tubo			Dimensions (mm)		Applications Toepassing					
	DN	SIZE	Inch	D	L	1SN	R1AT	2SN	R2AT	2SC	
H103	5	03	3/16"	17	26	1SN	R1AT	2SN	R2AT		
H104	6	04	1/4"	19	29	1SN	R1AT	2SN	R2AT	2SC	
H105	8	05	5/16"	21	29	1SN	R1AT	2SN	R2AT	2SC	
H106	10	06	3/8"	23	31,5	1SN	R1AT	2SN	R2AT	2SC	
H108	12	08	1/2"	27	34	1SN	R1AT	2SN	R2AT	2SC	
H110	16	10	5/8"	32	37	1SN	R1AT	2SN	R2AT	2SC	
H112	19	12	3/4"	36	43	1SN	R1AT	2SN	R2AT	2SC	
H116	25	16	1"	44	49	1SN	R1AT	2SN	R2AT	2SC	



SCHILLEN		H1		SWAGED SKIVE FERRULE PERSHULS SCHILLEN							
TIEFFE Part. N°	Hose I.D. Ø Interno tubo			Dimensions (mm)		Applications Toepassing					
	DN	SIZE	Inch	D	L	1SN	R1AT	2SN	R2AT	2SC	
H120	31	20	1 1/4"	50	55	1SN	R1AT				
H124	38	24	1 1/2"	57	60	1SN	R1AT				
H132	51	32	2"	70	75	1SN	R1AT				



SCHILLEN		H2		SWAGED SKIVE FERRULE PERSHULS SCHILLEN							
TIEFFE Part. N°	Hose I.D. Ø Interno tubo			Dimensions (mm)		Applications Toepassing					
	DN	SIZE	Inch	D	L	1SN	R1AT	2SN	R2AT	2SC	
H220	31	20	1 1/4"	54	55			2SN	R2AT		
H224	38	24	1 1/2"	62	60			2SN	R2AT		
H232	51	32	2"	75	75			2SN	R2AT		



For SAE100 R16 - SAE100 R17 and other compact braided hoses applications, contact TIEFFE.

Voor toepassing van SAE100 R16-SAE100 R17slang neem contact op met FLEXTUBO

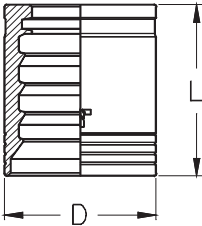
NO SKIVE	HSC	SWAGED NON SKIVE FERRULE BOCCOLA A PRESSARE NON SKIVE												
		TIEFFE Part. N°	Hose I.D. Ø Interno tubo			Dimensions (mm)		Applications Applicazioni						
			DN	SIZE	Inch	D	L							
	HSC04	6	04	1/4"	19	23	1SC							
	HSC05	8	05	5/16"	20	27,5	1SC							
	HSC06	10	06	3/8"	23	30	1SC							
	HSC08	12	08	1/2"	26,5	32	1SC							
	HSC10	16	10	5/8"	29	35	1SC							
	HSC12	19	12	3/4"	33	34	1SC							
	HSC16	25	16	1"	42	45	1SC							

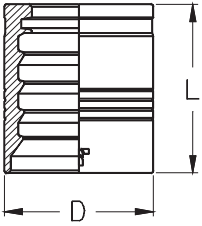
NO SKIVE	HXT1	SWAGED NON SKIVE FERRULE BOCCOLA A PRESSARE NON SKIVE												
		TIEFFE Part. N°	Hose I.D. Ø Interno tubo			Dimensions (mm)		Applications Applicazioni						
			DN	SIZE	Inch	D	L							
	HXT103	5	03	3/16"	19	24	1SN	R1AT						
	HXT104	6	04	1/4"	20	27	1SN	R1AT	2SC					
	HXT105	8	05	5/16"	22	27,5	1SN	R1AT	2SC					
	HXT106	10	06	3/8"	24,5	30	1SN	R1AT	2SC					
	HXT108	12	08	1/2"	28	32,5	1SN	R1AT	2SC					
	HXT110	16	10	5/8"	32	35	1SN	R1AT	2SC					
	HXT112	19	12	3/4"	36	40	1SN	R1AT	2SC					
	HXT116	25	16	1"	45	50	1SN	R1AT	2SC					
	HXT120	31	20	1 1/4"	54	50	1SN	R1AT						
	HXT124	38	24	1 1/2"	62	55	1SN	R1AT						
	HXT132	51	32	2"	76	60	1SN	R1AT						

NO SKIVE	HXT	SWAGED NON SKIVE FERRULE BOCCOLA A PRESSARE NON SKIVE												
		TIEFFE Part. N°	Hose I.D. Ø Interno tubo			Dimensions (mm)		Applications Applicazioni						
			DN	SIZE	Inch	D	L							
	HXT03	5	03	3/16"	20	24	2SN	R2AT						
	HXT04	6	04	1/4"	22	26	2SN	R2AT	1SN	R1AT	2SC			
	HXT05	8	05	5/16"	24	27,5	2SN	R2AT	1SN	R1AT	2SC			
	HXT06	10	06	3/8"	26	30	2SN	R2AT	1SN	R1AT	2SC			
	HXT08	12	08	1/2"	30	32,5	2SN	R2AT	1SN	R1AT	2SC			
	HXT10	16	10	5/8"	34	35	2SN	R2AT	1SN	R1AT	2SC			
	HXT12	19	12	3/4"	38	40	2SN	R2AT	1SN	R1AT	2SC			
	HXT16	25	16	1"	48	50	2SN	R2AT						
	HXT20	31	20	1 1/4"	60	57	2SN	R2AT						
	HXT24	38	24	1 1/2"	67	62	2SN	R2AT						
	HXT32	51	32	2"	80	66	2SN	R2AT						

For SAE100 R16 - SAE100 R17 and other compact braided hoses applications, contact TIEFFE.

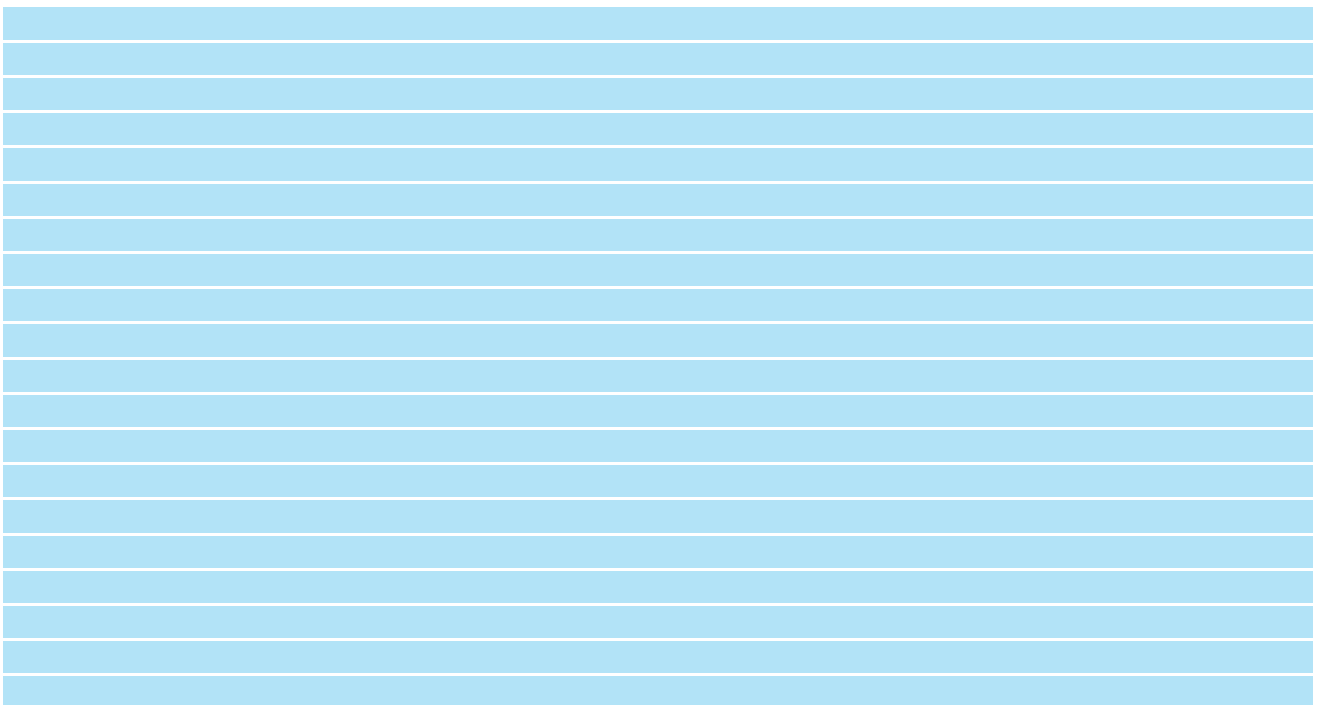
Voor toepassing van SAE100 R16-SAE100 R17slang neem contact op met FLEXTUBO

SCHILLEN	H4..	SWAGED SKIVE FERRULE SCHILHULS OM TE PERSEN											
		TIEFFE Part. N°	Hose I.D. Ø Interno tubo			Dimensions (mm)		Applications Toepassing					
			DN	SIZE	Inch	D	L						
	H404	6	04	1/4"	22	30	4SP	R9R**					
	H406	10	06	3/8"	26	32,5	4SP	R9R**		R12	2ST	R2A	
	H408	12	08	1/2"	30	35	4SP	R9R**		R12	2ST	R2A	
	H410	16	10	5/8"	34	38,5	4SP	R9R**		R12	2ST	R2A	
	H412	19	12	3/4"	38	43,5	4SP	R9R**	4SH**	R12	2ST	R2A	
	H416	25	16	1"	46	54	4SP	R9R**	4SH**	R12	2ST	R2A	
	H420	31	20	1 1/4"	56	61	4SP			R12	2ST	R2A	
	H424	38	24	1 1/2"	65	68	4SP			R12	2ST	R2A	
	H432	51	32	2"	78	74	4SP						

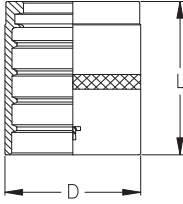
SCHILLEN	BXSH	SWAGED SKIVE FERRULE SCHILHULS OM TE PERSEN											
		TIEFFE Part. N°	Hose I.D. Ø Interno tubo			Dimensions (mm)		Applications Toepassing					
			DN	SIZE	Inch	D	L						
													
	H6SH20	31	20	1 1/4"	54	61		R9R**	4SH**				
H6SH24	38	24	1 1/2"	62	69		R9R**	4SH**					
H6SH32	51	32	2"	76	74		R9R**	4SH**	R12	2ST	R2A		

** The application of "CX" series hose connectors must be limited to the "DIN856 4SP" maximum working pressure.

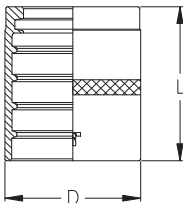
De toepassing van de CX serie moet beperkt blijven tot "DIN 856 4SP"



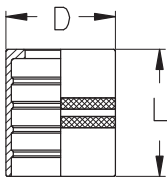
NIET SCHILLEN		H7			SWAGED NON SKIVE FERRULE Pershuls niet schillen						
TIEFFE Part. N°	Hose I.D. Ø Interno tubo			Dimensions (mm)		Applications Applicazioni					
	DN	SIZE	Inch	D	L						
H703	5	03	3/16"	15,0	26,0		R7	R8			
H704	6	04	1/4"	17,0	29,0		R7	R8			
H705	8	05	5/16"	20,0	30,5	R6	R7	R8			
H706	10	06	3/8"	22,0	32,0	R6	R7	R8			
H708	12	08	1/2"	27,0	32,5	R6	R7	R8			
H710	16	10	5/8"	31,0	37,0	R6	R7	R8			
H712	20	12	3/4"	34,5	41,0	R6	R7	R8			
H716	25	16	1"	40,0	50,0	R6	R7				



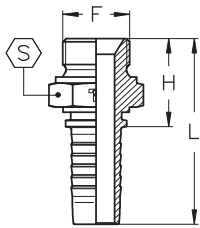
NIET SCHILLEN		H8			SWAGED NON SKIVE FERRULE Pershuls niet schillen						
TIEFFE Part. N°	Hose I.D. Ø Interno tubo			Dimensions (mm)		Applications Applicazioni					
	DN	SIZE	Inch	D	L						
H816	25	16	1"	43,0	52,0			R8			



NIET SCHILLEN		H3			SWAGED NON SKIVE FERRULE Pershuls niet schillen						
TIEFFE Part. N°	Hose I.D. Ø Interno tubo			Dimensions (mm)		Applications Applicazioni					
	DN	SIZE	Inch	D	L						
H304	6	04	1/4"	19,0	29,0	R3					
H305	8	05	5/16"	22,0	30,0	R3					
H306	10	06	3/8"	24,0	31,0	R3					
H308	12	08	1/2"	28,5	34,0	R3					
H310	16	10	5/8"	32,0	36,0	R3					
H312	20	12	3/4"	38,0	42,0	R3					
H316	25	16	1"	46,0	50,0	R3					
H320	32	20	1 1/4"	52,0	57,0	R3					

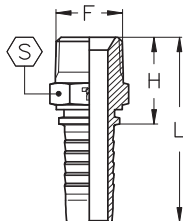


BS 5200	AGR	BSP PARALLEL MALE - 60° CONE SEAT MASCHIO GAS (BSP) CILINDRICO - SVASATO 60°											
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Dimensions (mm)					Maximum W.P.	
			DN	Size	Inch	F	H	L	S			bar	PSI
XBM0203	5	03	3/16"	1/8"-28	20	45	14				415	6000	
XBM0403	5	03	3/16"	1/4"-19	24	49	19				415	6000	
XBM0204	6	04	1/4"	1/8"-28	20	48	14				415	6000	
XBM0404	6	04	1/4"	1/4"-19	25	53	19				450	6500	
XBM0604	6	04	1/4"	3/8"-19	27	55	22				450	6500	
XBM0804	6	04	1/4"	1/2"-14	32	60	27				450	6500	
XBM0405	8	05	5/16"	1/4"-19	25	53	19				350	5000	
XBM0605	8	05	5/16"	3/8"-19	27	55	22				350	5000	
XBM0805	8	05	5/16"	1/2"-14	32	60	27				350	5000	
XBM0406	10	06	3/8"	1/4"-19	25	55	19				450	6500	
XBM0606	10	06	3/8"	3/8"-19	27	58	22				450	6500	
XBM0806	10	06	3/8"	1/2"-14	32	62	27				450	6500	
XBM0608	12	08	1/2"	3/8"-19	28	61	22				415	6000	
XBM0808	12	08	1/2"	1/2"-14	33	66	27				415	6000	
XBM1008	12	08	1/2"	5/8"-14	35	68	30				415	6000	
XBM1208	12	08	1/2"	3/4"-14	36	69	32				415	6000	
XBM1008	16	10	5/8"	1/2"-14	33	69	27				350	5000	
XBM1010	16	10	5/8"	5/8"-14	35	71	30				350	5000	
XBM1210	16	10	5/8"	3/4"-14	36	72	32				350	5000	
XBM0812	20	12	3/4"	1/2"-14	34	74	27				350	5000	
XBM1012	20	12	3/4"	5/8"-14	36	76	30				350	5000	
XBM1212	20	12	3/4"	3/4"-14	37	77	32				350	5000	
XBM1612	20	12	3/4"	1"-11	42	82	41				350	5000	
XBM1216	25	16	1"	3/4"-14	38	89	32				280	4000	
XBM1616	25	16	1"	1"-11	43	94	41				280	4000	
XBM2016	25	16	1"	1 1/4"-11	46	97	50				280	4000	
XBM2020	32	20	1 1/4"	1 1/4"-11	47	105	50				210	3000	
XBM2420	32	20	1 1/4"	1 1/2"-11	50	108	55				210	3000	
XBM2424	40	24	1 1/2"	1 1/2"-11	50	115	55				185	2700	
XBM3224	40	24	1 1/2"	2"-11	55	119	70				185	2700	
XBM3232	50	32	2"	2"-11	56	126	70				165	2400	

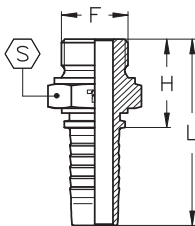


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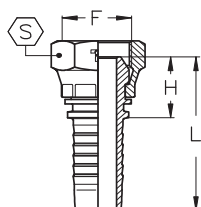
BSP TAPS	AGR-K	BSP TAPER MALE - 60° CONE SEAT BSP TAPS TOELOPENDE BU.DR. - 60° CONUS											
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Dimensions (mm)					Maximum W.P.	
			DN	Size	Inch	F	H	L	S			bar	PSI
XBT0203	5	03	3/16"	1/8"-28	20	45	12					415	6000
XBT0403	5	03	3/16"	1/4"-19	25	50	15					415	6000
XBT0204	6	04	1/4"	1/8"-28	21	49	12					450	6500
XBT0404	6	04	1/4"	1/4"-19	25	53	15					450	6500
XBT0604	6	04	1/4"	3/8"-19	26	54	19					450	6500
XBT0405	8	05	5/16"	1/4"-19	25	53	15					350	5000
XBT0605	8	05	5/16"	3/8"-19	26	54	19					350	5000
XBT0406	10	06	3/8"	1/4"-19	26	56	15					450	6500
XBT0606	10	06	3/8"	3/8"-19	27	57	19					450	6500
XBT0806	10	06	3/8"	1/2"-14	32	63	22					415	6000
XBT0608	12	08	1/2"	3/8"-19	28	64	19					415	6000
XBT0808	12	08	1/2"	1/2"-14	33	66	22					415	6000
XBT0810	16	10	5/8"	1/2"-14	33	69	22					350	5000
XBT1210	16	10	5/8"	3/4"-14	35	71	27					350	5000
XBT1212	20	12	3/4"	3/4"-14	36	77	27					350	5000
XBT1612	20	12	3/4"	1"-11	41	82	36					280	4000
XBT1616	25	16	1"	1"-11	43	94	36					280	4000
XBT2016	25	16	1"	1 1/4"-11	47	98	46					210	3000
XBT2020	32	20	1 1/4"	1 1/4"-11	48	106	46					210	3000
XBT2424	40	24	1 1/2"	1 1/2"-11	49	114	50					185	2700
XBT3223	50	32	2"	2"-11	57	127	65					165	2400



BSP VLAK	AGR FLAT SEAT	BSP PARALLEL MALE - FLAT SEAT BSP PARALLELE BU.DR. - VLAKKE ZITTING											
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Dimensions (mm)						
			DN	Size	Inch	F	H	L	S				
XBMP0404	6	04	1/4"	1/4"-19	25	53	19						
XBMP0604	6	04	1/4"	3/8"-19	27	55	22						
XBMP0605	8	05	5/16"	3/8"-19	27	55	22						
XBMP0606	10	06	3/8"	3/8"-19	27	58	22						
XBMP0806	10	06	3/8"	1/2"-14	32	62	27						
XBMP0808	12	08	1/2"	1/2"-14	33	66	27						
XBMP1008	12	08	1/2"	5/8"-14	35	68	30						
XBMP1208	12	08	1/2"	3/4"-14	36	69	32						
XBMP1010	16	10	5/8"	5/8"-14	35	71	30						
XBMP1210	16	10	5/8"	3/4"-14	36	72	32						
XBMP1212	20	12	3/4"	3/4"-14	37	77	32						
XBMP1612	20	12	3/4"	1"-11	42	82	41						
XBMP1616	25	16	1"	1"-11	43	94	41						
XBMP2020	32	20	1 1/4"	1 1/4"-11	47	105	50						

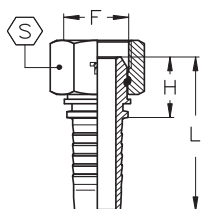


BS 5200	DKR	BSP STRAIGHT FEMALE - 60° CONE FEMMINA DIRITTA BSP (GAS) - OGIVA 60°												
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura F	Nut Dado P	Dimensions (mm)					Maximum W.P.	
			DN	Size	Inch			H	L	S		bar	PSI	
XBF0203	5	03	3/16"	1/8"-28	P	16	41	14				415	6000	
XBF0403	5	03	3/16"	1/4"-19	P	19	44	19				415	6000	
XBF0204	6	04	1/4"	1/8"-28	P	17	45	14				415	6000	
XBF0404	6	04	1/4"	1/4"-19	P	19	47	19				450	6500	
XBF0604	6	04	1/4"	3/8"-19	P	22	50	22				450	6500	
XBF0804	6	04	1/4"	1/2"-14	P	23	51	27				450	6500	
XBF0405	8	05	5/16"	1/4"-19	P	19	47	19				350	5000	
XBF0605	8	05	5/16"	3/8"-19	P	22	50	22				350	5000	
XBF0805	8	05	5/16"	1/2"-14	P	23	51	27				350	5000	
XBF0406	10	06	3/8"	1/4"-19	P	19	49	19				450	6500	
XBF0606	10	06	3/8"	3/8"-19	P	21	51	22				450	6500	
XBF0806	10	06	3/8"	1/2"-14	P	23	54	27				450	6500	
XBF0608	12	08	1/2"	3/8"-19	P	22	56	22				415	6000	
XBF0808	12	08	1/2"	1/2"-14	P	23	56	27				415	6000	
XBF1008	12	08	1/2"	5/8"-14	P	24	57	30				415	6000	
XBF1208	12	08	1/2"	3/4"-14	P	27	60	32				415	6000	
XBF0810	16	10	5/8"	1/2"-14	P	23	59	27				350	5000	
XBF1010	16	10	5/8"	5/8"-14	P	23	59	30				350	5000	
XBF1210	16	10	5/8"	3/4"-14	P	27	63	32				350	5000	
XBF0812	20	12	3/4"	1/2"-14	P	24	65	27				350	5000	
XBF1012	20	12	3/4"	5/8"-14	P	24	64	30				350	5000	
XBF1212	20	12	3/4"	3/4"-14	P	27	67	32				350	5000	
XBF1612	20	12	3/4"	1"-11	P	30	70	41				350	5000	
XBF1216	25	16	1"	3/4"-14	P	28	79	32				280	4000	
XBF1616	25	16	1"	1"-11	P	30	81	41				280	4000	
XBF2016	25	16	1"	1 1/4"-11	P	35	86	50				280	4000	
XBF2020	32	20	1 1/4"	1 1/4"-11	P	34	92	50				210	3000	
XBF2420	32	20	1 1/4"	1 1/2"-11	P	36	93	55				210	3000	
XBF2424	40	24	1 1/2"	1 1/2"-11	P	34	99	55				185	2700	
XBF3224	40	24	1 1/2"	2"-11	P	39	103	70				185	2700	
XBF3232	50	32	2"	2"-11	P	37	107	70				165	2400	



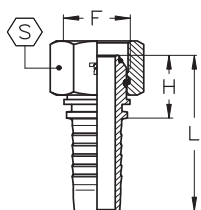
P - Pressed nut (Dado pressato)

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BS 5200
DKR
BSP STRAIGHT FEMALE - 60° CONE
BSP RECHT FEMALE MET LOSSE MOER 60° CONUS


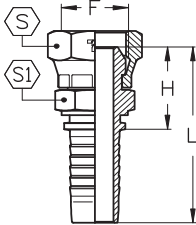
L - Loose nut (*Dado libero*)
 S - TIEFFE nut (*Dado TIEFFE*)

TIEFFE Part.N.	Hose I.D. <i>Ø interno tubo</i>			Thread <i>Filettatura</i>	Nut <i>Dado</i>	Dimensions <i>(mm)</i>					Maximum W.P.		
	DN	Size	Inch	F		H	L	S			bar	PSI	
XBF0404L	6	04	1/4"	1/4"-19	L	19	47	19				450	6500
XBF0604L	6	04	1/4"	3/8"-19	L	19	47	22				450	6500
XBF0605L	8	05	5/16"	3/8"-19	L	19	47	22				350	5000
XBF0606L	10	06	3/8"	3/8"-19	L	19	50	22				450	6500
XBF0806L	10	06	3/8"	1/2"-14	L	21	52	27				450	6500
XBF0808L	12	08	1/2"	1/2"-14	L	22	55	27				415	6000
XBF1008S	12	08	1/2"	5/8"-14	S	24	57	30				415	6000
XBF1010S	16	10	5/8"	5/8"-14	S	23	59	30				350	5000
XBF1210S	16	10	5/8"	3/4"-14	S	27	63	32				350	5000
XBF1212S	20	12	3/4"	3/4"-14	S	27	67	32				350	5000
XBF1612S	20	12	3/4"	1"-11	S	31	72	41				350	5000
XBF1616S	25	16	1"	1"-11	S	31	82	41				280	4000

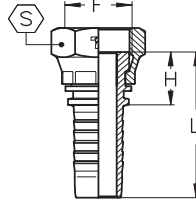
BS 5200
DKOR
BSP STRAIGHT FEMALE - 60° O'RING CONE
BSP RECHT FEMALE MET LOSSE MOER EN ORING - 60° CONUS


L - Loose nut (*Dado libero*)
 S - TIEFFE nut (*Dado TIEFFE*)

TIEFFE Part.N.	Hose I.D. <i>Ø interno tubo</i>			Thread <i>Filettatura</i>	Nut <i>Dado</i>	Dimensions <i>(mm)</i>					Maximum W.P.	
	DN	Size	Inch	F		H	L	S	O'Ring	bar	PSI	
XBF0404OL	6	04	1/4"	1/4"-19	L	22	50	19		6,5x1	450	6500
XBF0604OL	6	04	1/4"	3/8"-19	L	24	52	22		8,5x1,5	450	6500
XBF0605OL	8	05	5/16"	3/8"-19	L	24	52	22		8,5x1,5	350	5000
XBF0606OL	10	06	3/8"	3/8"-19	L	24	54	22		8,5x1,5	450	6500
XBF0806OL	10	06	3/8"	1/2"-14	L	26	56	27		11,5x1,5	450	6500
XBF0808OL	12	08	1/2"	1/2"-14	L	26	59	27		11,5x1,5	415	6000
XBF1008OS	12	08	1/2"	5/8"-14	S	26	59	30		13x1,5	415	6000
XBF1010OS	16	10	5/8"	5/8"-14	S	25	61	30		13x1,5	350	5000
XBF1210OS	16	10	5/8"	3/4"-14	S	28	64	32		17x1,5	350	5000
XBF1212OS	20	12	3/4"	3/4"-14	S	28	68	32		17x1,5	350	5000
XBF1612OS	20	12	3/4"	1"-11	S	32	73	41		22x1,5	280	4000
XBF1616OS	25	16	1"	1"-11	S	32	83	41		22x1,5	280	4000
XBF2016OS	25	16	1"	1 1/4"-11	S	37	88	50		28,3x1,78	280	4000
XBF2020OS	32	20	1 1/4"	1 1/4"-11	S	36	94	50		28,3x1,78	210	3000
XBF2420OS	32	20	1 1/4"	1 1/2"-11	S	39	97	55		33,05x1,78	210	3000
XBF2424OS	40	24	1 1/2"	1 1/2"-11	S	38	102	55		33,05x1,78	185	2700
XBF3224OS	40	24	1 1/2"	2"-11	S	41	105	70		44,17x1,78	185	2700
XBF3232OS	50	32	2"	2"-11	S	40	110	70		44,17x1,78	165	2400

JIS B 8363	DKR	JIS BSP STRAIGHT FEMALE (NISSAN) - 60° CONE SEAT JIS BSP RECHT FEMALE (NISSAN) - 60° CONUS											
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Nut Dado	Dimensions (mm)				Maximum W.P.	
			DN	Size	Inch	F		H	L	S	S1	bar	PSI
	XBFJ0403	5	03	3/16"	1/4"-19	P	23	48	19	14		415	6000
	XBFJ0404	6	04	1/4"	1/4"-19	P	24	52	19	14		450	6500
	XBFJ0604	6	04	1/4"	3/8"-19	P	26	54	22	17		450	6500
	XBFJ0605	8	05	5/16"	3/8"-19	P	26	54	22	17		350	5000
	XBFJ0606	10	06	3/8"	3/8"-19	P	26	57	22	17		450	6500
	XBFJ0806	10	06	3/8"	1/2"-14	P	29	60	27	22		450	6500
	XBFJ0808	12	08	1/2"	1/2"-14	P	30	63	27	22		415	6000
	XBFJ1210	16	10	5/8"	3/4"-14	P	35	71	32	27		350	5000
	XBFJ1212	20	12	3/4"	3/4"-14	P	36	76	32	27		350	5000
	XBFJ1616	25	16	1"	1"-11	P	40	91	41	32		280	4000
	XBFJ2020	32	20	1 1/4"	1 1/4"-11	P	46	104	50	41		210	3000
	XBFJ2424	40	24	1 1/2"	1 1/2"-11	P	47	112	55	46		185	2700
	XBFJ3232	50	32	2"	2"-11	P	53	123	70	60		165	2400

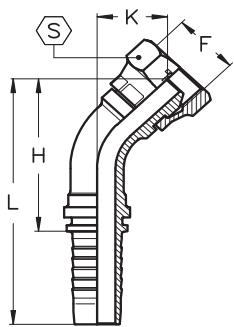
P - Pressed nut (Dado pressato)

BSP FLAT SEAT	DKR FLAT SEAT	BSP STRAIGHT FEMALE - FLAT SEAT BSP RECHT FEMALE - VLAK											
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Nut Dado	Dimensions (mm)					
			DN	Size	Inch	F		H	L	S			
	XBP0404	6	04	1/4"	1/4"-19	P	15	43	19				
	XBP0604	6	04	1/4"	3/8"-19	P	18	46	22				
	XBP0605	8	05	5/16"	3/8"-19	P	18	46	22				
	XBP0606	10	06	3/8"	3/8"-19	P	17	47	22				
	XBP0806	10	06	3/8"	1/2"-14	P	19	49	27				
	XBP0808	12	08	1/2"	1/2"-14	P	19	52	27				
	XBP1008	12	08	1/2"	5/8"-14	P	21	54	30				
	XBP1208	12	08	1/2"	3/4"-14	P	23	56	32				
	XBP1010	16	10	5/8"	5/8"-14	P	20	56	30				
	XBP1210	16	10	5/8"	3/4"-14	P	23	59	32				
	XBP1212	20	12	3/4"	3/4"-14	P	22	63	32				
	XBP1612	20	12	3/4"	1"-11	P	25	65	41				
	XBP1616	25	16	1"	1"-11	P	25	76	41				
	XBP2424	32	20	1 1/4"	1 1/4"-11	P	28	90	50				

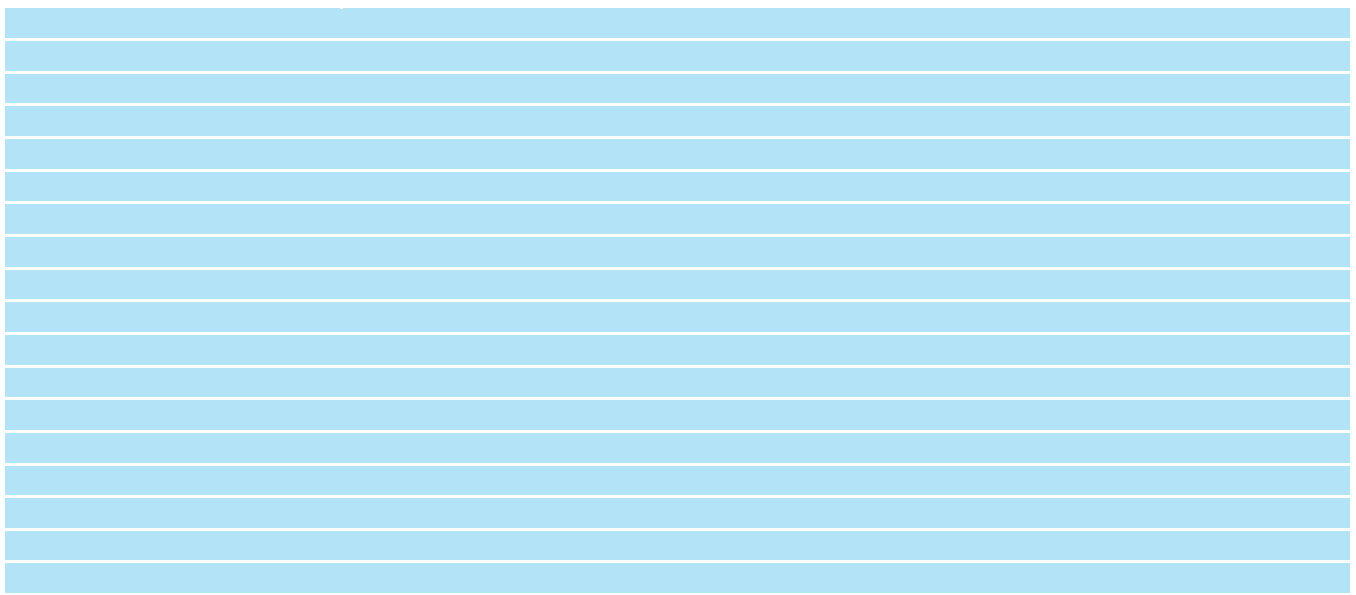
P - Pressed nut (Dado pressato)

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BS 5200	DKR45	45° BSP SWEEP ELBOW - 60° CONE 45° GEBOGEN BSP SLANGKOPPELING - 60° CONUS												
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Nut Dado	Dimensions (mm)					Maximum W.P.	
			DN	Size	Inch	F		H	L	K	S	bar	PSI	
XBF450302	5	03	3/16"	1/8"-28	P	33	58	14	14			415	6000	
XBF450402	5	03	3/16"	1/4"-19	P	35	60	16	19			415	6000	
XBF450204	6	04	1/4"	1/8"-28	P	36	64	16	14			415	6000	
XBF450404	6	04	1/4"	1/4"-19	P	37	65	16	19			450	6500	
XBF450604	6	04	1/4"	3/8"-19	P	40	68	19	22			450	6500	
XBF450804	6	04	1/4"	1/2"-14	P	42	70	21	27			450	6500	
XBF450405	8	05	5/16"	1/4"-19	P	39	67	18	19			350	5000	
XBF450605	8	05	5/16"	3/8"-19	P	41	69	19	22			350	5000	
XBF450805	8	05	5/16"	1/2"-14	P	43	71	21	27			350	5000	
XBF450406	10	06	3/8"	1/4"-19	P	41	72	18	19			450	6500	
XBF450606	10	06	3/8"	3/8"-19	P	42	73	19	22			450	6500	
XBF450806	10	06	3/8"	1/2"-14	P	44	75	21	27			450	6500	
XBF450608	12	08	1/2"	3/8"-19	P	49	82	22	22			415	6000	
XBF450808	12	08	1/2"	1/2"-14	P	49	82	22	27			415	6000	
XBF451008	12	08	1/2"	5/8"-14	P	49	82	22	30			415	6000	
XBF451208	12	08	1/2"	3/4"-14	P	53	86	26	32			415	6000	
XBF450810	16	10	5/8"	1/2"-14	P	57	93	26	27			350	5000	
XBF451010	16	10	5/8"	5/8"-14	P	54	90	24	30			350	5000	
XBF451210	16	10	5/8"	3/4"-14	P	57	93	26	32			350	5000	
XBF450812	20	12	3/4"	1/2"-14	P	68	108	30	27			350	5000	
XBF451012	20	12	3/4"	5/8"-14	P	66	106	28	30			350	5000	
XBF451212	20	12	3/4"	3/4"-14	P	66	106	28	32			350	5000	
XBF451612	20	12	3/4"	1"-11	P	68	108	30	41			350	5000	
XBF451216	25	16	1"	3/4"-14	P	87	138	38	32			280	4000	
XBF451616	25	16	1"	1"-11	P	84	135	36	41			280	4000	
XBF452016	25	16	1"	1 1/4"-11	P	85	136	37	50			280	4000	
XBF452020	32	20	1 1/4"	1 1/4"-11	P	100	157	43	50			210	3000	
XBF452420	32	20	1 1/4"	1 1/2"-11	P	100	157	43	55			210	3000	
XBF452424	40	24	1 1/2"	1 1/2"-11	P	116	180	49	55			185	2700	
XBF453224	40	24	1 1/2"	2"-11	P	116	180	49	70			185	2700	
XBF453232	50	32	2"	2"-11	P	150	220	62	70			165	2400	



P - Pressed nut (Dado pressato)



BS 5200	DKR45	45° BSP SWEPT ELBOW - 60° CONE 45° GEBOGEN SLANGKOPPELING MET WARTEL-60° CONUS												
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Nut Dado	Dimensions (mm)				Maximum W.P.		
			DN	Size	Inch	F		H	L	K	S	bar	PSI	
		XBF450404L	6	04	1/4"	1/4"-19	L	35	63	13	19		450	6500
		XBF450604L	6	04	1/4"	3/8"-19	L	36	64	14	22		450	6500
		XBF450605L	8	05	5/16"	3/8"-19	L	37	65	14	22		350	5000
		XBF450606L	10	06	3/8"	3/8"-19	L	38	68	14	22		450	6500
		XBF450806L	10	06	3/8"	1/2"-14	L	41	71	17	27		450	6500
		XBF450808L	12	08	1/2"	1/2"-14	L	44	77	18	27		415	6000
		XBF451008S	12	08	1/2"	5/8"-14	S	49	82	23	30		415	6000
		XBF451010S	16	10	5/8"	5/8"-14	S	54	90	23	30		350	5000
		XBF451210S	16	10	5/8"	3/4"-14	S	57	93	26	32		350	5000
		XBF451212S	20	12	3/4"	3/4"-14	S	66	106	29	32		350	5000
		XBF451612S	20	12	3/4"	1"-11	S	68	109	31	41		350	5000
		XBF451616S	25	16	1"	1"-11	S	84	135	36	41		280	4000

L - Loose nut (Dado libero)

S - TIEFFE nut (Dado TIEFFE)

BS 5200	DKOR45	45° BSP SWEPT ELBOW - 60° O'RING CONE 45° GEBOGEN SLANGKOPPELING MET WARTEL-60° CONUS MET ORING												
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Nut Dado	Dimensions (mm)					Maximum W.P.	
			DN	Size	Inch	F		H	L	K	S	O'Ring	bar	PSI
		XBF450404OL	6	04	1/4"	1/4"-19	L	35	63	13	19	6,5x1	450	6500
		XBF450604OL	6	04	1/4"	3/8"-19	L	37	65	15	22	8,5x1,5	450	6500
		XBF450605OL	8	05	5/16"	3/8"-19	L	38	66	15	22	8,5x1,5	350	5000
		XBF450606OL	10	06	3/8"	3/8"-19	L	39	69	15	22	8,5x1,5	450	6500
		XBF450806OL	10	06	3/8"	1/2"-14	L	41	71	18	27	11,5x1,5	450	6500
		XBF450808OL	12	08	1/2"	1/2"-14	L	45	78	18	27	11,5x1,5	415	6000
		XBF451008OL	12	08	1/2"	5/8"-14	S	51	84	24	30	13x1,5	415	6000
		XBF451010OS	16	10	5/8"	5/8"-14	S	55	91	24	30	13x1,5	350	5000
		XBF451210OS	16	10	5/8"	3/4"-14	S	58	94	27	32	17x1,5	350	5000
		XBF451212OS	20	12	3/4"	3/4"-14	S	66	107	29	32	17x1,5	350	5000
		XBF451612OS	20	12	3/4"	1"-11	S	69	110	32	41	22x1,5	350	5000
		XBF451616OS	25	16	1"	1"-11	S	85	136	37	41	22x1,5	280	4000
		XBF452016OS	25	16	1"	1 1/4"-11	S	86	137	38	50	28,3x1,78	280	4000
		XBF452020OS	32	20	1 1/4"	1 1/4"-11	S	99	157	43	50	28,3x1,78	210	3000
		XBF452420OS	32	20	1 1/4"	1 1/2"-11	S	99	157	43	55	33,05x1,78	210	3000
		XBF452424OS	40	24	1 1/2"	1 1/2"-11	S	118	182	51	55	33,05x1,78	185	2700
		XBF453224OS	40	24	1 1/2"	2"-11	S	118	182	51	70	44,17x1,78	185	2700
		XBF453232OS	50	32	2"	2"-11	S	153	223	65	70	44,17x1,78	165	2400

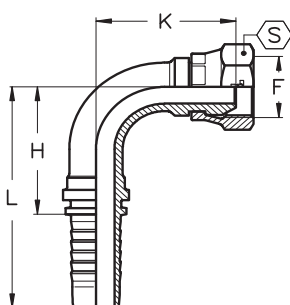
L - Loose nut (Dado libero)

S - TIEFFE nut (Dado TIEFFE)

BS 5200

DKR90

90° BSP SWEPT ELBOW - 60° CONE
90° GEBOGEN SLANGKOPPELING BSP - 60° CONUS



TIEFFE Part.N.	Hose I.D. <i>Ø interno tubo</i>			Thread <i>Filettatura</i>	Nut <i>Dado</i>	Dimensions <i>(mm)</i>					Maximum W.P.	
	DN	Size	Inch	F		H	L	K	S	bar	PSI	
XBF900203	5	03	3/16"	1/8"-28	P	21	46	23	14		415	6000
XBF900403	5	03	3/16"	1/4"-19	P	21	46	26	19		415	6000
XBF900204	6	04	1/4"	1/8"-28	P	26	54	28	14		415	6000
XBF900404	6	04	1/4"	1/4"-19	P	26	54	28	19		450	6500
XBF900604	6	04	1/4"	3/8"-19	P	26	54	32	22		450	6500
XBF900804	6	04	1/4"	1/2"-14	P	26	54	36	27		450	6500
XBF900405	8	05	5/16"	1/4"-19	P	28	56	31	19		350	5000
XBF900605	8	05	5/16"	3/8"-19	P	28	56	34	22		350	5000
XBF900805	8	05	5/16"	1/2"-14	P	28	56	37	27		350	5000
XBF900406	10	06	3/8"	1/4"-19	P	31	61	34	19		450	6500
XBF900606	10	06	3/8"	3/8"-19	P	31	61	35	22		450	6500
XBF900806	10	06	3/8"	1/2"-14	P	31	61	38	27		450	6500
XBF900608	12	08	1/2"	3/8"-19	P	37	70	42	22		415	6000
XBF900808	12	08	1/2"	1/2"-14	P	37	70	42	27		415	6000
XBF901008	12	08	1/2"	5/8"-14	P	37	70	43	30		415	6000
XBF901208	12	08	1/2"	3/4"-14	P	37	70	48	32		415	6000
XBF900810	16	10	5/8"	1/2"-14	P	45	80	50	27		350	5000
XBF901010	16	10	5/8"	5/8"-14	P	45	80	46	30		350	5000
XBF901210	16	10	5/8"	3/4"-14	P	45	80	50	32		350	5000
XBF900812	20	12	3/4"	1/2"-14	P	54	95	59	27		350	5000
XBF901012	20	12	3/4"	5/8"-14	P	54	95	56	30		350	5000
XBF901212	20	12	3/4"	3/4"-14	P	54	95	56	32		350	5000
XBF901612	20	12	3/4"	1"-11	P	54	95	59	41		350	5000
XBF901216	25	16	1"	3/4"-14	P	70	121	75	32		280	4000
XBF901616	25	16	1"	1"-11	P	70	121	72	41		280	4000
XBF902016	25	16	1"	1 1/4"-11	P	70	121	73	50		280	4000
XBF902020	32	20	1 1/4"	1 1/4"-11	P	84	142	87	50		210	3000
XBF902420	32	20	1 1/4"	1 1/2"-11	P	84	142	87	55		210	3000
XBF902424	40	24	1 1/2"	1 1/2"-11	P	100	165	100	55		185	2700
XBF903224	40	24	1 1/2"	2"-11	P	100	165	100	70		185	2700
XBF903232	50	32	2"	2"-11	P	134	204	131	70		165	2400

P - Pressed nut (*Dado pressato*)

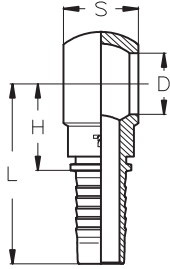
BS 5200	DKR90	90° BSP SWEPT ELBOW - 60° CONE 90° GEBOGEN SLAGKOPPELING BSP - 60° CONUS												
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread <i>Filettatura</i>	Nut <i>Dado</i>	Dimensions (mm)					Maximum W.P.	
			DN	Size	Inch	F		H	L	K	S	bar	PSI	
		XBF900404L	6	04	1/4"	1/4"-19	L	29	57	26	19		450	6500
		XBF900604L	6	04	1/4"	3/8"-19	L	29	57	28	22		450	6500
		XBF900605L	8	05	5/16"	3/8"-19	L	29	57	28	22		350	5000
		XBF900606L	10	06	3/8"	3/8"-19	L	30	61	29	22		450	6500
		XBF900806L	10	06	3/8"	1/2"-14	L	30	61	32	27		450	6500
		XBF900808L	12	08	1/2"	1/2"-14	L	37	70	35	27		415	6000
		XBF901008S	12	08	1/2"	5/8"-14	S	37	70	43	30		415	6000
		XBF901010S	16	10	5/8"	5/8"-14	S	44	80	46	30		350	5000
		XBF901210S	16	10	5/8"	3/4"-14	S	44	80	50	32		350	5000
		XBF901212S	20	12	3/4"	3/4"-14	S	54	94	56	32		350	5000
		XBF901612S	20	12	3/4"	1"-11	S	54	94	60	41		350	5000
		XBF901616S	25	16	1"	1"-11	S	70	121	72	41		280	4000

L - Loose nut (*Dado libero*)
S - TIEFFE nut (*Dado TIEFFE*)

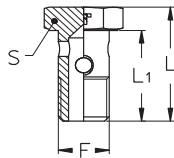
BS 5200	DKOR90	90° BSP SWEPT ELBOW - 60° CONE 90° GEBOGEN SLAGKOPPELING BSP - 60° CONUS MET ORING												
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread <i>Filettatura</i>	Nut <i>Dado</i>	Dimensions (mm)					Maximum W.P.	
			DN	Size	Inch	F		H	L	K	S	O'Ring	bar	PSI
		XBF900404OL	6	04	1/4"	1/4"-19	L	29	57	27	19	6,5x1	450	6500
		XBF900604OL	6	04	1/4"	3/8"-19	L	29	57	29	22	8,5x1,5	450	6500
		XBF900605OL	8	05	5/16"	3/8"-19	L	29	57	29	22	8,5x1,5	350	5000
		XBF900606OL	10	06	3/8"	3/8"-19	L	30	61	30	22	8,5x1,5	450	6500
		XBF900806OL	10	06	3/8"	1/2"-14	L	30	61	33	27	11,5x1,5	450	6500
		XBF900808OL	12	08	1/2"	1/2"-14	L	37	70	36	27	11,5x1,5	415	6000
		XBF901008OL	12	08	1/2"	5/8"-14	S	37	70	45	30	13x1,5	415	6000
		XBF901010S	16	10	5/8"	5/8"-14	S	44	80	48	30	13x1,5	350	5000
		XBF901210S	16	10	5/8"	3/4"-14	S	44	80	51	32	17x1,5	350	5000
		XBF901212S	20	12	3/4"	3/4"-14	S	54	94	57	32	17x1,5	350	5000
		XBF901612S	20	12	3/4"	1"-11	S	54	94	61	41	22x1,5	350	5000
		XBF901616S	25	16	1"	1"-11	S	70	121	73	41	22x1,5	280	4000
		XBF902016S	25	16	1"	1 1/4"-11	S	70	121	76	50	28,3x1,78	280	4000
		XBF902020S	32	20	1 1/4"	1 1/4"-11	S	84	142	88	50	28,3x1,78	210	3000
		XBF902420S	32	20	1 1/4"	1 1/2"-11	S	84	142	88	55	33,05x1,78	210	3000
		XBF902424S	40	24	1 1/2"	1 1/2"-11	S	100	165	104	55	33,05x1,78	185	2700
		XBF903224S	40	24	1 1/2"	2"-11	S	100	165	104	70	44,17x1,78	185	2700
		XBF903232S	50	32	2"	2"-11	S	134	204	137	70	44,17x1,78	165	2400

L - Loose nut (*Dado libero*)
S - TIEFFE nut (*Dado TIEFFE*)

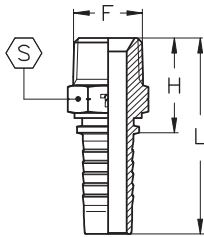
		B.S.P. BANJO BANJOKOPPELING BSP									
TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Dimensions (mm)						
	DN	Size	Inch	F	H	L	D	S			
XQB0203	5	03	3/16"	1/8"-28	20	45	10,2	10			
XQB0403	5	03	3/16"	1/4"-19	22,6	47,6	13,3	14			
XQB0204	6	04	1/4"	1/8"-28	23	51	10,2	10			
XQB0404	6	04	1/4"	1/4"-19	23	51	13,3	14			
XQB0604	6	04	1/4"	3/8"-19	26,5	54,5	16,8	17,5			
XQB0804	6	04	1/4"	1/2"-14	33,5	61,5	21	23			
XQB0405	8	05	5/16"	1/4"-19	24	52	13,3	14			
XQB0605	8	05	5/16"	3/8"-19	26,5	54,5	16,8	17,5			
XQB0805	8	05	5/16"	1/2"-14	33,5	61,5	21	23			
XQB0406	10	06	3/8"	1/4"-19	24	54,5	13,3	14			
XQB0606	10	06	3/8"	3/8"-19	24	54,5	16,8	17,5			
XQB0806	10	06	3/8"	1/2"-14	32	62,5	21	23			
XQB0608	12	08	1/2"	3/8"-19	26,5	59,5	16,8	17,5			
XQB0808	12	08	1/2"	1/2"-14	28,5	61,5	21	23			
XQB1008	12	08	1/2"	5/8"-14	31	64	23,1	23,5			
XQB1208	12	08	1/2"	3/4"-14	39	72	26,5	29,5			
XQB0810	16	10	5/8"	1/2"-14	27,2	63	21	23			
XQB1010	16	10	5/8"	5/8"-14	28,2	64	23,1	23,5			
XQB1210	16	10	5/8"	3/4"-14	34,7	70,5	26,5	29,5			
XQB1212	20	12	3/4"	3/4"-14	37,5	78	26,5	29,5			
XQB1612	20	12	3/4"	1"-11	39,5	90,5	33,5	37,5			
XQB1616	25	10	1	1"-11	49	100	33,5	37,5			



		B.S.P. BANJO BOLT BANJOBOUT BSP						
TIEFFE Part.N.				Thread Filettatura	Dimensions (mm)			
				F	L	L1	S	
QMB02				1/8"-28	26	21,5	14	
QMB04				1/4"-19	34,3	29,5	19	
QMB06				3/8"-19	40,5	34	22	
QMB08				1/2"-14	46	36	27	
QMB10				5/8"-14	55	45,5	30	
QMB12				3/4"-14	56	48	32	
QMB16				1"-11	69	59	41	

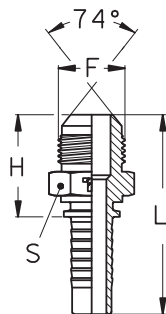


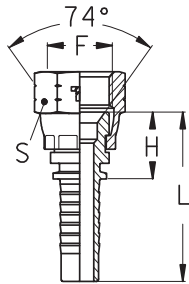
SAEJ516		AGN		NPTF MALE - 60° CONE SEAT MASCHIO NPTF - SVASATO 60°											
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)							Maximum WP			
	DN	Size	Inch	F	H	L	S					bar	PSI		
XNM0203	5	03	3/16"	1/8"-27	20,6	45,6	12					415	6000		
XNM0403	5	03	3/16"	1/4"-18	26,5	51,5	14					415	6000		
XNM0204	6	04	1/4"	1/8"-27	21,1	49,1	12					450	6500		
XNM0404	6	04	1/4"	1/4"-18	27	55	14					450	6500		
XNM0604	6	04	1/4"	3/8"-18	28,6	56,6	19					450	6500		
XNM0804	6	04	1/4"	1/2"-14	34	62	22					415	6000		
XNM0405	8	05	5/16"	1/4"-18	27	55	14					350	5000		
XNM0605	8	05	5/16"	3/8"-18	28,6	56,6	19					350	5000		
XNM0805	8	05	5/16"	1/2"-14	34	62	22					350	5000		
XNM0406	10	06	3/8"	1/4"-18	27,5	58	16					450	6500		
XNM0606	10	06	3/8"	3/8"-18	28,6	59,1	19					450	6500		
XNM0806	10	06	3/8"	1/2"-14	34	64,5	22					415	6000		
XNM0608	12	08	1/2"	3/8"-18	30,6	63,6	22					415	6000		
XNM0808	12	08	1/2"	1/2"-14	35	68	22					415	6000		
XNM1208	12	08	1/2"	3/4"-14	36,9	69,9	27					350	5000		
XNM0810	16	10	5/8"	1/2"-14	36,2	72	25					350	5000		
XNM1210	16	10	5/8"	3/4"-14	37,1	72,9	27					350	5000		
XNM0812	20	12	3/4"	1/2"-14	37,5	78	27					350	5000		
XNM1212	20	12	3/4"	3/4"-14	37,9	78,4	27					350	5000		
XNM1612	20	12	3/4"	1"-11,5	45,5	86	35					280	4000		
XNM1216	25	16	1"	3/4"-14	40,4	91,4	32					280	4000		
XNM1616	25	16	1"	1"-11,5	47	98	35					280	4000		
XNM2016	25	16	1"	1 1/4"-11,5	51,1	102,1	46					210	3000		
XNM2020	32	20	1 1/4"	1 1/4"-11,5	51,9	109,6	46					210	3000		
XNM2424	40	24	1 1/2"	1 1/2"-11,5	55	119,5	50					185	2700		
XNM3232	50	32	2"	2"-11,5	64	134	65					165	2400		



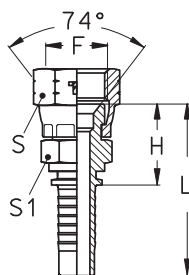
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AGJ	J.I.C. MALE - 74° CONE SLANGKOPPELING BU.DR. J.I.C. - CONUS 74°											
	TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)						Maximum WP bar
		DN	Size	Inch		H	L	S				
XJM0703	5	03	3/16"	7/16"-20	26,3	52	12				415	
XJM0803	5	03	3/16"	1/2"-20	26,3	52	14				415	
XJM0704	6	04	1/4"	7/16"-20	26,5	55	12				450	
XJM0804	6	04	1/4"	1/2"-20	26,5	55	14				450	
XJM0904	6	04	1/4"	9/16"-18	26,5	55	15				450	
XJM0805	8	05	5/16"	1/2"-20	26,5	55	14				350	
XJM0905	8	05	5/16"	9/16"-18	26,5	55	15				350	
XJM1205	8	05	5/16"	3/4"-16	30,2	58,7	19				350	
XJM0906	10	06	3/8"	9/16"-18	26,5	57	15				450	
XJM1206	10	06	3/8"	3/4"-16	30,2	60,5	19				415	
XJM1406	10	06	3/8"	7/8"-14	34,2	64,7	24				350	
XJM1208	12	08	1/2"	3/4"-16	31	64	19				415	
XJM1408	12	08	1/2"	7/8"-14	35,5	68	24				350	
XJM1708	12	08	1/2"	1 1/16"-12	38,5	71,5	27				350	
XJM1410	16	10	5/8"	7/8"-14	35	71	24				350	
XJM1710	16	10	5/8"	1 1/16"-12	38,5	74,5	27				350	
XJM1412	20	12	3/4"	7/8"-14	36	77	27				350	
XJM1712	20	12	3/4"	1 1/16"-12	39,5	80,5	27				350	
XJM1912	20	12	3/4"	1 3/16"-12	41,5	82,5	32				280	
XJM2112	20	12	3/4"	1 5/16"-12	42	83	36				280	
XJM1716	25	16	1"	1 1/16"-12	41	96	32				280	
XJM2116	25	16	1"	1 5/16"-12	42,7	97,7	36				280	
XJM2616	25	16	1"	1 5/8"-12	46	101	46				280	
XJM2620	32	20	1 1/4"	1 5/8"-12	46,5	107,5	46				210	
XJM3020	32	20	1 1/4"	1 7/8"-12	51	112	50				140	
XJM3024	40	24	1 1/2"	1 7/8"-12	51,2	121,7	50				140	
XJM4032	50	32	2"	2 1/2"-12	62,2	138,2	65				105	



DKJ
**J.I.C. FEMALE - 74° CONE SEAT - CRIMPED NUT
SLANGKOPPELING WARTEL J.I.C. - CONUS ZITTING 74° - MOER GEPERST**


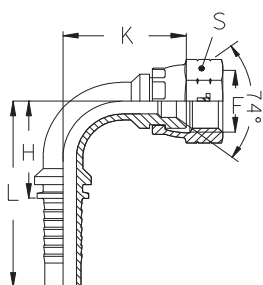
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					Maximum WP
	DN	Size	Inch	F	H	L	S			bar
XJF0703	5	03	3/16"	7/16"-20	14,5	40,2	15			350
XJF0703SW14	5	03	3/16"	7/16"-20	14,5	40,2	14			350
XJF0803	5	03	3/16"	1/2"-20	16,8	42,5	17			350
XJF0704	6	04	1/4"	7/16"-20	14,7	43,2	15			350
XJF0704SW14	6	04	1/4"	7/16"-20	14,7	43,2	14			350
XJF0804	6	04	1/4"	7/16"-20	16	44,5	17			350
XJF0904	6	04	1/4"	9/16"-18	18	46,5	19			250
XJF0805	8	05	5/16"	1/2"-20	16	44,5	17			350
XJF0905	8	05	5/16"	9/16"-18	17	45,5	19			250
XJF1205	8	05	5/16"	3/4"-16	18,5	47	24			250
XJF1205SW22	8	05	5/16"	3/4"-16	18,5	47	22			250
XJF0906	10	06	3/8"	9/16"-18	17	47,5	19			250
XJF1206	10	06	3/8"	3/4"-16	18,5	49	24			250
XJF1206SW22	10	06	3/8"	3/4"-16	18,5	49	22			250
XJF1406	10	06	3/8"	7/8"-14	19,5	50	27			200
XJF1208	12	08	1/2"	3/4"-16	18,5	51,5	24			250
XJF1208SW22	12	08	1/2"	3/4"-16	18,5	51,5	22			250
XJF1408	12	08	1/2"	7/8"-14	19,5	52,5	27			200
XJF1708	12	08	1/2"	1 1/16"-12	22,5	55,5	32			200
XJF1410	16	10	5/8"	7/8"-14	19,5	55,5	27			200
XJF1710	16	10	5/8"	1 1/16"-12	22,5	58,5	32			200
XJF1412	20	12	3/4"	7/8"-14	20,5	61,5	27			200
XJF1712	20	12	3/4"	1 1/16"-12	22	63	32			200
XJF1912	20	12	3/4"	1 3/16"-12	25,2	66,2	36			160
XJF2112	20	12	3/4"	1 5/16"-12	25,7	66,7	41			160
XJF1716	25	16	1"	1 1/16"-12	23,5	78,5	32			200
XJF2116	25	16	1"	1 5/16"-12	26	81	41			160
XJF2616	25	16	1"	1 5/8"-12	28,8	83,8	50			125
XJF2620	32	20	1 1/4"	1 5/8"-12	27,8	88,8	50			125
XJF3020	32	20	1 1/4"	1 7/8"-12	31	92	55			100
XJF3024	40	24	1 1/2"	1 7/8"-12	31,5	102	55			100
XJF4032	50	32	2"	2 1/2"-12	33,5	109,5	70			80

DKJ
**JIC STRAIGHT FEMALE - 74° CONE SEAT - DOUBLE EXAGON
SLANGKOPPELING WARTEL JIC - CONUS 74° - DUBBELE EXAGON**


TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					Maximum WP
	DN	Size	Inch	F	H	L	S	S1		bar
CP0404FIC	6	04	1/4"	7/16"-20	19	47,5	15	12		350
CP0404FIC-EX14	6	04	1/4"	7/16"-20	19	47,5	14	12		350
CP0405FIC	6	04	1/4"	1/2"-20	19	47,5	17	14		350
CP0406FIC	6	04	1/4"	9/16"-18	23	51,5	19	14		250
CP0506FIC	8	05	5/16"	9/16"-18	23	51,5	19	14		250
CP0606FIC	10	06	3/8"	9/16"-18	23	53,4	19	15		250
CP0608FIC	10	06	3/8"	3/4"-16	23,5	54	24	19		250
CP0608FIC-EX22	10	06	3/8"	3/4"-16	23,5	54	22	19		250
CP0808FIC	12	08	1/2"	3/4"-16	24,5	57,5	24	19		250
CP0808FIC-EX22	12	08	1/2"	3/4"-16	24,5	57,5	22	19		250
CP0810FIC	12	08	1/2"	7/8"-14	25,5	58,5	27	22		200
CP1010FIC	16	10	5/8"	7/8"-14	25,5	61,5	27	22		200
CP1012FIC	16	10	5/8"	1 1/16"-12	28	64	32	27		200
CP1212FIC	20	12	3/4"	1 1/16"-12	29	70	32	27		200
CP1616FIC	25	16	1"	1 5/16"-12	35	90	41	32		160

DKJ90

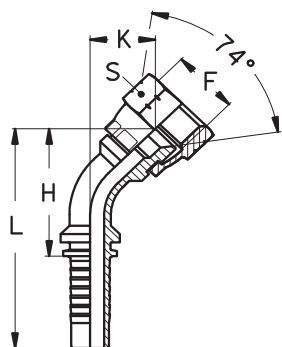
J.I.C. 90° SWEPT ELBOW - 74° CONE SEAT - ONE PIECE - CRIMPED NUT
SLANGKOPPELING 90° J.I.C. - CONUS 74° - UIT EEN STUK, MOER GEPERST



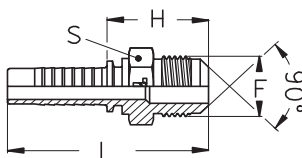
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					Maximum WP
	DN	Size	Inch	F	H	L	K	S		bar
XJF900703	5	03	3/16"	7/16"-20	21	47	22	15		350
XJF900703SW14	5	03	3/16"	7/16"-20	21	47	22	14		350
XJF900803	5	03	3/16"	1/2"-20	21	47	23	17		350
XJF900704	6	04	1/4"	7/16"-20	24	52	24	15		350
XJF900704SW14	6	04	1/4"	7/16"-20	24	52	24	14		350
XJF900804	6	04	1/4"	1/2"-20	24	52	25	17		350
XJF900904	6	04	1/4"	9/16"-18	23,5	52	27	19		250
XJF900805	8	05	5/16"	1/2"-20	31	59	29	17		350
XJF900905	8	05	5/16"	9/16"-18	30,5	59	30,5	19		250
XJF901205	8	05	5/16"	3/4"-16	30,5	59	33,5	24		250
XJF901205SW22	8	05	5/16"	3/4"-16	30,5	59	33,5	22		250
XJF900906	10	06	3/8"	9/16"-18	33,5	64	36,5	19		250
XJF901206	10	06	3/8"	3/4"-16	33,5	64	36	24		250
XJF901206SW22	10	06	3/8"	3/4"-16	33,5	64	36	22		250
XJF901406	10	06	3/8"	7/8"-14	33,5	64	38,5	27		200
XJF901208	12	08	1/2"	3/4"-16	41	74	40,5	24		250
XJF901208SW22	12	08	1/2"	3/4"-16	41	74	40,5	22		250
XJF901408	12	08	1/2"	7/8"-14	41	74	42	27		200
XJF901708	12	08	1/2"	1 1/16"-12	41	74	45,5	32		200
XJF901410	16	10	5/8"	7/8"-14	49	85	47	27		200
XJF901710	16	10	5/8"	1 1/16"-12	49	85	50,5	32		200
XJF901412	20	12	3/4"	7/8"-14	58	99	58	27		200
XJF901712	20	12	3/4"	1 1/16"-12	58	99	56,5	32		200
XJF901912	20	12	3/4"	1 3/16"-12	58	99	64	36		160
XJF902112	20	12	3/4"	1 5/16"-12	58	99	65	41		160
XJF901716	25	16	1"	1 1/16"-12	74	129	76	32		200
XJF902116	25	16	1"	1 5/16"-12	74	129	72	41		160
XJF902616	25	16	1"	1 5/8"-12	74	129	77	50		125
XJF902620	32	20	1 1/4"	1 5/8"-12	92	153	87	50		125
XJF903020	32	20	1 1/4"	1 7/8"-12	92	153	91	55		100
XJF903024	40	24	1 1/2"	1 7/8"-12	108	179	100	55		100
XJF904032	50	32	2"	2 1/2"-12	142	218	126	70		80

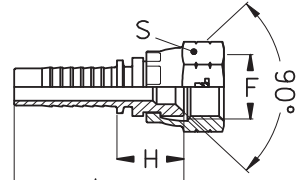
DKJ45

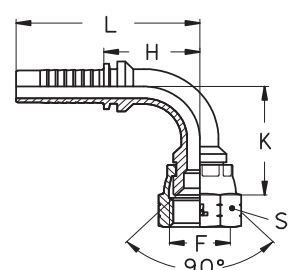
J.I.C. 45° SWEPT ELBOW - 74° CONE SEAT - ONE PIECE - CRIMPED NUT
SLANGKOPPELING 45° J.I.C. - CONUS 74° - UIT EEN STUK, MOER GEPERST



TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)						Maximum WP
	DN	Size	Inch	F	H	L	K	S			bar
XJF450703	5	03	3/16"	7/16"-20	34,5	60,5	13	15			350
XJF450703SW14	5	03	3/16"	7/16"-20	34,5	60,5	13	14			350
XJF450803	5	03	3/16"	1/2"-20	36	62	14,5	17			350
XJF450704	6	04	1/4"	7/16"-20	37	66	13,5	15			350
XJF450704SW14	6	04	1/4"	7/16"-20	37	66	13,5	14			350
XJF450804	6	04	1/4"	1/2"-20	38	67	14,5	17			350
XJF450904	6	04	1/4"	9/16"-18	39,5	68	15,5	19			250
XJF450805	8	05	5/16"	1/2"-20	46	74,5	16	17			350
XJF450905	8	05	5/16"	9/16"-18	47,5	76	17,5	19			250
XJF451205	8	05	5/16"	3/4"-16	49,5	77,5	19	24			250
XJF451205SW22	8	05	5/16"	3/4"-16	49,5	77,5	19	22			250
XJF450906	10	06	3/8"	9/16"-18	53,5	84	19,5	19			250
XJF451206	10	06	3/8"	3/4"-16	53,5	84	19,5	24			250
XJF451206SW22	10	06	3/8"	3/4"-16	53,5	84	19,5	22			250
XJF451406	10	06	3/8"	7/8"-14	55	85,5	21	27			200
XJF451208	12	08	1/2"	3/4"-16	61,5	94,5	22	24			200
XJF451208SW22	12	08	1/2"	3/4"-16	61,5	94,5	22	22			250
XJF451408	12	08	1/2"	7/8"-14	62,5	95,5	23	27			200
XJF451708	12	08	1/2"	1 1/16"-12	65	98	25,5	32			200
XJF451410	16	10	5/8"	7/8"-14	76	112	24	27			200
XJF451710	16	10	5/8"	1 1/16"-12	78,5	114,5	26	32			200
XJF451412	20	12	3/4"	7/8"-14	87	128	33,5	27			200
XJF451712	20	12	3/4"	1 1/16"-12	85,5	126,5	32	32			200
XJF451912	20	12	3/4"	1 3/16"-12	88,5	129,5	35	36			160
XJF452112	20	12	3/4"	1 5/16"-12	91	132	37,5	41			160
XJF451716	25	16	1"	1 1/16"-12	113	167,5	44,5	32			200
XJF452116	25	16	1"	1 5/16"-12	108	162,5	40	41			160
XJF452616	25	16	1"	1 5/8"-12	111	166	43	50			125
XJF452620	32	20	1 1/4"	1 5/8"-12	136	196,5	52	50			125
XJF453020	32	20	1 1/4"	1 7/8"-12	141	201,5	57	55			100
XJF453024	40	2'4	1 1/2"	1 7/8"-12	161	231	57	55			100
XJF454032	50	32	2"	2 1/2"-12	206	281	66,5	70			80

		SAE MALE - 90° CONE SLANGKOPPELING BU.DR. SAE - CONUS 90°									
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)						
	DN	Size	Inch	F	H	L	S				
											
XMS1005	8	05	5/16"	5/8"-18	28,2	56,7	17				
XMS1006	10	06	3/8"	5/8"-18	28,2	58,7	17				
XMS1712	20	12	3/4"	1 1/16"-14	40,5	81,5	27				

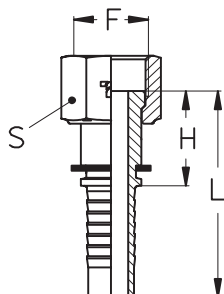
		SAE FEMALE - 90° CONE SEAT - CRIMPED NUT SLANGKOPPELING SAE - CONUS 90° - UIT EEN STUK, MOER GEPERST									
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)						
	DN	Size	Inch	F	H	L	S				
											
XFS1005	8	05	5/16"	5/8"-18	17,6	46,1	22				
XFS1006	10	06	3/8"	5/8"-18	16,6	47,1	22				
XFS1712	20	12	3/4"	1 1/16"-14	23,2	64,2	32				

		SAE 90° SWEPT ELBOW - 90° CONE SEAT - ONE PIECE - CRIMPED NUT SLANGKOPPELING 90° SAE - CONUS 90° - UIT EEN STUK, MOER GEPERST									
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)						
	DN	Size	Inch	F	H	L	K	S			
											
XFS901005	8	05	5/16"	5/8"-18	31	59	30	22			
XFS901006	10	06	3/8"	5/8"-18	34	64	33	22			
XFS901712	20	12	3/4"	1 1/16"-14	58	99	56	32			

		SAE 45° SWEPT ELBOW - 90° CONE SEAT - ONE PIECE - CRIMPED NUT SLANGKOPPELING 45° SAE - CONUS 90° - UIT EEN STUK, MOER GEPERST									
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)						
	DN	Size	Inch	F	H	L	K	S			
											
XFS451005	8	05	5/16"	5/8"-18	47	75	18	22			
XFS451006	10	06	3/8"	5/8"-18	50	81	18	22			
XFS451712	20	12	3/4"	1 1/16"-14	85	125	32	32			

ORFS

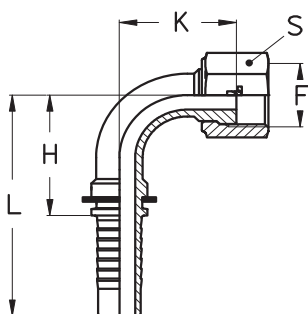
ORFS FEMALE - LOOSE NUT SLANGKOPPELING WARTEL ORFS - LOSSE MOER



TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)					Maximum WP bar
	DN	Size	Inch		H	L	S			
XFU0904	6	04	1/4"	9/16"-18	21	49,5	17			450
XFU1104	6	04	1/4"	11/16"-16	23	51,5	22			450
XFU1105	8	05	5/16"	11/16"-16	23	51,5	22			350
XFU1106	10	06	3/8"	11/16"-16	23	53,5	22			445
XFU1306	10	06	3/8"	13/16"-16	26	56,5	24			445
XFU1308	12	08	1/2"	13/16"-16	26,5	59,5	24			415
XFU1608	12	08	1/2"	1"-14	30	63	30			415
XFU1908	12	08	1/2"	1 3/16"-12	33	66	36			415
XFU1610	16	10	5/8"	1"-14	30	66	30			350
XFU1910	16	10	5/8"	1 3/16"-12	33	69	36			350
XFU1912	20	12	3/4"	1 3/16"-12	33,5	74,5	36			350
XFU2312	20	12	3/4"	1 7/16"-12	34,5	75,5	41			350
XFU2316	25	16	1"	1 7/16"-12	35,5	90,5	41			280
XFU2720	32	20	1 1/4"	1 11/16"-12	36	97	50			210
XFU3224	40	24	1 1/2"	2"-12	36,5	107	60			185

ORFS90

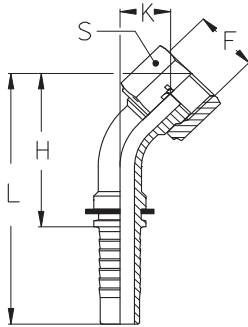
90° ORFS SWEPT ELBOW - ONE PIECE - LOOSE NUT SLANGKOPPELING 90° ORFS - EEN STUK - LOSSE MOER



TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)					Maximum WP bar
	DN	Size	Inch		H	L	K	S		
XFU900904	6	04	1/4"	9/16"-18	24	52	21	17		450
XFU901104	6	04	1/4"	11/16"-16	24	52	24	22		450
XFU901105	8	05	5/16"	11/16"-16	31	59	26,5	22		350
XFU901106	10	06	3/8"	11/16"-16	34	64	29,5	22		445
XFU901306	10	06	3/8"	13/16"-16	34	64	32,5	24		445
XFU901308	12	08	1/2"	13/16"-16	41	74	35,5	24		415
XFU901608	12	08	1/2"	1"-14	41	74	39	30		415
XFU901908	12	08	1/2"	1 3/16"-12	41	74	42	36		415
XFU901610	16	10	5/8"	1"-14	49	85	43,5	30		350
XFU901910	16	10	5/8"	1 3/16"-12	49	85	46,5	36		350
XFU901912	20	12	3/4"	1 3/16"-12	58	99	52	36		350
XFU902312	20	12	3/4"	1 7/16"-12	58	99	56	41		350
XFU902316	25	16	1"	1 7/16"-12	74	129	61,5	41		280
XFU902720	32	20	1 1/4"	1 11/16"-12	92	153	73,5	50		210
XFU903224	40	24	1 1/2"	2"-12	108	179	82,5	60		185

ORFS45

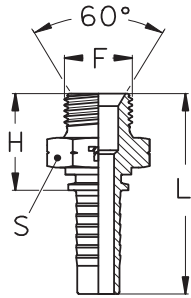
45° ORFS SWEPT ELBOW - ONE PIECE - LOOSE NUT SLANGKOPPELING 45° ORFS - EEN STUK - LOSSE MOER



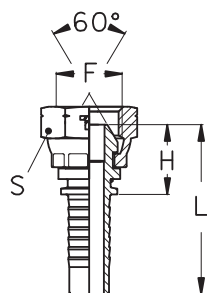
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)						Maximum WP bar
	DN	Size	Inch	F	H	L	K	S			
XFU450904	6	04	1/4"	9/16"-18	35,5	64	11,5	17			450
XFU451104	6	04	1/4"	11/16"-16	37	65,5	13	22			450
XFU451105	8	05	5/16"	11/16"-16	44,5	73	14	22			350
XFU451106	10	06	3/8"	11/16"-16	48,5	79	14,5	22			445
XFU451306	10	06	3/8"	13/16"-16	51	81,5	17	24			445
XFU451308	12	08	1/2"	13/16"-16	58	91	18,5	24			415
XFU451608	12	08	1/2"	1"-14	60	93	21	30			415
XFU451908	12	08	1/2"	1 3/16"-12	62,5	95,5	23	36			415
XFU451610	16	10	5/8"	1"-14	73,5	109,5	21	30			350
XFU451910	16	10	5/8"	1 3/16"-12	75,7	111,5	23,5	36			350
XFU451912	20	12	3/4"	1 3/16"-12	82,5	123,5	29	36			350
XFU452312	20	12	3/4"	1 7/16"-12	85,5	126,5	32	41			350
XFU452316	25	16	1"	1 7/16"-12	103	157,5	34,5	41			280
XFU452720	32	20	1 1/4"	1 11/16"-12	127	187,5	43	50			210
XFU453224	40	24	1 1/2"	2"-12	141	219,5	45	60			185

AGM

METRIC MALE - 60° CONE SEAT
SLANGKOPPELING BU.DR. METRISCH - CONUS 60°



TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)					
	DN	Size	Inch		H	L	S			
XM61003	5	03	3/16"	M10x1	19	45	14			
XM61203	5	03	3/16"	M12x1,5	24	49	17			
XM61004	6	04	1/4"	M10x1	20	48	14			
XM61204	6	04	1/4"	M12x1,5	24	52	17			
XM61404	6	04	1/4"	M14x1,5	25	53	19			
XM61604	6	04	1/4"	M16x1,5	26	54	22			
XM61804	6	04	1/4"	M18x1,5	27	55	24			
XM61405	8	05	5/16"	M14x1,5	25	53	19			
XM61605	8	05	5/16"	M16x1,5	26	54	22			
XM61805	8	05	5/16"	M18x1,5	27	55	24			
XM61406	10	06	3/8"	M14x1,5	25	55	19			
XM61606	10	06	3/8"	M16x1,5	26	56	22			
XM61806	10	06	3/8"	M18x1,5	27	57	24			
XM62006	10	06	3/8"	M20x1,5	29	59	25			
XM62206	10	06	3/8"	M22x1,5	29	59	27			
XM61808	12	08	1/2"	M18x1,5	28	60	24			
XM62008	12	08	1/2"	M20x1,5	29	62	25			
XM62208	12	08	1/2"	M22x1,5	29	62	27			
XM62408	12	08	1/2"	M24x1,5	30	63	30			
XM62608	12	08	1/2"	M26x1,5	33	66	32			
XM62610	16	10	5/8"	M26x1,5	32	68	32			
XM62612	20	12	3/4"	M26x1,5	33	74	32			
XM63012	20	12	3/4"	M30x1,5	34	75	36			
XM63816	25	16	1"	M38x1,5	37	92	46			
XM64520	32	20	1 1/4"	M45x1,5	38	99	50			



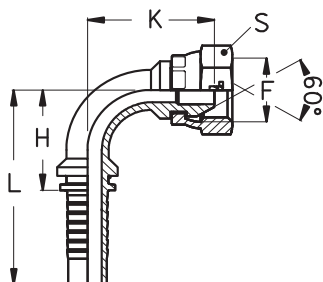
DKM

METRIC FEMALE - 60° CONE - CRIMPED NUT SLANGKOPPELING METRISCH - CONUS 60° - GEPERSTE MOER

TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)			
	DN	Size	Inch		H	L	S	
XF61003	5	4,8	3/16"	M10x1	19	44	14	
XF61203	5	4,8	3/16"	M12x1,5	19	44	15	
XF61004	6	6,3	1/4"	M10X1	19	47	14	
XF61204	6	6,3	1/4"	M12x1,5	19	47	15	
XF61404	6	6,3	1/4"	M14x1,5	18	47	17	
XF61604	6	6,3	1/4"	M16x1,5	20	49	22	
XF61804	6	6,3	1/4"	M18x1,5	20	49	22	
XF61405	8	7,9	5/16"	M14x1,5	18	47	17	
XF61605	8	7,9	5/16"	M16x1,5	20	49	22	
XF61805	8	7,9	5/16"	M18x1,5	20	49	22	
XF61406	10	9,5	3/8"	M14x1,5	18	49	17	
XF61606	10	9,5	3/8"	M16x1,5	20	51	22	
XF61806	10	9,5	3/8"	M18x1,5	20	51	22	
XF62006	10	9,5	3/8"	M20x1,5	22	53	27	
XF62206	10	9,5	3/8"	M22x1,5	22	53	27	
XF61808	12	12,7	1/2"	M18x1,5	21	54	22	
XF62008	12	12,7	1/2"	M20x1,5	23	56	27	
XF62208	12	12,7	1/2"	M22x1,5	23	56	27	
XF62408	12	12,7	1/2"	M24x1,5	23	56	30	
XF62608	12	12,7	1/2"	M26x1,5	25	58	32	
XF62610	16	15,9	5/8"	M26x1,5	25	61	32	
XF62612	20	19,1	3/4"	M26x1,5	26	67	32	
XF63012	20	19,1	3/4"	M30x1,5	26	67	36	
XF63816	25	25,4	1"	M38x1,5	30	85	46	
XF64520	32	31,8	1 1/4"	M45x1,5	34	95	50	

DKM90

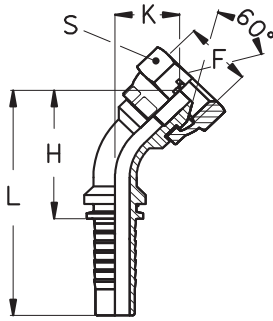
METRIC 90° SWEPT ELBOW - 60° CONE - ONE PIECE - CRIMPED NUT SLANGKOPPELING 90° METRISCH - CONUS 60° - 1 STUK - GEPERSTE MOER



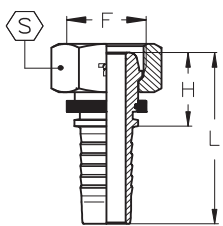
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)			
	DN	Size	Inch		H	L	K	S
XF6901003	5	4,8	3/16"	M10x1	21	47	25	14
XF6901203	5	4,8	3/16"	M12x1,5	21	47	28	15
XF6901004	6	6,3	1/4"	M10X1	24	52	16	14
XF6901204	6	6,3	1/4"	M12x1,5	24	52	28	15
XF6901404	6	6,3	1/4"	M14x1,5	24	52	28	17
XF6901604	6	6,3	1/4"	M16x1,5	24	52	31	22
XF6901804	6	6,3	1/4"	M18x1,5	24	52	31	22
XF6901405	8	7,9	5/16"	M14x1,5	31	59	31,5	17
XF6901605	8	7,9	5/16"	M16x1,5	31	59	33,5	22
XF6901805	8	7,9	5/16"	M18x1,5	31	59	33,5	22
XF6901406	10	9,5	3/8"	M14x1,5	34	64	35,5	17
XF6901606	10	9,5	3/8"	M16x1,5	34	64	40,5	22
XF6901806	10	9,5	3/8"	M18x1,5	34	64	40,5	22
XF6902006	10	9,5	3/8"	M20x1,5	34	64	40,5	27
XF6902206	10	9,5	3/8"	M22x1,5	34	64	40,5	27
XF6901808	12	12,7	1/2"	M18x1,5	41	74	42	22
XF6902008	12	12,7	1/2"	M20x1,5	41	74	44	27
XF6902208	12	12,7	1/2"	M22x1,5	41	74	44	27
XF6902408	12	12,7	1/2"	M24x1,5	41	74	45,5	30
XF6902608	12	12,7	1/2"	M26x1,5	41	74	49,5	32
XF6902610	16	15,9	5/8"	M26x1,5	49	85	54,5	32
XF6902612	20	19,1	3/4"	M26x1,5	58	99	60,5	32
XF6903012	20	19,1	3/4"	M30x1,5	58	99	65	36
XF6903816	25	25,4	1"	M38x1,5	74	129	79	46
XF6904520	32	31,8	1 1/4"	M45x1,5	92	179	89	50

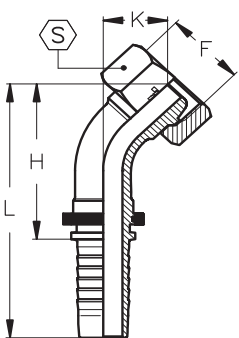
DKM45

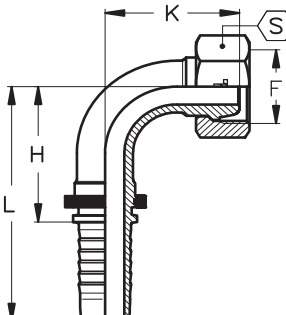
METRIC 45° SWEEP ELBOW - 60° CONE - ONE PIECE - CRIMPED NUT SLANGKOPPELING 45° METRISCH - CONUS 60° - 1 STUK - MOER GEPERST



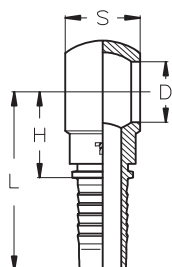
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					Maximum WP
	DN	Size	Inch	F	H	L	K	S		bar
XF6451003	5	4,8	3/16"	M10x1	36	61,5	14	14		
XF6451203	5	4,8	3/16"	M12x1,5	37,5	63	15,5	15		
XF6451004	6	6,3	1/4"	M10x1	39	67,5	15	14		
XF6451204	6	6,3	1/4"	M12x1,5	40	68,5	16,5	15		
XF6451404	6	6,3	1/4"	M14x1,5	40	68,5	16,5	17		
XF6451604	6	6,3	1/4"	M16x1,5	42,5	71	18,5	22		
XF6451804	6	6,3	1/4"	M18x1,5	42,5	71	18,5	22		
XF6451405	8	7,9	5/16"	M14x1,5	48	76,5	18	17		
XF6451605	8	7,9	5/16"	M16x1,5	49,5	78	19,5	22		
XF6451805	8	7,9	5/16"	M18x1,5	49,5	78	19,5	22		
XF6451406	10	9,5	3/8"	M14x1,5	53	83,5	19	17		
XF6451606	10	9,5	3/8"	M16x1,5	53,5	84	19,5	22		
XF6451806	10	9,5	3/8"	M18x1,5	53,5	84	19,5	22		
XF6452006	10	9,5	3/8"	M20x1,5	56,5	87	22,5	27		
XF6452206	10	9,5	3/8"	M22x1,5	56,5	87	22,5	27		
XF6451808	12	12,7	1/2"	M18x1,5	62,5	95,5	23	22		
XF6452008	12	12,7	1/2"	M20x1,5	64	97	24,5	27		
XF6452208	12	12,7	1/2"	M22x1,5	64	97	24,5	27		
XF6452408	12	12,7	1/2"	M24x1,5	65	98	25,5	30		
XF6452608	12	12,7	1/2"	M26x1,5	67,5	101	28	32		
XF6452610	16	15,9	5/8"	M26x1,5	81	117	29	32		
XF6452612	20	19,1	3/4"	M26x1,5	88,5	130	35	32		
XF6453012	20	19,1	3/4"	M30x1,5	91	132	38,5	36		
XF6453816	25	25,4	1"	M38x1,5	114	169	46	46		
XF6454520	32	31,8	1 1/4"	M45x1,5	138	199	54	50		

DIN 20078/3868	DKL	METRIC FEMALE - MULTISEAL METRISCH WARTEL - MULISEAL												
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)					Maximum W.P.	
			DN	Size	Inch	F	mm	H	L	S		bar	PSI	
		XFE140804	6	04	1/4"	M14x1,5	8	20	48	17			280	4000
		XFE161004	8	05	5/16"	M16x1,5	10	20	48	19			280	4000
		XFE181206	10	06	3/8"	M18x1,5	12	20	50	22			280	4000
		XFE221508	12	08	1/2"	M22x1,5	15	21	54	27			280	4000
		XFE261810	16	10	5/8"	M26x1,5	18	23	58	32			210	3000

DIN 20078/3868	DKL45	45° METRIC SWEPT ELBOW - MULTISEAL SLANGKOPPELING BOCHT 45° METRISCH - MULTISEAL												
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)					Maximum W.P.	
			DN	Size	Inch	F	mm	H	L	K	S	bar	PSI	
		XFE45140804	6	04	1/4"	M14x1,5	8	35	63	13	17		280	4000
		XFE45161005	8	05	5/16"	M16x1,5	10	37	65	15	19		280	4000
		XFE45181206	10	06	3/8"	M18x1,5	12	39	69	15	22		280	4000
		XFE45221508	12	08	1/2"	M22x1,5	15	45	78	17	27		280	4000
		XFE45261810	16	10	5/8"	M26x1,5	18	52	87	20	32		210	3000

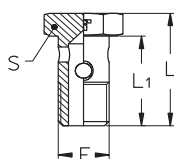
DIN 20078/3868	DKL90	90° METRIC SWEPT ELBOW - MULTISEAL SLANGKOPPELING 90° METRISCH - MULTISEAL												
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)					Maximum W.P.	
			DN	Size	Inch	F	mm	H	L	K	S	bar	PSI	
		XFE90140804	6	04	1/4"	M14x1,5	8	29	57	27	17		280	4000
		XFE90161005	8	05	5/16"	M16x1,5	10	31	59	30	19		280	4000
		XFE90181206	10	06	3/8"	M18x1,5	12	31	61	30	22		280	4000
		XFE90221508	12	08	1/2"	M22x1,5	15	37	70	36	27		280	4000
		XFE90261810	16	10	5/8"	M26x1,5	18	45	81	42	32		210	3000

METRIC BANJO - ONEPIECE METRISCHE BANJO - UIT 1 DEEL



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Dimensions (mm)					
	DN	Size	Inch	F	H	L	D	S		
XQB0203	5	03	3/16"	M10x1	20	45	10,2	10		
XQE1203	5	03	3/16"	M12x1,5	21,1	46,1	12,1	12		
XQE1403	5	03	3/16"	M14x1,5	22,6	47,6	14,2	14		
XQB0204	6	04	1/4"	M10x1	23	51	10,2	10		
XQE1204	6	04	1/4"	M12x1,5	23	51	12,1	12		
XQE1404	6	04	1/4"	M14x1,5	23	51	14	14		
XQE1604	6	04	1/4"	M16x1,5	26,5	54,5	16,2	17,5		
XQE1804	6	04	1/4"	M18x1,5	28,5	56,5	18,2	20,5		
XQE1205	8	05	5/16"	M12x1,5	23,5	51,5	12,1	12		
XQE1405	8	05	5/16"	M14x1,5	24	52	14,2	14		
XQE1605	8	05	5/16"	M16x1,5	26,5	54,5	16,2	17,5		
XQE1805	8	05	5/16"	M18x1,5	28,5	56,5	18,2	20,5		
XQE1406	10	06	3/8"	M14x1,5	24	54,5	14,2	14		
XQE1606	10	06	3/8"	M16x1,5	24	54,5	16,2	17,5		
XQE1806	10	06	3/8"	M18x1,5	27	57,5	18,2	20,5		
XQE2006	10	06	3/8"	M20x1,5	32	62,5	20,2	23		
XQE2206	10	06	3/8"	M22x1,5	32	62,5	22,2	22,5		
XQB1208	12	08	1/2"	M26x1,5	39	72	26,5	29,5		
XQE1808	12	08	1/2"	M18x1,5	28,1	61,1	18,2	20,5		
XQE2008	12	08	1/2"	M20x1,5	28,5	61,5	20,2	23		
XQE2208	12	08	1/2"	M22x1,5	28,5	61,5	22,2	22,5		
XQB1210	16	10	5/8"	M26x1,5	34,7	70,5	26,5	29,5		
XQE2210	16	10	5/8"	M22x1,5	27,2	63	22,2	22,5		
XQB1212	20	12	3/4"	M26x1,5	37,5	78	26,5	29,5		
XQE3012	20	12	3/4"	M30x1,5	41,5	82	30,2	30		
XQE3016	25	16	1"	M30x1,5	43	94	30,2	37		

METRIC BANJO BOLT METRISCHE BANJO BOUT

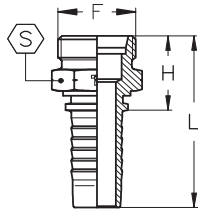


TIEFFE Part.N.		Thread Filettatura	Dimensions (mm)					
		F	L	L1	S			
QME10		M10x1	26	21,5	14			
QME12		M12x1,5	31	25,5	17			
QME14		M14x1,5	37,5	30,5	19			
QME16		M16x1,5	40	32,5	22			
QME18		M18x1,5	44	36,5	24			
QME20		M20x1,5	48	39,5	27			
QME22		M22x1,5	50	41,5	28			
QME26		M26x1,5	58	48,5	32			
QME30		M30x1,5	64	53	36			

ISO 12151-2
DIN 20078

CEL

METRIC MALE - 24° CONE SEAT - LIGHT DUTY
METRISCHE BU.DR. KOPPELING - 24° CONUS - LICHTE SERIE

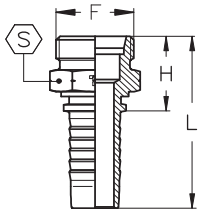


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	F	mm	H	L	S			bar	PSI
	XME120603	5	03	3/16"	M12x1,5	6	21	46	12			280
XME140803	5	03	3/16"	M14x1,5	8	21	46	14			280	4000
XME120604	6	04	1/4"	M12x1,5	6	21	49	12			280	4000
XME140804	6	04	1/4"	M14x1,5	8	21	49	14			280	4000
XME161004	6	04	1/4"	M16x1,5	10	23	51	17			280	4000
XME181204	6	04	1/4"	M18x1,5	12	23	51	19			280	4000
XME161005	8	05	5/16"	M16x1,5	10	23	51	17			280	4000
XME181205	8	05	5/16"	M18x1,5	12	23	51	19			280	4000
XME161006	10	06	3/8"	M16x1,5	10	23	53	17			280	4000
XME181206	10	06	3/8"	M18x1,5	12	23	53	19			280	4000
XME221506	10	06	3/8"	M22x1,5	15	25	56	22			280	4000
XME221508	12	08	1/2"	M22x1,5	15	26	59	22			280	4000
XME261808	12	08	1/2"	M26x1,5	18	28	61	27			210	3000
XME261810	16	10	5/8"	M26x1,5	18	28	64	27			210	3000
XME302210	16	10	5/8"	M30x2	22	30	66	30			210	3000
XME261812	20	12	3/4"	M26x1,5	18	29	70	27			210	3000
XME302212	20	12	3/4"	M30x2	22	31	72	30			210	3000
XME362816	25	16	1"	M36x2	28	35	86	36			165	2350
XME453520	32	20	1 1/4"	M45x2	35	40	97	46			125	1800
XME524224	40	24	1 1/2"	M52x2	42	42	106	55			100	1450

ISO 12151-2
DIN 20078

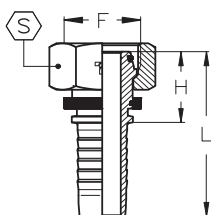
CES

METRIC MALE - 24° CONE SEAT - HEAVY DUTY
METRISCHE BU.DR. KOPPELING - 24° CONUS - ZWARE SERIE



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	F	mm	H	L	S			bar	PSI
	XME140603	5	03	3/16"	M14x1,5	6	23	48	14			420
XME160803	5	03	3/16"	M16x1,5	8	23	48	17			420	6000
XME140604	6	04	1/4"	M14x1,5	6	23	51	14			450	6500
XME160804	6	04	1/4"	M16x1,5	8	23	51	17			450	6500
XME181004	6	04	1/4"	M18x1,5	10	24	52	19			450	6500
XME201204	6	04	1/4"	M20x1,5	12	25	53	22			450	6500
XME181005	8	05	5/16"	M18x1,5	10	24	52	19			350	5000
XME201205	8	05	5/16"	M20x1,5	12	25	53	22			350	5000
XME181006	10	06	3/8"	M18x1,5	10	24	55	19			450	6500
XME201206	10	06	3/8"	M20x1,5	12	25	56	22			450	6500
XME221406	10	06	3/8"	M22x1,5	14	27	58	22			450	6500
XME221408	12	08	1/2"	M22x1,5	14	28	61	22			420	6000
XME241608	12	08	1/2"	M24x1,5	16	29	62	24			420	6000
XME302010	16	10	5/8"	M30x2	20	32	68	30			350	5000
XME302012	20	12	3/4"	M30x2	20	33	74	30			350	5000
XME362512	20	12	3/4"	M36x2	25	37	78	36			350	5000
XME362516	25	16	1"	M36x2	25	39	90	36			280	4000
XME423016	25	16	1"	M42x2	30	43	94	46			280	4000
XME423020	32	20	1 1/4"	M42x2	30	44	101	46			210	3000
XME523820	32	20	1 1/4"	M52x2	38	48	105	55			210	3000
XME523824	40	24	1 1/2"	M52x2	38	48	112	55			185	2600

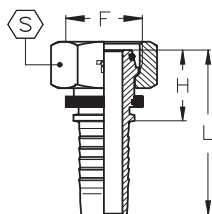
ISO 12151-2 DIN 20078	DKOL	METRIC FEMALE - 24° O-RING CONE - LIGHT DUTY METRISCHE WARTELKOPPELING - CONUS 24° O-RING - LICHTE SERIE											
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)				Maximum W.P.	
			DN	Size	Inch	F	mm	H	L	S	O'Ring	bar	PSI
	XFEO120603	5	03	3/16"	M12x1,5	6	21	46	14		5x1	280	4000
	XFEO140803	5	03	3/16"	M14x1,5	8	21	46	17		6x1,5	280	4000
	XFEO120604	6	04	1/4"	M12x1,5	6	23	51	17		5x1	280	4000
	XFEO140804	6	04	1/4"	M14x1,5	8	22	50	17		6x1,5	280	4000
	XFEO161004	6	04	1/4"	M16x1,5	10	24	52	19		7,5x1,5	280	4000
	XFEO181204	6	04	1/4"	M18x1,5	12	24	52	22		9x1,5	280	4000
	XFEO161005	8	05	5/16"	M16x1,5	10	24	52	19		7,5x1,5	280	4000
	XFEO181205	8	05	5/16"	M18x1,5	12	24	52	22		9x1,5	280	4000
	XFEO161006	10	06	3/8"	M16x1,5	10	23	54	19		7,5x1,5	280	4000
	XFEO181206	10	06	3/8"	M18x1,5	12	24	54	22		9x1,5	280	4000
	XFEO221506	10	06	3/8"	M22x1,5	15	24	54	27		12x2	280	4000
	XFEO221508	12	08	1/2"	M22x1,5	15	24	57	27		12x2	280	4000
	XFEO261808	12	08	1/2"	M26x1,5	18	26	59	32		15x2	210	3000
	XFEO261810	16	10	5/8"	M26x1,5	18	27	62	32		15x2	210	3000
	XFEO302210	16	10	5/8"	M30x2	22	28	64	36		20x2	210	3000
	XFEO261812	20	12	3/4"	M26x1,5	18	34	75	32		15x2	210	3000
	XFEO302212	20	12	3/4"	M30x2	22	31	71	36		20x2	210	3000
	XFEO362816	25	16	1"	M36x2	28	32	83	41		26x2	165	2350
	XFEO453520	32	20	1 1/4"	M45x2	35	36	94	50		32x2,5	125	1800
	XFEO524224	40	24	1 1/2"	M52x2	42	37	102	60		38x2,5	100	1450



* Swaged nut

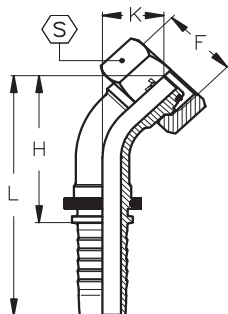
** Tieffe nut

ISO 12151-2 DIN 20078	DKOS	METRIC FEMALE - 24° O-RING CONE - HEAVY DUTY METRISCHE WARTELKOPPELING - CONUS 24° O-RING - ZWARE SERIE											
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)				Maximum W.P.	
			DN	Size	Inch	F	mm	H	L	S	O'Ring	bar	PSI
	XFEO140603	5	03	3/16"	M14x1,5	6	21	46	17		5x1	420	6000
	XFEO160803	5	03	3/16"	M16x1,5	8	21	46	19		6x1,5	420	6000
	XFEO140604	6	04	1/4"	M14x1,5	6	23	51	17		5x1	450	6500
	XFEO160804	6	04	1/4"	M16x1,5	8	22	50	19		6x1,5	450	6500
	XFEO181004	6	04	1/4"	M18x1,5	10	24	52	22		7,5x1,5	450	6500
	XFEO201204	6	04	1/4"	M20x1,5	12	24	52	24		9x1,5	450	6500
	XFEO181005	8	05	5/16"	M18x1,5	10	24	52	22		7,5x1,5	350	5000
	XFEO201205	8	05	5/16"	M20x1,5	12	24	52	24		9x1,5	350	5000
	XFEO181006	10	06	3/8"	M18x1,5	10	25	55	22		7,5x1,5	450	6500
	XFEO201206	10	06	3/8"	M20x1,5	12	24	54	24		9x1,5	450	6500
	XFEO221406	10	06	3/8"	M22x1,5	14	28	58	27		10x2	450	6500
	XFEO221408	12	08	1/2"	M22x1,5	14	28	61	27		10x2	420	6000
	XFEO241608	12	08	1/2"	M24x1,5	16	29	62	30		12x2	420	6000
	XFEO302010	16	10	5/8"	M30x2	20	33	69	36		16,3x2,4	350	5000
	XFEO302012	20	12	3/4"	M30x2	20	36	76	36		16,3x2,4	350	5000
	XFEO362512	20	12	3/4"	M36x2	25	38	78	46		20,3x2,4	350	5000
	XFEO362512SW41	20	12	3/4"	M36x2	25	38	78	41		20,3x2,4	350	5000
	XFEO362516	25	16	1"	M36x2	25	40	91	46		22x2	280	4000
	XFEO423016	25	16	1"	M42x2	30	40	91	50		25,3x2,4	280	4000
	XFEO423020	32	20	1 1/4"	M42x2	30	41	99	50		25,3x2,4	210	3000
	XFEO523820	32	20	1 1/4"	M52x2	38	45	103	60		33,3x2,4	210	3000
	XFEO523824	40	24	1 1/2"	M52x2	38	46	110	60		33,3x2,4	185	2600



* Swaged nut

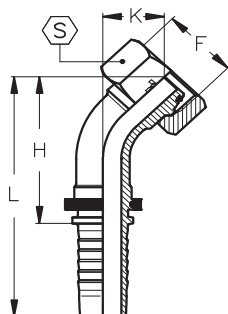
ISO 12151-2 DIN 20078	DKOL45	45° METRIC SWEEP ELBOW - 24° O-RING CONE - LIGHT DUTY METRISCHE BOCHT 45° - 24° CONUS MET ORING - LICHTE SERIE												
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)					Maximum W.P.	
			DN	Size	Inch	F	mm	H	L	K	S	O'Ring	bar	PSI
	XFEO45120603	5	03	3/16"	M12x1,5	6	34	59	14	14	5x1	280	4000	
	XFEO45140803	5	03	3/16"	M14x1,5	8	35	60	14	17	6x1,5	280	4000	
	XFEO45120604	6	04	1/4"	M12x1,5	6	35	63	14	17	5x1	280	4000	
	XFEO45140804	6	04	1/4"	M14x1,5	8	36	64	14	17	6x1,5	280	4000	
	XFEO45161004	6	04	1/4"	M16x1,5	10	38	66	16	19	7,5x1,5	280	4000	
	XFEO45181204	6	04	1/4"	M18x1,5	12	39	67	17	22	9x1,5	280	4000	
	XFEO45161005	8	05	5/16"	M16x1,5	10	39	67	17	19	7,5x1,5	280	4000	
	XFEO45181205	8	05	5/16"	M18x1,5	12	39	67	18	22	9x1,5	280	4000	
	XFEO45161005	10	06	3/8"	M16x1,5	10	39	69	16	19	7,5x1,5	280	4000	
	XFEO45181206	10	06	3/8"	M18x1,5	12	40	71	18	22	9x1,5	280	4000	
	XFEO45221506	10	06	3/8"	M22x1,5	15	42	72	19	27	12x2	280	4000	
	XFEO45221508	12	08	1/2"	M22x1,5	15	46	79	19	27	12x2	280	4000	
	XFEO45261808	12	08	1/2"	M26x1,5	18	47	80	21	32	15x2	210	3000	
	XFEO45261810	16	10	5/8"	M26x1,5	18	53	89	22	32	15x2	210	3000	
	XFEO45302210	16	10	5/8"	M30x2	22	54	90	23	36	20x2	210	3000	
	XFEO45261812	20	12	3/4"	M26x1,5	18	66	107	29	32	15x2	210	3000	
	XFEO45302212	20	12	3/4"	M30x2	22	62	103	25	36	20x2	210	3000	
	XFEO45362816	25	16	1"	M36x2	28	80	131	31	41	26x2	165	2350	
	XFEO45453520	32	20	1 1/4"	M45x2	35	96	154	40	50	32x2,5	125	1800	
	XFEO45524224	40	24	1 1/2"	M52x2	42	115	179	48	60	38x2,5	100	1450	



* Swaged nut

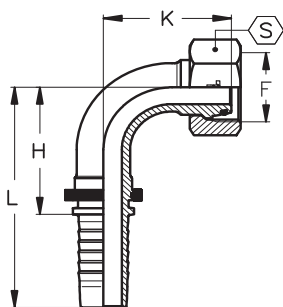
** Tieffe nut

ISO 12151-2 DIN 20078	DKOS45	45° METRIC SWEEP ELBOW - 24° O-RING CONE - HEAVY DUTY METRISCHE BOCHT 45° - 24° CONUS MET ORING - ZWARE SERIE												
		TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)					Maximum W.P.	
			DN	Size	Inch	F	mm	H	L	K	S	O'Ring	bar	PSI
	XFEO45140603	5	03	3/16"	M14x1,5	6	34	59	14	17	5x1	420	6000	
	XFEO45160803	5	03	3/16"	M16x1,5	8	35	60	14	19	6x1,5	420	6000	
	XFEO45140604	6	04	1/4"	M14x1,5	6	35	63	14	17	5x1	450	6500	
	XFEO45160804	6	04	1/4"	M16x1,5	8	36	64	14	19	6x1,5	450	6500	
	XFEO45181004	6	04	1/4"	M18x1,5	10	38	66	16	22	7,5x1,5	450	6500	
	XFEO45201204	6	04	1/4"	M20x1,5	12	39	67	17	24	9x1,5	450	6500	
	XFEO45181005	8	05	5/16"	M18x1,5	10	39	67	17	22	7,5x1,5	350	5000	
	XFEO45201205	8	05	5/16"	M20x1,5	12	39	67	18	24	9x1,5	350	5000	
	XFEO45181006	10	06	3/8"	M18x1,5	10	40	70	17	22	7,5x1,5	450	6500	
	XFEO45201206	10	06	3/8"	M20x1,5	12	40	71	18	24	9x1,5	450	6500	
	XFEO45221406	10	06	3/8"	M22x1,5	14	42	72	19	27	10x2	450	6500	
	XFEO45221408	12	08	1/2"	M22x1,5	14	46	79	20	27	10x2	420	6000	
	XFEO45241608	12	08	1/2"	M24x1,5	16	47	80	21	30	12x2	420	6000	
	XFEO45302010	16	10	5/8"	M30x2	20	56	92	25	36	16,3x2,4	350	5000	
	XFEO45302012	20	12	3/4"	M30x2	20	64	105	27	36	16,3x2,4	350	5000	
	XFEO45362512	20	12	3/4"	M36x2	25	64	105	28	46	20,3x2,4	350	5000	
	XFEO45362512SW41	20	12	3/4"	M36x2	25	64	105	28	41	20,3x2,4	350	5000	
	XFEO45362516	25	16	1"	M36x2	25	82	133	34	41	22x2	280	4000	
	XFEO45423016	25	16	1"	M42x2	30	80	131	31	50	25,3x2,4	280	4000	
	XFEO45423020	32	20	1 1/4"	M42x2	30	96	154	41	50	25,3x2,4	210	3000	
	XFEO45523820	32	20	1 1/4"	M52x2	38	94	152	38	60	33,3x2,4	210	3000	
	XFEO45523824	40	24	1 1/2"	M52x2	38	115	180	49	60	33,3x2,4	185	2600	



* Swaged nut

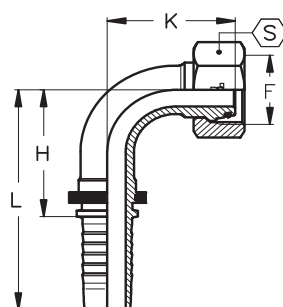
ISO 12151-2 DIN 20078	DKOL90		90° METRIC SWEEP ELBOW - 24° O-RING CONE - LIGHT DUTY METRISCHE BOCHT 90° - 24° CONUS MET ORING - LICHTE SERIE												
			TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)					Maximum W.P.	
				DN	Size	Inch	F	mm	H	L	K	S	O'Ring	bar	PSI
	XFE090120603	5	03	3/16"	M12x1,5	6	27	52	28	14	5x1	280	4000		
	XFE090140803	5	03	3/16"	M14x1,5	8	27	52	28	17	6x1,5	280	4000		
	XFE090120604	6	04	1/4"	M12x1,5	6	26	53	26	17	5x1	280	4000		
	XFE090140804	6	04	1/4"	M14x1,5	8	29	57	29	17	6x1,5	280	4000		
	XFE090161004	6	04	1/4"	M16x1,5	10	29	57	30	19	7,5x1,5	280	4000		
	XFE090181204	6	04	1/4"	M18x1,5	12	29	57	32	22	9x1,5	280	4000		
	XFE090161005	8	05	5/16"	M16x1,5	10	31	59	33	19	7,5x1,5	280	4000		
	XFE090181205	8	05	5/16"	M18x1,5	12	28	56	32	22	9x1,5	280	4000		
	XFE090161006	10	06	3/8"	M16x1,5	10	31	61	31	19	7,5x1,5	280	4000		
	XFE090181206	10	06	3/8"	M18x1,5	12	31	61	33	22	9x1,5	280	4000		
	XFE090221506	10	06	3/8"	M22x1,5	15	31	61	35	27	12x2	280	4000		
	XFE090221508	12	08	1/2"	M22x1,5	15	37	70	38	27	12x2	280	4000		
	XFE090261808	12	08	1/2"	M26x1,5	18	37	70	40	32	15x2	210	3000		
	XFE090261810	16	10	5/8"	M26x1,5	18	44	80	45	32	15x2	210	3000		
	XFE090302210	16	10	5/8"	M30x2	22	44	80	47	36	20x2	210	3000		
	XFE090261812	20	12	3/4"	M26x1,5	18	54	94	57	32	15x2	210	3000		
	XFE090302212	20	12	3/4"	M30x2	22	54	94	52	36	20x2	210	3000		
	XFE090362816	25	16	1"	M36x2	28	70	121	66	41	26x2	165	2350		
	XFE090453520	32	20	1 1/4"	M45x2	35	84	141	83	50	32x2,5	125	1800		
	XFE090524224	40	24	1 1/2"	M52x2	42	100	164	100	60	38x2,5	100	1450		



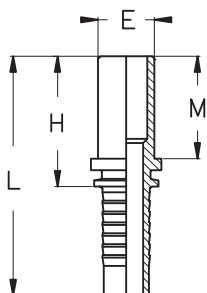
* Swaged nut

** Tieffe nut

ISO 12151-2 DIN 20078	DKOS90		90° METRIC SWEEP ELBOW - 24° O-RING CONE - HEAVY DUTY METRISCHE BOCHT 90° - 24° CONUS MET ORING - ZWARE SERIE												
			TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)					Maximum W.P.	
				DN	Size	Inch	F	mm	H	L	K	S	O'Ring	bar	PSI
	XFE090140603	5	03	3/16"	M14x1,5	6	27	52	28	17	5x1	420	6000		
	XFE090160803	5	03	3/16"	M16x1,5	8	27	52	28	19	6x1,5	420	6000		
	XFE090140604	6	04	1/4"	M14x1,5	6	25	53	26	17	5x1	450	6500		
	XFE090160804	6	04	1/4"	M16x1,5	8	29	57	29	19	6x1,5	450	6500		
	XFE090181004	6	04	1/4"	M18x1,5	10	29	57	30	22	7,5x1,5	450	6500		
	XFE090201204	6	04	1/4"	M20x1,5	12	29	57	32	24	9x1,5	450	6500		
	XFE090181005	8	05	5/16"	M18x1,5	10	31	59	33	22	7,5x1,5	350	5000		
	XFE090201205	8	05	5/16"	M20x1,5	12	28	56	32	24	9x1,5	350	5000		
	XFE090181006	10	06	3/8"	M18x1,5	10	30	61	33	22	7,5x1,5	450	6500		
	XFE090201206	10	06	3/8"	M20x1,5	12	31	61	33	24	9x1,5	450	6500		
	XFE090221406	10	06	3/8"	M22x1,5	14	34	64	37	27	10x2	450	6500		
	XFE090221408	12	08	1/2"	M22x1,5	14	39	71	41	27	10x2	420	6000		
	XFE090241608	12	08	1/2"	M24x1,5	16	39	71	42	30	12x2	420	6000		
	XFE090302010	16	10	5/8"	M30x2	20	44	80	49	36	16,3x2,4	350	5000		
	XFE090302012	20	12	3/4"	M30x2	20	54	94	55	36	16,3x2,4	350	5000		
	XFE090362512	20	12	3/4"	M36x2	25	54	94	57	46	20,3x2,4	350	5000		
	XFE090362512SW41	20	12	3/4"	M36x2	25	54	94	57	41	20,3x2,4	350	5000		
	XFE090362516	25	16	1"	M36x2	25	70	121	70	46	22x2	280	4000		
	XFE090423016	25	16	1"	M42x2	30	70	121	66	50	25,3x2,4	280	4000		
	XFE090423020	32	20	1 1/4"	M42x2	30	84	141	84	50	25,3x2,4	210	3000		
	XFE090523820	32	20	1 1/4"	M52x2	38	84	141	80	60	33,3x2,4	210	3000		
	XFE090523824	40	24	1 1/2"	M52x2	38	100	164	101	60	33,3x2,4	185	2600		

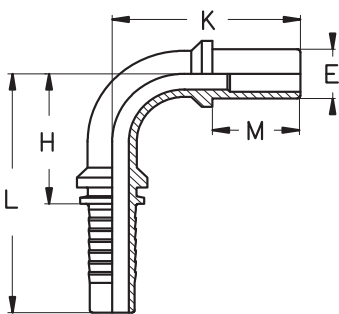


* Swaged nut

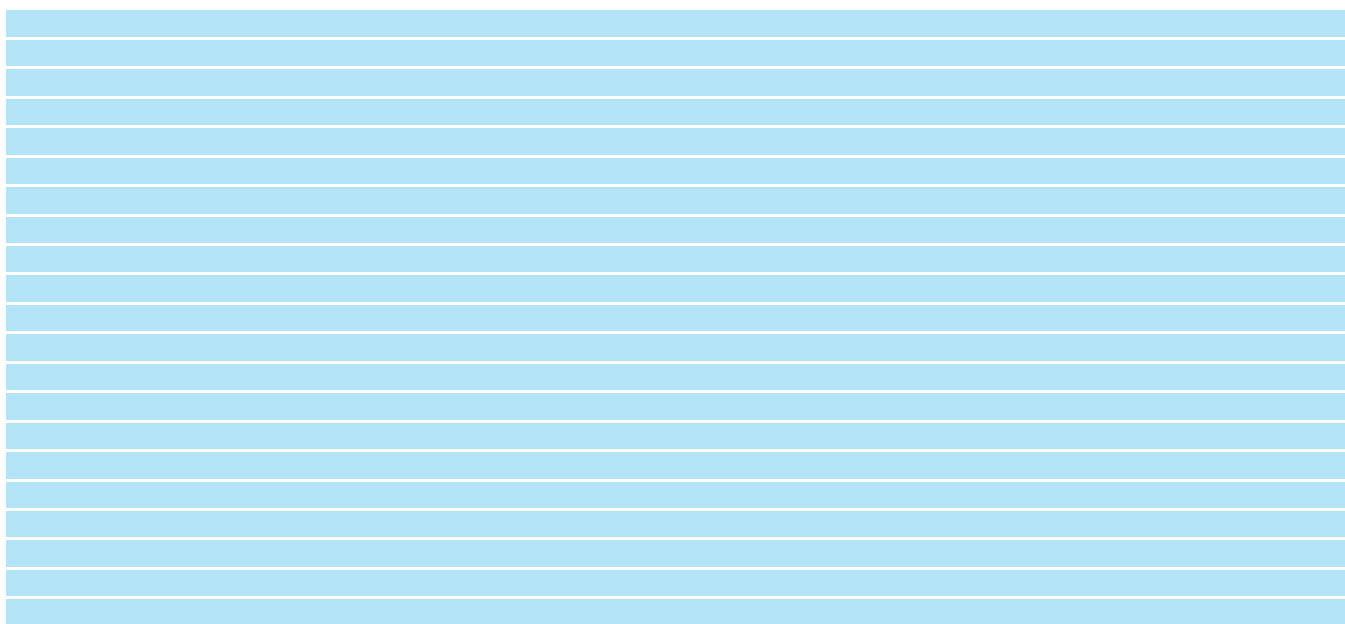
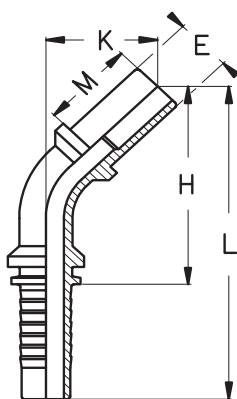


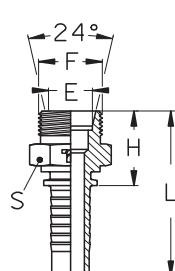
BEL BES	METRIC STANDPIPE METRISCHE STANDPIJP											
	TIEFFE Part. N.	Hose I.D. Ø interno tubo			E	Dimensions (mm)						Maximum WP bar
		DN	Size	Inch		mm	H	L	M			
XEZ0603	5	03	3/16"	6	29,5	55	23					415
XEZ0803	5	03	3/16"	8	29,5	55	23					415
XEZ0604	6	04	1/4"	6	27,5	56	21					320
XEZ0804	6	04	1/4"	8	29,5	58	23					450
XEZ1004	6	04	1/4"	10	31,5	60	25					450
XEZ1204	6	04	1/4"	12	32,5	61	25					450
XEZ1005	8	05	5/16"	10	31,5	60	25					350
XEZ1205	8	05	5/16"	12	31,5	59	25					350
XEZ1006	10	06	3/8"	10	28,5	59	22					330
XEZ1206	10	06	3/8"	12	31,5	62	25					445
XEZ1406	10	06	3/8"	14	34,5	65	28					445
XEZ1506	10	06	3/8"	15	30,5	61	24					250
XEZ1408	12	08	1/2"	14	35,5	68,5	28					275
XEZ1508	12	08	1/2"	15	31,5	64,5	24					250
XEZ1608	12	08	1/2"	16	36,5	69,5	29					415
XEZ1808	12	08	1/2"	18	33,5	66,5	26					160
XEZ1810	16	10	5/8"	18	33,5	69,5	26					160
XEZ2010	16	10	5/8"	20	42,5	78,5	35					350
XEZ2210	16	10	5/8"	22	35,5	71,5	28					160
XEZ1812	20	12	3/4"	18	34,5	75,5	26					160
XEZ2012	20	12	3/4"	20	43,5	84,5	35					215
XEZ2212	20	12	3/4"	22	36,5	77,5	28					160
XEZ2512	20	12	3/4"	25	47,5	88,5	39					350
XEZ2516	25	16	1"	25	49	104	39					165
XEZ2816	25	16	1"	28	39	94	29					100
XEZ3016	25	16	1"	30	53	108	43					250
XEZ3020	32	20	1 1/4"	30	53,5	114,5	43					210
XEZ3520	32	20	1 1/4"	35	45,5	106,5	35					100
XEZ3820	32	20	1 1/4"	38	58,5	119,5	48					210
XEZ3824	40	24	1 1/2"	38	59,5	130	48					170
XEZ4224	40	24	1 1/2"	42	47,5	118	36					100

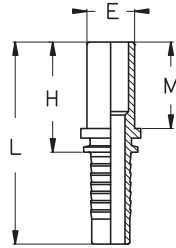
TIEFFE Part. N.	90° METRIC STANDPIPE - ONE PIECE STANDPIJP METRISCH 90° - UIT 1 STUK										
	Hose I.D. Ø interno tubo			E mm	Dimensions (mm)						Maximum WP bar
	DN	Size	Inch		H	L	K	M			
XEZ900603	5	03	3/16"	6	21	47	37,5	23			415
XEZ900803	5	03	3/16"	8	21	47	37,5	23			415
XEZ900604	6	04	1/4"	6	24	52	39	21			320
XEZ900804	6	04	1/4"	8	24	52	39	23			450
XEZ901004	6	04	1/4"	10	24	52	41	25			450
XEZ901204	6	04	1/4"	12	24	52	42,5	25			450
XEZ901005	8	05	5/16"	10	31	59	45	25			350
XEZ901205	8	05	5/16"	12	31	59	45	25			350
XEZ901006	10	06	3/8"	10	34	64	48	22			330
XEZ901206	10	06	3/8"	12	34	64	49	25			445
XEZ901406	10	06	3/8"	14	34	64	52	28			445
XEZ901506	10	06	3/8"	15	34	64	48	24			250
XEZ901408	12	08	1/2"	14	41	74	57,5	28			275
XEZ901508	12	08	1/2"	15	41	74	53,5	24			250
XEZ901608	12	08	1/2"	16	41	74	58,5	29			415
XEZ901808	12	08	1/2"	18	41	74	55,5	26			160
XEZ901810	16	10	5/8"	18	49	85	61,5	26			160
XEZ902010	16	10	5/8"	20	49	85	70,5	35			350
XEZ902210	16	10	5/8"	22	49	85	60	28			160
XEZ901812	20	12	3/4"	18	58	99	69	26			160
XEZ902012	20	12	3/4"	20	58	99	78	35			215
XEZ902212	20	12	3/4"	22	58	99	71	28			160
XEZ902512	20	12	3/4"	25	58	99	82	39			350
XEZ902516	25	16	1"	25	74	129	99	39			165
XEZ902816	25	16	1"	28	74	129	89	29			100
XEZ903010	25	16	1"	30	74	129	96	43			250
XEZ903020	32	20	1 1/4"	30	92	153	110	43			210
XEZ903520	32	20	1 1/4"	35	92	153	107	35			100
XEZ903820	32	20	1 1/4"	38	92	153	115	48			210
XEZ903824	40	24	1 1/2"	38	108	179	128	48			170
XEZ904224	40	24	1 1/2"	42	108	179	120	36			100

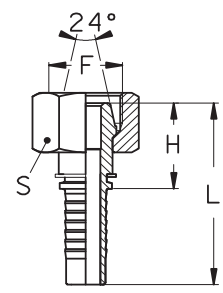


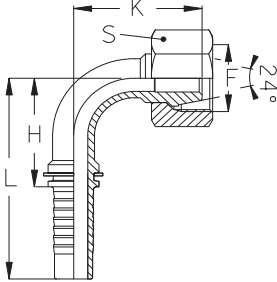
BEL 45 BES 45		45° METRIC STANDPIPE - ONE PIECE STANDPIJP METRISCH 45° - UIT 1 STUK										
TIEFFE Part. N.	Hose I.D. Ø interno tubo			E mm	Dimensions (mm)						Maximum WP bar	
	DN	Size	Inch		H	L	K	M				
XEZ450603	5	03	3/16"	6	44,5	70	22,5	23				415
XEZ450803	5	03	3/16"	8	44,5	70	22,5	23				415
XEZ450604	6	04	1/4"	6	48	77	24	21				320
XEZ450804	6	04	1/4"	8	48	76,5	24	23				450
XEZ451004	6	04	1/4"	10	49,5	78	25,5	25				450
XEZ451204	6	04	1/4"	12	50,5	79	26,5	25				450
XEZ451005	8	05	5/16"	10	51,5	80	27,5	25				350
XEZ451205	8	05	5/16"	12	57,5	86	27,5	25				350
XEZ451006	10	06	3/8"	10	62	92,5	27,5	22				330
XEZ451206	10	06	3/8"	12	62,5	93	28,5	25				445
XEZ451406	10	06	3/8"	14	64,5	95	30,5	28				445
XEZ451506	10	06	3/8"	15	61,5	92,5	27,5	24				250
XEZ451408	12	08	1/2"	14	73,5	106,5	34	28				275
XDEZ451508	12	08	1/2"	15	70,5	103,5	31	24				250
XEZ451608	12	08	1/2"	16	74	107	34,5	29				415
XEZ451808	12	08	1/2"	18	72	105	32,5	26				160
XEZ451810	16	10	5/8"	18	86,5	122,5	34	26				160
XEZ452010	16	10	5/8"	20	92,5	128,5	40,5	35				350
XEZ452210	16	10	5/8"	22	85,5	121,5	33	28				160
XEZ451812	20	12	3/4"	18	94,5	135,5	41	26				160
XEZ452012	20	12	3/4"	20	100,5	141,5	47	35				215
XEZ452212	20	12	3/4"	22	96	137	42,5	28				160
XEZ452512	20	12	3/4"	25	103,5	144,5	50	39				350
XEZ452516	25	16	1"	25	131	186	63	39				165
XEZ452816	25	16	1"	28	124	178	56	29				100
XEZ453016	25	16	1"	30	126,5	181,5	58,5	43				250
XEZ453020	32	20	1 1/4"	30	152,5	213,5	69	43				210
XEZ453520	32	20	1 1/4"	35	153	214	69	35				100
XEZ453820	32	20	1 1/4"	38	156	217	72,5	48				210
XEZ453824	40	24	1 1/2"	38	184	254	79	48				170
XEZ454224	40	24	1 1/2"	42	175	246	71	36				100

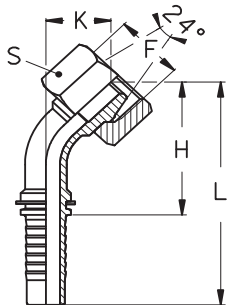


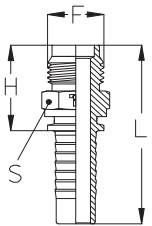
AGF		METRIC MALE 24° CONE SEAT - FRENCH TYPE METRISCHE BU.DR. KOPPELING 24° CONUS - FRANSE SERIE											
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto	Tube	Dimensions (mm)							
	DN	Size	Inch	F	mm	H	L	E	S				
	XMG201304	6	04	1/4"	M20x1,5	13,25	26,7	55,2	13,25	22			
	XMG201305	8	05	5/16"	M20x1,5	13,25	26,7	55,2	13,25	22			
	XMG201306	10	06	3/8"	M20x1,5	13,25	26,7	57,2	13,25	22			
	XMG241706	10	06	3/8"	M24x1,5	16,75	30,2	60,7	16,75	27			
	XMG241708	12	08	1/2"	M24x1,5	16,75	30,7	63,7	16,75	27			
	XMG302108	12	08	1/2"	M30x1,5	21,25	31,2	64,2	21,25	32			
	XMG302110	16	10	5/8"	M30x1,5	21,25	31,2	67,2	21,25	32			
	XMG302112	20	12	3/4"	M30x1,5	21,25	31,7	73,2	21,25	32			
	XMG362712	20	12	3/4"	M36x1,5	26,75	31,7	73,2	26,75	36			
	XMG453316	25	16	1"	M45x1,5	33,50	37,2	92,2	33,50	46			
	XMG453324	32	20	1 1/4"	M45x1,5	33,50	38,2	99,2	33,50	46			

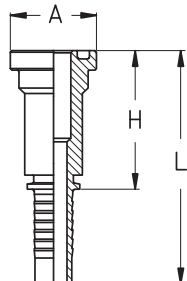
BEF		STRAIGHT STANDPIPE - FRENCH TYPE STANDPIJP - FRANSE SERIE										
TIEFFE Part. N.	Hose I.D. Ø interno tubo			E	Dimensions (mm)							
	DN	Size	Inch	mm	H	L	M					
	XFZ1304	6	04	1/4"	13,25	29,5	58,0	22				
	XFZ1305	8	05	5/16"	13,25	29,5	58,0	22				
	XFZ1306	10	06	3/8"	13,25	29,5	60,0	22				
	XFZ1706	10	06	3/8"	16,75	31,5	62,0	24				
	XFZ1708	12	08	1/2"	16,75	32,5	65,5	24				
	XFZ2108	12	08	1/2"	21,25	34,5	67,5	26				
	XFZ2110	16	10	5/8"	21,25	34,5	70,5	26				
	XFZ2112	20	12	3/4"	21,25	35,3	76,3	26				
	XFZ2712	20	12	3/4"	26,75	34,3	75,3	25				
	XFZ3316	25	16	1"	33,5	37,3	92,3	27				
	XFZ3320	32	20	1 1/4"	33,5	38,0	99,0	27				

DKF		METRIC FEMALE - 24° CONE - LOOSE NUT - FRENCH TYPE METRISCHE SLANGKOPPELING 24° CONUS - FRANSE SERIE										
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto	Tube	Dimensions (mm)						
	DN	Size	Inch	F	mm	H	L	S				
	XFG201304	6	04	1/4"	M20x1,5	13,25	23,8	52,3	24			
	XFG201305	8	05	5/16"	M20x1,5	13,25	23,8	52,3	24			
	XFG201306	10	06	3/8"	M20x1,5	13,25	23,8	54,3	24			
	XFG241706	10	06	3/8"	M24x1,5	16,75	27	57,5	30			
	XFG241708	12	08	1/2"	M24x1,5	16,75	27,3	60,3	30			
	XFG302108	12	08	1/2"	M30x1,5	21,25	30	63	36			
	XFG302110	16	10	5/8"	M30x1,5	21,25	30	66	36			
	XFG302112	20	12	3/4"	M30x1,5	21,25	30,6	71,6	36			
	XFG362712	20	12	3/4"	M36x1,5	26,75	33,6	74,5	41			
	XFG453316	25	16	1"	M45x1,5	33,50	33,9	88,9	50			
	XFG453320	32	20	1 1/4"	M45x1,5	33,50	34,5	95,5	50			

TIEFFE Part. N.		Hose I.D. Ø interno tubo			Thread Filetto	Tube	Dimensions (mm)					
		DN	Size	Inch	F	mm	H	L	K	S		
		DKF90	90° METRIC SWEPT ELBOW - 24° CONE - ONE PIECE - LOOSE NUT - FRENCH TYPE									
		BOCHT 90° METRISCH - CONUS 24° - 1 STUK - LOSSE MOER - FRANSE SERIE										
		XFG90201304	6	04	1/4"	M20x1,5	13,25		24,0	53	31,00	24
		XFG90201305	8	05	5/16"	M20x1,5	13,25		31,0	59	34,00	24
		XFG90201306	10	06	3/8"	M20x1,5	13,25		34,0	64	35,00	24
		XFG90241706	10	06	3/8"	M24x1,5	16,75		34,0	64	37,00	30
		XFG90241708	12	08	1/2"	M24x1,5	16,75		41,0	74	42,00	30
		XFG90302108	12	08	1/2"	M30x1,5	21,25		39,0	72	47,30	36
		XFG90302110	16	10	5/8"	M30x1,5	21,25		49,7	85,7	51,00	36
		XFG90302112	20	12	3/4"	M30x1,5	21,25		54,9	95,9	59,00	36
		XFG90362712	20	12	3/4"	M36x1,5	26,75		55,3	96,5	61,30	41
		XFG90453316	25	16	1"	M45x1,5	33,50		54,0	109	75,40	50
XFG90453320	32	20	1 1/4"	M45x1,5	33,50					50		

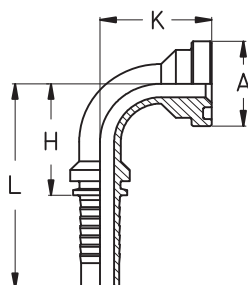
TIEFFE Part. N.		Hose I.D. Ø interno tubo			E	Tube	Dimensions (mm)					
		DN	Size	Inch	mm	mm	H	L	K	S		
		DKF45	45° METRIC SWEPT ELBOW - 24° CONE - ONE PIECE - LOOSE NUT - FRENCH TYPE									
		BOCHT 45° METRISCH - CONUS 24° - 1 STUK - LOSSE MOER - FRANSE SERIE										
		XFG45201304	6	04	1/4"	M20x1,5	13,25		41,5	70,0	21,3	24
		XFG45201305	8	05	5/16"	M20x1,5	13,25		48,6	77,2	21,5	24
		XFG45201306	10	06	3/8"	M20x1,5	13,25		54,3	84,7	21,9	24
		XFG45241706	10	06	3/8"	M24x1,5	16,75					30
		XFG45241708	12	08	1/2"	M24x1,5	16,75		65,0	97,7	23,8	30
		XFG45302108	12	08	1/2"	M30x1,5	21,25					36
		XFG45302110	16	10	5/8"	M30x1,5	21,25		76,5	112,6	30,5	36
		XFG45302112	20	12	3/4"	M30x1,5	21,25		86,7	127,7	31,8	36
		XFG45362712	20	12	3/4"	M36x1,5	26,75		90,4	131,4	36,7	41
		XFG45453316	25	16	1"	M45x1,5	33,50		113,3	168,2	45,5	50
XFG45453320	32	20	1 1/4"	M45x1,5	33,50					50		

TIEFFE Part. N.		Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)				
		DN	Size	Inch	F	H	L	S		
		METRIC MALE FOR AGRICULTUR COUPLINGS								
		METRISCHE BU.DR. KOPPELING VOOR LANDBOUW KOPPELINGEN								
		XM1805	8	05	5/16"	M18x1,5		29,3	57,8	19
		XM1806	10	06	3/8"	M18x1,5		29,3	59,8	19
XM1808	12	08	1/2"	M18x1,5		30,3	63,3	19		



* Straight Komatsu Flange
Flangia Diritta Komatsu

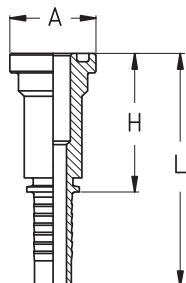
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Flange Flangia	Inch	Dimensions (mm)				Maximum WP bar
	DN	Size	Inch			H	L	K	A	
X30808B	12	08	1/2"	1/2"		48,5	81,5	30,2		350
X31208B	12	08	1/2"	3/4"		52,5	85,5	38,1		350
* X31008B	12	08	1/2"	5/8"		49,3	82,3	34,0		350
X30810B	16	10	5/8"	1/2"		46,5	82,5	30,2		350
* X31010B	16	10	5/8"	5/8"		49,3	85,3	34,0		350
X31210B	16	10	5/8"	3/4"		52,5	88,5	38,1		350
X30812B	20	12	3/4"	1/2"		36,0	77,0	30,2		350
X31212B	20	12	3/4"	3/4"		53,5	94,5	38,1		350
X31612B	20	12	3/4"	1"		59,5	100,5	44,5		350
X31216B	25	16	1"	3/4"		61,0	116,0	38,1		280
X31616B	25	16	1"	1"		60,5	115,5	44,5		280
X32016B	25	16	1"	1 1/4"		65,0	120,0	50,8		280
X31620B	32	20	1 1/4"	1"		61,0	122,0	44,5		210
X32020B	32	20	1 1/4"	1 1/4"		65,5	126,5	50,8		210
X32420B	32	20	1 1/4"	1 1/2"		70,0	130,0	60,3		210
X32424B	40	24	1 1/2"	1 1/2"		70,5	141,0	60,3		185
X33224B	40	24	1 1/2"	2"		77,5	147,5	71,4		185
X33232B	50	32	2"	2"		77,0	153,0	71,4		170
X34032B	50	32	2"	2 1/2"		77,5	153,5	84,1		170



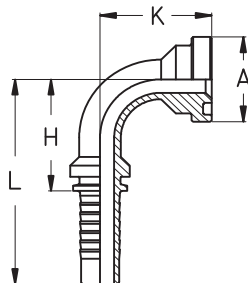
* 90° Komatsu Flange
Flangia 90° Komatsu

TIEFFE Part. N.	Hose I.D. Ø interno tubo			Flange Flangia	Inch	Dimensions (mm)				Maximum WP bar
	DN	Size	Inch			H	L	K	A	
X3900808B	12	08	1/2"	1/2"		41	74	42	30,2	350
X3901208B	12	08	1/2"	3/4"		41	74	47	38,1	350
* X3901008B	12	08	1/2"	5/8"		41	74	44	34,0	350
X3901008B	16	10	5/8"	1/2"		49	85	46	30,2	350
* X3901010B	16	10	5/8"	5/8"		49	85	49	34,0	350
X3901210B	16	10	5/8"	3/4"		49	85	52	38,1	350
X3900812B	20	12	3/4"	1/2"		58	99	51	30,2	350
X3901212B	20	12	3/4"	3/4"		58	99	57	38,1	350
X3901612B	20	12	3/4"	1"		58	99	62	44,5	350
X3901216B	25	16	1"	3/4"		74	129	69	38,1	280
X3901616B	25	16	1"	1"		74	129	69	44,5	280
X3902016B	25	16	1"	1 1/4"		74	129	70	50,8	280
X3901620B	32	20	1 1/4"	1"		92	153	78	44,5	210
X3902020B	32	20	1 1/4"	1 1/4"		92	153	87	50,8	210
X3902420B	32	20	1 1/4"	1 1/2"		92	153	88	60,3	210
X3902424B	40	24	1 1/2"	1 1/2"		108	179	101	60,3	185
X3903224B	40	24	1 1/2"	2"		108	179	104	71,4	185
X3903232B	50	32	2"	2"		142	218	134	71,4	170
X3904032B	50	32	2"	2 1/2"		142	218	143	84,1	170

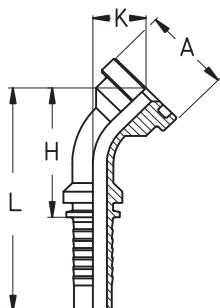
SFS		STRAIGHT SAE J518 FLANGE - 6000 PSI - ONE PIECE RECHTE FLENS SAE J518 - 6000 PSI - UIT 1 STUK										
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)					Maximum WP		
	DN	Size	Inch	Inch	H	L	A			bar		
X60808B	12	08	1/2"	1/2"	49,5	82,5	31,7			415		
X61208B	12	08	1/2"	3/4"	52,5	89,0	41,3			415		
X60810B	16	10	5/8"	1/2"	53,0	89,0	31,7			350		
X61210B	16	10	5/8"	3/4"	59,5	95,5	41,3			350		
X60812B	20	12	3/4"	1/2"	45,5	86,5	31,7			350		
X61212B	20	12	3/4"	3/4"	60,0	101,0	41,3			350		
X61612B	20	12	3/4"	1"	62,5	103,5	47,6			350		
X61216B	25	16	1"	3/4"	61,0	116,0	41,3			280		
X61616B	25	16	1"	1"	66,5	121,5	47,6			280		
X62016B	25	16	1"	1 1/4"	70,5	125,5	54,0			280		
X61620B	32	20	1 1/4"	1"	66,0	127,0	47,6			210		
X62020B	32	20	1 1/4"	1 1/4"	71,0	132,0	54,0			210		
X62420B	32	20	1 1/4"	1 1/2"	80,5	141,5	63,5			210		
X62424B	40	24	1 1/2"	1 1/2"	81,0	151,5	63,5			185		
X63224B	40	24	1 1/2"	2"	100,0	170,5	79,4			185		
X63232B	50	32	2"	2"	100,0	176,0	79,4			172		



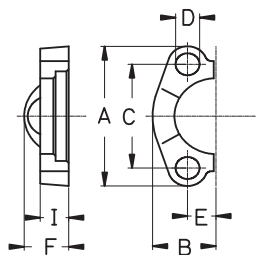
SFS90		90° SAE J518 FLANGE - 6000 PSI - ONE PIECE FLENS 90° SAE J518 - 6000 PSI - UIT 1 STUK										
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)					Maximum WP		
	DN	Size	Inch	Inch	H	L	K	A		bar		
X6900808B	12	08	1/2"	1/2"	41	74	42	31,7		415		
X6901208B	12	08	1/2"	3/4"	41	74	50	41,3		415		
X6900810B	16	10	5/8"	1/2"	49	85	47	31,7		350		
X6901210B	16	10	5/8"	3/4"	49	85	55	41,3		350		
X6900812B	20	12	3/4"	1/2"	58	99	52	31,7		350		
X6901212B	20	12	3/4"	3/4"	58	99	62	41,3		350		
X6901612B	20	12	3/4"	1"	58	99	70	47,6		350		
X6901216B	25	16	1"	3/4"	74	129	70	41,3		280		
X6901616B	25	16	1"	1"	74	129	75	47,6		280		
X6902016B	25	16	1"	1 1/4"	74	129	82	54,0		280		
X6901620B	32	20	1 1/4"	1"	92	153	84	47,6		210		
X6902020B	32	20	1 1/4"	1 1/4"	92	153	90	54,0		210		
X6902420B	32	20	1 1/4"	1 1/2"	92	153	96	63,5		210		
X6902424B	40	24	1 1/2"	1 1/2"	108	179	102	63,5		185		
X6903224B	40	24	1 1/2"	2"	108	179	118	79,4		185		
X6903232B	50	32	2"	2"	142	218	137	79,4		172		

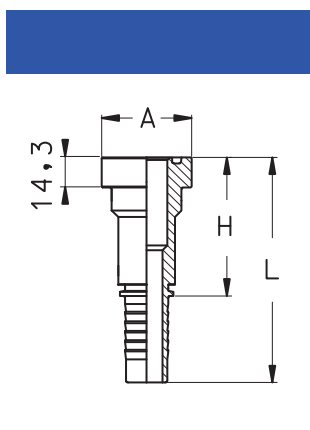


SFS45		45° SAE J518 FLANGE - 6000 PSI - ONE PIECE FLENS 45° SAE J518 - 6000 PSI - UIT 1 STUK										
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Flange Flangia Inch	Dimensions (mm)						Maximum WP bar	
	DN	Size	Inch		H	L	K	A				
X6450808B	12	08	1/2"	1/2"	63,0	96,0	23,5	31,7				415
X6451208B	12	08	1/2"	3/4"	68,5	101,5	29,0	41,3				415
X6450810B	16	10	5/8"	1/2"	76,0	112,0	23,5	31,7				350
X6451210B	16	10	5/8"	3/4"	81,5	117,5	29,5	41,3				350
X6450812B	20	12	3/4"	1/2"	83,0	124,0	29,5	31,7				350
X6451212B	20	12	3/4"	3/4"	89,5	130,5	36,0	41,3				350
X6451612B	20	12	3/4"	1"	95,5	136,5	41,5	47,6				350
X6451216B	25	16	1"	3/4"	108,5	163,5	40,5	41,3				280
X6451616B	25	16	1"	1"	112,0	167,0	44,0	47,6				280
X6452016B	25	16	1"	1 1/4"	116,5	171,5	48,5	54,0				280
X6451620B	32	20	1 1/4"	1"	134,0	195,0	50,5	47,6				210
X6452020B	32	20	1 1/4"	1 1/4"	138,5	200,0	55,0	54,0				210
X6452420B	32	20	1 1/4"	1 1/2"	143,0	203,5	59,0	63,5				210
X6452424B	40	24	1 1/2"	1 1/2"	162,5	233,0	58,5	63,5				185
X6453224B	40	24	1 1/2"	2"	166,0	244,0	70,0	79,4				185
X6453232B	50	32	2"	2"	212,5	289,0	73,5	79,4				172

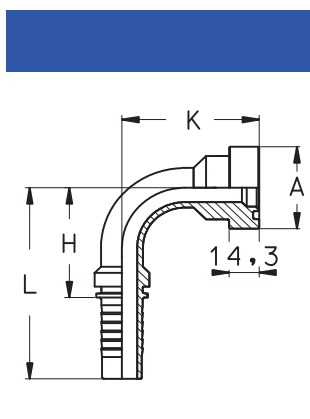


SAE J518 SPLIT FLANGE HALF - 6000 PSI FLENS HELFT SAE J518 - 6000 PSI											
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Flange Flangia Inch	Dimensions (mm)						
	DN	Size	Inch		A	B	C	D	E	F	I
FL608				1/2"	57	24	40,5	8,75	9,1	22	16
FL612				3/4"	72	30	50,8	10,5	11,9	28	19
FL616				1"	81	35	57,2	13	13,9	32	24
FL620				1 1/4"	96	39	66,7	15	15,8	38	27
FL624				1 1/2"	113	48	79,4	17	18,3	42	30
FL632				2"	134	57	96,8	21	22,2	52	37

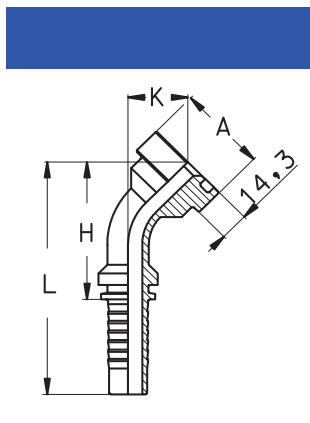




TIEFFE Part. N.	STRAIGHT "SUPERCAT" FLANGE - ONE PIECE RECHTE FLENS "SUPERCAT" - UIT 1 STUK											
	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)							Maximum WP
	DN	Size	Inch	Inch	H	L	A				bar	
XC1212	20	12	3/4"	3/4"	65,5	106,0	41,3				350	
XC1612	20	12	3/4"	1"	67,5	108,0	47,6				350	
XC1616	25	16	1"	1"	71,5	126,0	47,6				280	
XC2016	25	16	1"	1 1/4"	74,5	129,5	54,0				280	
XC2020	32	20	1 1/4"	1 1/4"	75,0	136,0	54,0				210	
XC2420	32	20	1 1/4"	1 1/2"	82,0	143,0	63,5				210	
XC2424	40	24	1 1/2"	1 1/2"	83,0	153,0	63,5				185	



TIEFFE Part. N.	90° "SUPERCAT" FLANGE - ONE PIECE FLENS 90° "SUPERCAT" - UIT 1 STUK											
	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)							Maximum WP
	DN	Size	Inch	Inch	H	L	K	A			bar	
XC901212	20	12	3/4"	3/4"	58	99	67	41,3			350	
XC901612	20	12	3/4"	1"	58	99	75	47,6			350	
XC901616	25	16	1"	1"	74	129	80	47,6			280	
XC902016	25	16	1"	1 1/4"	74	129	86	54,0			280	
XC902020	32	20	1 1/4"	1 1/4"	92	153	94	54,0			210	
XC902420	32	20	1 1/4"	1 1/2"	92	153	98	63,5			210	
XC902424	40	24	1 1/2"	1 1/2"	108	179	103	63,5			185	

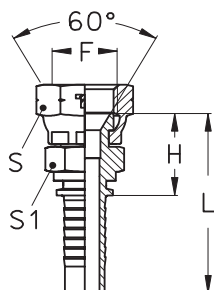


TIEFFE Part. N.	45° "SUPERCAT" FLANGE - ONE PIECE FLENS 45° "SUPERCAT" - UIT 1 STUK											
	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)							Maximum WP
	DN	Size	Inch	Inch	H	L	K	A			bar	
XC451212	20	12	3/4"	3/4"	94,0	135,0	40,0	41,3			350	
XC451612	20	12	3/4"	1"	99,0	140,0	45,0	47,6			350	
XC451616	25	16	1"	1"	111,5	170,5	47,5	47,6			280	
XC452016	25	16	1"	1 1/4"	120,0	175,0	51,5	54			280	
XC452020	32	20	1 1/4"	1 1/4"	141,5	202,5	58,0	54			210	
XC452420	32	20	1 1/4"	1 1/2"	144,5	205,5	60,5	63,5			210	
XC452424	40	24	1 1/2"	1 1/2"	163,5	234,0	60,0	63,5			185	

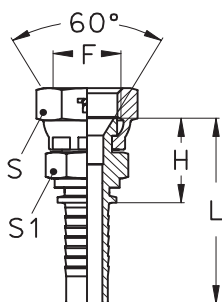
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)							Maximum WP
	DN	Size	Inch	Inch	H	L	K	A			bar	

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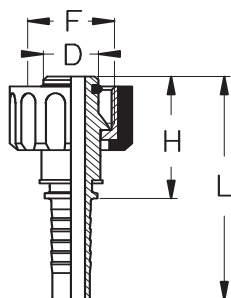
"KOMATSU" METRIC FEMALE - 60° CONE SEAT - CRIMPED NUT METR. WARTELKOPP. "KOMATSU" - CONUS 60° - GEKROMPEN MOER											
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)						
	DN	Size	Inch		H	L	S	S1			
	6	04	1/4"	M14x1,5	24,0	52,5	19	19			
	8	05	5/16"	M16x1,5	22,2	50,7	22	19			
	10	06	3/8"	M14x1,5	24,0	54,5	19	19			
	10	06	3/8"	M16x1,5	22,2	52,7	22	19			
	10	06	3/8"	M18x1,5	24,3	54,8	24	19			
	12	08	1/2"	M22x1,5	26,5	59,5	27	27			
	12	08	1/2"	M24x1,5	29,9	62,9	32	32			
	16	10	5/8"	M24x1,5	29,9	65,9	32	32			
	20	12	3/4"	M30x1,5	33,0	74,0	36	36			
	25	16	1"	M33x15	34,5	89,5	41	36			
	32	20	1 1/4"	M36x1,5	42,6	103,6	46	46			
	40	24	1 1/2"	M42x1,5	43,5	114,0	50	50			



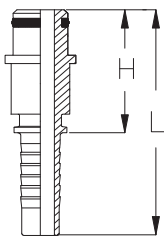
"TOYOTA" B.S.P. FEMALE - 60° CONE SEAT - CRIMPED NUT BSP WARTELKOPP. "TOYOTA" - CONUS 60° - GEKROMPEN MOER											
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)						
	DN	Size	Inch		H	L	S	S1			
	6	04	1/4"	1/4"	21,8	50,3	19	17			
	10	06	3/8"	3/8"	22,5	53,0	22	19			
	12	08	1/2"	1/2"	25,2	58,2	27	22			
	20	12	3/4"	3/4"	29,7	70,7	32	27			
	25	16	1"	1"	34,3	89,3	41	32			
	32	20	1 1/4"	1 1/4"	37,0	98,0	50	41			
	40	24	1 1/2"	1 1/2"	40,2	110,7	55	50			



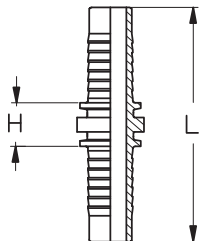
DKOK WASHCLEANER FEMALE - "FK" TYPE CLEANER SLANGKOPPELING - TYPE "FK"											
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)						
	DN	Size	Inch		H	L	D				
	6	04	1/4"	M22x1,5	36,5	65	14				
	8	05	5/16"	M22x1,5	36,5	65	14				
	10	06	3/8"	M22x1,5	36,5	67	14				



PISTOL WASHCLEANER JUNCTION SLANGKOPPELING PISTOOL CLEANER												
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Dimensions (mm)								
	DN	Size	Inch	H		L						
XZKO1004	6	04	1/4"	34,5		63,0						
XZKO1005	8	05	5/16"	34,5		63,0						



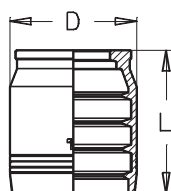
DOUBLE INSERT DUBBEL NIPPEL												
TIEFFE Part. N.	Hose I.D. Ø interno tubo			Dimensions (mm)								Maximum WP
	DN	Size	Inch	H		L						bar
XW0404	6	04	1/4"	13	70							450
XW0505	8	05	5/16"	13	70							350
XW0606	10	06	3/8"	13	74							445
XW0808	12	08	1/2"	15	81							415
XW1010	16	10	5/8"	15	87							350
XW1212	20	12	3/4"	17	99							350
XW1616	25	16	1"	20	130							280
XW2020	32	20	1 1/4"	21	143							210



NIET SCHILLEN

HSN4

NON SKIVE SWAGED FERRULE HULS NIET SCHILLEN

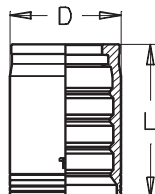


TIEFFE Part. N°	Hose I.D. Ø Interno tuHo			Dimensions (mm)		Applications <i>Applicazioni</i>					
	DN	SIZE	Inch	D	L						
HSN412	19	12	3/4"	43	50	4SP	4SH	R9R	R12	R13	R15
HSN416	25	16	1"	51	56	4SP	4SH	R9R	R12	R13	R15
HSN420	31	20	1 1/4"	61	68		4SH	R9R	R12		
HSN424	38	24	1 1/2"	70	86		4SH	R9R	R12		
HSN432	51	32	2"	85	100		4SH	R9R	R12		

SCHILLEN

HSS4

OUTSIDE SKIVE SWAGED FERRULE HULS VOOR ALLEEN BUITEN SCHILLEN

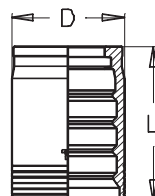


TIEFFE Part. N°	Hose I.D. Ø Interno tuHo			Dimensions (mm)		Applications <i>Applicazioni</i>					
	DN	SIZE	Inch	D	L						
HSS412	19	12	3/4"	38	54	4SP	4SH	R9R	R12	R13	R15
HSS416	25	16	1"	46	60	4SP	4SH	R9R	R12	R13	R15
HSS420	31	20	1 1/4"	54	72		4SH	R9R	R12		
HSS424	38	24	1 1/2"	62	90		4SH	R9R	R12		
HSS432	51	32	2"	76	102		4SH	R9R	R12		

SCHILLEN

HSS6

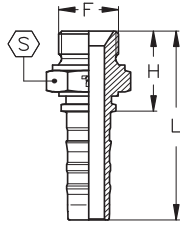
OUTSIDE SKIVE SWAGED FERRULE HULS VOOR BUITENSCHILLEN



TIEFFE Part. N°	Hose I.D. Ø Interno tuHo			Dimensions (mm)		Applications <i>Applicazioni</i>					
	DN	SIZE	Inch	D	L						
HSS620	31	20	1 1/4"	58	72	4SP				R13	R15
HSS624	38	24	1 1/2"	68	90	4SP				R13	R15
HSS632	51	32	2"	84	102	4SP				R13	

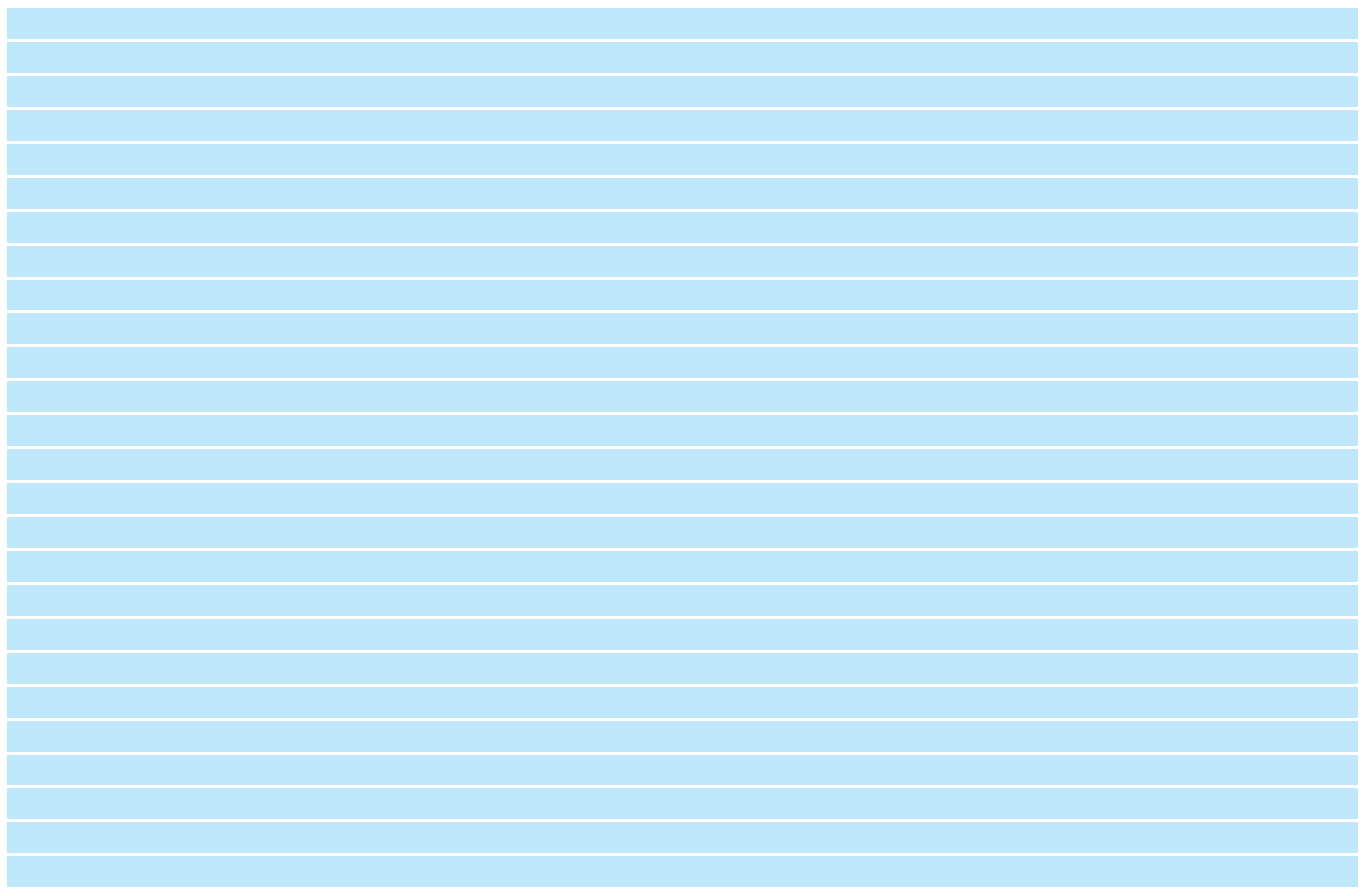
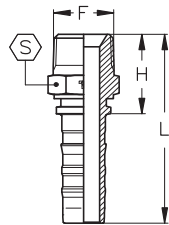
BS 5200

TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	F	H	L	S			bar	PSI
	ZBM1212	20	12	3/4"	3/4"-14	38	89	32			420
ZBM1612	20	12	3/4"	1"-11	43	94	41			420	6000
ZBM1616	25	16	1"	1"-11	45	101	41			420	6000
ZBM2016	25	16	1"	1 1/4"-11	48	104	50			345	5000
ZBM2020	32	20	1 1/4"	1 1/4"-11	50	117	50			345	5000
ZBM2420	32	20	1 1/4"	1 1/2"-11	53	120	55			345	5000
ZBM2424	40	24	1 1/2"	1 1/2"-11	55	138	55			345	5000
ZBM3232	50	32	2"	2"-11	63	159	70			345	5000



BSP TAPER

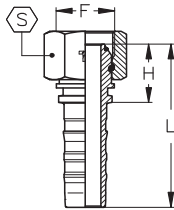
TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	F	H	L	S			bar	PSI
	ZBT1212	20	12	3/4"	3/4"-14	37	88	27			420
ZBT1616	25	16	1"	1"-11	44	101	36			380	5400
ZBT2020	32	20	1 1/4"	1 1/4"-11	51	118	46			325	4600
ZBT2424	40	24	1 1/2"	1 1/2"-11	54	137	50			290	4100
ZBT3232	50	32	2"	2"-11	64	160	65			250	3600



BS 5200

DKOR

BSP STRAIGHT FEMALE - 60° O'RING CONE - TIEFFE NUT WARTELKOPP. BSP (GAS) - CONUS 60° O'RING - TIEFFE MOER

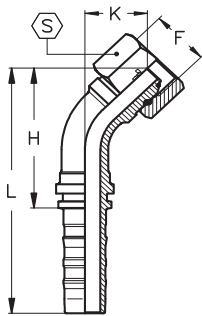


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura F	Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch		H	L	S	O'Ring	bar	PSI	
ZBF1212	20	12	3/4"	3/4"-14	29	80		32	17x1,5	420	6000
ZBF1612	20	12	3/4"	1"-11	32	83		41	22x1,5	420	6000
ZBF1616	25	16	1"	1"-11	34	90		41	22x1,5	420	6000
ZBF2016	25	16	1"	1 1/4"-11	37	93		50	28,3x1,78	345	5000
ZBF2020	32	20	1 1/4"	1 1/4"-11	39	106		50	28,3x1,78	345	5000
ZBF2420	32	20	1 1/4"	1 1/2"-11	41	107		60	33,05x1,78	345	5000
ZBF2424	40	24	1 1/2"	1 1/2"-11	43	125		60	33,05x1,78	345	5000
ZBF3232	50	32	2"	2"-11	47	143		75	44,17x1,78	345	5000

BS 5200

DKOR45

45° BSP SWEPT ELBOW - 60° O'RING CONE - TIEFFE NUT BOCHT 45° BSP (GAS) - CONUS 60° O'RING - TIEFFE MOER

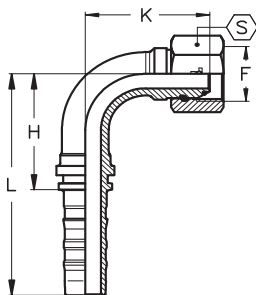


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura F	Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch		H	L	K	S	O'Ring	bar	PSI
ZBF451212	20	12	3/4"	3/4"-14	67	118	29	32	17x1,5	420	6000
ZBF451612	20	12	3/4"	1"-11	67	118	29	41	22x1,5	420	6000
ZBF451616	25	16	1"	1"-11	86	142	36	41	22x1,5	420	6000
ZBF452016	25	16	1"	1 1/4"-11	86	142	36	50	28,3x1,78	345	5000
ZBF452020	32	20	1 1/4"	1 1/4"-11	103	169	43	50	28,3x1,78	345	5000
ZBF452420	32	20	1 1/4"	1 1/2"-11	103	169	43	60	33,05x1,78	345	5000
ZBF452424	40	24	1 1/2"	1 1/2"-11	123	206	51	60	33,05x1,78	345	5000
ZBF453232	50	32	2"	2"-11	160	257	65	75	44,17x1,78	345	5000

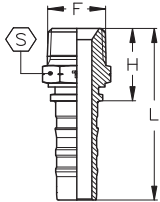
BS 5200

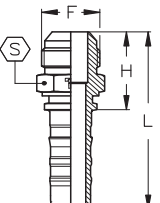
DKOR90

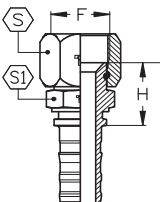
90° BSP SWEPT ELBOW - 60° O'RING CONE - TIEFFE NUT BOCHT 90° BSP (GAS) - CONUS 60° O'RING - TIEFFE MOER



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura F	Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch		H	L	K	S	O'Ring	bar	PSI
ZBF901212	20	12	3/4"	3/4"-14	55	106	57	32	17x1,5	420	6000
ZBF901612	20	12	3/4"	1"-11	55	106	57	41	22x1,5	420	6000
ZBF901616	25	16	1"	1"-11	71	128	72	41	22x1,5	420	6000
ZBF902016	25	16	1"	1 1/4"-11	71	128	72	50	28,3x1,78	345	5000
ZBF902020	32	20	1 1/4"	1 1/4"-11	87	154	88	50	28,3x1,78	345	5000
ZBF902420	32	20	1 1/4"	1 1/2"-11	87	154	88	60	33,05x1,78	345	5000
ZBF902424	40	24	1 1/2"	1 1/2"-11	105	188	104	60	33,05x1,78	345	5000
ZBF903232	50	32	2"	2"-11	140	237	137	75	44,17x1,78	345	5000

SAE J516		AGN		N.P.T.F. MALE - 60° CONE SEAT NPTF MALE KOPPELING - CONUS 60°								
TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					Maximum W.P.		
	DN	Size	Inch	F	H	L	S			bar	PSI	
												
ZNM1212	20	12	3/4"	3/4"-14	39	90	27			420	6000	
ZNM1612	20	12	3/4"	1"-11,5	47	98	36			380	5400	
ZNM1216	20	12	3/4"	3/4"-14	41,5	98	32			420	6000	
ZNM1616	20	12	3/4"	1"-11,5	48,5	105	36			380	5400	
ZNM2016	20	12	3/4"	1 1/4"-11,5	53	109,5	46			325	4600	
ZNM1620	32	20	1 1/4"	1"-11,5	52,5	119	41			380	5400	
ZNM2020	32	20	1 1/4"	1 1/4"-11,5	55	121,5	46			325	4600	
ZNM2420	32	20	1 1/4"	1 1/2"-11,5	59	125,5	50			290	4100	
ZNM2424	38	24	1 1/2"	1 1/2"-11,5	61	143,5	50			290	4100	
ZNM3224	38	24	1 1/2"	2"-11,5	67,5	150	65			250	3600	
ZNM3232	51	32	2"	2"-11,5	70,5	167	65			250	3600	

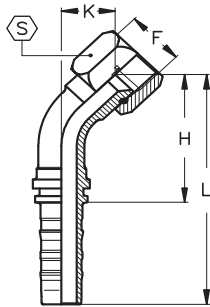
ISO12151/5 SAE J516		AGJ		J.I.C. MALE - 74° CONE JIC MALE KOPPELING - CONUS 74°								
TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					Maximum W.P.		
	DN	Size	Inch	F	H	L	S			bar	PSI	
												
ZJM1412	20	12	3/4"	7/8"-14	37	88	27			420	6000	
ZJM1712	20	12	3/4"	1 1/16"-12	40	91	27			420	6000	
ZJM1912	20	12	3/4"	1 3/16"-12	41,5	92,5	32			420	6000	
ZJM2112	20	12	3/4"	1 5/16"-12	43	94	36			380	5400	
ZJM1716	25	16	1"	1 1/16"-12	43	99,5	32			420	6000	
ZJM2116	25	16	1"	1 5/16"-12	45	101,5	36			380	5400	
ZJM2616	25	16	1"	1 5/8"-12	48	104,5	46			325	4600	
ZJM2120	32	20	1 1/4"	1 5/16"-12	48,5	115	41			380	5400	
ZJM2620	32	20	1 1/4"	1 5/8"-12	50,5	117	46			325	4600	
ZJM3020	32	20	1 1/4"	1 7/8"-12	55	121,5	50			290	4100	
ZJM3024	38	24	1 1/2"	1 7/8"-12	57	139,5	50			290	4100	
ZJM4024	38	24	1 1/2"	2 1/2"-12	65,5	148	65			250	3600	
ZJM4032	51	32	2"	2 1/2"-12	68,5	165	65			250	3600	

ISO12151/5 SAE J516		DKJ		J.I.C. FEMALE - 74° CONE SEAT - DOUBLE EXAGON - TIEFFE NUT JIC WARTELKOPPELING MET ZESKANT - CONUS 74° - TIEFFE MOER								
TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					Maximum W.P.		
	DN	Size	Inch	F	H	L	S	S1		bar	PSI	
												
ZJF1412	20	12	3/4"	7/8"-14	33	84	27	27		420	6000	
ZJF1712	20	12	3/4"	1 1/16"-12	34	85	32	27		420	6000	
ZJF1912	20	12	3/4"	1 3/16"-12	35,5	86,5	36	30		420	6000	
ZJF2112	20	12	3/4"	1 5/16"-12	38	89	41	32		380	5400	
ZJF1716	25	16	1"	1 1/16"-12	36,5	93	32	32		420	6000	
ZJF2116	25	16	1"	1 5/16"-12	39,5	96	41	32		380	5400	
ZJF2616	25	16	1"	1 5/8"-12	46	102,5	50	41		325	4600	
ZJF2120	32	20	1 1/4"	1 5/16"-12	45,5	112	41	41		380	5400	
ZJF2620	32	20	1 1/4"	1 5/8"-12	48	114,5	50	41		325	4600	
ZJF3020	32	20	1 1/4"	1 7/8"-12	51	117,5	60	46		290	4100	
ZJF3024	38	24	1 1/2"	1 7/8"-12	53	135,5	60	46		290	4100	
ZJF4024	38	24	1 1/2"	2 1/2"-12	66	148,5	75	60		250	3600	
ZJF4032	51	32	2"	2 1/2"-12	69	165,5	75	60		250	3600	

ISO12151/5
SAE J516

DKJ45

JIC 45° SWEPT ELBOW - 74° CONE SEAT - TIEFFE NUT
JIC WARTEL MET BOCHT 45° JIC - CONUS 74° - TIEFFE MOER

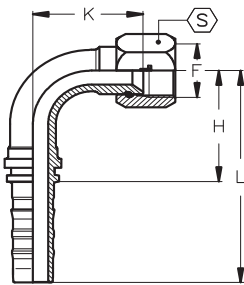


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	F	H	L	K	S	bar	PSI	
ZJF451412	20	12	3/4"	7/8"-14	66	117	28	27		420	6000
ZJF451712	20	12	3/4"	1 1/16"-12	63	114	25	32		420	6000
ZJF451912	20	12	3/4"	1 3/16"-12	63	114	25	36		420	6000
ZJF452112	20	12	3/4"	1 5/16"-12	63	114	25	41		380	5400
ZJF451716	25	16	1"	1 1/16"-12	85	141	35	32		420	6000
ZJF452116	25	16	1"	1 5/16"-12	82	138	32	41		380	5400
ZJF452616	25	16	1"	1 5/8"-12	82	138	32	50		325	4600
ZJF452120	32	20	1 1/4"	1 5/16"-12	100	167	41	41		380	5400
ZJF452620	32	20	1 1/4"	1 5/8"-12	98	164	38	50		325	4600
ZJF453020	32	20	1 1/4"	1 7/8"-12	98	164	38	60		290	4100
ZJF453024	38	24	1 1/2"	1 7/8"-12	118	201	46	60		290	4100
ZJF454024	38	24	1 1/2"	2 1/2"-12	118	201	46	75		250	3600
ZJF454032	51	32	2"	2 1/2"-12	157	253	62	75		250	3600

ISO12151/5
SAE J516

DKJ90

JIC 90° SWEPT ELBOW - 74° CONE SEAT - TIEFFE NUT
JIC WARTEL MET BOCHT 90° - CONUS 74° - TIEFFE MOER



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	F	H	L	K	S	bar	PSI	
ZJF901412	20	12	3/4"	7/8"-14	55	106	55	27		420	6000
ZJF901712	20	12	3/4"	1 1/16"-12	55	106	52	32		420	6000
ZJF901912	20	12	3/4"	1 3/16"-12	55	106	52	36		420	6000
ZJF902112	20	12	3/4"	1 5/16"-12	55	106	52	41		380	5400
ZJF901716	25	16	1"	1 1/16"-12	71	128	71	32		420	6000
ZJF902116	25	16	1"	1 5/16"-12	71	128	67	41		380	5400
ZJF902616	25	16	1"	1 5/8"-12	71	128	67	50		325	4600
ZJF902120	32	20	1 1/4"	1 5/16"-12	87	154	84	41		380	5400
ZJF902620	32	20	1 1/4"	1 5/8"-12	87	154	81	50		325	4600
ZJF903020	32	20	1 1/4"	1 7/8"-12	87	154	81	60		290	4100
ZJF903024	38	24	1 1/2"	1 7/8"-12	105	188	97	60		290	4100
ZJF904024	38	24	1 1/2"	2 1/2"-12	105	188	97	75		250	3500
ZJF904032	51	32	2"	2 1/2"-12	140	237	132	75		250	3500

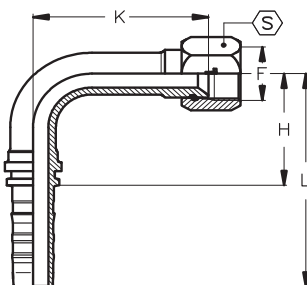
ISO12151/5
SAE J516

DKJ90

LANGE BOCHT

JIC 90° LONG DROP SWEPT ELBOW - 74° CONE SEAT - TIEFFE NUT

JIC WARTEL MET BOCHT 90° - CONUS 74° - TIEFFE MOER

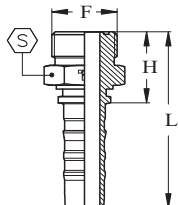


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	F	H	L	K	S	bar	PSI	
ZJF901712-K96	20	12	3/4"	1 1/16"-12	55	106	96	32		420	6000
ZJF902116-K116	25	16	1"	1 5/16"-12	71	128	116	41		380	5400
ZJF902616-K116	25	16	1"	1 5/8"-12	71	128	116	50		325	4600
ZJF902620-K136	32	20	1 1/4"	1 5/8"-12	87	154	136	50		325	4600
ZJF903024-K162	38	24	1 1/2"	1 7/8"-12	105	188	162	60		290	4100
ZJF904032-K220	51	32	2"	2 1/2"-12	140	137	220	75		250	3500

ISO12151/1
SAE J516

MRS

ORFS MALE
MANNELIJK ORFS



NRS

Hose I.D.
Ø interno tubo

Thread
Filettatura

Dimensions
(mm)

Maximum
W.P.

DN

Size

Inch

F

H

L

S

bar

PSI

ZFU1912

20

12

3/4"

1 3/16"-12

36

87

32

420

6000

ZFU2316

25

16

1"

1 7/16"-12

41

97

41

420

6000

ZMU2720

32

20

1 1/4"

1 11/16"-12

44

111

46

350

5000

ZMU3224

40

24

1 1/2"

2"-12

48

131

55

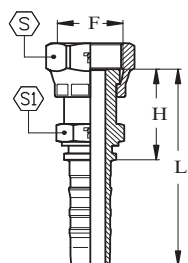
290

4200

ISO12151/1
SAE J516

FRC

DOUBLE EXAGON ORFS STRAIGHT FEMALE - PRESSED NUT
WARTELKOPPELING ORFS - DUBBELE ZESKANT - GEPERSTE MOER



TIEFFE
Part.N.

Hose I.D.
Ø interno tubo

Thread
Filettatura

Dimensions
(mm)

Maximum
W.P.

DN

Size

Inch

F

H

L

S

S1

bar

PSI

ZFU1612

20

12

3/4"

1"-14

43

94

30

420

6000

ZFU1912

20

12

3/4"

1 3/16"-12

46

97

36

420

6000

ZFU2312

20

12

3/4"

1 7/16"-12

49

100

41

420

6000

ZFU2316

25

16

1"

1 7/16"-12

51

107

41

420

6000

ZFU2716

25

16

1"

1 11/16"-12

52

109

50

350

5000

ZFU2720

32

20

1 1/4"

1 11/16"-12

55

121

50

350

5000

ZFU3224

40

24

1 1/2"

2"-12

60

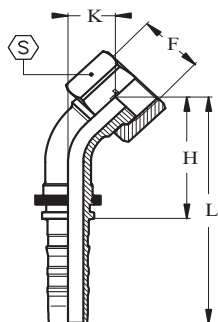
142

60

290

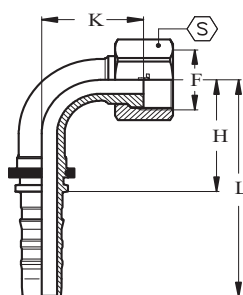
4200

**ISO12151/1
SAE J516**



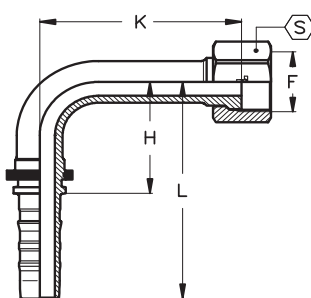
TIEFFE Part.N.	Hose I.D. <i>Ø interno tubo</i>		Thread <i>Filettatura</i>	Dimensions <i>(mm)</i>					Maximum W.P.	
	DN	Size	Inch	F	H	L	K	S	bar	PSI
	ZFU451912	20	12	3/4"	1 3/16"-12	60	111	22	36	420
ZFU452112	20	12	3/4"	1 7/16"-12	61	112	23	41	420	6000
ZFU452116	25	16	1"	1 7/16"-12	78	134	29	41	420	6000
ZFU452716	25	16	1"	1 11/16"-12	78	134	29	50	350	5000
ZFU452720	32	20	1 1/4"	1 11/16"-12	93	159	34	50	350	5000
ZFU453224	40	24	1 1/2"	2"-12	113	195	41	60	290	4200

**ISO12151/1
SAE J516**



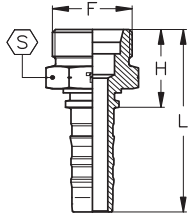
TIEFFE Part.N.	Hose I.D. <i>Ø interno tubo</i>		Thread <i>Filettatura</i>	Dimensions <i>(mm)</i>					Maximum W.P.	
	DN	Size	Inch	F	H	L	K	S	bar	PSI
	ZFU901912	20	12	3/4"	1 3/16"-12	54	105	48	36	420
ZFU902112	20	12	3/4"	1 7/16"-12	54	105	49	41	420	6000
ZFU902116	25	16	1"	1 7/16"-12	71	127	62	41	420	6000
ZFU902716	25	16	1"	1 11/16"-12	71	127	62	50	350	5000
ZFU902720	32	20	1 1/4"	1 11/16"-12	87	153	75	50	350	5000
ZFU903224	40	24	1 1/2"	2"-12	105	187	90	60	290	4200

**ISO12151/1
SAE J516**



TIEFFE Part.N.	Hose I.D. <i>Ø interno tubo</i>		Thread <i>Filettatura</i>	Dimensions <i>(mm)</i>					Maximum W.P.	
	DN	Size	Inch	F	H	L	K	S	bar	PSI
	ZFU901912-K96	20	12	3/4"	1 3/16"-12	54	105	96	36	420
ZFU902116-K114	25	16	1"	1 7/16"-12	71	127	114	41	420	6000
ZFU902720-K130	32	20	1 1/4"	1 11/16"-12	87	153	130	50	350	5000
ZFU903224-K155	40	24	1 1/2"	2"-12	105	187	155	60	290	4200

ISO 12151-2
DIN 20078

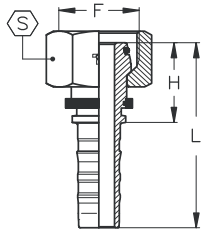


CES

METRIC MALE - 24° CONE SEAT - HEAVY DUTY
BUITENDRAAD METRISCH - CONUS 24° - ZWARE SERIE

TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	F	mm	H	L	S			bar	PSI
ZME302012	20	12	3/4"	M30x2	20	34	85	30			420	6000
ZME362512	20	12	3/4"	M36x2	25	38	89	36			420	6000
ZME362516	25	16	1"	M36x2	25	40	97	36			380	5400
ZME423016	25	16	1"	M42x2	30	44	101	46			280	4000
ZME423020	32	20	1 1/4"	M42x2	30	47	113	46			250	3500
ZME523820	32	20	1 1/4"	M52x2	38	51	117	55			250	3500
ZME523824	40	24	1 1/2"	M52x2	38	53	135	55			250	3500

ISO 12151-2
DIN 20078

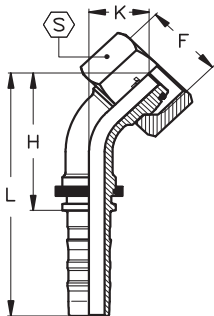


DKOS

METRIC FEMALE - 24° O'RING CONE - HEAVY DUTY
WARELKOPPELING METRISCH - CONUS 24° O'RING - ZWARE SERIE

TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	F	mm	H	L	S	O'Ring	bar	PSI	
ZFEO302012	20	12	3/4"	M30x2	20	37	88	36	16,3x2,4	420	6000	
ZFEO362512	20	12	3/4"	M36x2	25	39	90	46	20,3x2,4	420	6000	
ZFEO362516	25	16	1"	M36x2	25	41	97	46	22x2	380	5400	
ZFEO423016	25	16	1"	M42x2	30	42	98	50	25,3x2,4	280	4000	
ZFEO423020	32	20	1 1/4"	M42x2	30	43	109	50	25,3x2,4	250	3500	
ZFEO523820	32	20	1 1/4"	M52x2	38	48	115	60	33,3x2,4	250	3500	
ZFEO523824	40	24	1 1/2"	M52x2	38	51	133	60	33,3x2,4	250	3500	

ISO 12151-2
DIN 20078

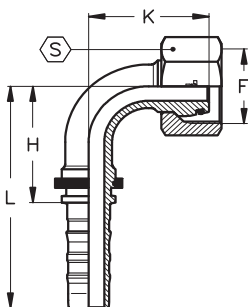


DKOS45

45° METRIC SWEPT ELBOW - 24° O'RING CONE - HEAVY DUTY
BOCHT 45° METRISCH - CONUS 24° O'RING - ZWARE SERIE

TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	F	mm	H	L	K	S	O'Ring	bar	PSI
ZFEO45302012	20	12	3/4"	M30x2	20	65	116	27	36	16,3x2,4	420	6000
ZFEO45362512	20	12	3/4"	M36x2	25	66	117	28	46	20,3x2,4	420	6000
ZFEO45362516	25	16	1"	M36x2	25	83	140	34	46	22x2	380	5400
ZFEO45423016	25	16	1"	M42x2	30	82	138	32	50	25,3x2,4	280	4000
ZFEO45423020	32	20	1 1/4"	M42x2	30	100	166	40	50	25,3x2,4	250	3500
ZFEO45523820	32	20	1 1/4"	M52x2	38	97	164	38	60	33,3x2,4	250	3500
ZFEO45523824	40	24	1 1/2"	M52x2	38	121	203	48	60	33,3x2,4	250	3500

ISO 12151-2
DIN 20078



DKOS90

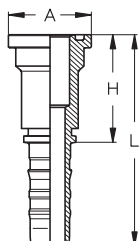
90° METRIC SWEPT ELBOW - 24° O'RING CONE - HEAVY DUTY
BOCHT 90° METRISCH - CONUS 24° O'RING - ZWARE SERIE

TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filettatura	Tube	Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	F	mm	H	L	K	S	O'Ring	bar	PSI
ZFEO90302012	20	12	3/4"	M30x2	20	55	106	55	36	16,3x2,4	420	6000
ZFEO90362512	20	12	3/4"	M36x2	25	55	106	55	46	20,3x2,4	420	6000
ZFEO90362516	25	16	1"	M36x2	25	71	128	69	46	22x2	380	5400
ZFEO90423016	25	16	1"	M42x2	30	71	128	67	50	25,3x2,4	280	4000
ZFEO90423020	32	20	1 1/4"	M42x2	30	87	154	83	50	25,3x2,4	250	3500
ZFEO90523820	32	20	1 1/4"	M52x2	38	87	154	80	60	33,3x2,4	250	3500
ZFEO90523824	40	24	1 1/2"	M52x2	38	105	188	100	60	33,3x2,4	250	3500

ISO12151/3
SAE J516

SFL

STRAIGHT FLANGE - ISO "L" SERIES - SAE CODE 61
RECHTE FLENS - ISO SERIE "L" - SAE CODE 61

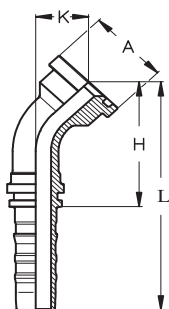


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	A			bar	PSI
Z31212	20	12	3/4"	12	3/4"	55	106	38,1			350	5000
Z31612	20	12	3/4"	16	1"	57	108	44,5			350	5000
Z32012	20	12	3/4"	20	1 1/4"	55	106	50,8			280	4000
Z31216	25	16	1"	12	3/4"	58	114,5	38,1			350	5000
Z31616	25	16	1"	16	1"	58	114,5	44,5			350	5000
Z32016	25	16	1"	20	1 1/4"	63	119,5	50,8			280	4000
Z32416	25	16	1"	24	1 1/2"	55	115,5	60,4			210	3000
Z31620	32	20	1 1/4"	16	1"	64	130,5	44,5			350	5000
Z32020	32	20	1 1/4"	20	1 1/4"	64	130,5	50,8			280	4000
Z32420	32	20	1 1/4"	24	1 1/2"	68	134,5	60,4			210	3000
Z33220	32	20	1 1/4"	32	2"	75	141,5	71,4			210	3000
Z32424	38	24	1 1/2"	24	1 1/2"	73	155,5	60,4			210	3000
Z33224	38	24	1 1/2"	32	2"	76	158,5	71,4			210	3000
Z33232	51	32	2"	32	2"	77	176,5	71,4			210	3000
Z34032	51	32	2"	40	2 1/2"	90	186,5	84,1			175	2500

ISO12151/3
SAE J516

SFL45

45° FLANGE ELBOW - ISO "L" SERIES - SAE CODE 61
FLENS BOCHT 45° - ISO SERIE "L" - SAE CODE 61

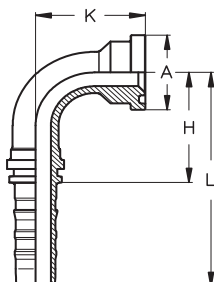


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A		bar	PSI
Z3451212	20	12	3/4"	12	3/4"	63	114	25	38,1		350	5000
Z3451612	20	12	3/4"	16	1"	65	116	27	44,5		350	5000
Z3451216	25	16	1"	12	3/4"	81	137	31	38,1		350	5000
Z3451616	25	16	1"	16	1"	78	134	28	44,5		350	5000
Z3452016	25	16	1"	20	1 1/4"	78	134	28	50,8		280	4000
Z3451620	32	20	1 1/4"	16	1"	96	163	37	44,5		350	5000
Z3452020	32	20	1 1/4"	20	1 1/4"	91	157	32	50,8		280	4000
Z3452420	32	20	1 1/4"	24	1 1/2"	91	157	32	60,4		210	3000
Z3452424	38	24	1 1/2"	24	1 1/2"	108	191	36	60,4		210	3000
Z3453224	38	24	1 1/2"	32	2"	107	189	35	71,4		210	3000
Z3453232	51	32	2"	32	2"	151	245	57	71,4		210	3000
Z3454032	51	32	2"	40	2 1/2"	146	243	51	84,1		175	2500

ISO12151/3
SAE J516

SFL90

90° FLANGE ELBOW - ISO "L" SERIES - SAE CODE 61
FLENS BOCHT 90° - ISO SERIE "L" - SAE CODE 61

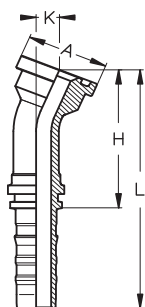


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A		bar	PSI
Z3901212	20	12	3/4"	12	3/4"	55	106	51	38,1		350	5000
Z3901612	20	12	3/4"	16	1"	55	106	55	44,5		350	5000
Z3902012	20	12	3/4"	20	1 1/4"	55	106	60	50,8		280	4000
Z3901216	25	16	1"	12	3/4"	71	128	65	38,1		350	5000
Z3901616	25	16	1"	16	1"	71	128	61	44,5		350	5000
Z3902016	25	16	1"	20	1 1/4"	71	128	61	50,8		280	4000
Z3902416	25	16	1"	24	1 1/2"	71	128	61	60,4		210	3000
Z3901620	32	20	1 1/4"	16	1"	87	154	79	44,5		350	5000
Z3902020	32	20	1 1/4"	20	1 1/4"	87	154	71	50,8		280	4000
Z3902420	32	20	1 1/4"	24	1 1/2"	87	154	71	60,4		210	3000
Z3902424	38	24	1 1/2"	24	1 1/2"	105	188	83	60,4		210	3000
Z3903224	38	24	1 1/2"	32	2"	105	188	81	71,4		210	3000
Z3903232	51	32	2"	32	2"	140	237	122	71,4		210	3000
Z3904032	51	32	2"	40	2 1/2"	140	237	117	84,1		175	2500

**ISO12151/3
SAE J516**

SFL22,5

22,5° FLANGE ELBOW - ISO "L" SERIES - SAE CODE 61
FLENS BOCHT 22,5° - ISO SERIE "L" - SAE CODE 61

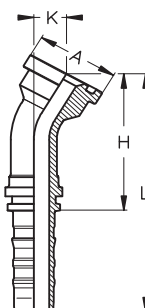


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	bar	PSI	
Z32251212	20	12	3/4"	12	3/4"	70	121	11	38,1	350	5000	
Z32251612	20	12	3/4"	16	1"	73	124	12	44,5	350	5000	
Z32251616	25	16	1"	16	1"	86	142	12	44,5	350	5000	
Z32252016	25	16	1"	20	1 1/4"	86	142	12	50,8	280	4000	
Z32252020	32	20	1 1/4"	20	1 1/4"	100	166	13	50,8	280	4000	
Z32252420	32	20	1 1/4"	24	1 1/2"	100	166	13	60,4	210	3000	
Z32252424	38	24	1 1/2"	24	1 1/2"	118	201	15	60,4	210	3000	
Z32253224	38	24	1 1/2"	32	2"	116	199	14	71,4	210	3000	
Z32253232	51	32	2"	32	2"	165	262	22	71,4	210	3000	

**ISO12151/3
SAE J516**

SFL30

30° FLANGE ELBOW - ISO "L" SERIES - SAE CODE 61
FLENS BOCHT 30° - ISO SERIE "L" - SAE CODE 61

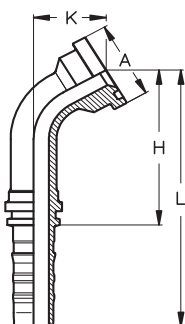


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	bar	PSI	
Z3301212	20	12	3/4"	12	3/4"	68	119	16	38,1	350	5000	
Z3301612	20	12	3/4"	16	1"	71	122	17	44,5	350	5000	
Z3301616	25	16	1"	16	1"	84	140	17	44,5	350	5000	
Z3302016	25	16	1"	20	1 1/4"	84	140	17	50,8	280	4000	
Z3302020	32	20	1 1/4"	20	1 1/4"	98	164	19	50,8	280	4000	
Z3302420	32	20	1 1/4"	24	1 1/2"	98	164	19	60,4	210	3000	
Z3302424	38	24	1 1/2"	24	1 1/2"	116	199	22	60,4	210	3000	
Z3303224	38	24	1 1/2"	32	2"	114	197	21	71,4	210	3000	
Z3303232	51	32	2"	32	2"	162	258	31	71,4	210	3000	

**ISO12151/3
SAE J516**

SFL60

60° FLANGE ELBOW - ISO "L" SERIES - SAE CODE 61
FLENS BOCHT 60° - ISO SERIE "L" - SAE CODE 61

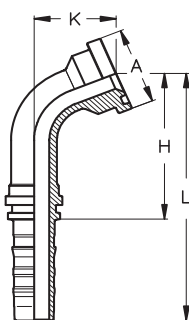


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	bar	PSI	
Z3601212	20	12	3/4"	12	3/4"	77	128	34	38,1	350	5000	
Z3601612	20	12	3/4"	16	1"	79	130	37	44,5	350	5000	
Z3601616	25	16	1"	16	1"	98	154	40	44,5	350	5000	
Z3602016	25	16	1"	20	1 1/4"	98	154	40	50,8	280	4000	
Z3602020	32	20	1 1/4"	20	1 1/4"	118	184	45	50,8	280	4000	
Z3602420	32	20	1 1/4"	24	1 1/2"	118	184	45	60,4	210	3000	
Z3602424	38	24	1 1/2"	24	1 1/2"	140	223	52	60,4	210	3000	
Z3603224	38	24	1 1/2"	32	2"	139	222	50	71,4	210	3000	
Z3603232	51	32	2"	32	2"	192	289	73	71,4	210	3000	

**ISO12151/3
SAE J516**

SFL67,5

67,5° FLANGE ELBOW - ISO "L" SERIES - SAE CODE 61
FLENS BOCHT 67,5° - ISO SERIE "L" - SAE CODE 61

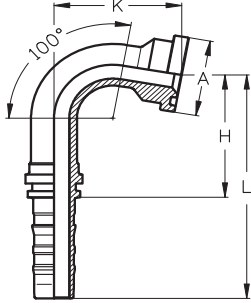


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	bar	PSI	
Z36751212	20	12	3/4"	12	3/4"	72	123	39	38,1	350	5000	
Z36751612	20	12	3/4"	16	1"	73	124	41	44,5	350	5000	
Z36751616	25	16	1"	16	1"	92	148	45	44,5	350	5000	
Z36752016	25	16	1"	20	1 1/4"	92	148	45	50,8	280	4000	
Z36752020	32	20	1 1/4"	20	1 1/4"	111	178	52	50,8	280	4000	
Z36752420	32	20	1 1/4"	24	1 1/2"	111	178	52	60,4	210	3000	
Z36752424	38	24	1 1/2"	24	1 1/2"	133	216	60	60,4	210	3000	
Z36753024	38	24	1 1/2"	32	2"	132	215	58	71,4	210	3000	
Z36753232	51	32	2"	32	2"	181	278	84	71,4	210	3000	

**ISO12151/3
SAE J516**

SFL100

100° FLANGE ELBOW - ISO "L" SERIES - SAE CODE 61
FLENS BOCHT 100° - ISO SERIE "L" - SAE CODE 61

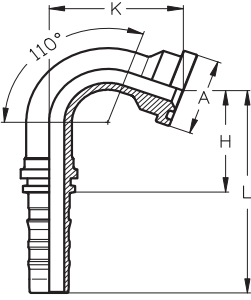


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)				Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	bar	PSI
Z31001212	20	12	3/4"	12	3/4"	61	112	59	38,1	350	5000
Z31001616	25	16	1"	16	1"	77	134	68	44,5	350	5000

**ISO12151/3
SAE J516**

SFL110

110° FLANGE ELBOW - ISO "L" SERIES - SAE CODE 61
FLENS BOCHT 110° - ISO SERIE "L" - SAE CODE 61

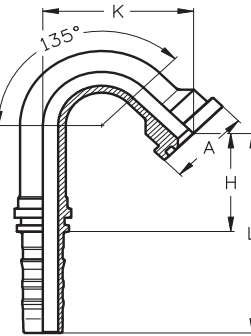


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)				Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	bar	PSI
Z31101212	20	12	3/4"	12	3/4"	51	102	62	38,1	350	5000
Z31101616	25	16	1"	16	1"	65	121	73	44,5	350	5000
Z31102016	25	16	1"	20	1 1/4"	65	121	73	50,8	280	4000
Z31102020	32	20	1 1/4"	20	1 1/4"	82	148	83	50,8	280	4000
Z31102420	32	20	1 1/4"	24	1 1/2"	82	148	83	60,4	210	3000
Z31102424	38	24	1 1/2"	24	1 1/2"	95	178	97	60,4	210	3000
Z31103232	51	32	2"	32	2"	124	220	142	71,4	210	3000

**ISO12151/3
SAE J516**

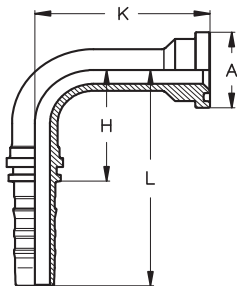
SFL135

135° FLANGE ELBOW - ISO "L" SERIES - SAE CODE 61
FLENS BOCHT 135° - ISO SERIE "L" - SAE CODE 61



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)				Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	bar	PSI
Z31351212	20	12	3/4"	12	3/4"	69	120	70	38,1	350	5000
Z31351612	20	12	3/4"	16	1"	69	120	70	44,5	350	5000
Z31351616	25	16	1"	16	1"	57	113	86	44,5	350	5000

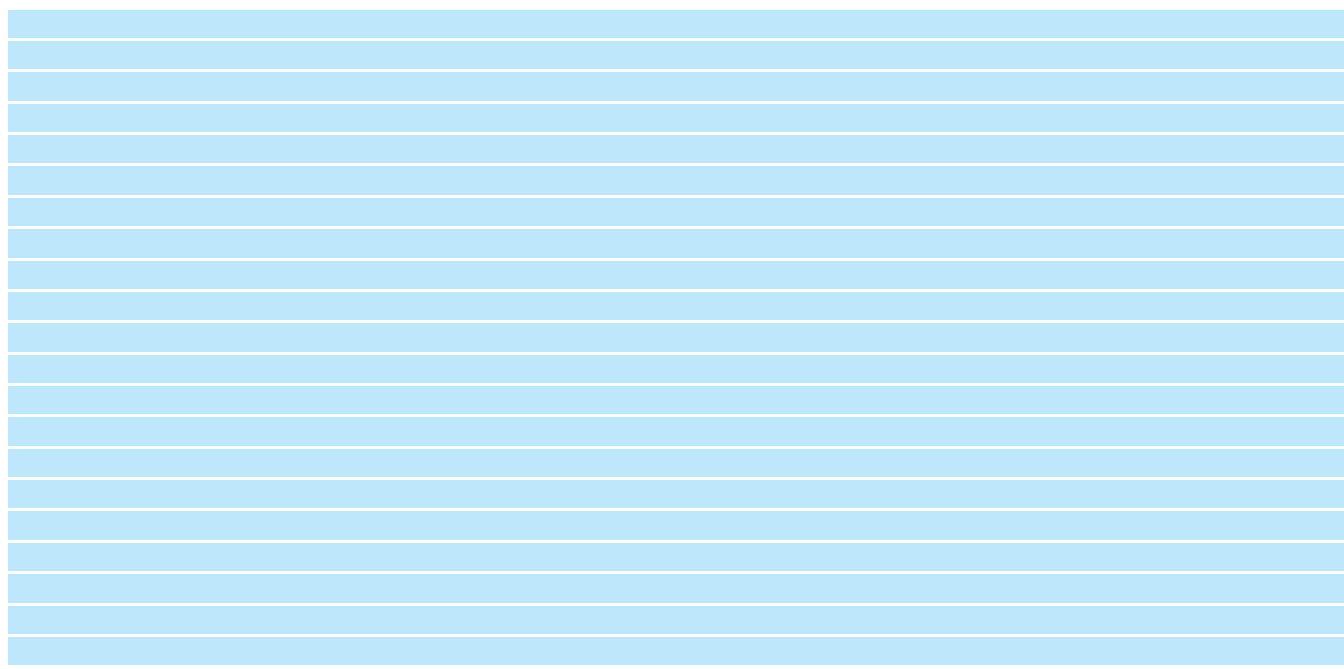
ISO12151/3 SAE J516		SFL90		90° LONG DROP FLANGE ELBOW - ISO "L" SERIES - SAE CODE 61 FLENS 90° LANGE BOCHT - ISO SERIE "L" - SAE CODE 61									
TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.		
	DN	Size	Inch	Size	Inch	H	L	K	A	bar	PSI		
Z3901212-K96	20	12	3/4"	12	3/4"	55	106	96	38,1	350	5000		
Z3901212-K127	20	12	3/4"	12	3/4"	55	106	127	38,1	350	5000		
Z3901612-K79	20	12	3/4"	16	1"	55	106	79	44,5	350	5000		
Z3901616-K118	25	16	1"	16	1"	71	128	118	44,5	350	5000		
Z3902016-K118	25	16	1"	20	1 1/4"	71	128	118	50,8	280	4000		
Z3902020-K91	32	20	1 1/4"	20	1 1/4"	87	154	91	50,8	280	4000		
Z3902020-K102	32	20	1 1/4"	20	1 1/4"	87	154	102	50,8	280	4000		
Z3902020-K112	32	20	1 1/4"	20	1 1/4"	87	154	112	50,8	280	4000		
Z3902020-K130	32	20	1 1/4"	20	1 1/4"	87	154	130	50,8	280	4000		
Z3902020-K168	32	20	1 1/4"	20	1 1/4"	87	154	168	50,8	280	4000		
Z3902420-K118	32	20	1 1/4"	24	1 1/2"	87	154	118	60,4	210	3000		
Z3902420-K130	32	20	1 1/4"	24	1 1/2"	87	154	130	60,4	210	3000		
Z3902424-K148	38	24	1 1/2"	24	1 1/2"	105	188	148	60,4	210	3000		
Z3902424-K172	38	24	1 1/2"	24	1 1/2"	105	188	172	60,4	210	3000		
Z3903224-K115	38	24	1 1/2"	32	2"	105	188	115	71,4	210	3000		
Z3903224-K172	38	24	1 1/2"	32	2"	105	188	172	71,4	210	3000		
Z3903232-K165	51	32	2"	32	2"	140	237	165	71,4	210	3000		
Z3903232-K203	51	32	2"	32	2"	140	237	203	71,4	210	3000		



O'RING SEAL FOR ISO "L" SERIES - SAE CODE 61 FLANGES
ORING VOOR ISO SERIE "L" - SAE CODE 61

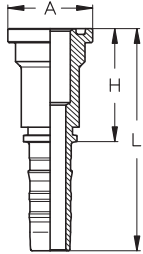


TIEFFE Part.N.	Flange Flangia		Dimensions (mm)	
	Size	Inch	ISO 3601-1	SAE
OR90SH35302499	12	3/4"	25x3,55	24,99x3,53
OR90SH35303292	16	1"	32,5x3,55	32,92x3,53
OR90SH35303769	20	1 1/4"	37,5x3,55	37,69x3,53
OR90SH35304722	24	1 1/2"	47,5x3,55	47,22x3,53
OR90SH35305674	32	2"	56x3,55	56,74x3,53



**ISO12151/3
SAE J516**

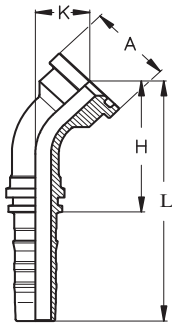
SFS **STRAIGHT FLANGE - ISO "S" SERIES - SAE CODE 62**
FLENS RECHT - ISO SERIE "S" - SAE CODE 62



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)				Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	A		bar	PSI
Z61212	20	12	3/4"	12	3/4"	59	110	41,3		420	6000
Z61612	20	12	3/4"	16	1"	61	112	47,6		420	6000
Z61216	25	16	1"	12	3/4"	65	121,5	41,3		420	6000
Z61616	25	16	1"	16	1"	65	121,5	47,6		420	6000
Z62016	25	16	1"	20	1 1/4"	69	125,5	54		420	6000
Z61620	32	20	1 1/4"	16	1"	70	136,5	47,6		420	6000
Z62020	32	20	1 1/4"	20	1 1/4"	70	136,5	54		420	6000
Z62420	32	20	1 1/4"	24	1 1/2"	80	146,5	63,5		420	6000
Z62424	38	24	1 1/2"	24	1 1/2"	84	116,5	63,5		420	6000
Z63224	38	24	1 1/2"	32	2"	99	181,5	79,4		420	6000
Z63232	51	32	2"	32	2"	100	196,5	79,4		350	5000

**ISO12151/3
SAE J516**

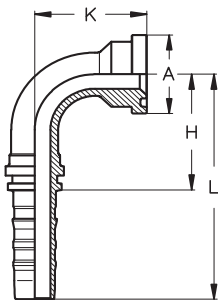
SFS45 **45° FLANGE ELBOW - ISO "S" SERIES - SAE CODE 62**
FLENS 45° - ISO SERIE "S" - SAE CODE 62



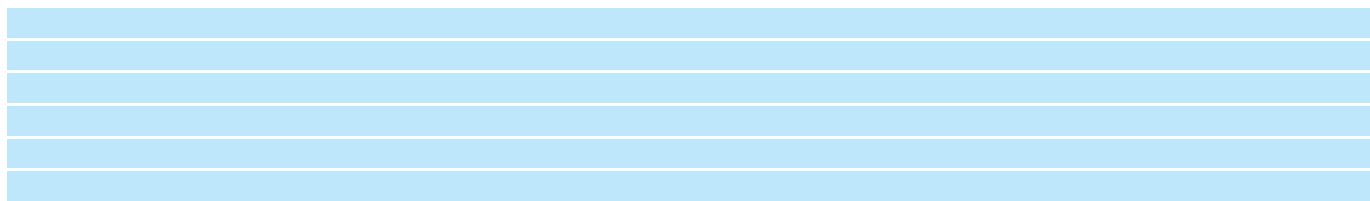
TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)				Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	bar	PSI
Z6451212	20	12	3/4"	12	3/4"	66	117	28	41,3	420	6000
Z6451612	20	12	3/4"	16	1"	68	118	29	47,6	420	6000
Z6451216	25	16	1"	12	3/4"	81	137	31	41,3	420	6000
Z6451616	25	16	1"	16	1"	80	136	30	47,6	420	6000
Z6452016	25	16	1"	20	1 1/4"	80	136	30	54	420	6000
Z6451620	32	20	1 1/4"	16	1"	96	163	37	47,6	420	6000
Z6452020	32	20	1 1/4"	20	1 1/4"	93	160	34	54	420	6000
Z6452420	32	20	1 1/4"	24	1 1/2"	94	161	35	63,5	420	6000
Z6452424	38	24	1 1/2"	24	1 1/2"	112	195	40	63,5	420	6000
Z6453224	38	24	1 1/2"	32	2"	115	198	43	79,4	420	6000
Z6453232	51	32	2"	32	2"	150	247	56	79,4	350	5000

**ISO12151/3
SAE J516**

SFS90 **90° FLANGE ELBOW - ISO "S" SERIES - SAE CODE 62**
FLENS 90° - ISO SERIE "S" - SAE CODE 62



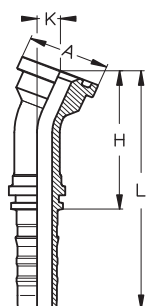
TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)				Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	bar	PSI
Z6901212	20	12	3/4"	12	3/4"	55	106	56	41,3	420	6000
Z6901612	20	12	3/4"	16	1"	55	106	58	47,6	420	6000
Z6901216	25	16	1"	12	3/4"	71	128	65	41,3	420	6000
Z6901616	25	16	1"	16	1"	71	128	64	47,6	420	6000
Z6902016	25	16	1"	20	1 1/4"	71	128	64	54	420	6000
Z6901620	32	20	1 1/4"	16	1"	87	154	79	47,6	420	6000
Z6902020	32	20	1 1/4"	20	1 1/4"	87	154	74	54	420	6000
Z6902420	32	20	1 1/4"	24	1 1/2"	87	154	76	63,5	420	6000
Z6902424	38	24	1 1/2"	24	1 1/2"	105	188	88	63,5	420	6000
Z6903224	38	24	1 1/2"	32	2"	105	188	93	79,4	420	6000
Z6903232	51	32	2"	32	2"	140	237	123	79,4	350	5000



ISO12151/3
SAE J516

SFS22,5

22,5° FLANGE ELBOW - ISO "S" SERIES - SAE CODE 62
FLENS 22,5° - ISO SERIE "S" - SAE CODE 62

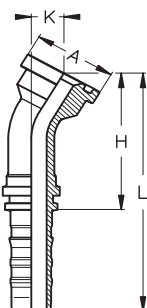


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)				Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	bar	PSI
	20	12	3/4"	12	3/4"	74	125	13	41,3	420	6000
	20	12	3/4"	16	1"	76	127	14	47,6	420	6000
	25	16	1"	16	1"	89	145	13	47,6	420	6000
	25	16	1"	20	1 1/4"	89	145	13	54	420	6000
	32	20	1 1/4"	20	1 1/4"	103	169	15	54	420	6000
	32	20	1 1/4"	24	1 1/2"	104	171	15	63,5	420	6000
	38	24	1 1/2"	24	1 1/2"	123	206	17	63,5	420	6000
	38	24	1 1/2"	32	2"	127	210	19	79,4	420	6000
	51	32	2"	32	2"	166	263	24	79,4	350	5000

ISO12151/3
SAE J516

SFS30

30° FLANGE ELBOW - ISO "S" SERIES - SAE CODE 62
FLENS 30° - ISO SERIE "S" - SAE CODE 62

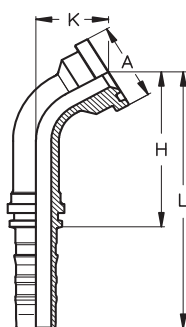


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)				Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	bar	PSI
	20	12	3/4"	12	3/4"	72	123	18	41,3	420	6000
	20	12	3/4"	16	1"	74	125	19	47,6	420	6000
	25	16	1"	16	1"	87	143	19	47,6	420	6000
	25	16	1"	20	1 1/4"	87	143	19	54	420	6000
	32	20	1 1/4"	20	1 1/4"	100	167	20	54	420	6000
	32	20	1 1/4"	24	1 1/2"	102	168	21	63,5	420	6000
	38	24	1 1/2"	24	1 1/2"	121	203	24	63,5	420	6000
	38	24	1 1/2"	32	2"	124	207	26	79,4	420	6000
	51	32	2"	32	2"	162	259	34	79,4	350	5000

ISO12151/3
SAE J516

SFS60

60° FLANGE ELBOW - ISO "S" SERIES - SAE CODE 62
FLENS 60° - ISO SERIE "S" - SAE CODE 62

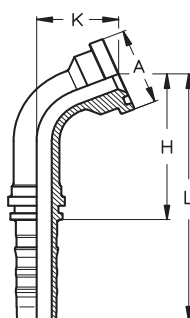


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)				Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	bar	PSI
Z6601212	20	12	3/4"	12	3/4"	79	130	38	41,3	420	6000
Z6601612	20	12	3/4"	16	1"	80	131	40	47,6	420	6000
Z6601616	25	16	1"	16	1"	99	155	42	47,6	420	6000
Z6602016	25	16	1"	20	1 1/4"	99	155	42	54	420	6000
Z6602020	32	20	1 1/4"	20	1 1/4"	119	185	47	54	420	6000
Z6602420	32	20	1 1/4"	24	1 1/2"	120	186	49	63,5	420	6000
Z6602424	38	24	1 1/2"	24	1 1/2"	143	225	56	63,5	420	6000
Z6603224	38	24	1 1/2"	32	2"	145	228	60	79,4	420	6000
Z6603232	51	32	2"	32	2"	193	289	79	79,4	350	5000

ISO12151/3
SAE J516

SFS67,5

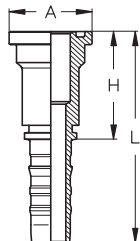
67,5° FLANGE ELBOW - ISO "S" SERIES - SAE CODE 62
FLENS 67,5° - ISO SERIE "S" - SAE CODE 62



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)				Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	bar	PSI
	20	12	3/4"	12	3/4"	74	125	43	41,3	420	6000
	20	12	3/4"	16	1"	75	126	45	47,6	420	6000
	25	16	1"	16	1"	93	150	48	47,6	420	6000
	25	16	1"	20	1 1/4"	93	150	48	54	420	6000
	32	20	1 1/4"	20	1 1/4"	112	179	54	54	420	6000
	32	20	1 1/4"	24	1 1/2"	113	180	56	63,5	420	6000
	38	24	1 1/2"	24	1 1/2"	135	217	65	63,5	420	6000
	38	24	1 1/2"	32	2"	137	219	69	79,4	420	6000
	51	32	2"	32	2"	182	278	90	79,4	350	5000

SFS^{UPERCAT}

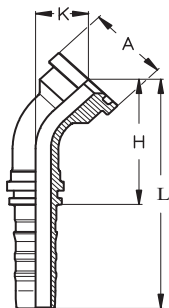
"SUPERCAT" STRAIGHT FLANGE FLENS "SUPERCAT" - RECHT



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	A		D'RING	bar	PSI
ZC1212	20	12	3/4"	12	3/4"	84	135	41,3		DR12	420	6000
ZC1612	20	12	3/4"	16	1"	84	135	47,6		DR16	420	6000
ZC1616	25	16	1"	16	1"	90	146,5	47,6		DR16	420	6000
ZC2016	25	16	1"	20	1 1/4"	90	146,5	54		DR20	420	6000
ZC2020	32	20	1 1/4"	20	1 1/4"	88	154,4	54		DR20	420	6000
ZC2420	32	20	1 1/4"	24	1 1/2"	88	154,5	63,5		DR24	420	6000
ZC2424	38	24	1 1/2"	24	1 1/2"	84	166,5	63,5		DR24	420	6000
ZC3224	38	24	1 1/2"	32	2"	110	192,5	79,4		DR32	420	6000
ZC3232	51	32	2"	32	2"	130	226,5	79,4		DR32	350	5000

SFS^{UPERCAT45}

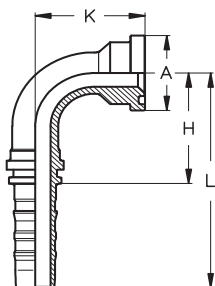
"SUPERCAT" 45° FLANGE ELBOW FLENS "SUPERCAT" - BOCHT 45°



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	D'RING	bar	PSI
ZC451212	20	12	3/4"	12	3/4"	72	123	34	41,3	DR12	420	6000
ZC451612	20	12	3/4"	16	1"	74	125	36	47,6	DR16	420	6000
ZC451616	25	16	1"	16	1"	86	143	36	47,6	DR16	420	6000
ZC452016	25	16	1"	20	1 1/4"	86	143	36	54	DR20	420	6000
ZC452020	32	20	1 1/4"	20	1 1/4"	96	162	36	54	DR20	420	6000
ZC452420	32	20	1 1/4"	24	1 1/2"	96	162	36	63,5	DR24	420	6000
ZC452424	38	24	1 1/2"	24	1 1/2"	114	196	41	63,5	DR24	420	6000
ZC453224	38	24	1 1/2"	32	2"	116	199	44	79,4	DR32	420	6000
ZC453232	51	32	2"	32	2"	152	250	57	79,4	DR32	350	5000

SFS^{UPERCAT90}

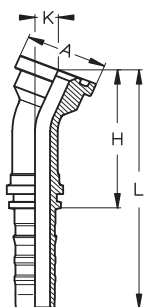
"SUPERCAT" 90° FLANGE ELBOW FLENS "SUPERCAT" - BOCHT 90°



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	D'RING	bar	PSI
ZC901212	20	12	3/4"	12	3/4"	55	106	64	41,3	DR12	420	6000
ZC901612	20	12	3/4"	16	1"	55	106	64	47,6	DR16	420	6000
ZC901616	25	16	1"	16	1"	71	128	73	47,6	DR16	420	6000
ZC902016	25	16	1"	20	1 1/4"	71	128	73	54	DR20	420	6000
ZC902020	32	20	1 1/4"	20	1 1/4"	87	154	77	54	DR20	420	6000
ZC902420	32	20	1 1/4"	24	1 1/2"	87	154	78	63,5	DR24	420	6000
ZC902424	38	24	1 1/2"	24	1 1/2"	105	188	90	63,5	DR24	420	6000
ZC903224	38	24	1 1/2"	32	2"	105	188	94	79,4	DR32	420	6000
ZC903232	51	32	2"	32	2"	140	237	125	79,4	DR32	350	5000

SFS^{SUPERCAT}22,5

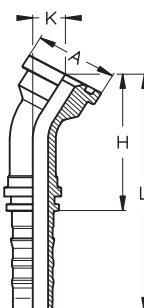
"SUPERCAT" 22,5° FLANGE ELBOW FLENS "SUPERCAT" - BOCHT 22,5°



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	D'RING	bar	PSI
	20	12	3/4"	12	3/4"	82	133	16	41,3	DR12	420	6000
	20	12	3/4"	16	1"	84	135	17	47,6	DR16	420	6000
	25	16	1"	16	1"	97	153	17	47,6	DR16	420	6000
	25	16	1"	20	1 1/4"	97	153	17	54	DR20	420	6000
	32	20	1 1/4"	20	1 1/4"	406	172	16	54	DR20	420	6000
	32	20	1 1/4"	24	1 1/2"	406	174	16	63,5	DR24	420	6000
	38	24	1 1/2"	24	1 1/2"	125	208	18	63,5	DR24	420	6000
	38	24	1 1/2"	32	2"	129	211	19	79,4	DR32	420	6000
	51	32	2"	32	2"	168	265	25	79,4	DR32	350	5000

SFS^{SUPERCAT}30

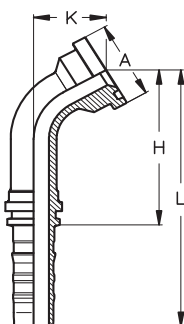
"SUPERCAT" 30° FLANGE ELBOW FLENS "SUPERCAT" - BOCHT 30°



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	D'RING	bar	PSI
	20	12	3/4"	12	3/4"	79	130	22	41,3	DR12	420	6000
	20	12	3/4"	16	1"	82	133	23	47,6	DR16	420	6000
	25	16	1"	16	1"	94	151	23	47,6	DR16	420	6000
	25	16	1"	20	1 1/4"	94	151	23	54	DR20	420	6000
	32	20	1 1/4"	20	1 1/4"	103	170	22	54	DR20	420	6000
	32	20	1 1/4"	24	1 1/2"	104	170	23	63,5	DR24	420	6000
	38	24	1 1/2"	24	1 1/2"	123	205	25	63,5	DR24	420	6000
	38	24	1 1/2"	32	2"	126	208	27	79,4	DR32	420	6000
	51	32	2"	32	2"	164	264	35	79,4	DR32	350	5000

SFS^{SUPERCAT}60

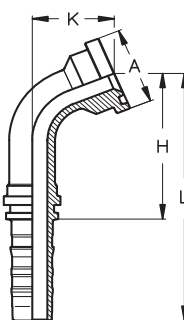
"SUPERCAT" 60° FLANGE ELBOW FLENS "SUPERCAT" - BOCHT 60°



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	D'RING	bar	PSI
	20	12	3/4"	12	3/4"	83	134	45	41,3	DR12	420	6000
	20	12	3/4"	16	1"	85	136	48	47,6	DR16	420	6000
	25	16	1"	16	1"	103	160	50	47,6	DR16	420	6000
	25	16	1"	20	1 1/4"	103	160	50	54	DR20	420	6000
	32	20	1 1/4"	20	1 1/4"	121	187	50	54	DR20	420	6000
	32	20	1 1/4"	24	1 1/2"	121	187	51	63,5	DR24	420	6000
	38	24	1 1/2"	24	1 1/2"	144	226	58	63,5	DR24	420	6000
	38	24	1 1/2"	32	2"	146	228	61	79,4	DR32	420	6000
	51	32	2"	32	2"	194	290	81	79,4	DR32	350	5000

SFS^{SUPERCAT}67,5

"SUPERCAT" 67,5° FLANGE ELBOW FLENS "SUPERCAT" - BOCHT 67,5°

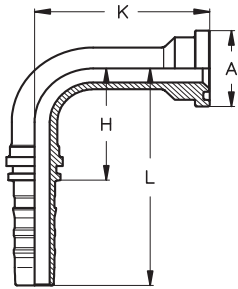


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	D'RING	bar	PSI
	20	12	3/4"	12	3/4"	77	128	50	41,3	DR12	420	6000
	20	12	3/4"	16	1"	79	130	53	47,6	DR16	420	6000
	25	16	1"	16	1"	97	153	56	47,6	DR16	420	6000
	25	16	1"	20	1 1/4"	97	153	56	54	DR20	420	6000
	32	20	1 1/4"	20	1 1/4"	114	181	57	54	DR20	420	6000
	32	20	1 1/4"	24	1 1/2"	114	181	58	63,5	DR24	420	6000
	38	24	1 1/2"	24	1 1/2"	137	219	66	63,5	DR24	420	6000
	38	24	1 1/2"	32	2"	138	220	69	79,4	DR32	420	6000
	51	32	2"	32	2"	184	280	92	79,4	DR32	350	5000

SFSUPERCAT 90

"SUPERCAT" 90° LONG DROP FLANGE ELBOW

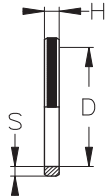
FLANGIA "SUPERCAT" - CURVA 90° - INGOMBRO SPECIALE



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia		Dimensions (mm)					Maximum W.P.	
	DN	Size	Inch	Size	Inch	H	L	K	A	D'RING	bar	PSI
	20	12	3/4"	12	3/4"	55	106	129	41,3	DR12	420	6000
	25	16	1"	16	1"	71	128	132	47,6	DR16	420	6000
	25	16	1"	16	1"	71	128	150	47,6	DR16	420	6000
	32	20	1 1/4"	20	1 1/4"	87	154	150	54	DR20	420	6000
	32	20	1 1/4"	24	1 1/2"	87	154	135	63,5	DR24	420	6000
	38	24	1 1/2"	24	1 1/2"	105	188	106	63,5	DR24	420	6000

D'RING SEAL FOR "SUPERCAT" FLANGES

GUARNIZIONI D'RING PER FLANGE "SUPERCAT"

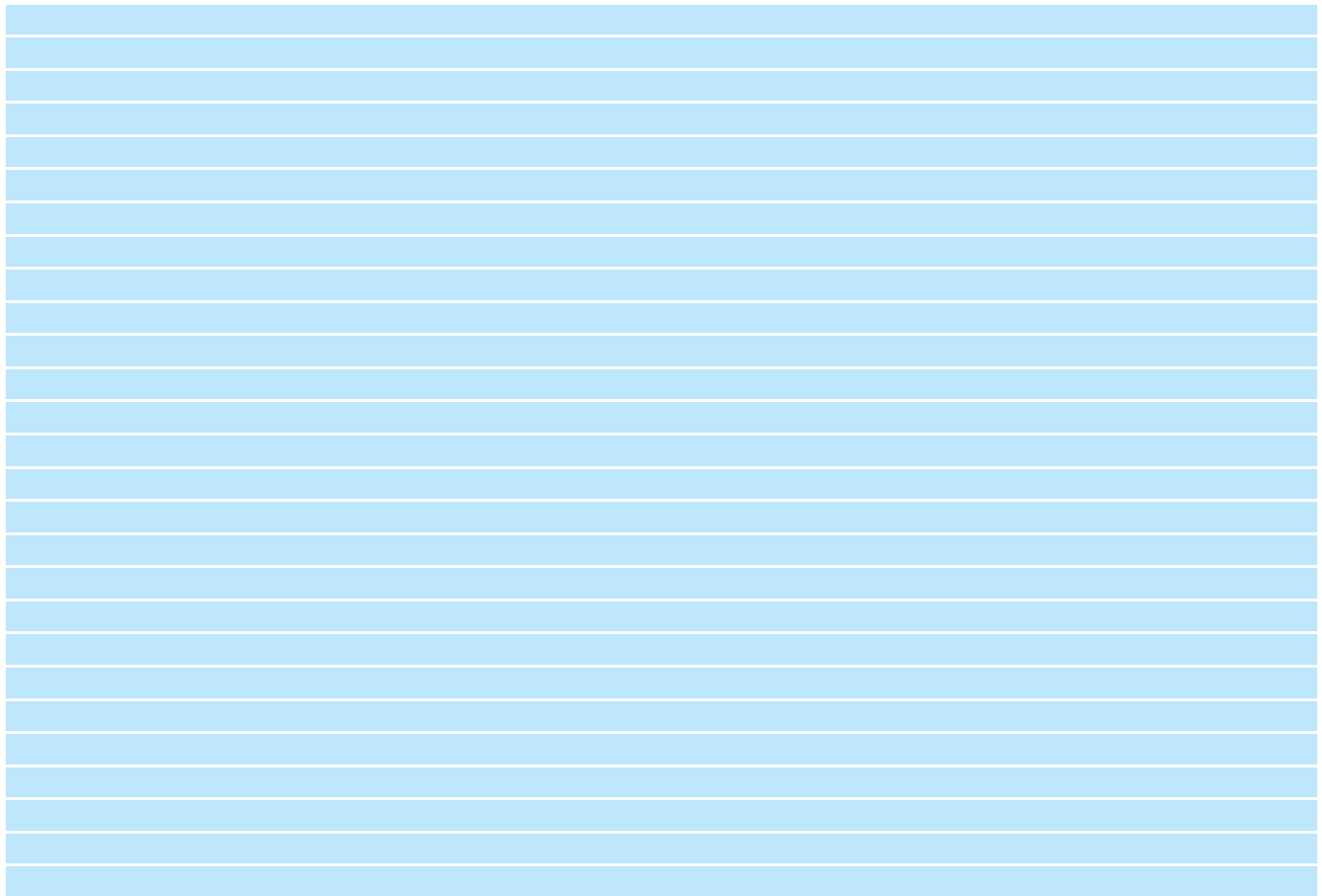


TIEFFE Part.N.	Flange Flangia		Dimensions (mm)		
	Size	Inch	D	H	S
DR12	12	3/4"	25,4	5	3,5
DR16	16	1"	31,8	5	3,5
DR20	20	1 1/4"	38,1	5	3,5
DR24	24	1 1/2"	44,5	5	3,5
DR32	32	2"	63,9	5	3,5



FEMALE SWIVEL ENDS TORQUE VALUES

SWIVEL END THREAD FILETTO FEMMINA GIREVOLE		TIEFFE DASH SIZE		NUT EXAGON ESAGONO DADO	TORQUE VALUE (Nm) COPPIA DI SERRAGGIO (Nm)	
				mm	Nominal	Min. - Max.
BSPP (GAS)	3/4"-14	12	FGO	32	115	95-135
BSPP (GAS)	1"-11	16	FGO	41	140	115-165
BSPP (GAS)	1 1/4"-11	20	FGO	50	210	140-280
BSPP (GAS)	1 1/2"-11	24	FGO	60	290	215-365
BSPP (GAS)	2"-11	32	FGO	75	400	300-500
J.I.C.	7/8"-14	10	FIC-FIS	27	69	44-94
J.I.C.	1 1/16"-12	12	FIC-FIS	32	98	63-133
J.I.C.	1 3/16"-12	14	FIC-FIS	36	118	73-163
J.I.C.	1 5/16"-12	16	FIC-FIS	41	140	90-190
J.I.C.	1 5/8"-12	20	FIC-FIS	50	210	135-285
J.I.C.	1 7/8"-12	24	FIC-FIS	60	290	215-365
J.I.C.	2 1/2"-12	32	FIC-FIS	75	400	300-500
ORFS	1 3/16"-12	12	FRC-FRS	36	90	95 max
ORFS	1 7/16"-12	16	FRC-FRS	41	125	135 max
ORFS	1 11/16"-12	20	FRC-FRS	50	170	190 max
ORFS	2"-12	24	FRC-FRS	60	200	225 max
METRIC	30x2	20S	FOS	36	135	115-155
METRIC	36x2	25S	FOS	46	166	140-192
METRIC	42x2	30S	FOS	50	240	210-270
METRIC	52x2	38S	FOS	60	330	280-380



**HOSE ASSEMBLING PROCEDURE - BY CHECKING INSERT
BORE COLLAPSE**

- 1- Select the specified hose (A), ferrules (B) and inserts (C) listed in the latest release of TIEFFE hose connectors catalogue. (See Figure 1)

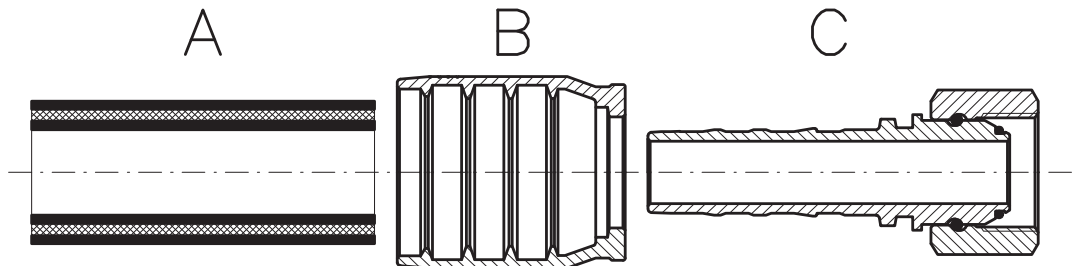


Figure 1

- 2- Cut the hose squarely using a rotary steel blade (non abrasive) to the required length.
- 3- **If skiving is required**, remove all rubber cover to the "skiving length" specified in the ASSEMBLING DATA TABLE avoiding damages to the steel wires reinforcement.
- 4- Place the ferrule fully onto the hose. Push the insert fully into the hose. Select the "COLLAPSE CONTROL MANDREL" for size and series of TIEFFE inserts. Insert the MANDREL into the insert bore. The "NO GO" part of the MANDREL must fully go into the insert bore. (See Figure 2). Remove the MANDREL.

**PROCEDURE VOOR MONTAGE SLANG COPPELING -
METHODE VOOR CONTROLE VAN DE COLLAPSE**

- 1- Selecteer de slang. (A), de huls (B) en de koppeling (C) Opgenomen in de laatste catalogus van KW Flextubo (zie figuur 1)

Figura 1

- 2- Zaag de slang met een metaal blad (non abrasieve) tot de gewenste lengte
- 3- **Als schillen nodig is, verwijder alle rubber tot** de "skiving length" gespecificeerd op de ASSEMBLING DATA TABLE maar voorkom beschadiging aan de stalen draden.
- 4- Schuif de huls om de slang Druk de koppeling in de slang Kies de Collapse (colpin) voor de maat van de Tieffe koppeling Druk de colpin in de slang Het dunne gedeelte van de colpin moet volledig in de koppeling gaan (kijk naar figuur 2) Verwijder de colpin

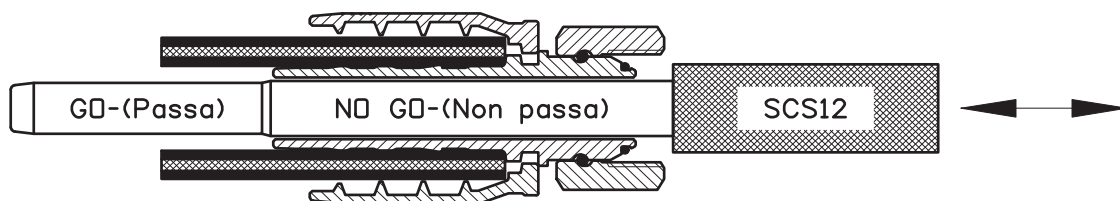


Figure 2

Figura 2

- 5- Crimp the ferrule to the diameter specified in the table ASSEMBLING DATA TABLE.
- 6- Inspect the crimp diameter by measuring it on each each die impressions. All measurements must be taken in the center of ferrule length. All measurements must be according to the specified crimp diameters, within a tolerance +0,0/-0,2 mm.
- 7- Insert the "COLLAPSE CONTROL MANDREL".

- 5- Pers de huls tot de diameter gespecificeerd in de Montage tabel
- 6- Controleer de krimp diameter door te meten in elke koppeling. De maten moeten genomen in het midden van de huls. Alle maten moeten overeenkomen met de krimp diameter met een tolerantie van +0 tot -/ 0,2 mm
- 7- Controleer met de colpin

- 8- **If the "NO GO" part of the MANDREL stops in the bore as shown in Figure 3**, crimp diameter and bore collapse are correct.
- 9- **If the "NO GO" part of the MANDREL goes through the bore**, the crimp diameter must be reduced by increments of 0,1 mm to reach the condition shown in Figure 3.
- 10- **If the "GO" part of the MANDREL does not go through the bore**, the crimp diameter must be increased (step by step) to reach the condition shown in Figure 3.

- 8- **Als het NO GO gedeelte van de colpin stopt in de boring zoals afgebeeld in figuur 3** crimp Diameter is correct
- 9 **Als het NO Go gedeelte van de colpin er volledig ingaat , dan moet je verder persen met 0,1 mm elke keer, zie figuur 3**
- 10 **Als het Go gedeelte van de colpin er niet ingaat**, dan moet de Crimp Diameter groter gemaakt worden stapje voor stapje totdat hij er weer inschuift. zie figuur 3

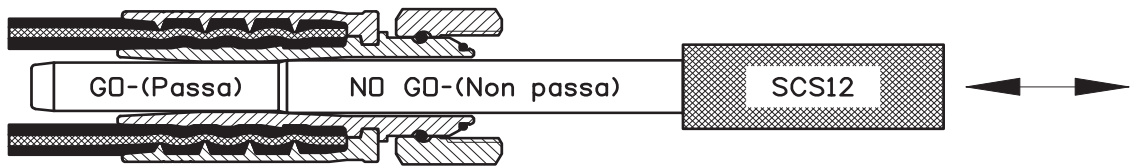


Figure 3

Figura 3

"SCS" COLLAPSE CONTROL MANDREL dimensions

Dimensies Colpin "SCS"

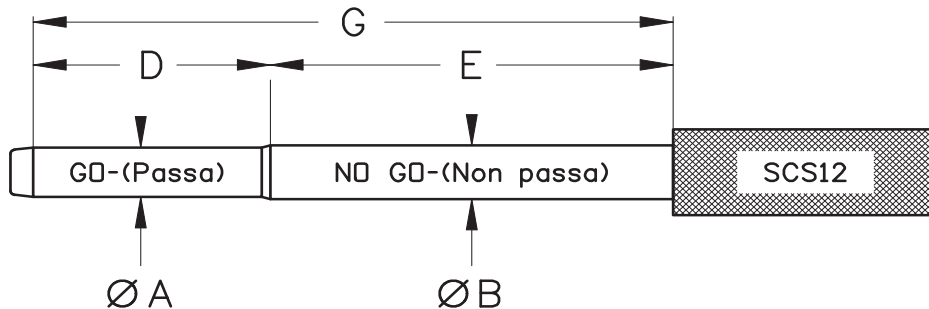
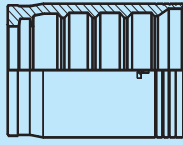


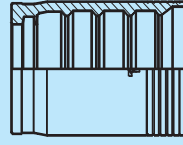
Figure 4

TIEFFE Part.N.	Hose I.D. Ø interno tubo			INSERT BORE COLLAPSE Collasso foro inserto (mm)		COLLAPSE CONTROL MANDREL dimensions (mm) Dimensioni SPINE DI CONTROLLO COLLASSO (mm)				
	DN	Size	Inch	minimum	maximum	ØA +0,00/-0,05	ØB +0,00/-0,05	D	E	G
SCS12	20	12	3/4"	0,70	1,40	12,60	13,30	55	115	170
SCS16	25	16	1"	0,80	1,60	17,4	18,2	60	130	190
SCS20	32	20	1 1/4"	0,90	1,80	22,7	23,6	70	150	220
SCS24	40	24	1 1/2"	1,00	2,00	28	29	85	185	270
SCS32	50	32	2"	1,20	2,40	37,6	38,8	100	230	330

Hose I.D. Ø Interno tubo		EN8564 SP			EN456 4SH			EN856 R12 SAE100 R12			EN856 R13 SAE100 R13			SAE100 R15		
		Part. N.	Skiving length Lung. di spellat.	Swaged diam. Diametro di press. (Ref.)	Part. N.	Skiving length Lung. di spellat.	Swaged diam. Diametro di press. (Ref.)	Part. N.	Skiving length Lung. di spellat.	Swaged diam. Diametro di press. (Ref.)	Part. N.	Ferrule Boccola	Skiving length Lung. di spellat.	Ferrule Boccola	Skiving length Lung. di spellat.	Swaged diam. Diametro di press. (Ref.)
DN	SIZE	Inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Part. N.
19	12	3/4"	41,5	32,5	41,5	32,7	41,5	32,1	41,5	41,5	33,2	41,5	41,5	33,2	HSS412	SCS12
25	16	1"	44,5	40,4	44,5	40,3	44,5	40,1	44,5	44,5	40,8	44,5	44,5	40,8	HSS416	SCS16
31	20	1 1/4"	53	50,7	52,5	46,4	52,5	48,0	52,5	53	51,3	53	53	51,3	HSS620	SCS20
38	24	1 1/2"	69	59,4	68,5	57,4	68,5	56,0	68,5	78	60,8	69	69	60,8	HSS624	SCS24
51	32	2"	78	73,6	78	68,8	78	69,1	78	78	75,7	78	78	75,7	HSS632	SCS32



BSS4

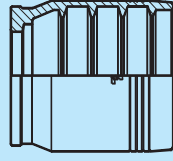


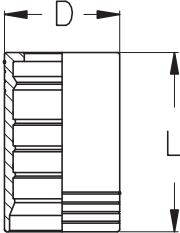
BSS6


SKIVE

SKIVE
Collapse control mandrel
Spina controllo collasso

NON SKIVE		BSN4										NON SKIVE	
Hose I.D. Ø Interno tubo		EN8564 SP		EN456 4SH		EN856 R12 SAE100 R12		EN856 R13 SAE100 R13		SAE100 R15		Collapse control mandrel Spina controllo mandrel	
		Ferrule Boccola	Swaged diam. Diametro di press. (Ref.)	Ferrule Boccola	Swaged diam. Diametro di press. (Ref.)	Ferrule Boccola	Swaged diam. Diametro di press. (Ref.)	Ferrule Boccola	Swaged diam. Diametro di press. (Ref.)	Ferrule Boccola	Swaged diam. Diametro di press. (Ref.)		
DN	SIZE	Part. N.	mm	Part. N.	mm	Part. N.	mm	Part. N.	mm	Part. N.	mm	Part. N.	mm
19	12	HSN412	35,9	HSN412	35,9	HSN412	34,6	HSN412	35,8	HSN412	35,8	SCS12	
25	16	HSN416	43,0	HSN416	42,1	HSN416	41,5	HSN416	42,2	HSN416	42,1	SCS16	
31	20			HSN420	50,6	HSN420	51,9					SCS20	
38	24			HSN424	60,0	HSN424	60,0					SCS24	
51	32			HSN432	73,8	HSN432	72,5					SCS32	



INTERLOCK	H6SH	SWAGED INTERLOCK FERRULE PERSHULS INTERLOCK											
		TIEFFE Part. N°			Hose I.D. Ø Interno tubo		Dimensions (mm)		Applications <i>Applicazioni</i>				
		DN	SIZE	Inch	D	L							
	H6SH12	20	12	3/4"	38	60	4SP	4SH	R12	R13	R15		
	H6SH16	25	16	1"	46	74,5	4SP	4SH	R12	R13	R15		
	H6SH20	32	20	1 1/4"	55	88	4SP	4SH					
	H6SH24	40	24	1 1/2"	62	94	4SP	4SH					
	H6SH32	50	32	2"	78,5	99	4SP	4SH					

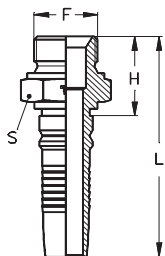
INTERLOCK	H6	SWAGED INTERLOCK FERRULE PERSHULS INTERLOCK											
		TIEFFE Part. N°			Hose I.D. Ø Interno tubo		Dimensions (mm)		Applications <i>Applicazioni</i>				
		DN	SIZE	Inch	D	L							
	H620	32	20	1 1/4"	59,8	88				R13	R15		
	H624	40	24	1 1/2"	67	94				R13			
	H632	50	32	2"	84,5	99				R13			

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YBM

BSP MALE - PARALLEL - 60° CONE SEAT

BU.DR. SLANGKOPPELING BSP - CONUS 60°

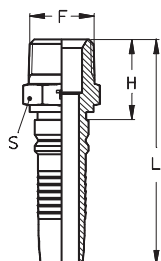


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		F	H	L	S		
YBM1212	19	12	3/4"	3/4"-14	35	97	32			420
YBM1616	25	16	1"	1"-11	41	114	41			414
YBM2016	25	16	1"	1 1/4"-11	44	117	50			414
YBM2020	31	20	1 1/4"	1 1/4"-11	46	134	50			414
YBM2424	38	24	1 1/2"	1 1/2"-11	49	143	55			345
YBM3232	51	32	2"	2"-11	56	154	70			345

YBT

BSP TAPER MALE - 60° CONE SEAT

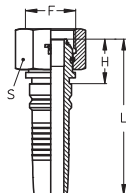
BU.DR. SLANGKOPPELING BSP TAPS - CONUS 60°



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		F	H	L	S		
YBT1212	19	12	3/4"	3/4"-14	34	96	27			420
YBT1616	25	16	1"	1"-11	40	113	36			414
YBT2020	31	20	1 1/4"	1 1/4"-11	47	135	46			414
YBT2424	38	24	1 1/2"	1 1/2"-11	48	142	50			345
YBT3232	51	32	2"	2"-11	57	155	65			345

YBF

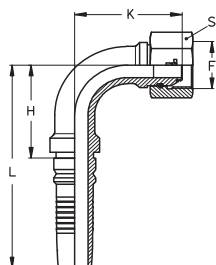
BSP STRAIGHT FEMALE - 60° O-RING CONE - TIEFFE NUT SLANGKOPP. RECHT BSP - CONUS 60° O-RING - TIEFFE MOER



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L	S	O'Ring		
YBF1212	19	12	3/4"	3/4"-14	25	87		32	16x1,5	420
YBF1616	25	16	1"	1"-11	30	103		41	22x1,5	414
YBF2016	25	16	1"	1 1/4"-11	33	106		50	28,3x1,78	414
YBF2020	31	20	1 1/4"	1 1/4"-11	35	122		50	28,3x1,78	414
YBF2424	38	24	1 1/2"	1 1/2"-11	36	130		60	33,05x1,78	345
YBF3232	51	32	2"	2"-11	40	138		75	44,17x1,78	345

YBF90

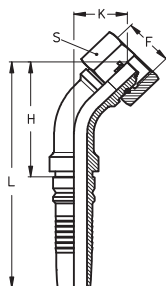
90° BSP SWEPT ELBOW - 60° O-RING CONE - ONE PIECE - TIEFFE NUT SLANGKOPP. 90° BSP - CONUS 60° O-RING - UIT 1 STUK - TIEFFE MOER



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L	K	S	O'Ring	
YBF901212	19	12	3/4"	3/4"-14	55	117	63	32	16x1,5	420
YBF901616	25	16	1"	1"-11	71	144	79	41	22x1,5	414
YBF902016	25	16	1"	1 1/4"-11	71	144	81	50	28,3x1,78	414
YBF902020	31	20	1 1/4"	1 1/4"-11	90	177	96	50	28,3x1,78	414
YBF902424	38	24	1 1/2"	1 1/2"-11	107	201	113	60	33,05x1,78	345
YBF903232	51	32	2"	2"-11	142	240	140	75	44,17x1,78	345

YBF45

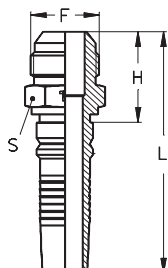
45° BSP SWEPT ELBOW - 60° O-RING CONE - ONE PIECE - TIEFFE NUT SLANGKOPP. 45° BSP - CONUS 60° O-RING - UIT 1 STUK - TIEFFE MOER



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L	K	S	O'Ring	
YBF451212	19	12	3/4"	3/4"-14	68	130	32	32	16x1,5	420
YBF451616	25	16	1"	1"-11	86	159	39	41	22x1,5	414
YBF452016	25	16	1"	1 1/4"-11	88	161	41	50	28,3x1,78	414
YBF452020	31	20	1 1/4"	1 1/4"-11	107	195	47	50	28,3x1,78	414
YBF452424	38	24	1 1/2"	1 1/2"-11	126	220	55	60	33,05x1,78	345
YBF453232	51	32	2"	2"-11	160	258	66	75	44,17x1,78	345

YJM

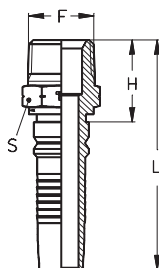
J.I.C. MALE - 74° CONE BU.DR. SLANGKOPPELING J.I.C. - CONUS 74°



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)			W. P. (max) bar
	DN	SIZE	Inch		H	L	S	
YJM1712	19	12	3/4"	1 1/16"-12	38	99	27	420
YJM1912	19	12	3/4"	1 3/16"-12	39	101	32	420
YJM2112	19	12	3/4"	1 5/16"-12	41	102	36	420
YJM2116	25	16	1"	1 5/16"-12	42	114	36	414
YJM2616	25	16	1"	1 5/8"-12	45	117	46	414
YJM2620	31	20	1 1/4"	1 5/8"-12	47	134	46	414
YJM3020	31	20	1 1/4"	1 7/8"-12	51	139	50	414
YJM3024	38	24	1 1/2"	1 7/8"-12	52	145	50	345
YJM4032	51	32	2"	2 1/2"-12	63	160	65	345

YNM

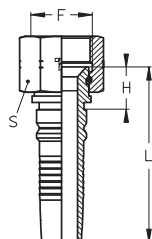
NPTF MALE - 60° CONE SEAT BU.DR. SLANGKOPP. NPTF - CONUS 60°



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)			W. P. (max) bar
	DN	SIZE	Inch		H	L	S	
YNM1212	20	12	3/4"	3/4"-14	34	98	27	420
YNM1612	20	12	3/4"	1"-11,5	42	103	36	420
YNM1616	25	16	1"	1"-11,5	42	115	36	420
YNM2016	25	16	1"	1 1/4"-11,5	45	118	46	420
YNM2020	32	20	1 1/4"	1 1/4"-11,5	47	135	46	420
YNM2420	32	20	1 1/4"	1 1/2"-11,5	50	137	50	420
YNM2424	40	24	1 1/2"	1 1/2"-11,5	50	144	50	345
YNM3232	50	32	2"	2"-11,5	55	153	60	345

YJF

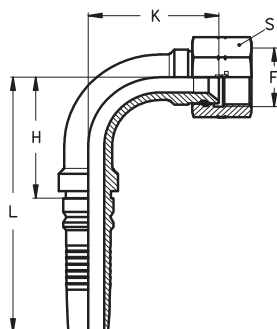
J.I.C. STRAIGHT FEMALE - 74° CONE SEAT - TIEFFE NUT SLANGKOPP. WARTEL J.I.C. - CONUS 74° - TIEFFE MOER



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L	S			
YJF1712	19	12	3/4"	1 1/16"-12	20	82		32		420
YJF1912	19	12	3/4"	1 3/16"-12	21,5	83		36		420
YJF2112	19	12	3/4"	1 5/16"-12	22,5	84		41		420
YJF2116	25	16	1"	1 5/16"-12	23,5	96		41		414
YJF2616	25	16	1"	1 5/8"-12	28	101		50		414
YJF2620	31	20	1 1/4"	1 5/8"-12	29	117		50		414
YJF3020	31	20	1 1/4"	1 7/8"-12	29,5	117		60		414
YJF3024	38	24	1 1/2"	1 7/8"-12	30	124		60		345
YJF4032	51	32	2"	2 1/2"-12	37	135		75		345

YJF90

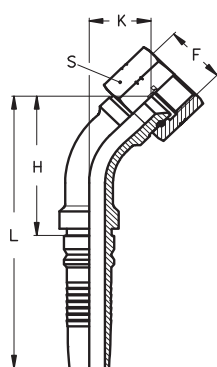
J.I.C. 90° SWEEP ELBOW - 74° CONE SEAT - ONE PIECE - TIEFFE NUT BOCHT 90° J.I.C. - CONUS 74° - UIT 1 STUK - TIEFFE MOER



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L	K	S		
YJF901712	19	12	3/4"	1 1/16"-12	55	117	58	32		420
YJF901912	19	12	3/4"	1 3/16"-12	55	117	59	36		420
YJF902112	19	12	3/4"	1 5/16"-12	55	117	63	41		420
YJF902116	25	16	1"	1 5/16"-12	71	144	73	41		414
YJF902616	25	16	1"	1 5/8"-12	71	144	76	50		414
YJF902620	31	20	1 1/4"	1 5/8"-12	90	177	91	50		414
YJF903020	31	20	1 1/4"	1 7/8"-12	90	177	91	60		414
YJF903024	38	24	1 1/2"	1 7/8"-12	107	201	106	60		345
YJF904032	51	32	2"	2 1/2"-12	140	240	139	75		345

YJF45

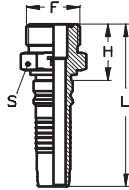
J.I.C. 45° SWEEP ELBOW - 74° CONE SEAT - ONE PIECE - TIEFFE NUT BOCHT 45° J.I.C. - CONUS 74° - UIT 1 STUK - TIEFFE MOER



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L	K	S		
YJF451712	19	12	3/4"	1 1/16"-12	64	126	28	32		420
YJF451912	19	12	3/4"	1 3/16"-12	65	127	29	36		420
YJF452112	19	12	3/4"	1 5/16"-12	68	130	32	41		420
YJF452116	25	16	1"	1 5/16"-12	82	155	35	41		414
YJF452616	25	16	1"	1 5/8"-12	84	157	37	50		414
YJF452620	31	20	1 1/4"	1 5/8"-12	103	191	43	50		414
YJF453020	31	20	1 1/4"	1 7/8"-12	103	191	43	60		414
YJF453024	38	24	1 1/2"	1 7/8"-12	121	215	50	60		345
YJF454032	51	32	2"	2 1/2"-12	158	256	65	75		345

YMU
ORFS MALE

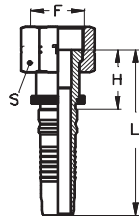
SLANGKOPPELING BU.DR. ORFS



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					W. P. (max)
	DN	SIZE	Inch	F	H	L	S	O'Ring**	bar	
YMU1912	19	12	3/4"	1 3/16"-12	34	95	32	18,77x1,78	420	
YMU2116	25	16	1"	1 7/16"-12	37	110	41	23,52x1,78	414	
YMU2720	31	20	1 1/4"	1 11/16"-12	40	128	46	29,87x1,78	250	
YMU3224	38	24	1 1/2"	2"-12	43	136	55	37,82x1,78	250	

YFU
ORFS FEMALE

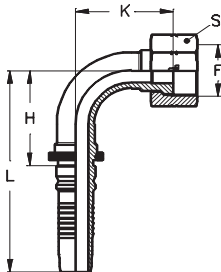
SLANGKOPP. WARTEL ORFS



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					W. P. (max)
	DN	SIZE	Inch	F	H	L	S	O'Ring**	bar	
YFU1912	19	12	3/4"	1 3/16"-12	35	97	36		420	
YFU2116	25	16	1"	1 7/16"-12	37	110	41		414	
YFU2720	31	20	1 1/4"	1 11/16"-12	38	126	50		250	
YFU3224	38	24	1 1/2"	2"-12	39	132	60		250	

YFU90
90° ORFS SWEPT ELBOW

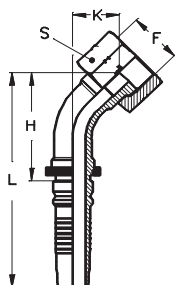
SLANGKOPP. WARTEL 90° ORFS



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					W. P. (max)
	DN	SIZE	Inch	F	H	L	K	S	bar	
YFU901912	19	12	3/4"	1 3/16"-12	56	118	55	36	420	
YFU902116	25	16	1"	1 7/16"-12	71	144	67	41	414	
YFU902720	31	20	1 1/4"	1 11/16"-12	90	177	81	50	250	
YFU903224	38	24	1 1/2"	2"-12	107	201	95	60	250	

YFU45
45° ORFS SWEPT ELBOW

SLANGKOPP. WARTEL 45° ORFS

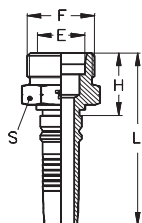


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto	Dimensions (mm)					W. P. (max)
	DN	SIZE	Inch	F	H	L	K	S	bar	
YFU451912	19	12	3/4"	1 3/16"-12	63	125	26	36	420	
YFU452116	25	16	1"	1 7/16"-12	78	151	31	41	414	
YFU452720	31	20	1 1/4"	1 11/16"-12	96	184	36	50	250	
YFU453224	38	24	1 1/2"	2"-12	113	207	42	60	250	

** The "Part.N." do not include O'Ring.

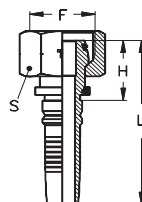
** IL "Part.N." non comprende O'Ring.

YME METRIC MALE - 24° CONE SEAT - HEAVY TYPE SLANGKOPP. BU.DR. METRISCH - CONUS 24° - ZWARE SERIE



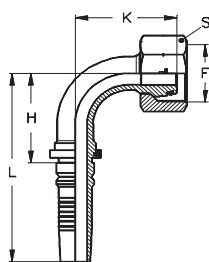
TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)				W. P. (max) bar	
	DN	SIZE	Inch		H	L	S	E (PIPE)		
YME302012	19	12	3/4"	M 30x2	31	93		30	20	420
YME362512	19	12	3/4"	M 36x2	35	97		36	25	420
YME362516	25	16	1"	M 36x2	36	109		36	25	414
YME423016	25	16	1"	M 42x2	40	113		46	30	280
YME423020	31	20	1 1/4"	M 42x2	42	130		46	30	250
YME523820	31	20	1 1/4"	M 52x2	46	134		55	38	250
YME523824	38	24	1 1/2"	M 52x2	47	141		55	38	250

YFEO O'RING METRIC FEMALE - 24° CONE - HEAVY TYPE SLANGKOPP. WARTEL METRISCH - CONUS 24° O'RING - ZWARE SERIE



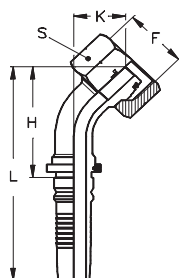
TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)				W. P. (max) bar	
	DN	SIZE	Inch		H	L	S	O'Ring		
YFEO302012	19	12	3/4"	M 30x2	33	95		36	16,3x2,4	420
YFEO362512	19	12	3/4"	M 36x2	36	98		41	20,3x2,4	420
YFEO362516	25	16	1"	M 36x2	37	110		41	22x2	414
YFEO423016	25	16	1"	M 42x2	39	112		50	25,3x2,4	280
YFEO423020	31	20	1 1/4"	M 42x2	41	128		50	25,3x2,4	250
YFEO523820	31	20	1 1/4"	M 52x2	43	131		60	33,3x2,4	250
YFEO523824	38	24	1 1/2"	M 52x2	44	138		60	33,3x2,4	250

YFEO90 90° METRIC SWEEP ELBOW - 24° CONE - HEAVY TYPE BOCHT 90° METRISCH - CONUS 24° O'RING - ZWARE SERIE



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)				W. P. (max) bar	
	DN	SIZE	Inch		H	L	K	S		O'Ring
YFEO90302012	19	12	3/4"	M 30x2	55	117	60	36	16,3x2,4	420
YFEO90362512	19	12	3/4"	M 36x2	55	117	60	41	20,3x2,4	420
YFEO90362516	25	16	1"	M 36x2	71	144	71	41	22x2	414
YFEO90423016	25	16	1"	M 42x2	71	144	71	50	25,3x2,4	280
YFEO90423020	31	20	1 1/4"	M 42x2	90	177	85	50	25,3x2,4	250
YFEO90523820	31	20	1 1/4"	M 52x2	90	177	86	60	33,3x2,4	250
YFEO90523824	38	24	1 1/2"	M 52x2	107	201	98	60	33,3x2,4	250

YFEO45 45° METRIC SWEEP ELBOW - 24° CONE - HEAVY TYPE BOCHT 45° METRISCH - CONUS 24° O'RING - ZWARE SERIE

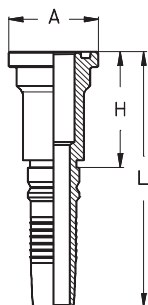


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Thread Filetto F	Dimensions (mm)				W. P. (max) bar	
	DN	SIZE	Inch		H	L	K	S		O'Ring
YFEO45302012	19	12	3/4"	M 30x2	67	129	29	36	16,3x2,4	420
YFEO45362512	19	12	3/4"	M 36x2	66	128	30	41	20,3x2,4	420
YFEO4536216	25	16	1"	M 36x2	81	154	33	41	22x2	414
YFEO45423016	25	16	1"	M 42x2	81	154	33	50	25,3x2,4	280
YFEO45423020	31	20	1 1/4"	M 42x2	99	187	39	50	25,3x2,4	250
YFEO45523820	31	20	1 1/4"	M 52x2	100	188	40	60	33,3x2,4	250
YFEO45523824	38	24	1 1/2"	M 52x2	116	210	44	60	33,3x2,4	250

Y3

STRAIGHT SAE J518 FLANGE - 3000 PSI - ONE PIECE

RECHTE FLENS SAE J518 - 3000 PSI - UIT 1 STUK

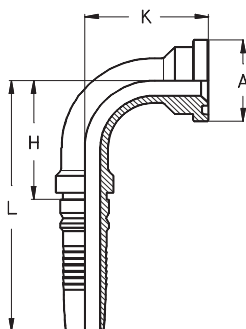


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L		A	O'Ring**	
Y31212	19	12	3/4"	3/4"	52	113		38	24,99x3,53	350
Y31612	19	12	3/4"	1"	58	119		44,5	32,92x3,53	350
Y31612	25	16	1"	3/4"	53	125		38	24,99x3,53	350
Y31616	25	16	1"	1"	59	131		44,5	32,92x3,53	350
Y32016	25	16	1"	1 1/4"	63	135		51	37,69x3,53	250
Y32020	31	20	1 1/4"	1 1/4"	64	151		51	37,69x3,53	250
Y32420	31	20	1 1/4"	1 1/2"	69	156		60,5	47,22x3,53	200
Y32424	38	24	1 1/2"	1 1/2"	69	163		60,5	47,22x3,53	200
Y33224	38	24	1 1/2"	2"	74	168		71,5	56,74x3,53	200
Y33232	51	32	2"	2"	76	173		71,5	56,74x3,53	200

Y390

90° SWEPT ELBOW - SAE J518 FLANGE - 3000 PSI - ONE PIECE

BOCHT 90° - FLENS SAE J518 - 3000 PSI - UIT 1 STUK

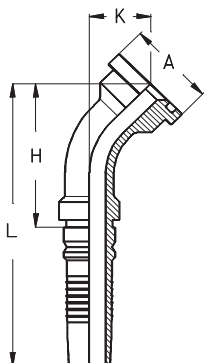


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L	K	A	O'Ring**	
Y3901212	19	12	3/4"	3/4"	56	118	56	38	24,99x3,53	350
Y3901612	19	12	3/4"	1"	56	118	61	44,5	32,92x3,53	350
Y3901216	25	16	1"	3/4"	72	145	67	38	24,99x3,53	350
Y3901616	25	16	1"	1"	72	145	68	44,5	32,92x3,53	350
Y3902016	25	16	1"	1 1/4"	72	145	70	51	37,69x3,53	250
Y3902020	31	20	1 1/4"	1 1/4"	91	178	85	51	37,69x3,53	250
Y3902420	31	20	1 1/4"	1 1/2"	91	178	85	60,5	47,22x3,53	200
Y3902424	38	24	1 1/2"	1 1/2"	108	202	100	60,5	47,22x3,53	200
Y3903224	38	24	1 1/2"	2"	108	202	102	71,5	56,74x3,53	200
Y3903232	51	32	2"	2"	143	281	129	71,5	56,74x3,53	200

Y345

45° SWEPT ELBOW - SAE J518 FLANGE - 3000 PSI - ONE PIECE

BOCHT 45° - FLENS SAE J518 - 3000 PSI - UIT 1 STUK



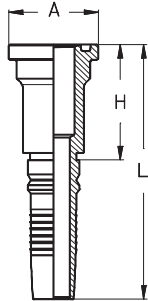
TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L	K	A	O'Ring**	
Y3451212	19	12	3/4"	3/4"	63	125	27	38	24,99x3,53	350
Y3451612	19	12	3/4"	1"	67	129	31	44,5	32,92x3,53	350
Y3451216	25	16	1"	3/4"	78	151	31	38	24,99x3,53	350
Y3451616	25	16	1"	1"	79	152	32	44,5	32,92x3,53	350
Y3452016	25	16	1"	1 1/4"	80	153	33	51	37,69x3,53	250
Y3452020	31	20	1 1/4"	1 1/4"	99	187	39	51	37,69x3,53	250
Y3452420	31	20	1 1/4"	1 1/2"	99	187	39	60,5	47,22x3,53	200
Y3452424	38	24	1 1/2"	1 1/2"	117	211	46	60,5	47,22x3,53	200
Y3453224	38	24	1 1/2"	2"	118	212	47	71,5	56,74x3,53	200
Y3453232	51	32	2"	2"	152	250	58	71,5	56,74x3,53	200

** The "Part.N." do not include O'Ring.

** IL "Part.N." non comprende O'Ring.

Y6

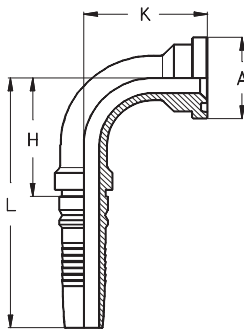
STRAIGHT SAE J518 FLANGE - 6000 PSI - ONE PIECE RECHTE FLENS SAE J518 - 6000 PSI - UIT 1 STUK



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L	A	O'Ring**		
Y61212	19	12	3/4"	3/4"	58	120	41,3	24,99x3,53	420	
Y61612	19	12	3/4"	1"	60	122	47,6	32,92x3,53	420	
Y61216	25	16	1"	3/4"	59	132	41,3	24,99x3,53	415	
Y61616	25	16	1"	1"	64	137	47,6	32,92x3,53	415	
Y62016	25	16	1"	1 1/4"	68	141	54	37,69x3,53	415	
Y62020	31	20	1 1/4"	1 1/4"	69	157	54	37,69x3,53	415	
Y62420	31	20	1 1/4"	1 1/2"	79	166	63,5	47,22x3,53	415	
Y62424	38	24	1 1/2"	1 1/2"	79	173	63,5	47,22x3,53	345	
Y63232	51	32	2"	2"	97	195	79,4	56,74x3,53	345	

Y690

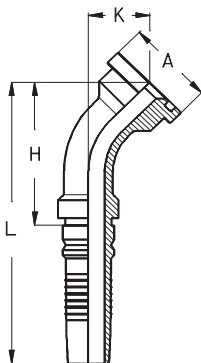
90° SWEPT ELBOW - SAE J518 FLANGE - 6000 PSI - ONE PIECE BOCHT 90° - FLENS SAE J518 - 6000 PSI - UIT 1 STUK



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L	K	A	O'Ring**	
Y6901212	19	12	3/4"	3/4"	56	118	61	41,3	24,99x3,53	420
Y6901612	19	12	3/4"	1"	56	118	66	47,6	32,92x3,53	420
Y6901216	25	16	1"	3/4"	72	145	67	41,3	24,99x3,53	415
Y6901616	25	16	1"	1"	72	145	72	47,6	32,92x3,53	415
Y6902016	25	16	1"	1 1/4"	72	145	79	54	37,69x3,53	415
Y6902020	31	20	1 1/4"	1 1/4"	91	178	86	54	37,69x3,53	415
Y6902420	31	20	1 1/4"	1 1/2"	91	178	93	63,5	47,22x3,53	415
Y6902424	38	24	1 1/2"	1 1/2"	108	202	100	63,5	47,22x3,53	345
Y6903232	51	32	2"	2"	143	240	131	79,4	56,74x3,53	345

Y645

45° SWEPT ELBOW - SAE J518 FLANGE - 6000 PSI - ONE PIECE BOCHT 45° FLENS SAE J518 - 6000 PSI - UIT 1 STUK



TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L	K	A	O'Ring**	
Y6451212	19	12	3/4"	3/4"	67	129	31	41,3	24,99x3,53	420
Y6451612	19	12	3/4"	1"	71	132	34	47,6	32,92x3,53	420
Y6451216	25	16	1"	3/4"	78	151	31	41,3	24,99x3,53	415
Y6451616	25	16	1"	1"	82	155	35	47,6	32,92x3,53	415
Y6452016	25	16	1"	1 1/4"	87	160	40	54	37,69x3,53	415
Y6452020	31	20	1 1/4"	1 1/4"	100	188	40	54	37,69x3,53	415
Y6452420	31	20	1 1/4"	1 1/2"	105	193	45	63,5	47,22x3,53	415
Y6452424	38	24	1 1/2"	1 1/2"	117	211	46	63,5	47,22x3,53	345
Y6453232	51	32	2"	2"	154	252	60	79,4	56,74x3,53	345

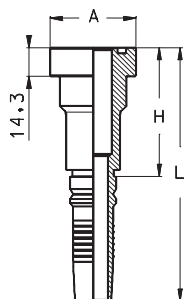
** The "Part.N." do not include O'Ring.

** IL "Part.N." non comprende O'Ring.

YC

STRAIGHT "SUPERCAT" FLANGE - ONE PIECE

RECHTE FLENS "SUPERCAT" - UIT 1 STUK

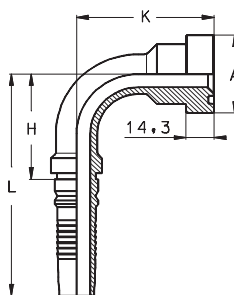


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L	A	O'Ring**		
YC1212	19	12	3/4"	3/4"	64	126	41,3	24,99x3,53	420	
YC1612	19	12	3/4"	1"	65	127	47,6	32,92x3,53	420	
YC1616	25	16	1"	1"	69	142	47,6	32,92x3,53	415	
YC2016	25	16	1"	1 1/4"	72	145	54	37,69x3,53	415	
YC2020	31	20	1 1/4"	1 1/4"	73	161	54	37,69x3,53	415	
YC2420	31	20	1 1/4"	1 1/2"	80	168	63,5	47,22x3,53	415	
YC2424	38	24	1 1/2"	1 1/2"	81	175	63,5	47,22x3,53	345	

YC90

90° "SUPERCAT" FLANGE - ONE PIECE

FLENS 90° "SUPERCAT" - UIT 1 STUK

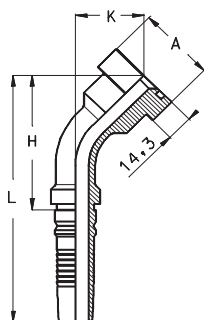


TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L	K	A	O'Ring**	
YC901212	19	12	3/4"	3/4"	55	117	70	41,3	24,99x3,53	420
YC901612	19	12	3/4"	1"	55	117	73	47,6	32,92x3,53	420
YC901616	25	16	1"	1"	71	144	79	47,6	32,92x3,53	415
YC902016	25	16	1"	1 1/4"	71	144	82	54	37,69x3,53	415
YC902020	31	20	1 1/4"	1 1/4"	90	177	89	54	37,69x3,53	415
YC902420	31	20	1 1/4"	1 1/2"	90	177	97	63,5	47,22x3,53	415
YC902424	38	24	1 1/2"	1 1/2"	107	201	105	63,5	47,22x3,53	345

YC45

45° "SUPERCAT" FLANGE - ONE PIECE

FLENS 45° "SUPERCAT" - UIT 1 STUK

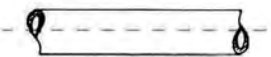
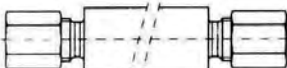
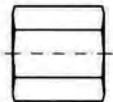



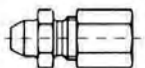
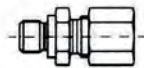


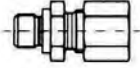
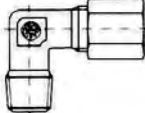
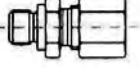
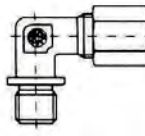

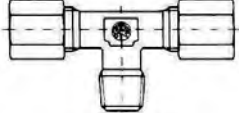
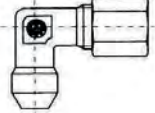
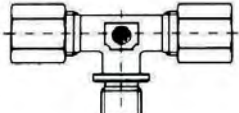
TIEFFE Part.N.	Hose I.D. Ø interno tubo			Flange Flangia	Dimensions (mm)					W. P. (max) bar
	DN	SIZE	Inch		H	L	K	A	O'Ring**	
YC451212	19	12	3/4"	3/4"	73	135	37	41,3	24,99x3,53	420
YC451612	19	12	3/4"	1"	76	137	39	47,6	32,92x3,53	420
YC451616	25	16	1"	1"	87	160	40	47,6	32,92x3,53	415
YC452016	25	16	1"	1 1/4"	88	161	41	54	37,69x3,53	415
YC452020	31	20	1 1/4"	1 1/4"	102	189	42	54	37,69x3,53	415
YC452420	31	20	1 1/4"	1 1/2"	108	196	48	63,5	47,22x3,53	415
YC452424	38	24	1 1/2"	1 1/2"	120	214	49	63,5	47,22x3,53	345

** The "Part.N." do not include O'Ring.

** Het "artikel no" is zonder O'Ring.

Overzicht snijringkoppelingen

	
	<p>GES rechte laskoppeling 3.13</p>
	
<p>M moer 3.11</p>	<p>GE rechte inschroefkoppeling 3.14</p>
	
<p>D snijring 3.11</p>	<p>GE 60GR rechte snijringkopp. 60gr conus 3.16</p>
	
<p>AS rechte aanlaskoppeling 3.12</p>	<p>GE WD rechte snijringkopp. met dichting 3.17</p>

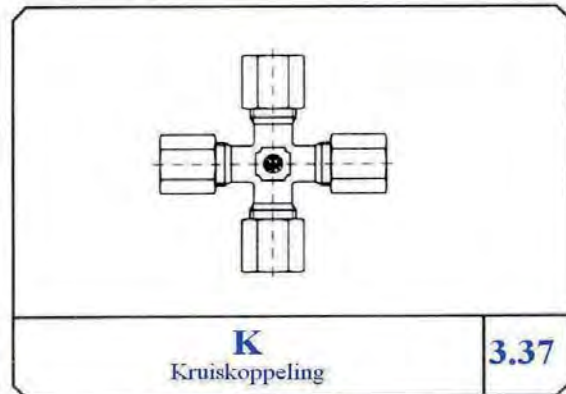
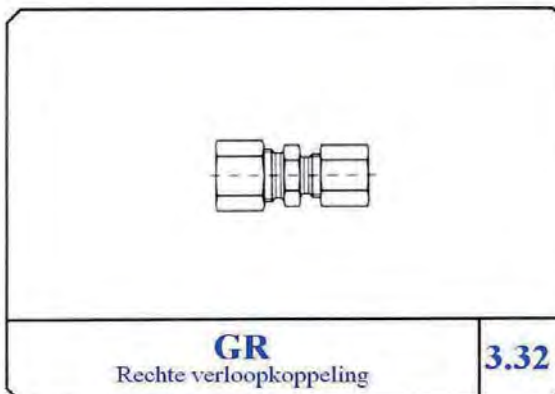
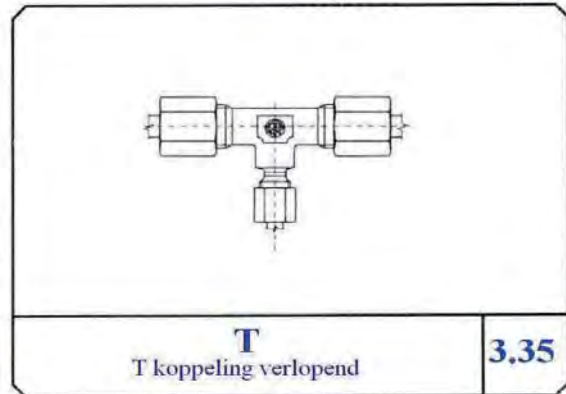
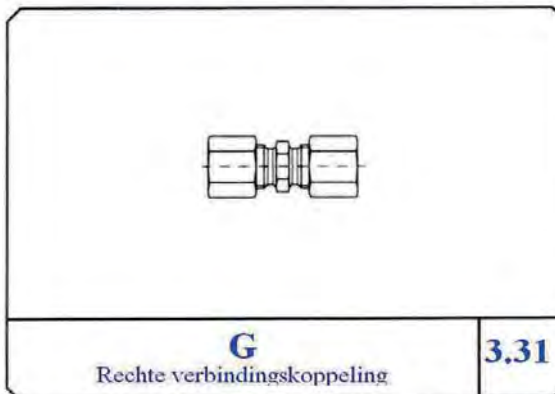
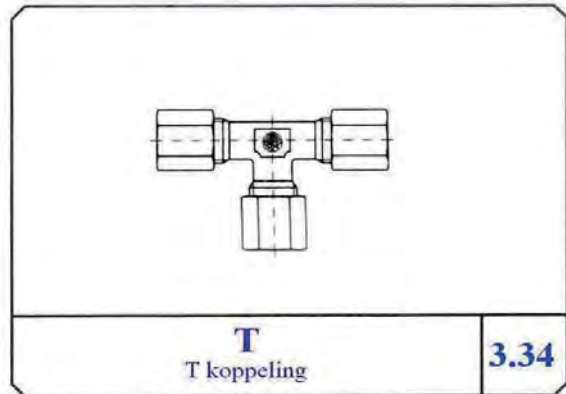
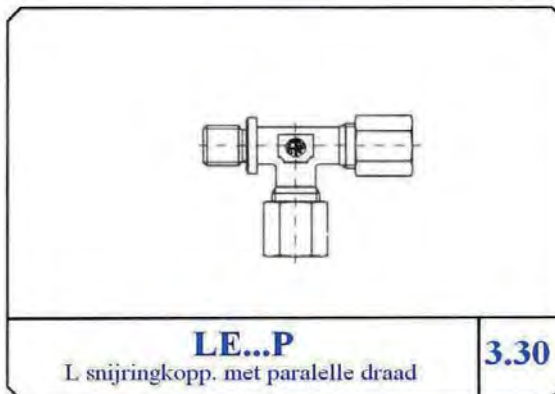
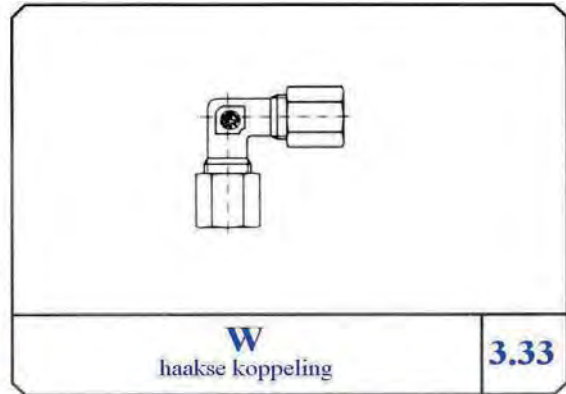
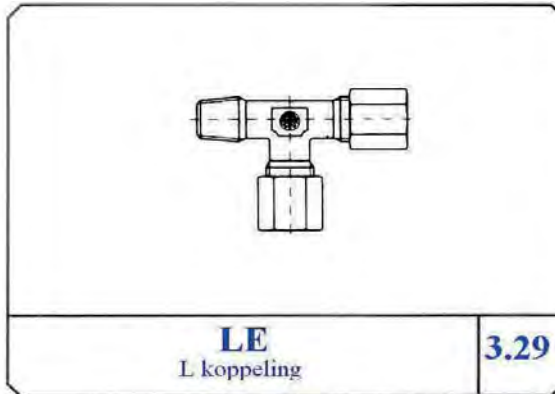
	
<p>GE TYPE A rechte inschroefk. type a</p>	<p>WE haakse inschroefkoppeling</p>
	
<p>GE...U.. rechte inschroefk. unf</p>	<p>WE.. P haakse inschroefkopp. parallele draad</p>
	
<p>GE...T.. rechte inschroefk. taps</p>	<p>TE T inschroefkoppeling</p>
	
<p>haakse aanlasschroefk.</p>	<p>TE...P T inschroefkopp. parallele draad</p>


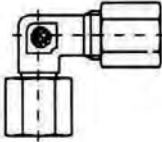
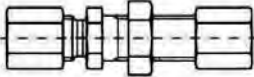
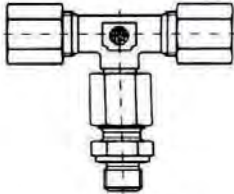
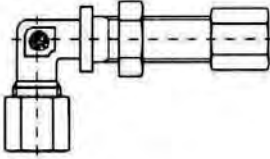
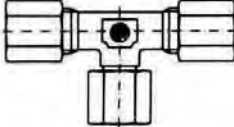
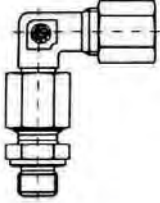
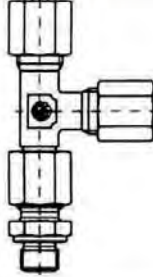


RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN

3

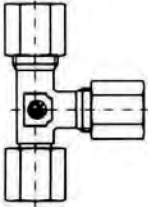
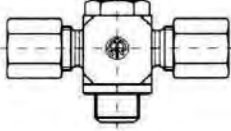
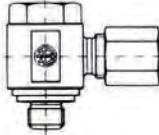
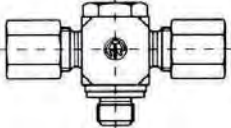
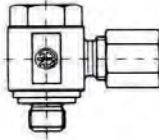
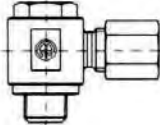
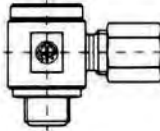
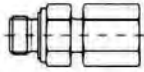



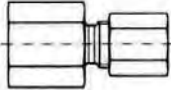
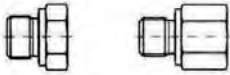
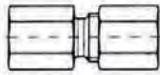

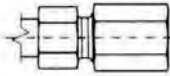
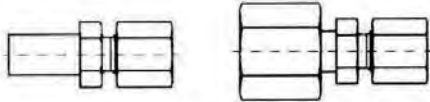
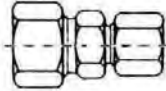
	
<p>AMLN schotmoer</p>	<p>EWS instelbare haakse koppeling</p>
	
<p>SV schotkoppeling</p>	<p>3.43</p>
	
<p>WSV haakse schotkoppeling</p>	<p>ETS instelbare t koppeling</p>
	
<p>EWS instelbare haakse koppeling</p>	<p>3.45</p>


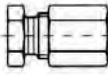
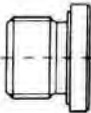
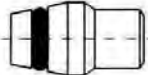

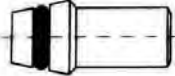
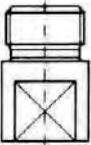
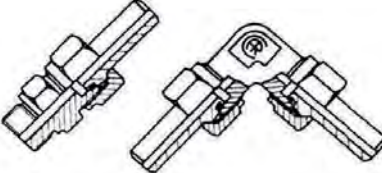



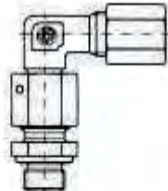
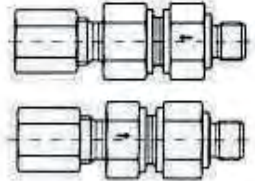
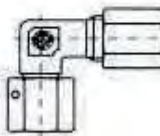

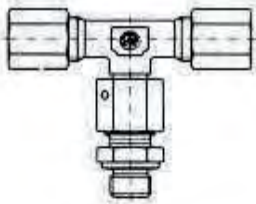
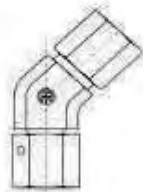
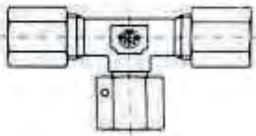
HYDRAULIEK SNIJRINGKOPPELINGEN

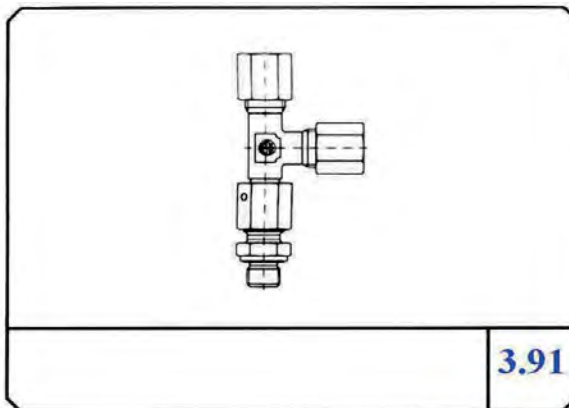
3

	
ELS instelbare L koppeling	DSWT banjokoppeling T
3.46	3.53
	
SWV banjokoppeling	DSWT...WD banjokoppeling T met rubber seal
3.47	3.55
	
SWV...WD banjokoppeling met rubber seal	SWV...KL banjokoppeling licht
3.49	3.57
	
3.51	PSS..LR.. recht voorgesmonteerd pijpstuk
	3.59

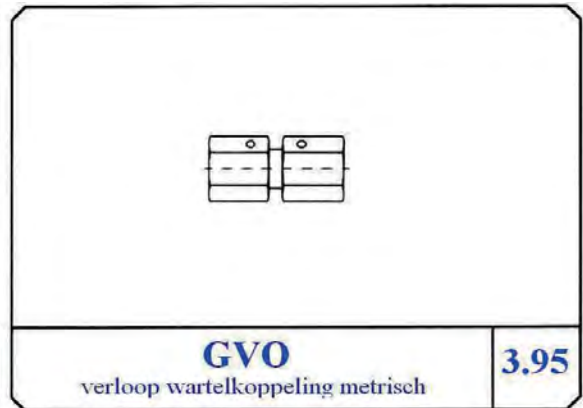
	
<p>PSS..LN.. pijpstuk npt</p>	<p>MAV manometer koppeling</p>
<p>3.61</p>	<p>3.66</p>
	
<p>VAD reductiekoppeling buiten binnen</p>	<p>GAI opschroefkoppeling</p>
<p>3.62</p>	<p>3.67</p>
	
<p>3.63</p>	<p>TN258 Diesel</p>
<p>3.68</p>	
	
<p>RL.. RLS.. standpijp</p>	<p>3.69</p>
<p>3.64</p>	

	
<p style="text-align: right;">3.71</p>	<p style="text-align: center;">PME plug</p> <p style="text-align: right;">3.75</p>
	
<p style="text-align: center;">PLUG plug met zeskant</p> <p style="text-align: right;">3.72</p>	<p style="text-align: center;">STOP stop met oring</p> <p style="text-align: right;">3.76</p>
	
	<p style="text-align: center;">SNO lasnippel met oring</p> <p style="text-align: right;">3.78</p>
	
<p style="text-align: center;">VMK voormontage koppeling</p> <p style="text-align: right;">3.74</p>	<p style="text-align: center;">soldeer nippel</p> <p style="text-align: right;">3.79</p>

	
<p>RD terugslag ventiel</p>	<p>3.81</p>
	
<p>NRBT terugslag ventiel met rubber afdichting</p>	<p>EWS...WD instelbare haakse koppeling</p>
	
<p>3.85</p>	<p>3.89</p>
	
<p>EWS...45 instelbare 45 graden koppeling</p>	<p>ETS...WD instelbare T koppeling, zware uitvoering</p>
<p>3.86</p>	<p>3.90</p>

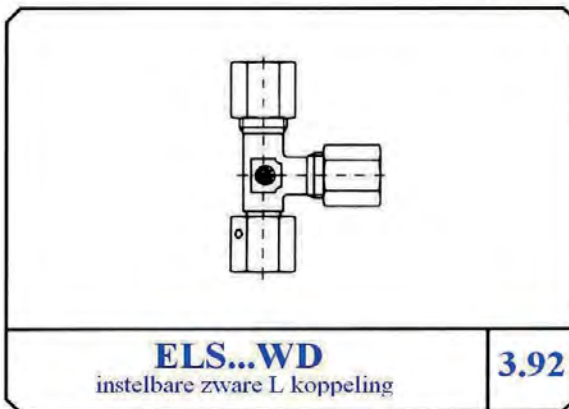


3.91



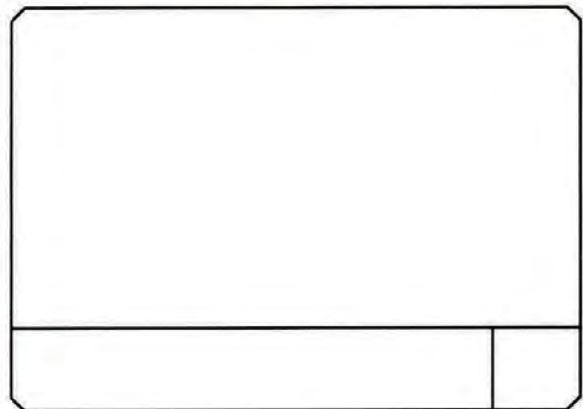
GVO
verloop wartelkoppeling metrisch

3.95



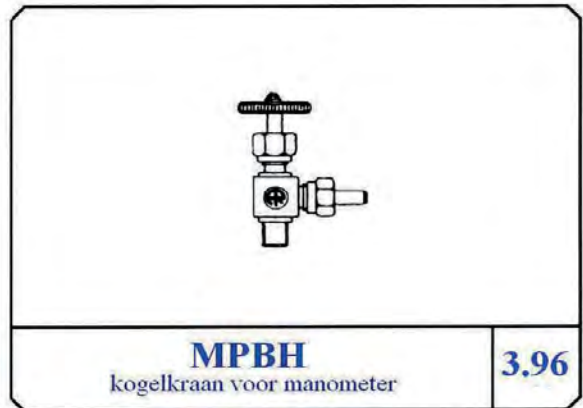
ELS..WD
instelbare zware L koppeling

3.92



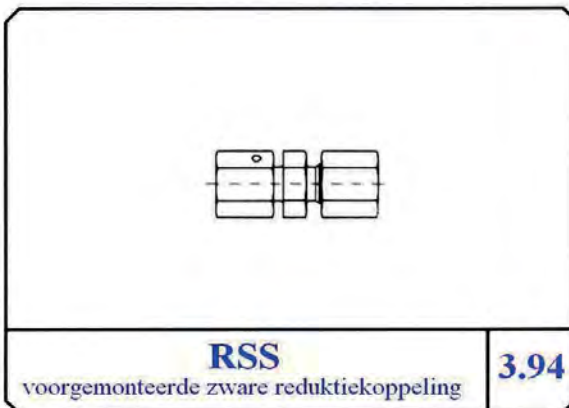
PSS..WD
voorgemonteerde zwaar pijpstuk

3.93



MPBH
kogelkraan voor manometer

3.96



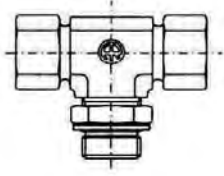
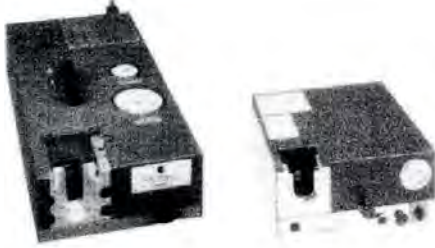
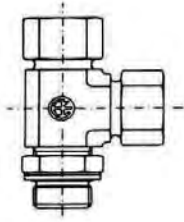

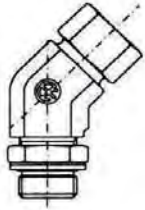
RSS
voorgemonteerde zware reductiekoppeling

3.94



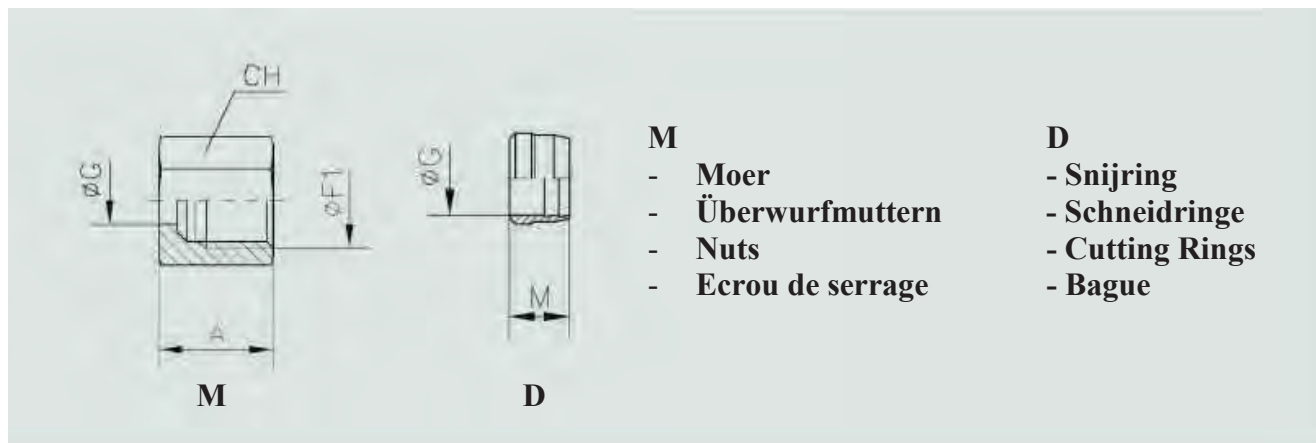
WE..LRO..
haakse koppeling met schotmoer

3.101

	
<p>3.105</p>	<p>voormontage machine 3.117</p>
	
<p>3.109</p>	<p>BY buigijzer 3.120</p>
	<p>Technische data</p>
<p>3.113</p>	<p>3.121</p>

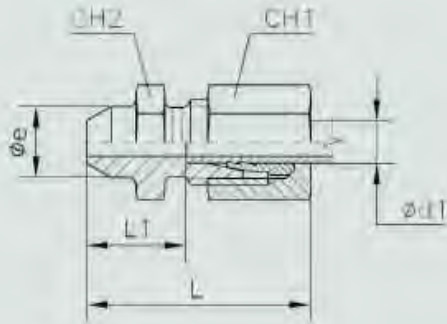
M en D

Moeren en snijringen.



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	Ø F1	Ø G	A	M	CH	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.×100 P.	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.×100 P.	
LL	4	100	8 × 1	4	11	6	10	M 4LL	0,4	D 4LL	0,05	
	5		10 × 1	5	11,5	7	12	M 5LL	0,5	D 5LL	0,07	
	6		10 × 1	6	11,5	7	12	M 6LL	0,5	D 6LL	0,09	
	8		12 × 1	8	12	7	14	M 8LL	0,7	D 8LL	0,11	
	10		14 × 1	10	12,5	7	17	M10LL	1,2	D10LL	0,14	
	12		16 × 1	12	13	7,5	19	M12LL	1,5	D12LL	0,16	
L	6	315	12 × 1,5	6	14,5	9,5	14	M 6L	0,9	D 6L/S	0,13	
	8		14 × 1,5	8	14,5	9,5	17	M 8L	1,2	D 8L/S	0,19	
	10		16 × 1,5	10	15,5	10	19	M10L	2,1	D10L/S	0,24	
	12		18 × 1,5	12	15,5	10	22	M12L	2,4	D12L/S	0,31	
	15		22 × 1,5	15	17	10	27	M15L	3,9	D15L	0,41	
	18		26 × 1,5	18	18	10,5	32	M18L	5,9	D18L	0,46	
	22	160	30 × 2	22	20	11	36	M22L	7,9	D22L	0,60	
	28		36 × 2	28	21	11	41	M28L	8,4	D28L	0,75	
	35		45 × 2	35	24	13,5	50	M35L	12,9	D35L	1,60	
	42		52 × 2	42	24	13,5	60	M42L	20,9	D42L	2,10	
S	6	630	14 × 1,5	8	16,5	9,5	17	M 6S	1,4	D 6L/S	0,13	
	8		16 × 1,5	8	16,5	9,5	19	M 8S	1,6	D 8L/S	0,19	
	10		18 × 1,5	10	17,5	10	22	M10S	3,1	D10L/S	0,24	
	12		20 × 1,5	12	17,5	10	24	M12S	3,6	D12L/S	0,31	
	14		22 × 1,5	14	20,5	10	27	M14S	5,1	D14S	0,36	
	16		400	24 × 1,5	16	20,5	10,5	30	M16S	6,1	D16S	0,41
	20	30 × 2		20	24	13	36	M20S	9,4	D20S	0,85	
	25	36 × 2		25	27	13	46	M25S	19,5	D25S	1,06	
	30	42 × 2		30	29	13,5	50	M30S	21,5	D30S	1,60	
	38	315		52 × 2	38	32,5	13,5	60	M38S	31,0	D38S	2,00

AS Rechte aanlaskoppeling



- AS**
- Rechte aanlaskoppeling
 - Gerade Anschweissverschraubung
 - Welding Bosses
 - Union simple à souder

Serie Reihe Series Série	∅ Tube Rohr AD Tube O.D. ∅ Tube d,	PN	L	L1	∅ e	CH1	CH2	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.×100 P.
L	6	315	29	14	10	14	12	AS 6L	2,5
	8		31	16	12	17	14	AS 8L	3,6
	10		33	18	14	19	17	AS10L	4,7
	12		33	18	16	22	19	AS12L	6,3
	15		37	22	19	27	22	AS15L	8,4
	18		40	23,5	22	32	27	AS18L	13,9
	22	160	45	28,5	27	36	32	AS22L	18,1
	28		47	30,5	32	41	41	AS28L	30,2
	35		54	32,5	40	50	46	AS35L	37,7
	42		58	35	46	60	55	AS42L	64,1
S	6	630	34	19	11	17	14	AS 6S	3,2
	8		36	21	13	19	17	AS 8S	4,9
	10		39	22,5	15	22	19	AS10S	7,2
	12		41	24,5	17	24	22	AS12S	8,3
	14		45	27	19	27	24	AS14S	10,8
	16	400	45	26,5	21	30	27	AS16S	14,4
	20		51	29,5	26	36	32	AS20S	21,8
	25		56	32	31	46	41	AS25S	37,7
	30		62	35,5	36	50	46	AS30S	44,9
	38		69	38	44	60	55	AS38S	68,4

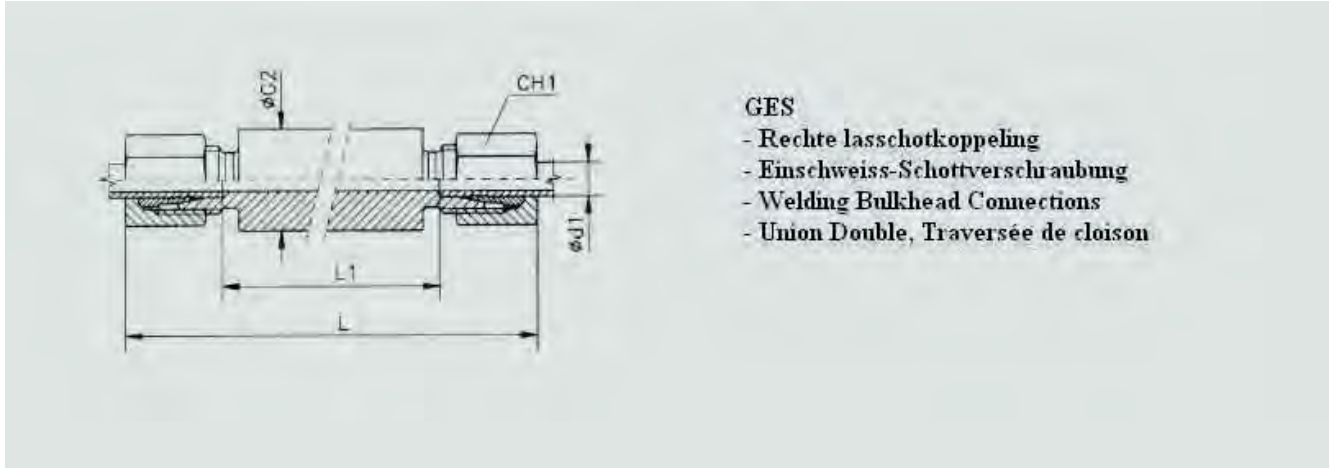


HYDRAULIEK SNIJRINGKOPPELINGEN



GES

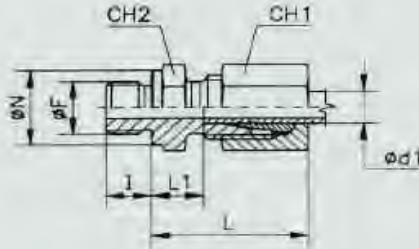
Rechte laskoppeling



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O. D. Ø Tube d ₁	PN	Ø G2	L	L1	CH1	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg×100 P.
L	6	315	18	85	56	14	GES 6L	13,1
	8		20	85	56	17	GES 8L	16,2
	10		22	87	58	19	GES10L	19,5
	12		25	87	58	22	GES12L	24,1
	15		28	100	70	27	GES15L	35,3
	18		32	101	89	32	GES18L	46,9
	22	160	36	105	73	36	GES22L	58,2
	28		40	106	73	41	GES28L	66,0
	35		50	114	71	50	GES35L	102,9
	42		60	115	70	60	GES42L	148,1
S	6	630	20	89	60	17	GES 6S	16,9
	8		22	89	60	19	GES 8S	20,4
	10		25	91	59	22	GES10S	27,0
	12		28	91	59	24	GES12S	33,1
	14		30	107	72	27	GES14S	44,7
	16	400	35	107	71	30	GES16S	57,8
	20		38	114	71	36	GES20S	73,2
	25		45	120	72	46	GES25S	114,6
	30		50	126	73	50	GES30S	134,4
	38		60	133	72	60	GES38S	191,3

GE

Rechte inschroeffkoppeling, type B volgens DIN 3852 deel 2



GE
 - Rechte inschroeffkoppeling
 - Gerade Einschraubverschraubung
 - Male Stud Couplings
 - Union simple male

Filettatura:
Gas cilindrica
Metrica cilindrica

Einschraubgewinde:
Withworth-Rohrgewinde zylindrisch
Metricches Feingewinde zylindrisch

Thread:
B.S.P. parallel
Metric parallel

Filetage:
Gaz cylindrique
Métrique cylindrique

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN PE	b)		L1	CH1	R			M			Peso Gewicht Weight Poids kg. x 100 P.			
			l	L			Ø F	Ø N	CH2	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Ø F	Ø N		CH2	Simbolo di ordinazione Bestell-Nr. Part. No. Références	
L	6	PN 315	8	23	8,5	14	1/8"	14	14	GE 6LR 1/8	10 × 1	14	14	GE 6LM 10	2,5	
	8		12	25	10	17	1/4"	18	19	GE 8LR 1/4	12 × 1,5	17	17	GE 8LM 12	4,5	
	8		12	26	11,5	17	3/8"	22	22	GE 8LR 3/8	—	—	—	—	6,0	
	10		12	26	11	19	1/4"	18	19	GE10LR 1/4	14 × 1,5	19	19	GE10LM 14	4,7	
	10		12	27	12,5	19	3/8"	22	22	GE10LR 3/8	—	—	—	—	6,0	
	12		12	27	12	22	1/4"	18	19	GE12LR 1/4	—	—	—	—	6,1	
	12		12	27	12,5	22	3/8"	22	22	GE12LR 3/8	16 × 1,5	21	22	GE12LM 16	6,5	
	12		14	28	13	22	1/2"	26	27	GE12LR 1/2	—	—	—	—	9,5	
	15		14	29	14	27	1/2"	26	27	GE15LR 1/2	18 × 1,5	23	24	GE15LM 18	11,5	
	18		14	31	14,5	32	1/2"	26	27	GE18LR 1/2	22 × 1,5	27	27	GE18LM 22	13,0	
	22	16	PN 160	16	33	16,5	36	3/4"	32	32	GE22LR 3/4	26 × 1,5	31	32	GE22LM 26	18,0
	28	18		34	17,5	41	1"	39	41	GE28LR 1	33 × 2	39	41	GE28LM 33	25,0	
35	20	39		17,5	50	1" 1/4	49	50	GE35LR 1 1/4	42 × 2	49	50	GE35LM 42	41,0		
42	22	42		19	60	1" 1/2	55	55	GE42LR 1 1/2	48 × 2	55	55	GE42LM 48	46,0		
S	6	a) PE 630	12	28	13	17	1/4"	18	19	GE 6SR 1/4	12 × 1,5	17	17	GE 6SM 12	5,2	
	8		12	30	15	19	1/4"	18	19	GE 8SR 1/4	14 × 1,5	19	19	GE 8SM 14	6,0	
	10		12	31	15	22	3/8"	22	22	GE10SR 3/8	16 × 1,5	21	22	GE10SM 16	9,0	
	12		12	33	17	24	3/8"	22	22	GE12SR 3/8	18 × 1,5	23	24	GE12SM 18	10,2	
	12		14	34	17,5	24	1/2"	26	27	GE12SR 1/2	—	—	—	—	13,5	
	14		14	37	19	27	1/2"	26	27	GE14SR 1/2	20 × 1,5	25	27	GE14SM 20	15,2	
	16	14	PE 400	37	18,5	30	1/2"	26	27	GE16SR 1/2	22 × 1,5	27	27	GE16SM 22	16,0	
	20	16		42	20,5	36	3/4"	32	32	GE20SR 3/4	27 × 2	32	32	GE20SM 27	27,0	
	25	18		47	23	46	1"	39	41	GE25SR 1	33 × 2	39	41	GE25SM 33	49,0	
	30	20		PE 250	50	23,5	50	1" 1/4	49	50	GE30SR 1 1/4	42 × 2	49	50	GE30SM 42	66,0
38	22	57	26		60	1" 1/2	55	55	GE38SR 1 1/2	48 × 2	55	55	GE38SM 48	92,0		

de totale inbouwmaat is de koppeling met aangedraaide moeren
 veiligheidsfactor = 2 (thread metric parallel)
 voorbeeld GE15LM 18 L=29; L1=14



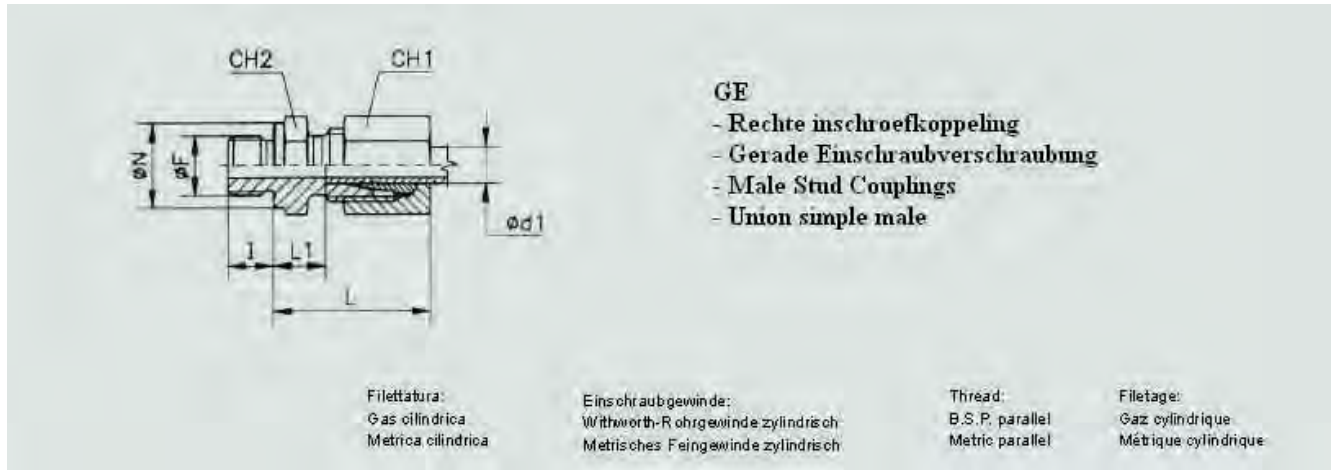
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



GE

Rechte inschroeffkoppeling met afwijkende BSP maten, type B volgens DIN 3852 deel 2

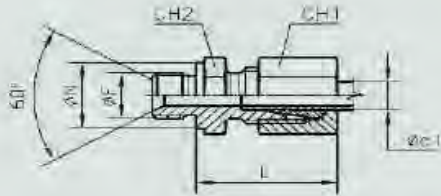


Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d	PN PE	I	L	L1	CH1	R			M			Peso Gewicht Weight Poids kg. × 100 P.			
							Ø F	Ø N	CH2	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Ø F	Ø N		CH2	Simbolo di ordinazione Bestell-Nr. Part. No. Références	
L	6	PN 315	12	25	10	14	1/4"	18	19	GE 6LR 1/4	-	-	-	-	3,5	
	6		12	26	11,5	14	3/8"	22	22	GE 6LR 3/8	-	-	-	-	5,6	
	6		14	27	12	14	1/2"	26	27	GE 6LR 1/2	-	-	-	-	7,3	
	8		8	24	8,5	17	1/8"	14	14	GE 8LR 1/8	-	-	-	-	3,1	
	8		14	27	12	17	1/2"	26	27	GE 8LR 1/2	-	-	-	-	9,0	
	8		12	25	10	17	-	-	-	-	14 × 1,5	19	19	GE 8LM 14	-	5,5
	8		12	26	11,5	17	-	-	-	-	16 × 1,5	21	22	GE 8LM 16	-	5,8
	8		12	26	11,5	17	-	-	-	-	18 × 1,5	23	24	GE 8LM 18	-	6,7
	10		8	26	11	19	1/8"	14	17	GE10LR 1/8	-	-	-	-	4,0	
	10		12	27	12	19	-	-	-	-	16 × 1,5	21	22	GE10LM 16	-	6,0
	10		12	27	12,5	19	-	-	-	-	18 × 1,5	23	24	GE10LM 18	-	7,0
	10		14	28	13	19	1/2"	26	27	GE10LR 1/2	22 × 1,5	27	27	GE10LM 22	-	9,2
	12		16	29	14	22	3/4"	32	32	GE12LR 3/4	-	-	-	-	14,7	
	12		12	26	11	22	-	-	-	-	14 × 1,5	19	19	GE12LM 14	-	5,7
	12		12	27	12,5	22	-	-	-	-	18 × 1,5	23	24	GE12LM 18	-	7,4
	12		14	29	14	22	-	-	-	-	22 × 1,5	27	27	GE12LM 22	-	10,3
	15		12	29	13,5	27	3/8"	22	24	GE15LR 3/8	16 × 1,5	21	24	GE15LM 16	-	9,7
	15		16	30	15	27	3/4"	32	32	GE15LR 3/4	-	-	-	-	16,1	
	15		14	30	15	27	-	-	-	-	22 × 1,5	27	27	GE15LM 22	-	12,1
	18		12	29	14	32	3/8"	22	27	GE18LR 3/8	18 × 1,5	23	27	GE18LM 18	-	13,3
	18		16	30	14,5	32	3/4"	32	32	GE18LR 3/4	-	-	-	-	17,3	
	18		16	32	16,5	32	-	-	-	-	26 × 1,5	31	32	GE18LM 26	-	17,9
22	14	33	16,5	36	1/2"	26	32	GE22LR 1/2	22 × 1,5	27	32	-	-	17,7		
22	18	34	17,5	36	1"	39	41	GE22LR 1	-	-	-	-	27,8			
28	16	34	17,5	41	3/4"	32	41	GE28LR 3/4	-	-	-	-	25,6			
35	18	38	17,5	50	1"	39	46	GE35LR 1	-	-	-	-	37,8			
S	6	PE 630	14	33	18	17	1/2"	26	27	GE 6SR 1/2	-	-	-	-	10,8	
	8		12	30	15,5	19	3/8"	22	22	GE 8SR 3/8	-	-	-	-	8,0	
	10		12	31	14,5	22	1/4"	18	19	GE10SR 1/4	-	-	-	-	7,5	
	10		14	34	17,5	22	1/2"	26	27	GE10SR 1/2	-	-	-	-	12,9	
	10		12	31	15,5	22	-	-	-	-	18 × 1,5	23	24	GE10SM 18	-	8,6
	12		12	33	16,5	24	1/4"	18	22	GE12SR 1/4	-	-	-	-	9,3	
	12		14	34	17,5	24	-	-	-	-	22 × 1,5	27	27	GE12SM 22	-	13,0
	14		12	36	18,5	27	3/8"	22	24	GE14SR 3/8	-	-	-	-	12,8	
	16		12	36	18	30	3/8"	22	27	GE16SR 3/8	18 × 1,5	23	27	GE16SM 18	-	15,3
	16		16	38	20,5	30	3/4"	32	32	GE16SR 3/4	-	-	-	-	22,6	
	20		14	42	20,5	36	1/2"	26	32	GE20SR 1/2	-	-	-	-	24,3	
	25		16	47	23	46	3/4"	32	41	GE25SR 3/4	27 × 2	32	41	GE25SM 27	-	46,5
	30		PE	18	50	23,5	50	1"	39	46	GE30SR 1	-	-	-	-	57,8
	38		250	20	57	26	60	1" 1/4	49	55	GE38SR 1 1/4	-	-	-	-	91,9

de totale inbouwmaat is de koppeling met aangedraaide moeren
veiligheidsfactor = 2 (thread metric parallel)

GE...60GR

Rechte inschroefkoppeling met 60 graden conus, type B volgens DIN 3852 deel 2



GE...60GR

- Rechte inschroefkoppeling met 60GR conus
- Gerade Einschraubverschraubung SV 60GR
- Male Stud Couplings SV 60gr
- Union simple male SV 60GR

Filettatura:
Gas cilindrica
Metrica cilindrica

Einschraubgewinde:
Witworth-Rohrgewinde zylindrisch
Metricches F eingewinde zylindrisch

Thread:
B.S.P. parallel
Metric parallel

Filetage:
Gaz cylindrique
Métrique cylindrique

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O. D. Ø Tube d _t	PN PE	b)				R			M			Peso Gewicht Weight Poids kg×100 P.		
			I	L	L1	CH1	Ø F	Ø N	CH2	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Ø F	Ø N		CH2	Simbolo di ordinazione Bestell-Nr. Part. No. Références
L	6	PN 315	8	23	8,5	14	1/8"	14	14	GE 6LR 1/8 60GR	10 × 1	14	14	GE 6LM 10 60GR	2,5
	8		12	25	10	17	1/4"	18	19	GE 8LR 1/4 60GR	12 × 1,5	17	17	GE 8LM 12 60GR	4,5
	8		12	26	11,5	17	3/8"	22	22	GE 8LR 3/8 60GR	-	-	-	-	6,0
	10		12	26	11	19	1/4"	18	19	GE 10LR 1/4 60GR	14 × 1,5	19	19	GE 10LM 14 60GR	4,7
	10		12	27	12,5	19	3/8"	22	22	GE 10LR 3/8 60GR	-	-	-	-	6,0
	12		12	27	12	22	1/4"	18	19	GE 12LR 1/4 60GR	-	-	-	-	6,1
	12		12	27	12,5	22	3/8"	22	22	GE 12LR 3/8 60GR	16 × 1,5	21	22	GE 12LM 16 60GR	6,5
	12		14	28	13	22	1/2"	26	27	GE 12LR 1/2 60GR	-	-	-	-	9,5
	15		14	29	14	27	1/2"	26	27	GE 15LR 1/2 60GR	18 × 1,5	23	24	GE 15LM 18 60GR	11,5
	18		14	31	14,5	32	1/2"	26	27	GE 18LR 1/2 60GR	22 × 1,5	27	27	GE 18LM 22 60GR	13,0
	22	16	33	16,5	36	3/4"	32	32	GE 22LR 3/4 60GR	26 × 1,5	31	32	GE 22LM 26 60GR	18,0	
	28	18	34	17,5	41	1"	39	41	GE 28LR 1 60GR	33 × 2	39	41	GE 28LM 33 60GR	25,0	
	35	20	39	17,5	50	1" 1/4	49	50	GE 35LR 1 1/4 60GR	42 × 2	49	50	GE 35LM 42 60GR	41,0	
42	22	42	19	60	1" 1/2	55	55	GE 42LR 1 1/2 60GR	48 × 2	55	55	GE 42LM 48 60GR	46,0		
S	6	a) PE 630	12	28	13	17	1/4"	18	19	GE 6SR 1/4 60GR	12 × 1,5	17	17	GE 6SM 12 60GR	5,2
	8		12	30	15	19	1/4"	18	19	GE 8SR 1/4 60GR	14 × 1,5	19	19	GE 8SM 14 60GR	6,0
	10		12	31	15	22	3/8"	22	22	GE 10SR 3/8 60GR	16 × 1,5	21	22	GE 10SM 16 60GR	9,0
	12		12	33	17	24	3/8"	22	22	GE 12SR 3/8 60GR	18 × 1,5	23	24	GE 12SM 18 60GR	10,2
	12		14	34	17,5	24	1/2"	26	27	GE 12SR 1/2 60GR	-	-	-	-	13,5
	14	14	37	19	27	1/2"	26	27	GE 14SR 1/2 60GR	20 × 1,5	25	27	GE 14SM 20 60GR	15,2	
	16	14	37	18,5	30	1/2"	26	27	GE 16SR 1/2 60GR	22 × 1,5	27	27	GE 16SM 22 60GR	16,0	
	20	16	42	20,5	36	3/4"	32	32	GE 20SR 3/4 60GR	27 × 2	32	32	GE 20SM 27 60GR	27,0	
	25	18	47	23	46	1"	39	41	GE 25SR 1 60GR	33 × 2	39	41	GE 25SM 33 60GR	49,0	
	30	20	50	23,5	50	1" 1/4	49	50	GE 30SR 1 1/4 60GR	42 × 2	49	50	GE 30SM 42 60GR	66,0	
38	22	57	26	60	1" 1/2	55	55	GE 38SR 1 1/2 60GR	48 × 2	55	55	GE 38SM 48 60GR	92,0		

de totale inbouwmaat is de koppeling met aangedraaide moeren
veiligheidsfactor = 2 (thread metric parallel)



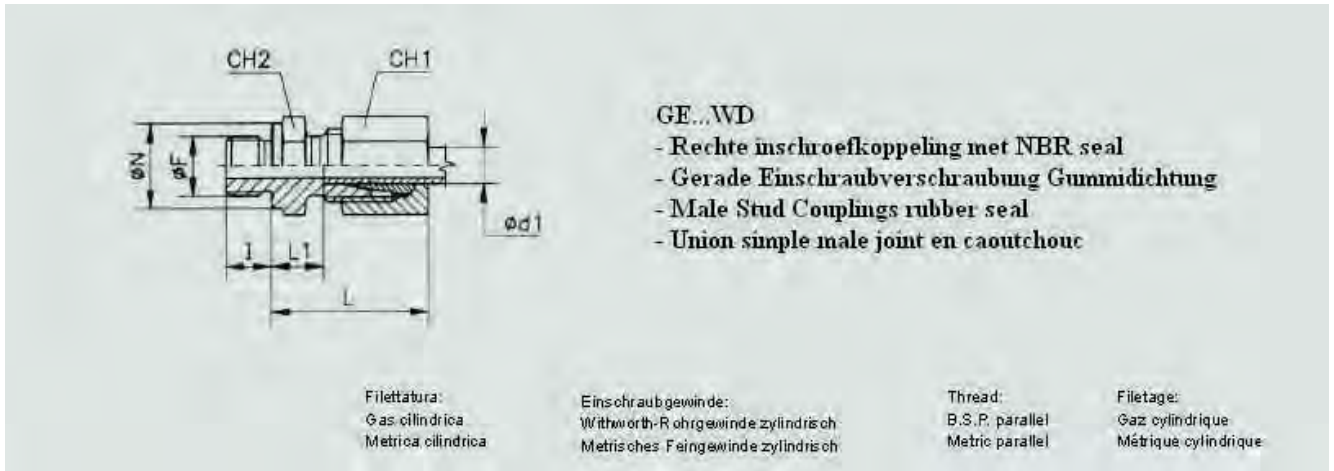
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



GE...WD

Rechte inschroefkoppeling met NBR seal, type E volgens DIN 3852 deel 11. NBR seal mag gebruikt worden voor een temperatuur van -35gr tot 100gr. C. FPM (Viton) -25 tot 125 gr. C.

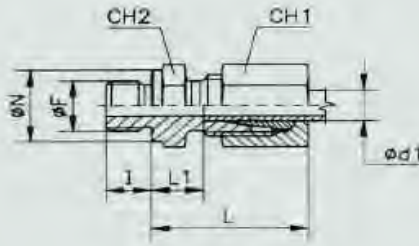


Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d	PN	b) I	L	b) L1	CH1	R				M				Peso Gewicht Weight Poids kg. × 100 P.
							Ø F	Ø N	CH2	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Ø F	Ø N	CH2	Simbolo di ordinazione Bestell-Nr. Part. No. Références	
L	6	315	8	23	8,5	14	1/8"	14	14	GE6LR 1/8WD	10 × 1	14	14	GE6LM 10WD	2,5
	8		12	25	10	17	1/4"	19	19	GE8LR 1/4WD	12 × 1,5	17	17	GE8LM 12WD	4,5
	10		12	26	11	19	1/4"	19	19	GE10LR 1/4WD	14 × 1,5	19	19	GE10LM 14WD	4,7
	12		12	27	12,5	22	3/8"	22	22	GE12LR 3/8WD	16 × 1,5	22	22	GE12LM 16WD	6,5
	15		14	29	14	27	1/2"	27	27	GE15LR 1/2WD	18 × 1,5	24	24	GE15LM 18WD	11,5
	18		14	31	14,5	32	1/2"	27	27	GE18LR 1/2WD	22 × 1,5	27	27	GE18LM 22WD	13,0
	22	160	16	33	16,5	36	3/4"	32	32	GE22LR 3/4WD	26 × 1,5	32	32	GE22LM 26WD	18,0
	28		18	34	17,5	41	1"	40	41	GE28LR 1WD	33 × 2	40	41	GE28LM 33WD	25,0
	35		20	39	17,5	50	1" 1/4	50	50	GE35LR 1 1/4WD	42 × 2	50	50	GE35LM 42WD	41,0
	42		22	42	19	60	1" 1/2	55	55	GE42LR 1 1/2WD	48 × 2	55	55	GE42LM 48WD	46,0
S	6	630	12	28	13	17	1/4"	19	19	GE6SR 1/4WD	12 × 1,5	17	17	GE6SM 12WD	5,2
	8		12	30	15	19	1/4"	19	19	GE8SR 1/4WD	14 × 1,5	19	19	GE8SM 14WD	6,0
	10		12	31	15	22	3/8"	22	22	GE10SR 3/8WD	16 × 1,5	22	22	GE10SM 16WD	9,0
	12		12	33	17	24	3/8"	22	22	GE12SR 3/8WD	18 × 1,5	24	24	GE12SM 18WD	10,2
	14		14	37	19	27	1/2"	27	27	GE14SR 1/2WD	20 × 1,5	26	27	GE14SM 20WD	15,2
	16	400	14	37	18,5	30	1/2"	27	27	GE16SR 1/2WD	22 × 1,5	27	27	GE16SM 22WD	16,0
	20		16	42	20,5	36	3/4"	32	32	GE20SR 3/4WD	27 × 2	32	32	GE20SM 27WD	27,0
	25		18	47	23	46	1"	40	41	GE25SR 1WD	33 × 2	40	41	GE25SM 33WD	49,0
	30		20	50	23,5	50	1" 1/4	50	50	GE30SR 1 1/4WD	42 × 2	50	50	GE30SM 42WD	66,0
	38		315	22	57	26	60	1" 1/2	55	55	GE38SR 1 1/2WD	48 × 2	55	55	GE38SM 48WD

de totale inbouwmaat is de koppeling met aangedraaide moeren
veiligheidsfactor = 2 (thread metric parallel)

GE...WD

Rechte inschroefkoppeling met NBR seal, type E volgens DIN 3852 deel 11. NBR seal mag gebruikt worden voor een temperatuur van -35gr tot 100gr. C. FPM (Viton) -25 tot 125 gr. C.



GE...WD

- Rechte inschroefkoppeling met NBR seal
- Gerade Einschraubverschraubung Gummidichtung
- Male Stud Couplings rubber seal
- Union simple male joint en caoutchouc

Filettatura:
Gas cilindrica
Metrica cilindrica

Einschraubgewinde:
Withworth-Rohrgewinde zylindrisch
Metricches Feingewinde zylindrisch

Thread:
B.S.P. parallel
Metric parallel

Filetage:
Gaz cylindrique
Métrique cylindrique

Serie Reihe Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	I	L	L1	CH1	R			M			Peso Gewicht Weight Poids kg×100 P.			
							Ø F	Ø N	CH2	Simbolo di ordinazione Bestell.Nr. Part. No. Références	Ø F	Ø N		CH2	Simbolo di ordinazione Bestell.Nr. Part. No. Références	
L	6	315	12	25	10	14	1/4"	19	19	GE 6LR 1/4WD	-	-	-	-	3,5	
	6		12	26	11,5	14	3/8"	22	22	GE 6LR 3/8WD	-	-	-	-	5,6	
	8		8	24	8,5	17	1/8"	14	14	GE 8LR 1/8WD	-	-	-	-	3,1	
	8		12	26	11,5	17	3/8"	22	22	GE 8LR 3/8WD	-	-	-	-	6,0	
	8		14	27	12	17	1/2"	27	27	GE 8LR 1/2WD	-	-	-	-	9,0	
	10		8	26	11	19	1/8"	14	17	GE10LR 1/8WD	-	-	-	-	4,0	
	10		12	27	12	19	-	-	-	-	16 × 1,5	22	22	GE10LM 16WD	-	6,0
	10		12	27	12,5	19	3/8"	22	22	GE10LR 3/8WD	18 × 1,5	24	24	GE10LM 18WD	-	7,0
	10		14	28	13	19	1/2"	27	27	GE10LR 1/2WD	22 × 1,5	27	27	GE10LM 22WD	-	9,2
	12		12	26	12	22	1/4"	19	19	GE12LR 1/4WD	14 × 1,5	19	19	GE12LM 14WD	-	6,1
	12		12	27	12,5	22	-	-	-	-	18 × 1,5	24	24	GE12LM 18WD	-	7,4
	12		14	28	13	22	1/2"	27	27	GE12LR 1/2WD	22 × 1,5	27	27	GE12LM 22WD	-	9,5
	15		12	29	13,5	27	3/8"	27	24	GE15LR 3/8WD	16 × 1,5	22	24	GE15LM 16WD	-	9,7
	15		16	30	15	27	3/4"	32	32	GE15LR 3/4WD	-	-	-	-	16,1	
	15		14	30	15	27	-	-	-	-	22 × 1,5	27	27	GE15LM 22WD	-	12,1
	18		16	30	14,5	32	3/4"	32	32	GE18LR 3/4WD	-	-	-	-	17,3	
	18		12	27	12,5	32	-	-	-	-	18 × 1,5	24	27	GE18LM 18WD	-	13,2
	160		22	14	33	16,5	36	1/2"	27	32	GE22LR 1/2WD	22 × 1,5	27	32	GE22LM 22WD	-
18		34	17,5	36	1"	40	41	GE22LR 1 WD	-	-	-	-	27,8			
28		16	34	17,5	41	3/4"	32	41	GE28LR 3/4WD	-	-	-	-	25,6		
35		18	39	17,5	50	1"	40	46	GE35LR 1 WD	-	-	-	-	37,8		
S		8	630	12	30	15,5	19	3/8"	22	22	GE 8SR 3/8WD	-	-	-	-	8,0
	10	12		31	14,5	22	1/4"	19	19	GE10SR 1/4WD	-	-	-	-	7,5	
	10	14		34	17,5	22	1/2"	27	27	GE10SR 1/2WD	-	-	-	-	12,9	
	12	12		33	16,5	24	1/4"	19	22	GE12SR 1/4WD	-	-	-	-	9,3	
	12	14		34	17,5	24	1/2"	27	27	GE12SR 1/2WD	22 × 1,5	27	27	GE12SM 22WD	-	13,5
	14	12		36	18,5	27	3/8"	22	24	GE14SR 3/8WD	-	-	-	-	12,8	
	16	12		36	18	30	3/8"	22	27	GE16SR 3/8WD	18 × 1,5	24	27	GE16SM 18WD	-	15,3
	16	16		39	20,5	30	3/4"	32	32	GE16SR 3/4WD	-	-	-	-	22,6	
	20	14		42	20,5	36	1/2"	27	32	GE20SR 1/2WD	-	-	-	-	24,3	
	25	16		47	23	46	3/4"	32	41	GE25SR 3/4WD	-	-	-	-	46,5	
315	30	18	50	23,5	50	1"	40	46	GE30SR 1 WD	-	-	-	-	57,8		
	38	20	57	26	60	1" 1/4	50	55	GE38SR 1 1/4WD	-	-	-	-	91,9		



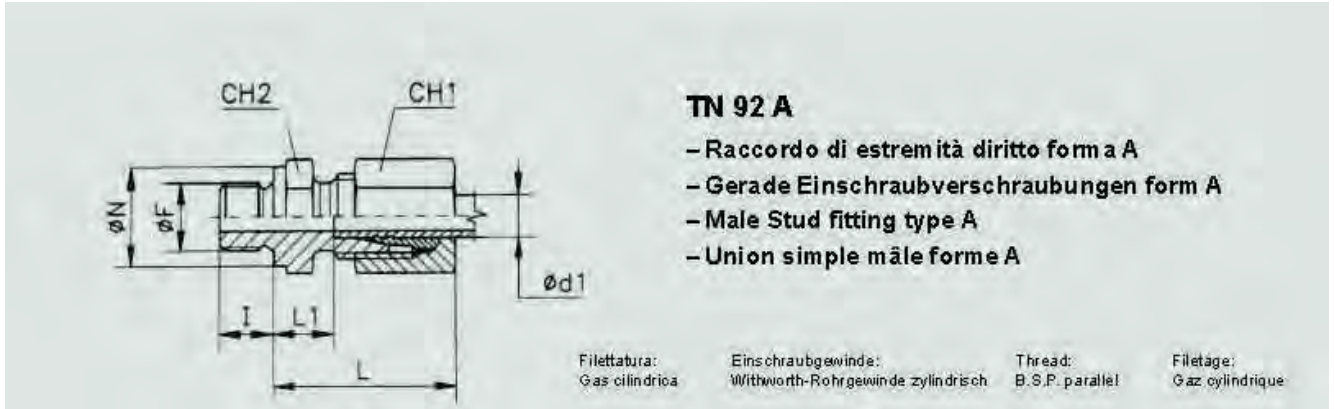
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



GE TYPE A

Rechte inschroefkoppeling, type A volgens DIN 3852 deel 2. Op aanvraag leverbaar



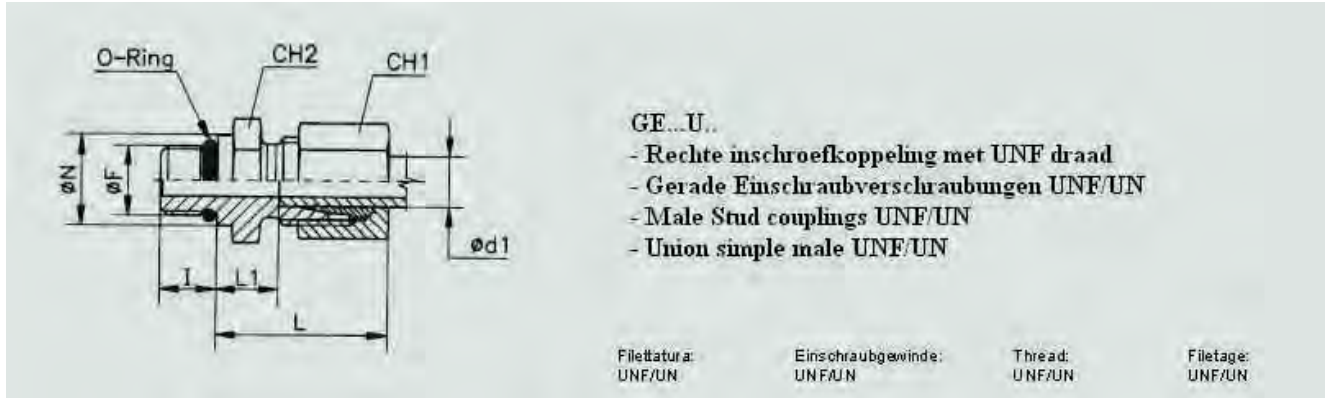
Serie Reihe Series Série	∅ Tubo Rohr AD Tube O.D. ∅ Tube d _t	PN PE	∅ F	∅ N	I	L1	L	CH1	CH2	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg×100 P.
L	6	PN 315	1/8"	14	8	8,5	23	14	14	TN 92 - 6 LR - A	2,5
	8		1/4"	18	12	10	25	17	19	TN 92 - 8 LR - A	4,5
	10		1/4"	18	12	11	26	19	19	TN 92 - 10 LR - A	4,7
	12		3/8"	22	12	12,5	27	22	22	TN 92 - 12 LR - A	6,9
	15		1/2"	26	14	14	29	27	27	TN 92 - 15 LR - A	11,5
	18	1/2"	26	14	14,5	31	32	27	TN 92 - 18 LR - A	12,9	
	22	PN 160	3/4"	32	16	16,5	33	36	32	TN 92 - 22 LR - A	17,6
	28		1"	39	18	17,5	34	41	41	TN 92 - 28 LR - A	24,7
	35		1" 1/4	49	20	17,5	39	50	50	TN 92 - 35 LR - A	40,7
	42		1" 1/2	55	22	19	42	60	55	TN 92 - 42 LR - A	45,6
6	PE 630		1/4"	18	12	13	28	17	19	TN 92 - 6 SR - A	5,0
8		1/4"	18	12	15	30	19	19	TN 92 - 8 SR - A	5,5	
10		3/8"	22	12	15	31	22	22	TN 92 - 10 SR - A	8,2	
12		3/8"	22	12	17	33	24	22	TN 92 - 12 SR - A	9,5	
14		1/2"	26	14	19	37	27	27	TN 92 - 14 SR - A	14,8	
16		PE 400	1/2"	26	14	18,5	37	30	27	TN 92 - 16 SR - A	15,4
20			3/4"	32	16	20,5	42	36	32	TN 92 - 20 SR - A	25,3
25			1"	39	18	23	47	46	41	TN 92 - 25 SR - A	48,5
30			1" 1/4	49	20	23,5	50	50	50	TN 92 - 30 SR - A	64,4
38			1" 1/2	55	22	26	57	60	55	TN 92 - 38 SR - A	88,9

RACCORDI SPECIALI - SONDERVERSCHRAUBUNGEN - SPECIAL FITTINGS - RACCORDS SPECIAUX

L	6	PN 315	1/4"	18	12	10	25	14	19	TN 92 - 6 LR - 1/4" - A	4,0	
	8		1/8"	14	8	9,5	24	17	14	TN 92 - 8 LR - 1/8" - A	3,1	
	8		3/8"	22	12	11,5	26	17	22	TN 92 - 8 LR - 3/8" - A	6,0	
	10		3/8"	22	12	12,5	27	19	22	TN 92 - 10 LR - 3/8" - A	6,2	
	10		1/2"	26	14	13	28	19	27	TN 92 - 10 LR - 1/2" - A	9,5	
	12		1/4"	18	12	12	27	22	19	TN 92 - 12 LR - 1/4" - A	6,0	
	12		1/2"	26	14	13	28	22	27	TN 92 - 12 LR - 1/2" - A	9,5	
S	15	PE 630	3/8"	22	12	13,5	29	27	24	TN 92 - 15 LR - 3/8" - A	9,7	
	6		1/8"	14	8	13	28	17	14	TN 92 - 6 SR - 1/8" - A	3,1	
	10		1/4"	18	12	14,5	31	22	19	TN 92 - 10 SR - 1/4" - A	7,3	
	12		1/4"	18	12	16,5	33	24	22	TN 92 - 12 SR - 1/4" - A	9,3	
	12		1/2"	26	14	17,5	34	24	27	TN 92 - 12 SR - 1/2" - A	13,5	
	16		PE 400	3/8"	22	12	18	36	30	27	TN 92 - 16 SR - 3/8" - A	15,2
	20			1/2"	26	14	20,5	42	36	32	TN 92 - 20 SR - 1/2" - A	25,3
	25			3/4"	32	16	23	47	46	41	TN 92 - 25 SR - 3/4" - A	46,5
	30			3/4"	32	16	23,5	50	50	46	TN 92 - 30 SR - 3/4" - A	54,0
	30			1"	39	18	23,5	50	50	46	TN 92 - 30 SR - 1" - A	58,0
38	PE 250	1"	39	18	26	57	60	55	TN 92 - 38 SR - 1" - A	90,5		
38		1" 1/4	49	20	26	57	60	55	TN 92 - 38 SR - 1" 1/4" - A	92,0		

GE...U..

Rechte inschroefkoppeling met UNF draad



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	Ø F	Ø N	I	L1	L	CH2	CH1	O-Ring * (Shore A Ca 90)	MT Nm	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg x 100 P.
L	8	315	7/16 - 20 UNF	14,4	9	10	25	17	17	8,92 × 1,83	15	GE8LU 7/16	3,2
	10		7/16 - 20 UNF	14,4	9	11	26	17	19	8,92 × 1,83	15	GE10LU 7/16	4,0
	12		9/16 - 18 UNF	17,6	10	11	26	19	22	11,9 × 1,98	25	GE12LU 9/16	5,0
	12		3/4 - 16 UNF	22,3	11	13	28	24	22	16,36 × 2,20	30	GE12LU 3/4	7,0
	12		7/8 - 14 UNF	25,5	12,7	14,3	29	27	22	19,18 × 2,46	50	GE12LU 7/8	7,5
	15		3/4 - 16 UNF	22,3	11	14	29	24	27	16,36 × 2,20	30	GE15LU 3/4	9,5
	18		3/4 - 16 UNF	22,3	11	14,5	31	27	32	16,36 × 2,20	30	GE18LU 3/4	12,5
	18	7/8 - 14 UNF	25,5	12,7	14,8	31	27	32	19,18 × 2,46	50	GE18LU 7/8	13,2	
	22	7/8 - 14 UNF	25,5	12,7	16,8	33	32	36	19,18 × 2,46	50	GE22LU 7/8	17,2	
	22	1"1/16 - 12 UN	31,9	15	16,5	33	32	36	23,47 × 2,95	60	GE22LU 1 1/16	18,5	
	22	1"5/16 - 12 UN	38,2	15	17,5	34	41	36	29,74 × 2,95	130	GE22LU 1 5/16	23,5	
	28	1"1/16 - 12 UN	31,9	15	17,5	34	41	41	23,47 × 2,95	60	GE28LU 1 1/16	24,2	
	28	1"5/16 - 12 UN	38,2	15	17,5	34	41	41	29,74 × 2,95	130	GE28LU 1 5/16	25,0	
	35	1"5/16 - 12 UN	38,2	15	17,5	39	46	50	29,74 × 2,95	130	GE35LU 1 5/16	36,2	
35	1"5/8 - 12 UN	47,7	15	17,5	39	50	50	37,46 × 3	150	GE35LU 1 5/8	40,0		
42	1"5/8 - 12 UN	47,7	15	19	42	55	60	37,46 × 3	150	GE42LU 1 5/8	56,0		
S	8	630	7/16 - 20 UNF	16	9	15	30	17	19	8,92 × 1,83	20	GE8SU 7/16	5,0
	10		9/16 - 18 UNF	17,6	10	14,5	31	19	22	11,9 × 1,98	35	GE10SU 9/16	6,5
	12		9/16 - 18 UNF	17,6	10	14,5	31	22	24	11,9 × 1,98	35	GE12SU 9/16	8,0
	12		3/4 - 16 UNF	22,3	11	17,5	34	24	24	16,36 × 2,20	70	GE12SU 3/4	10,0
	16	400	3/4 - 16 UNF	22,3	11	15,5	34	24	30	16,36 × 2,20	70	GE16SU 3/4	13,0
	16		7/8 - 14 UNF	25,5	12,7	18,8	37	27	30	19,18 × 2,46	100	GE16SU 7/8	15,0
	20		3/4 - 16 UNF	22,3	11	20,5	42	32	36	16,36 × 2,20	70	GE20SU 3/4	22,0
	20		7/8 - 14 UNF	25,5	12,7	20,8	42	32	36	19,18 × 2,46	100	GE20SU 7/8	23,0
	20		1"1/16 - 12 UN	31,9	15	20,5	42	32	36	23,47 × 2,95	170	GE20SU 1 1/16	25,0
	25		1"1/16 - 12 UN	31,9	15	23	47	36	46	23,47 × 2,95	170	GE25SU 1 1/16	40,0
	25		1"5/16 - 12 UN	38,2	15	23	47	41	46	29,74 × 2,95	270	GE25SU 1 5/16	46,0
	30		1"5/16 - 12 UN	38,2	15	23,5	50	46	50	29,74 × 2,95	270	GE30SU 1 5/16	53,0
	30		1"5/8 - 12 UN	47,7	15	23,5	50	50	50	37,46 × 3	280	GE30SU 1 5/8	62,0
	38		315	1"5/8 - 12 UN	47,7	15	26	57	55	60	37,46 × 3	280	GE38SU 1 5/8

de maten zijn met gemonteerde moer

de oring is standaard vervaardigd uit NBR (perbunan -35gr tot 100gr C) of op aanvraag uit Viton (-25gr tot 125gr C)



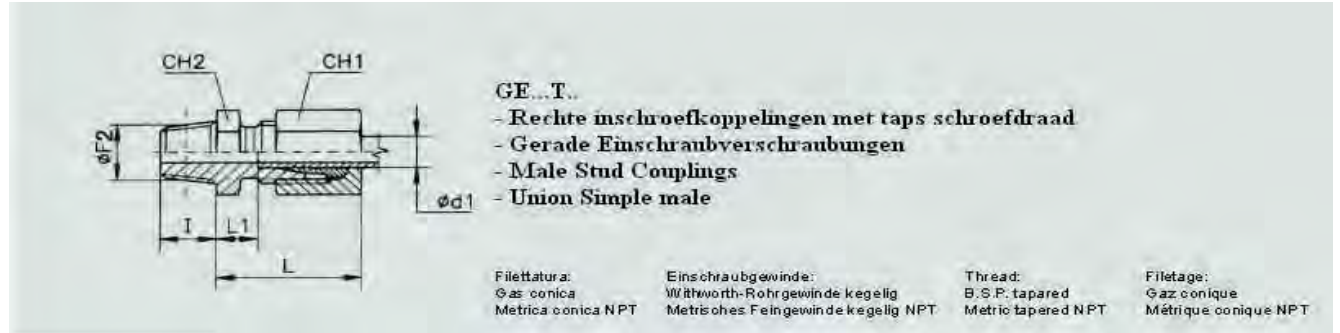
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



GE...T..

Rechte inschroeffkoppeling met taps toelopend schroefdraad

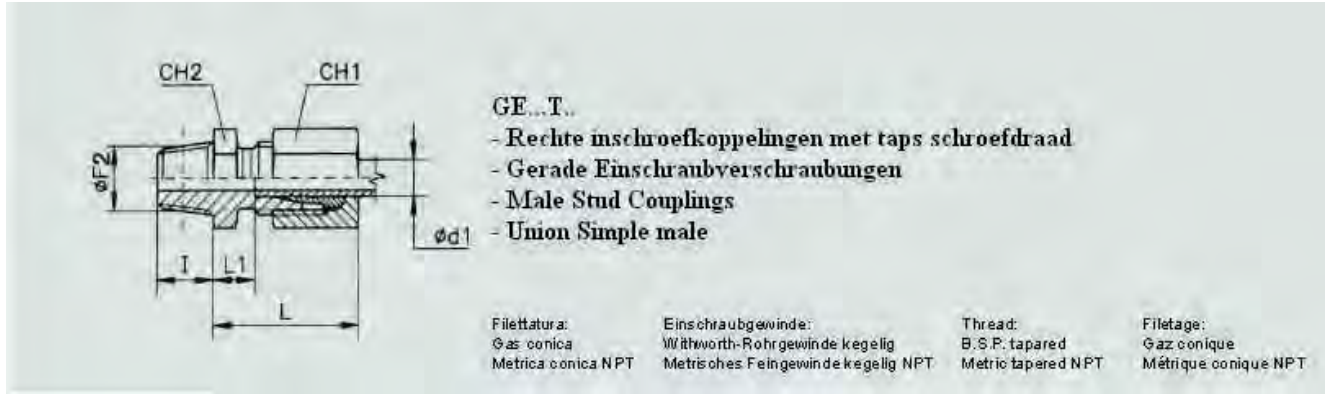


Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	Ø F2			I			L	L1	CH1	CH2	Simbolo di ordinazione - Bestell-Nr. Part. No. - Références			Peso Gewicht Weight Poids kg.×100 P.
			R	M	NPT	R	M	NPT					R	M	NPT	
LL	4	100	1/8"	8 × 1	1/8"	8	8	10	18	8	10	11	GE 4LLRT 1/8	GE 4LLM 8	GE 4LLN 1/8	1,5
	5		1/8"	8 × 1	1/8"	8	8	10	18	6,5	12	11	GE 5LLRT 1/8	GE 5LLM 8	GE 5LLN 1/8	1,5
	6		1/8"	10 × 1	1/8"	8	8	10	18	6,5	12	11	GE 6LLRT 1/8	GE 6LLM 10	GE 6LLN 1/8	1,7
	8		1/8"	10 × 1	1/8"	8	8	10	20	8,5	14	12	GE 8LLRT 1/8	GE 8LLM 10	GE 8LLN 1/8	1,9
	8		1/4"	-	-	12	-	-	20	8,5	14	14	GE 8LLRT 1/4	-	-	2,0
	10		1/4"	-	-	12	-	-	20	8,5	17	14	GE10LLRT 1/4	-	-	3,0
	12		1/4"	-	-	12	-	-	20	8	18	17	GE12LLRT 1/4	-	-	4,2
	12		3/8"	-	-	12	-	-	20	8	19	17	GE12LLRT 3/8	-	-	4,5
L	6	315	1/8"	10 × 1	1/8"	10	10	10	23	7	14	12	GE 6LRT 1/8	-	GE 6LN 1/8	2,4
	6		1/4"	-	1/4"	13	-	15	24	8	14	17	GE 6LRT 1/4	-	GE 6LN 1/4	3,9
	8		1/4"	12 × 1,5	1/4"	13	12	15	25	8	17	17	GE 8LRT 1/4	-	GE 8LN 1/4	4,2
	8		3/8"	-	3/8"	13	-	15	26	9	17	19	GE 8LRT 3/8	-	GE 8LN 3/8	6,0
	10		1/4"	14 × 1,5	1/4"	13	12	15	26	9	19	17	GE10LRT 1/4	-	GE10LN 1/4	4,7
	10		3/8"	-	3/8"	13	-	15	27	10	19	19	GE10LRT 3/8	-	GE10LN 3/8	6,0
	12		1/4"	-	1/4"	13	-	15	27	10	22	19	GE12LRT 1/4	-	GE12LN 1/4	5,9
	12		3/8"	16 × 1,5	3/8"	13	12	15	27	10	22	19	GE12LRT 3/8	-	GE12LN 3/8	6,5
	12		1/2"	-	1/2"	16	-	20	27	10	22	22	GE12LRT 1/2	-	GE12LN 1/2	9,0
	15		1/2"	18 × 1,5	1/2"	16	12	20	29	11	27	24	GE15LRT 1/2	-	GE15LN 1/2	10,8
	18		1/2"	22 × 1,5	1/2"	16	14	20	31	11,5	32	27	GE18LRT 1/2	-	GE18LN 1/2	14,3
	22		3/4"	26 × 1,5	3/4"	18	18	20	33	13,5	36	32	GE22LRT 3/4	-	GE22LN 3/4	19,5
	28		1"	33 × 2	1"	20	20	25	34	14,5	41	41	GE28LRT 1	-	GE28LN 1	30,0
35	1 1/4"	42 × 2	1 1/4"	21	21	26	39	14,5	50	46	GE35LRT 1 1/4	-	GE35LN 1 1/4	44,0		
42	1 1/2"	48 × 2	1 1/2"	22	22	26	42	16	60	55	GE42LRT 1 1/2	-	GE42LN 1 1/2	58,3		
S	6	630	1/4"	12 × 1,5	1/4"	13	12	15	28	12	17	17	GE 6SRT 1/4	-	GE 6SN 1/4	5,4
	8		1/4"	14 × 1,5	1/4"	13	12	15	30	13	19	17	GE 8SRT 1/4	-	GE 8SN 1/4	6,0
	10		1/4"	-	1/4"	13	-	15	31	12,5	22	19	GE10SRT 1/4	-	GE10SN 1/4	7,5
	10		3/8"	16 × 1,5	3/8"	13	12	15	31	12,5	22	19	GE10SRT 3/8	-	GE10SN 3/8	8,0
	12		1/4"	-	1/4"	13	-	15	33	14,5	24	22	GE12SRT 1/4	-	GE12SN 1/4	9,0
	12		3/8"	18 × 1,5	3/8"	13	12	15	33	14,5	24	22	GE12SRT 3/8	-	GE12SN 3/8	9,9
	12		1/2"	-	1/2"	16	-	20	33	14,5	24	22	GE12SRT 1/2	-	GE12SN 1/2	12,0
	14		1/2"	20 × 1,5	1/2"	16	14	20	37	16	27	24	GE14SRT 1/2	-	GE14SN 1/2	14,4
	16		1/2"	22 × 1,5	1/2"	16	14	20	37	17,5	30	27	GE16SRT 1/2	-	GE16SN 1/2	16,5
	20		3/4"	27 × 2	3/4"	18	18	20	42	17,5	36	32	GE20SRT 3/4	-	GE20SN 3/4	26,0
	25		1"	33 × 2	1"	20	20	25	47	18	46	41	GE25SRT 1	-	GE25SN 1	49,5
	30		1 1/4"	42 × 2	1 1/4"	21	21	26	50	19,5	50	46	GE30SRT 1 1/4	-	GE30SN 1 1/4	63,8
	38		1 1/2"	48 × 2	1 1/2"	22	22	26	57	22	60	55	GE38SRT 1 1/2	-	GE38SN 1 1/2	91,3

de maten zijn met gemonteerde moer

GE...T..

Rechte inschroefkoppeling met taps toelopend schroefdraad



Serie Reihe Series Série	∅ Tubo Rohr AD Tube O.D. ∅ Tube d ₁	PN	∅ F2		I		L	L1	CH1	CH2	Simbolo di ordinazione - Bestell-Nr. Part No. - Références		Peso Gewicht Weight Poids kg×100 P.
			R	NPT	R	NPT					R	NPT	
L	8	315	1/8"	-	10	-	25	8	17	14	GE8LRT 1/8	-	3,0
	8		1/2"	-	16	-	26	9	17	22	GE8LRT 1/2	-	8,0
	10		1/8"	-	10	-	26	9	19	17	GE10LRT 1/8	-	4,5
	10		1/2"	1/2"	16	20	27	10	19	22	GE10LRT 1/2	GE10LN 1/2	8,3
	15		3/8"	3/8"	13	15	29	11	27	24	GE15LRT 3/8	GE15 LN 3/8	9,3
	18		3/8"	-	13	-	31	11,5	32	27	GE18LRT 3/8	-	13,5
	18	3/4"	3/4"	18	20	32	11,5	32	32	GE18LRT 3/4	GE18LN 3/4	17,3	
	35	1"	-	20	-	39	14,5	50	46	GE35LRT 1	-	42,5	
S	14	630	3/8"	-	13	-	37	16	27	24	GE14SRT 3/8	-	13,0
	16	400	3/8"	-	13	-	37	17,5	30	27	GE16SRT 3/8	-	15,7
	30		1"	-	20	-	50	19,5	50	46	GE30SRT 1	-	56,1
	38	315	1 1/4"	-	21	-	57	22	60	55	GE38SRT 1 1/4	-	89,5

de maten zijn met gemonteerde moer



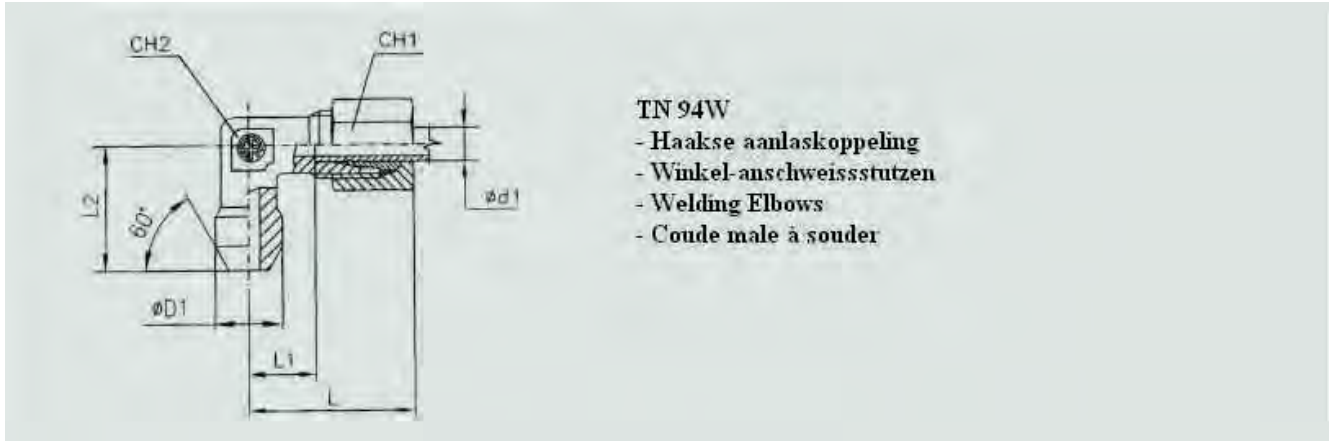
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



TN 94W

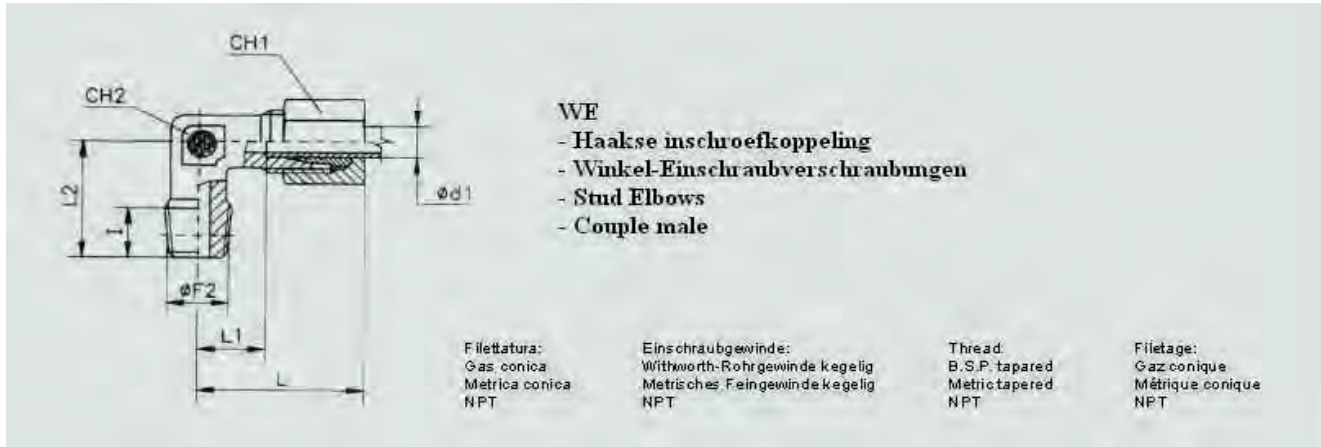
Haakse aanlas koppeling. Op aanvraag leverbaar



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	Ø D1	L	L1	L2	CH1	CH 2	Simbolo di ordinazione Bestell-Nr. Part No. Références	Peso Gewicht Weight Poids kg×100 P.
L	6	315	10	27	12	19	14	12	TN 94 W - 6 L	3,1
	8		12	29	14	23	17	12	TN 94 W - 8 L	4,1
	10		14	30	15	24	19	14	TN 94 W - 10 L	5,4
	12		16	32	17	25	22	17	TN 94 W - 12 L	7,2
	15		19	36	21	30	27	19	TN 94 W - 15 L	12,6
	18		22	40	23,5	33	32	24	TN 94 W - 18 L	18,0
	22	160	27	44	27,5	37	36	27	TN 94 W - 22 L	23,9
	28		32	47	30,5	42	41	36	TN 94 W - 28 L	37,2
	35		40	56	34,5	49	50	41	TN 94 W - 35 L	57,0
	42		46	63	40	57	60	50	TN 94 W - 42 L	65,4
S	6	630	11	31	16	23	17	12	TN 94 W - 6 S	4,9
	8		13	32	17	24	19	14	TN 94 W - 8 S	6,6
	10		15	34	17,5	25	22	17	TN 94 W - 10 S	9,1
	12		17	38	21,5	29	24	17	TN 94 W - 12 S	11,5
	14		19	40	22	30	27	19	TN 94 W - 14 S	15,3
	16	400	21	43	24,5	33	30	24	TN 94 W - 16 S	20,3
	20		26	48	26,5	37	36	27	TN 94 W - 20 S	30,3
	25		31	54	30	42	46	36	TN 94 W - 25 S	56,4
	30		36	62	35,5	49	50	41	TN 94 W - 30 S	76,0
	38		44	72	41	57	60	50	TN 94 W - 38 S	112,2

de maten zijn met gemonteerde moer

WE Haakse inschroefkoppeling



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	Ø F2			a) l	L	L1	a) L2	CH1	CH2	Simbolo di ordinazione - Bestell-Nr. Part. No. - Références			Peso Gewicht Weight Poids kg×100 P.
			R	M	NPT							R	M	NPT	
LL	4	100	1/8"	8 × 1	1/8"	8	21	11	17	10	9	WE 4LLR 1/8	WE 4LLM 8	WE 4LLN 1/8	2,0
	5		1/8"	8 × 1	1/8"	8	21	9,5	17	12	9	WE 5LLR 1/8	WE 5LLM 8	WE 5LLN 1/8	2,0
	6		1/8"	10 × 1	1/8"	8	21	9,5	17	12	9	WE 6LLR 1/8	WE 6LLM 10	WE 6LLN 1/8	2,0
	8		1/8"	10 × 1	1/8"	8	23	11,5	20	14	12	WE 8LLR 1/8	WE 8LLM 10	WE 8LLN 1/8	2,5
	10		1/4"	—	—	12	27	15	25	17	14	WE10LLR 1/4	—	—	3,5
	12		1/4"	—	—	12	25	13	23	19	17	WE12LLR 1/4	—	—	5,0
L	6	315	1/8"	10 × 1	1/8"	8	27	12	20	14	12	WE 6LR 1/8	WE 6LM 10	WE 6LN 1/8	3,5
	8		1/4"	12 × 1,5	1/4"	12	29	14	26	17	12	WE 8LR 1/4	WE 8LM 12	WE 8LN 1/4	5,0
	10		1/4"	14 × 1,5	1/4"	12	30	15	27	19	14	WE10LR 1/4	WE10LM 14	WE10LN 1/4	6,0
	12		3/8"	16 × 1,5	3/8"	12	32	17	28	22	17	WE12LR 3/8	WE12LM 16	WE12LN 3/8	8,5
	15		1/2"	18 × 1,5	1/2"	14	36	21	34	27	19	WE15LR 1/2	WE15LM 18	WE15LN 1/2	14,5
	18		1/2"	22 × 1,5	1/2"	14	40	23,5	36	32	24	WE18LR 1/2	WE18LM 22	WE18LN 1/2	17,0
	22	160	3/4"	—	3/4"	16	44	27,5	42	36	27	WE22LR 3/4	—	WE22LN 3/4	23,5
	28		1"	—	1"	18	47	30,5	48	41	36	WE28LR 1	—	WE28LN 1	37,5
	35		1 1/4"	—	1 1/4"	20	56	34,5	54	50	41	WE35LR 1 1/4	—	WE35LN 1 1/4	57,0
	42		1 1/2"	—	1 1/2"	22	63	40	61	60	50	WE42LR 1 1/2	—	WE42LN 1 1/2	83,0
S	6	630	1/4"	12 × 1,5	1/4"	12	31	16	26	17	12	WE 6SR 1/4	WE 6SM 12	WE 6SN 1/4	5,5
	8		1/4"	14 × 1,5	1/4"	12	32	17	27	19	14	WE 8SR 1/4	WE 8SM 14	WE 8SN 1/4	7,2
	10		3/8"	16 × 1,5	3/8"	12	34	17,5	28	22	17	WE10SR 3/8	WE10SM 16	WE10SN 3/8	10,3
	12		3/8"	18 × 1,5	3/8"	12	38	21,5	31	24	17	WE12SR 3/8	WE12SM 18	WE12SN 3/8	11,0
	14		1/2"	20 × 1,5	1/2"	14	40	22	32	27	19	WE14SR 1/2	WE14SM 20	WE14SN 1/2	16,0
	16		400	1/2"	22 × 1,5	1/2"	14	43	24,5	32	30	24	WE16SR 1/2	WE16SM 22	WE16SN 1/2
	20	3/4"		—	3/4"	16	48	26,5	42	36	27	WE20SR 3/4	—	WE20SN 3/4	30,3
	25	1"		—	1"	18	54	30	48	46	36	WE25SR 1	—	WE25SN 1	57,0
	30	1 1/4"		—	1 1/4"	20	62	35,5	54	50	41	WE30SR 1 1/4	—	WE30SN 1 1/4	83,0
	38	315	1 1/2"	—	1 1/2"	22	72	41	61	60	50	WE38SR 1 1/2	—	WE38SN 1 1/2	117,0

de maten zijn met gemonteerde moer



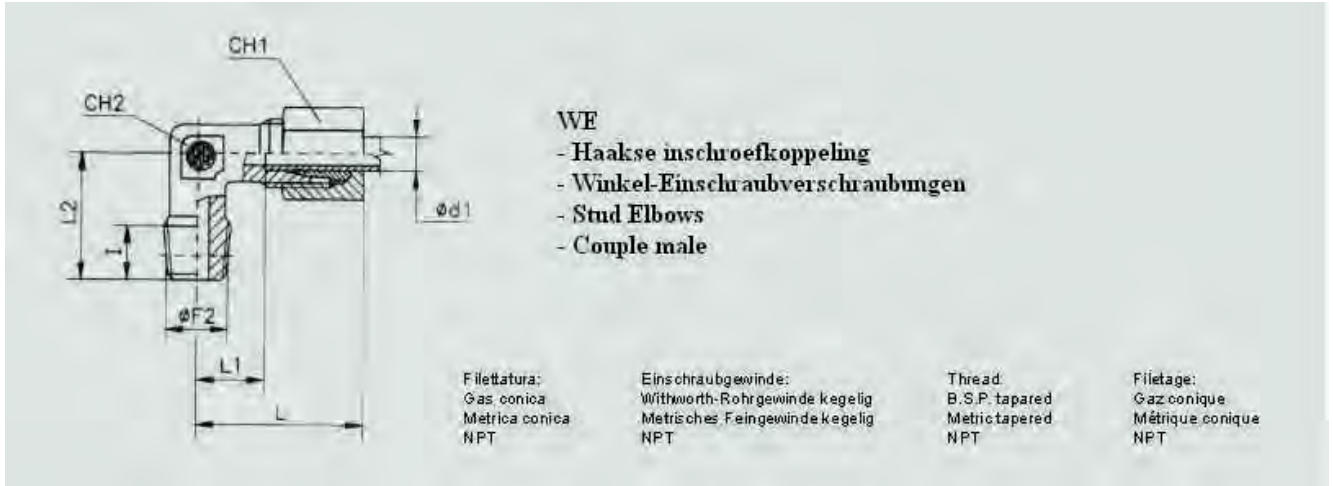
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



WE

Haakse inschroefkoppeling

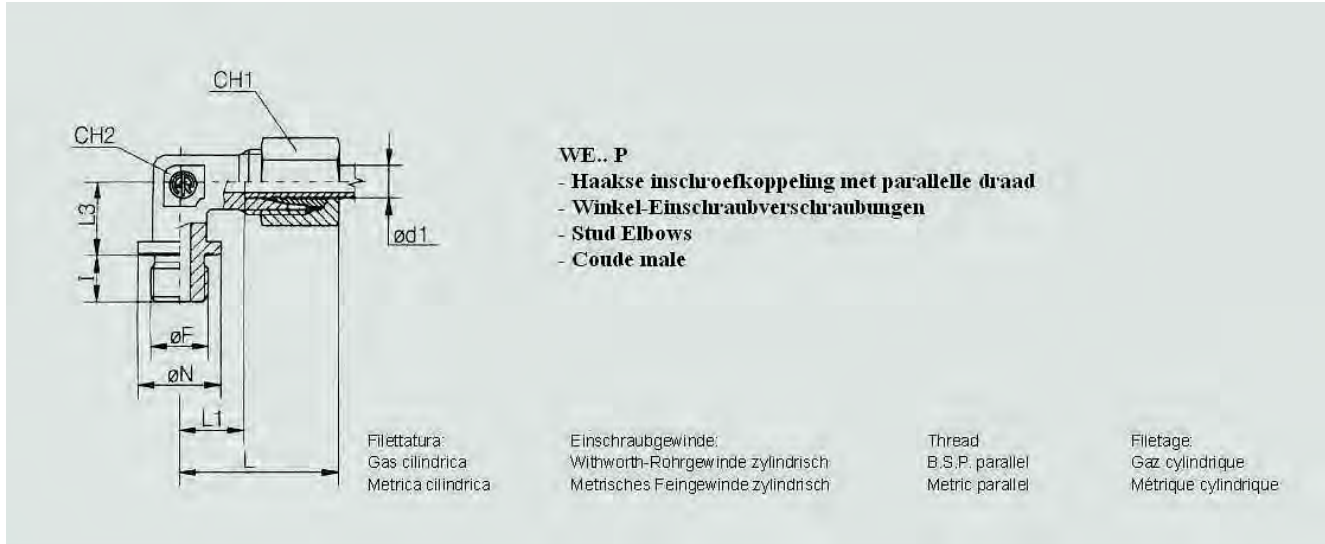


Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	Ø F2		I		L	L1	L2	CH1	CH2	Simbolo di ordinazione - Bestell-Nr. Part. No. - Références		Peso Gewicht Weight Poids kg. x100 P.
			R	NPT	R	NPT						R	NPT	
L	6	315	1/4"	1/4"	12	12	29	14	26	14	12	WE6LR 1/4	WE6LN 1/4	3,6
	8		1/8"	-	8	-	29	14	26	17	12	WE8LR 1/8	-	3,6
	8		3/8"	3/8"	12	12	32	17	28	17	17	WE8LR 3/8	WE8LN 3/8	6,2
	10		3/8"	3/8"	12	12	32	17	28	19	17	WE10LR 3/8	WE10LN 3/8	7,3
	10		1/2"	-	14	-	36	21	34	19	19	WE10LR 1/2	-	11,3
	12		1/4"	1/4"	12	12	32	17	28	22	17	WE12LR 1/4	WE12LN 1/4	7,3
	12		1/2"	1/2"	14	14	36	21	34	22	19	WE12LR 1/2	WE12LN 1/2	11,5
	15		3/8"	-	12	-	36	21	34	27	19	WE15LR 3/8	-	12,5
S	12	630	1/2"	1/2"	14	14	39	22,5	32	24	19	WE12SR 1/2	WE12SN 1/2	13,9
	16	400	3/8"	-	12	-	43	24,5	32	30	24	WE16SR 3/8	-	20,1
	20		1/2"	-	14	-	48	26,5	42	36	27	WE20SR 1/2	-	30,8

de maten zijn met gemonteerde moer

WE.. P

Haakse inschroeffkoppeling met parallelle draad, type B volgens DIN 3852 deel 2



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN PE	I	L	L1	L3	CH1	CH2	R			M			Peso Gewicht Weight Poids kg.x100 P.
									ØF	ØN	Simbolo di ordinazione Bestell-Nr. - Part.No. Références	ØF	ØN	Simbolo di ordinazione Bestell-Nr. - Part.No. Références	
L	22	PN 160	16	44	27,5	26	36	27	3/4"	32	WE22LR 3/4.P	26 x 1,5	31	WE22LM 26.P	24,6
	28		18	47	30,5	30	41	36	1"	39	WE28LR 1.WD	33 x 2	39	WE28LM 33.P	34,7
	35		20	56	34,5	34	50	41	1" 1/4	49	WE35LR 1 1/4.P	42 x 2	49	WE35LM 42.P	61,2
	42		22	63	40	39	60	50	1" 1/2	55	WE42LR 1 1/2.P	48 x 2	55	WE42LM 48.P	84,6
S	20	PE	16	48	26,5	26	36	27	3/4"	32	WE20SR 3/4.P	27 x 2	32	WE20SM 27.P	30,3
	25	400	18	54	31	30	46	36	1"	39	WE25SR 1.P	33 x 2	39	WE25SM 33.P	58,0
	30	PE	20	62	35,5	34	50	41	1" 1/4	49	WE30SR 1 1/4.P	42 x 2	49	WE30SM 42.P	74,4
	38	250	22	72	41	39	60	50	1" 1/2	55	WE38SR 1 1/2.P	48 x 2	55	WE38SM 48.P	98,9

de maten zijn met gemonteerde moer



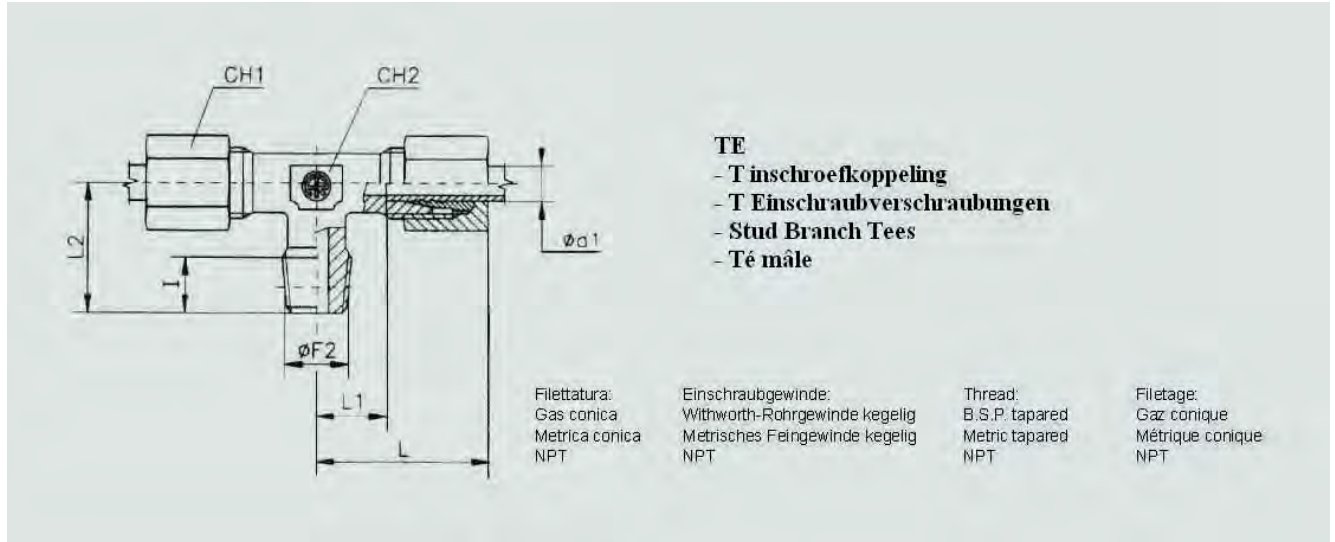
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



TE

T inschroefkoppeling

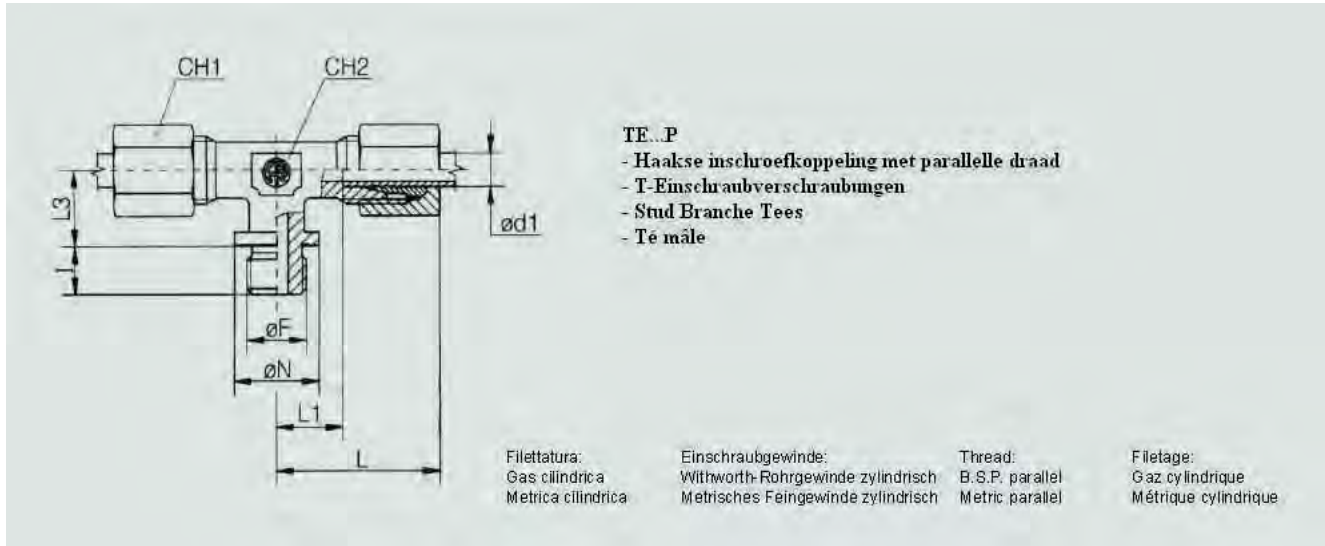


Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	Ø F2			a)				CH1	CH2	Simbolo di ordinazione - Bestell-Nr. Part. No. - Références			Peso Gewicht Weight Poids kg.×100 P.
			R	M	NPT	l	L	L1	L2			R	M	NPT	
			LL	4	100	1/8"	8 × 1	1/8"	8			21	11	17	
5	1/8"	8 × 1	1/8"	8		21	9,5	17	12	9	TE 5LLR 1/8	TE 5LLM 8	TE 5LLN 1/8	2,7	
6	1/8"	10 × 1	1/8"	8		21	9,5	17	12	9	TE 6LLR 1/8	TE 6LLM 10	TE 6LLN 1/8	2,8	
8	1/8"	10 × 1	1/8"	8		23	11,5	20	14	12	TE 8LLR 1/8	TE 8LLM 10	TE 8LLN 1/8	4,2	
10	1/4"	—	—	12		27	15	25	17	14	TE10LLR 1/4	—	—	6,9	
12	1/4"	—	—	12		25	13	23	19	17	TE12LLR 1/4	—	—	9,0	
L	6	315	1/8"	10 × 1	1/8"	8	27	12	20	14	12	TE 6LR 1/8	TE 6LM 10	TE 6LN 1/8	5,5
	8		1/4"	12 × 1,5	1/4"	12	29	14	26	17	12	TE 8LR 1/4	TE 8LM 12	TE 8LN 1/4	7,5
	10		1/4"	14 × 1,5	1/4"	12	30	15	27	19	14	TE10LR 1/4	TE10LM 14	TE10LN 1/4	10,6
	12		3/8"	16 × 1,5	3/8"	12	32	17	28	22	17	TE12LR 3/8	TE12LM 16	TE12LN 3/8	13,0
	15		1/2"	18 × 1,5	1/2"	14	36	21	34	27	19	TE15LR 1/2	TE15LM 18	TE15LN 1/2	22,0
	18		1/2"	22 × 1,5	1/2"	14	40	23,5	36	32	24	TE18LR 1/2	TE18LM 22	TE18LN 1/2	32,0
	22	160	3/4"	—	3/4"	16	44	27,5	42	36	27	TE22LR 3/4	—	TE22LN 3/4	40,0
	28		1"	—	1"	18	47	30,5	48	41	36	TE28LR 1	—	TE28LN 1	56,0
	35		1" 1/4	—	1" 1/4	20	56	34,5	54	50	41	TE35LR 1 1/4	—	TE35LN 1 1/4	90,0
	42		1" 1/2	—	1" 1/2	22	63	40	61	60	50	TE42LR 1 1/2	—	TE42LN 1 1/2	135,0
S	6	630	1/4"	12 × 1,5	1/4"	12	31	16	26	17	12	TE 6SR 1/4	TE 6SM 12	TE 6SN 1/4	9,5
	8		1/4"	14 × 1,5	1/4"	12	32	17	27	19	14	TE 8SR 1/4	TE 8SM 14	TE 8SN 1/4	12,1
	10		3/8"	16 × 1,5	3/8"	12	34	17,5	28	22	17	TE10SR 3/8	TE10SM 16	TE10SN 3/8	16,0
	12		3/8"	18 × 1,5	3/8"	12	38	21,5	31	24	17	TE12SR 3/8	TE12SM 18	TE12SN 3/8	20,3
	14		1/2"	20 × 1,5	1/2"	14	40	22	32	27	19	TE14SR 1/2	TE14SM 20	TE14SN 1/2	25,1
	16	400	1/2"	22 × 1,5	1/2"	14	43	24,5	32	30	24	TE16SR 1/2	TE16SM 22	TE16SN 1/2	32,4
	20		3/4"	—	3/4"	16	48	26,5	42	36	27	TE20SR 3/4	—	TE20SN 3/4	48,0
	25		1"	—	1"	18	54	30	48	46	36	TE25SR 1	—	TE25SN 1	92,0
	30		1" 1/4	—	1" 1/4	20	62	35,5	54	50	41	TE30SR 1 1/4	—	TE30SN 1 1/4	127,0
	38		315	1" 1/2	—	1" 1/2	22	72	41	61	60	50	TE38SR 1 1/2	—	TE38SN 1 1/2

de maten zijn met gemonteerde moer

TE...P

T inschroefkoppeling met parallelle draad, type B DIN 3852 deel 2



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN PE	I	L	L1	L3	CH1	CH2	R			M			Peso Gewicht Weight Poids kg.×100 P.
									Ø F	Ø N	Simbolo di ordinazione Bestell-Nr. - Part. No. Références	Ø F	Ø N	Simbolo di ordinazione Bestell-Nr. - Part. No. Références	
L	22	160	16	44	27,5	26	36	27	3/4"	32	TE22LR 3/4.P	26 × 1,5	31	TE22LM 26.P	38,5
	28		18	47	30,5	30	41	36	1"	39	TE28LR 1.P	33 × 2	39	TE28LM 33.P	64,5
	35		20	56	34,5	34	50	41	1" 1/4	49	TE35LR 1 1/4.P	42 × 2	49	TE35LM 42.P	109,0
	42		22	63	40	39	60	50	1" 1/2	55	TE42LR 1 1/2.P	48 × 2	55	TE42LM 48.P	153,3
S	20	400	16	48	26,5	26	36	27	3/4"	32	TE20SR 3/4.P	27 × 2	32	TE20SM 27.P	48,8
	25		18	54	31	30	46	36	1"	39	TE25SR 1.P	33 × 2	39	TE25SM 33.P	83,0
	30		20	62	35,5	34	50	41	1" 1/4	49	TE30SR 1 1/4.P	42 × 2	49	TE30SM 42.P	116,9
	38		22	72	41	39	60	50	1" 1/2	55	TE38SR 1 1/2.P	48 × 2	55	TE38SM 48.P	166,9

de maten zijn met gemonteerde moer



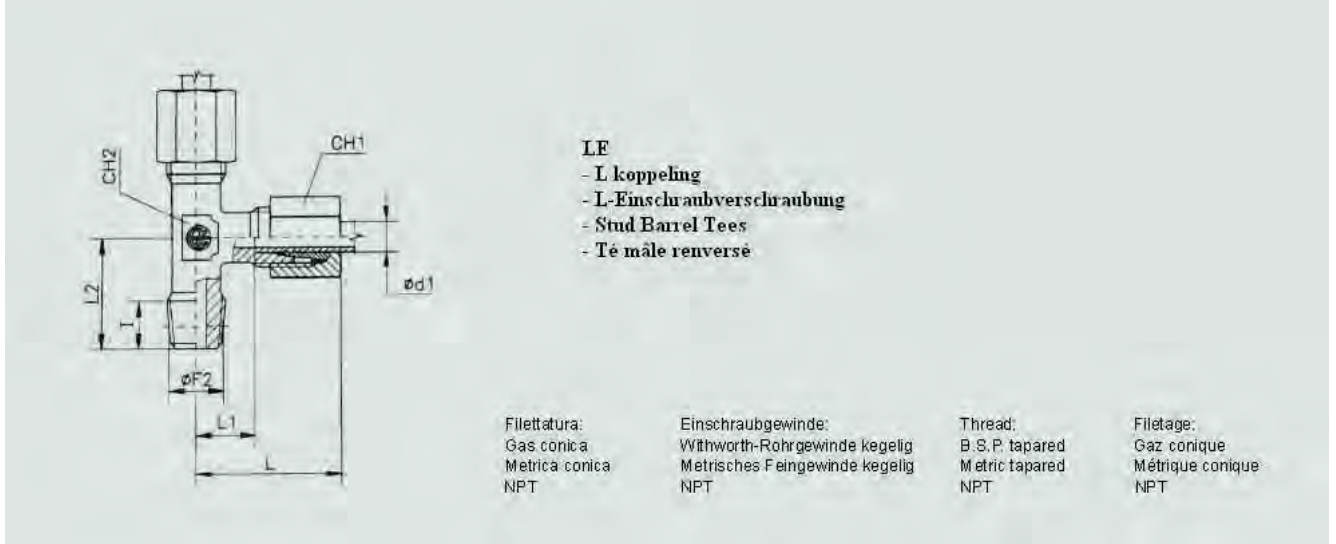
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



LE

L koppeling

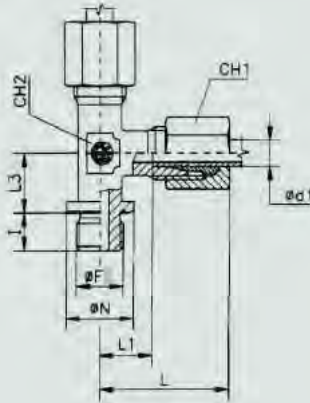


Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	Ø F2			a)	L	L1	a)	L2	CH1	CH2	Simbolo di ordinazione - Bestell-Nr. Part. No. - Références			Peso Gewicht Weight Poids kg. x 100 P.
			R	M	NPT								R	M	NPT	
LL	4	100	1/8"	8 × 1	1/8"	8	21	11	17	10	9	LE4LLR 1/8	LE4LLM 8	LE4LLN 1/8	3,0	
	5		1/8"	8 × 1	1/8"	8	21	9,5	17	12	9	LE5LLR 1/8	LE5LLM 8	LE5LLN 1/8	3,0	
	6		1/8"	10 × 1	1/8"	8	21	9,5	17	12	9	LE6LLR 1/8	LE6LLM 10	LE6LLN 1/8	3,0	
	8		1/8"	10 × 1	1/8"	8	23	11,5	20	14	12	LE8LLR 1/8	LE8LLM 10	LE8LLN 1/8	4,0	
	10		1/4"	—	—	12	27	15	25	17	14	LE10LLR 1/4	—	—	6,6	
	12		1/4"	—	—	12	25	13	23	19	17	LE12LLR 1/4	—	—	8,7	
L	6	315	1/8"	10 × 1	1/8"	8	27	12	20	14	12	LE6LR 1/8	LE6LM 10	LE6LN 1/8	5,5	
	8		1/4"	12 × 1,5	1/4"	12	29	14	26	17	12	LE8LR 1/4	LE8LM 12	LE8LN 1/4	7,5	
	10		1/4"	14 × 1,5	1/4"	12	30	15	27	19	14	LE10LR 1/4	LE10LM 14	LE10LN 1/4	11,0	
	12		3/8"	16 × 1,5	3/8"	12	32	17	28	22	17	LE12LR 3/8	LE12LM 16	LE12LN 3/8	13,0	
	15		1/2"	18 × 1,5	1/2"	14	36	21	34	27	19	LE15LR 1/2	LE15LM 18	LE15LN 1/2	22,0	
	18		1/2"	22 × 1,5	1/2"	14	40	23,5	36	32	24	LE18LR 1/2	LE18LM 22	LE18LN 1/2	32,0	
	22	160	3/4"	—	3/4"	16	44	27,5	42	36	27	LE22LR 3/4	—	LE22LN 3/4	40,0	
	28		1"	—	1"	18	47	30,5	48	41	36	LE28LR 1	—	LE28LN 1	56,0	
	35		1" 1/4	—	1" 1/4	20	56	34,5	54	50	41	LE35LR 1 1/4	—	LE35LN 1 1/4	90,0	
	42		1" 1/2	—	1" 1/2	22	63	40	61	60	50	LE42LR 1 1/2	—	LE42LN 1 1/2	135,0	
S	6	630	1/4"	12 × 1,5	1/4"	12	31	16	26	17	12	LE6SR 1/4	LE6SM 12	LE6SN 1/4	10,0	
	8		1/4"	14 × 1,5	1/4"	12	32	17	27	19	14	LE8SR 1/4	LE8SM 14	LE8SN 1/4	12,0	
	10		3/8"	16 × 1,5	3/8"	12	34	17,5	28	22	17	LE10SR 3/8	LE10SM 16	LE10SN 3/8	16,0	
	12		3/8"	18 × 1,5	3/8"	12	38	21,5	31	24	17	LE12SR 3/8	LE12SM 18	LE12SN 3/8	20,0	
	14		1/2"	20 × 1,5	1/2"	14	40	22	32	27	19	LE14SR 1/2	LE14SM 20	LE14SN 1/2	25,0	
	16	400	1/2"	22 × 1,5	1/2"	14	43	24,5	32	30	24	LE16SR 1/2	LE16SM 22	LE16SN 1/2	32,0	
	20		3/4"	—	3/4"	16	48	26,5	42	36	27	LE20SR 3/4	—	LE20SN 3/4	48,0	
	25		1"	—	1"	18	54	30	48	46	36	LE25SR 1	—	LE25SN 1	92,0	
	30		1" 1/4	—	1" 1/4	20	62	35,5	54	50	41	LE30SR 1 1/4	—	LE30SN 1 1/4	130,0	
	38		315	1" 1/2	—	1" 1/2	22	72	41	61	60	50	LE38SR 1 1/2	—	LE38SN 1 1/2	190,0

de maten zijn met gemonteerde moer

LE...P

L koppeling met parallelle draad, volgens type B DIN 3852 deel 2



LE...P

- L koppeling met parallelle draad
- L-Einschraubverschraubungen
- Stud Barrel Tees
- Tê mâle renversé

Filettatura:
Gas cilindrica
Metrica cilindrica

Einschraubgewinde:
Withworth-Rohrgewinde zylindrisch
Metrisches Feingewinde zylindrisch

Thread:
B.S.P. parallel
Metric parallel

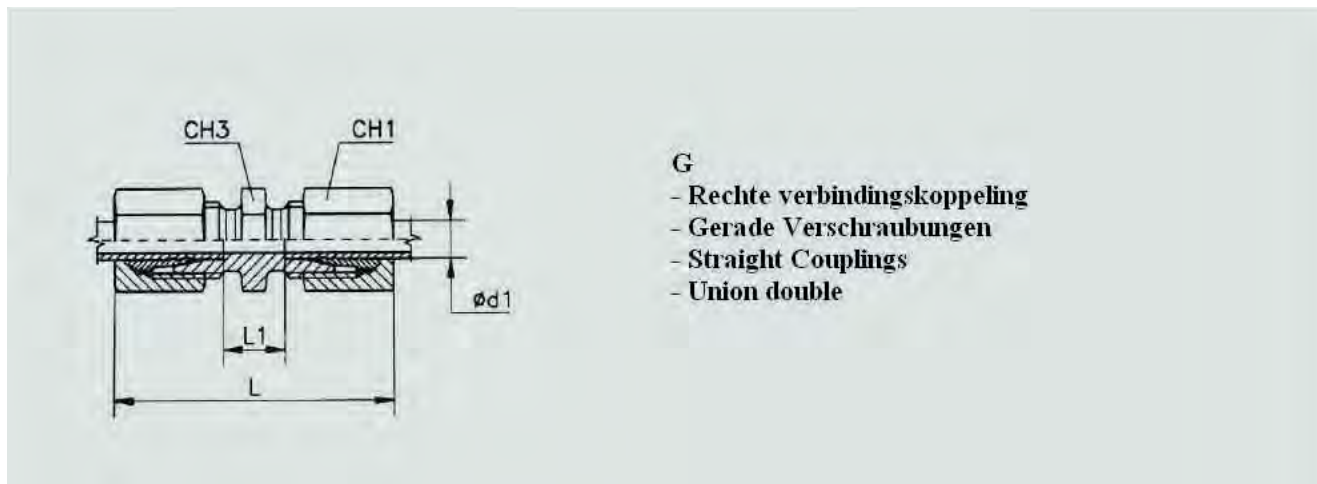
Filetage:
Gaz cylindrique
Métrique cylindrique

Serie Reihe Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN PE	I	L	L1	L3	CH1	CH2	R			M			Peso Gewicht Weight Poids kg. x 100 P.
									Ø F	Ø N	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Ø F	Ø N	Simbolo di ordinazione Bestell-Nr Part. No. Références	
L	22	PN 160	16	44	27,5	26	36	27	3/4"	32	LE22LR 3/4.P	26 x 1,5	31	LE22LM 26.P	42,7
	28		18	47	30,5	30	41	36	1"	39	LE28LN 1.P	33 x 2	39	LE28LM 33.P	75,0
	35		20	56	34,5	34	50	41	1" 1/4	49	LE35LN 1 1/4.P	42 x 2	49	LE35LM 42.P	108,9
	42		22	63	40	39	60	50	1" 1/2	55	LE42LN 1 1/2.P	48 x 2	55	LE42LM 48.P	163,3
S	20	PE	16	48	26,5	26	36	27	3/4"	32	LE20SR 3/4.P	27 x 2	32	LE20SM 27.P	50,2
	25	400	18	54	31	30	46	36	1"	39	LE25SR 1.P	33 x 2	39	LE25SM 33.P	87,1
	30	PE	20	62	35,5	34	50	41	1" 1/4	49	LE30SR 1 1/4.P	42 x 2	49	LE30SM 42.P	118,4
	38	250	22	72	41	39	60	50	1" 1/2	55	LE38SR 1 1/2.P	48 x 2	55	LE38SM 48.P	168,8

de maten zijn met gemonteerde moer

G

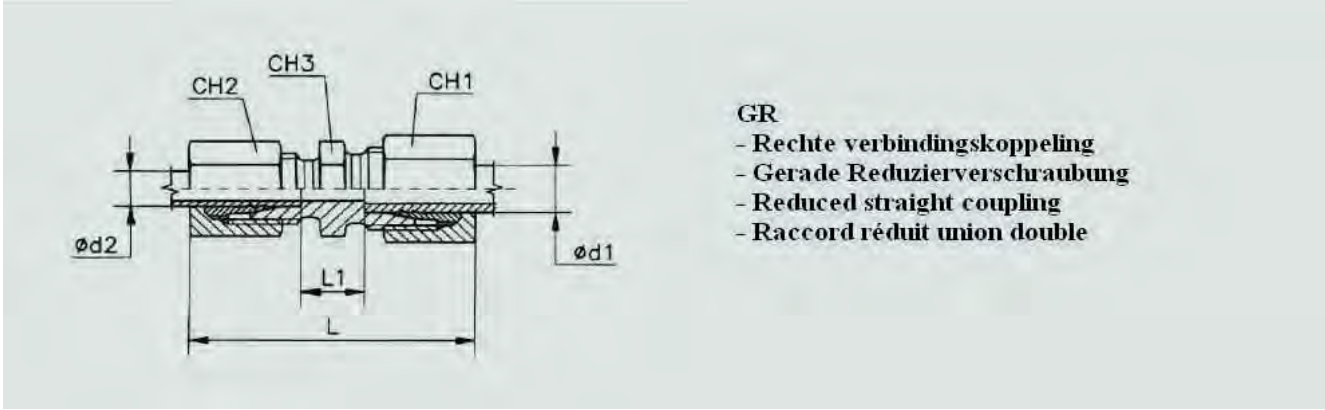
Rechte verbindingskoppeling



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	L	L1	CH1	CH3		Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.x100 P.
LL	4	100	31	12	10	9		G 4LL	1,5
	5		32	9	12	11		G 5LL	2,0
	6		32	9	12	11		G 6LL	2,2
	8		35	12	14	12		G 8LL	2,8
	10		35	12	17	14		G10LL	4,5
	12		35	11	19	17		G12LL	6,0
L	6	315	39	10	14	12		G 6L	3,6
	8		40	11	17	14		G 8L	5,0
	10		42	13	19	17		G10L	7,0
	12		43	14	22	19		G12L	8,7
	15		46	16	27	24		G15L	14,0
	18		48	16	32	27		G18L	20,0
	22	160	52	20	36	32		G22L	26,5
	28		54	21	41	41		G28L	32,0
	35		63	20	50	46		G35L	50,0
	42		66	21	60	55		G42L	74,1
S	6	630	45	16	17	14		G 6S	4,1
	8		47	18	19	17		G 8S	6,1
	10		49	17	22	19		G10S	8,0
	12		51	19	24	22		G12S	11,5
	14		57	22	27	24		G14S	18,0
	16		400	57	21	30	27		G16S
	20	66		23	36	32		G20S	35,0
	25	74		26	46	41		G25S	68,0
	30	80		27	50	46		G30S	83,0
	38	315	90	29	60	55		G38S	121,0

de maten zijn met gemonteerde moer

GR Rechte verloopkoppeling



- GR**
- Rechte verbindingskoppeling
 - Gerade Reduzierschraubung
 - Reduced straight coupling
 - Raccord réduit union double

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₂	PN	L	L1	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Poids kg.×100 P.
L	8	6	315	39,5	11	17	14	14	GR 8- 6L	4,3
	10	6		40,5	11,5	19	14	17	GR10- 6L	5,3
	10	8		41	11,5	19	17	17	GR10- 8L	6,0
	12	6		41	12,5	22	14	19	GR12- 6L	6,2
	12	8		41,5	12,5	22	17	19	GR12- 8L	6,9
	12	10		42,5	13,5	22	19	19	GR12-10L	7,9
	15	10		44	14,5	27	19	24	GR15-10L	10,5
	15	12		44,5	14,5	27	22	24	GR15-12L	11,4
	18	10		45	15	32	19	27	GR18-10L	13,5
	18	12		45,5	15	32	22	27	GR18-12L	14,4
	18	15		47	16,5	32	27	27	GR18-15L	17,0
	22	12		47,5	17	36	22	32	GR22-12L	17,6
	22	15		49	18,5	36	27	32	GR22-15L	20,3
	22	18		50	18	36	32	32	GR22-18L	23,3
	28	18		51	19	41	32	41	GR28-18L	26,0
28	22	53	21	41	36	41	GR28-22L	29,9		
35	22	57,5	21	50	36	46	GR35-22L	38,3		
35	28	58,5	21	50	41	46	GR35-28L	41,0		
S	8	6	630	46	18	19	17	17	GR 8- 6S	5,1
	10	6		47	17,5	22	17	19	GR10- 6S	6,0
	10	8		48	17,5	22	19	19	GR10- 8S	7,0
	12	6		48	18,5	24	17	22	GR12- 6S	7,8
	12	8		49	18,5	24	19	22	GR12- 8S	8,8
	12	10		50	18	24	22	22	GR12-10S	9,8
	14	10		53	20,5	27	22	24	GR14-10S	13,0
	14	12		54	20,5	27	24	24	GR14-12S	14,8
	16	12		54	21	30	24	27	GR16-12S	17,3
	16	14		57	22,5	30	27	27	GR16-14S	20,5
	20	10		57,5	23	36	22	32	GR20-10S	21,5
	20	12		58,5	23	36	24	32	GR20-12S	23,3
	20	14		61,5	24	36	27	32	GR20-14S	26,5
	20	16		61,5	24	36	30	32	GR20-16S	29,0
	25	16		65,5	27,5	46	30	41	GR25-16S	45,5
	25	20		70	25,5	46	36	41	GR25-20S	51,5
	30	20		73	28	50	36	46	GR30-20S	59,0
	30	25		77	28,5	50	46	46	GR30-25S	75,5
38	25	82	30	60	46	55	GR38-25S	94,5		
38	30	85	30,5	60	50	55	GR38-30S	102,0		

de maten zijn met gemonteerde moer



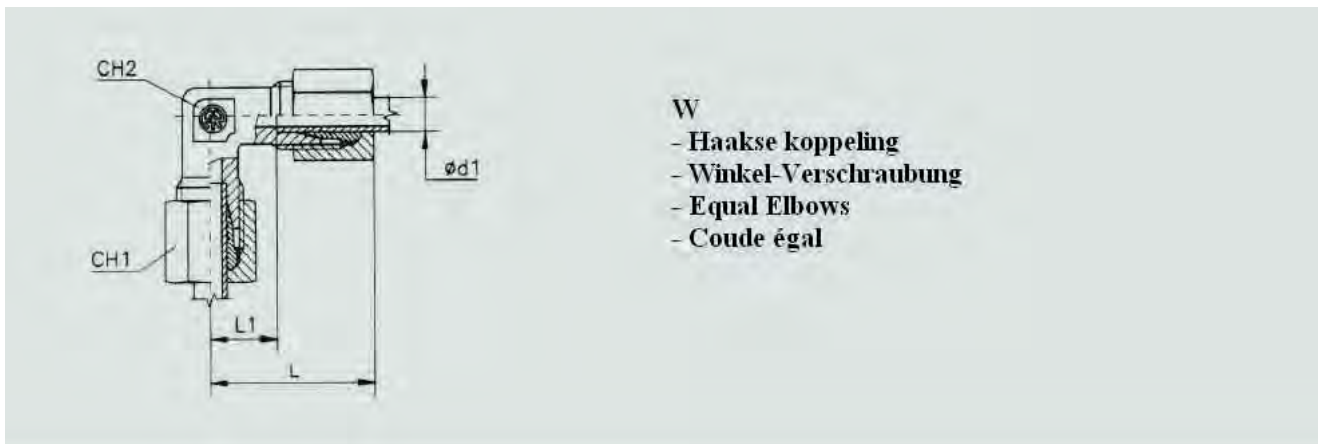
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



W

Haakse verbindingskoppeling



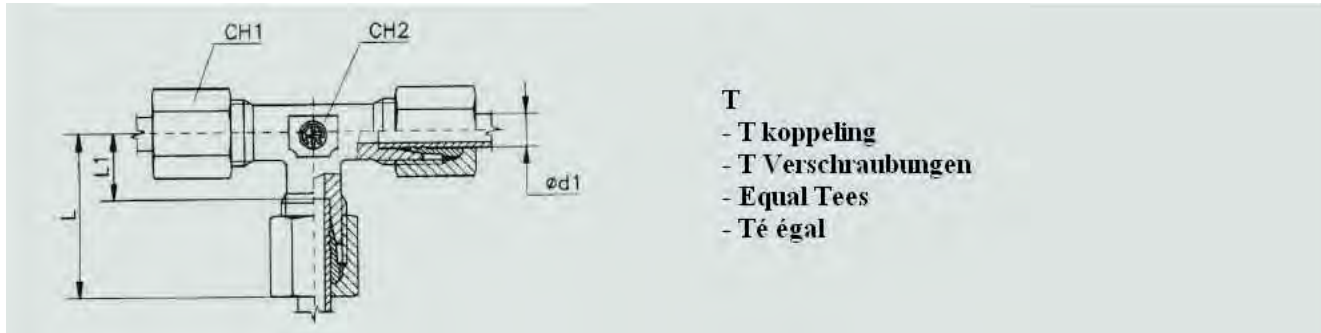
W

- Haakse koppeling
- Winkel-Verschraubung
- Equal Elbows
- Coude égal

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	L	L1	CH1	CH2		Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x 100 P.
LL	4	100	21	11	10	9		W 4LL	2,0
	5		21	9,5	12	9		W 5LL	2,0
	6		21	9,5	12	9		W 6LL	2,2
	8		23	11,5	14	12		W 8LL	3,9
	10		27	15	17	14		W10LL	5,2
	12		25	13	19	17		W12LL	7,0
L	6	315	27	12	14	12		W 6L	4,2
	8		29	14	17	12		W 8L	5,8
	10		30	15	19	14		W10L	7,7
	12		32	17	22	17		W12L	9,8
	15		36	21	27	19		W15L	16,0
	18		40	23,5	32	24		W18L	24,0
	22	160	44	27,5	36	27		W22L	32,0
	28		47	30,5	41	36		W28L	42,4
	35		56	34,5	50	41		W35L	76,5
	42		63	40	60	50		W42L	109,0
S	6	630	31	16	17	12		W 6S	7,1
	8		32	17	19	14		W 8S	8,1
	10		34	17,5	22	17		W10S	12,9
	12		38	21,5	24	17		W12S	15,0
	14		40	22	27	19		W14S	21,0
	16	400	43	24,5	30	24		W16S	26,0
	20		48	26,5	36	27		W20S	42,0
	25		54	30	46	36		W25S	78,0
	30		62	35,5	50	41		W30S	99,0
	38		315	72	41	60	50		W38S

de maten zijn met gemonteerde moer

T T koppeling



Serie Reihe Series Série	∅ Tubo Rohr AD Tube O.D. ∅ Tube d ₁	PN	L	L1	CH1	CH2	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.×100 P.
LL	4	100	21	11	10	9	T 4LL	2,9
	5		21	9,5	12	9	T 5LL	3,5
	6		21	9,5	12	9	T 6LL	3,5
	8		23	11,5	14	12	T 8LL	4,5
	10		27	15	17	14	T10LL	7,2
	12		25	13	19	17	T12LL	9,5
L	6	315	27	12	14	12	T 6L	6,3
	8		29	14	17	12	T 8L	8,5
	10		30	15	19	14	T10L	11,5
	12		32	17	22	17	T12L	15,0
	15		36	21	27	19	T15L	24,5
	18		40	23,5	32	24	T18L	35,8
	22	160	44	27,5	36	27	T22L	47,9
	28		47	30,5	41	36	T28L	74,5
	35		56	34,5	50	41	T35L	100,0
	42		63	40	60	50	T42L	150,0
S	6	630	31	16	17	12	T 6S	11,0
	8		32	17	19	14	T 8S	14,2
	10		34	17,5	22	17	T10S	19,1
	12		38	21,5	24	17	T12S	24,3
	14		40	22	27	19	T14S	30,2
	16		400	43	24,5	30	24	T16S
	20	48		26,5	36	27	T20S	60,0
	25	54		30	46	36	T25S	112,0
	30	62		35,5	50	41	T30S	146,0
	38	315	72	41	60	50	T38S	206,0

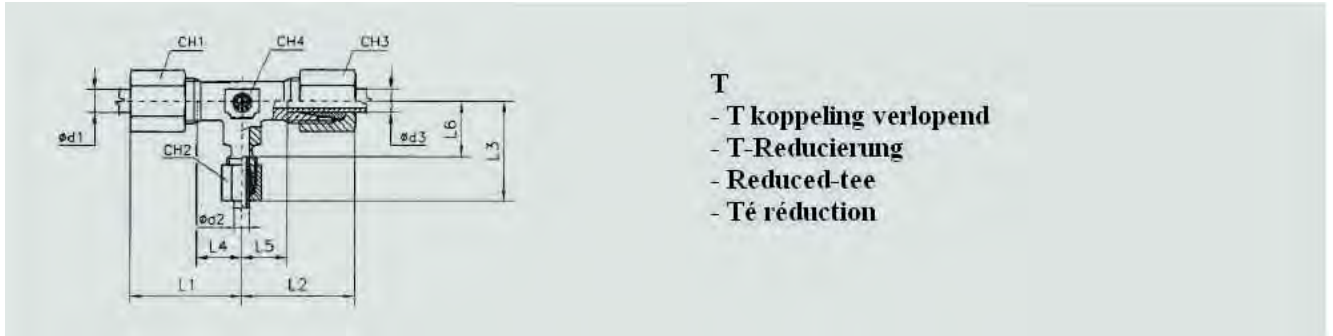
de maten zijn met gemonteerde moer



HYDRAULIEK SNIJRINGKOPPELINGEN



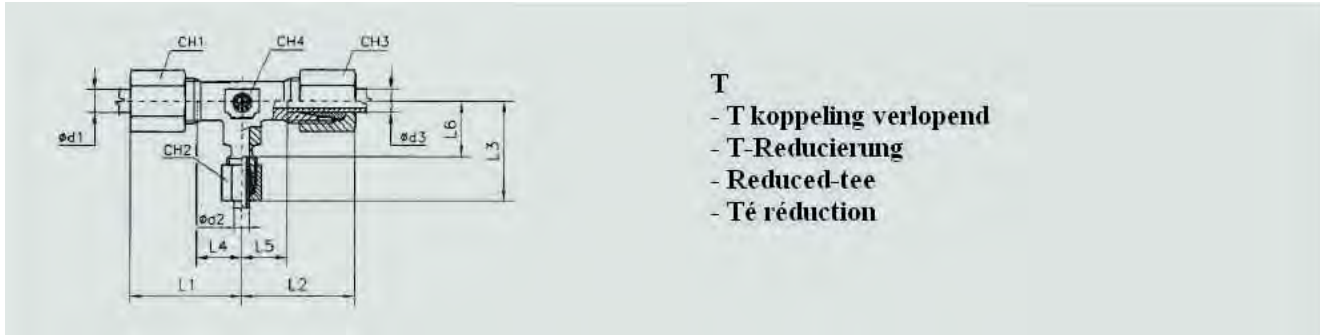
T T koppeling verlopend



- T**
- T koppeling verlopend
 - T-Reducierung
 - Reduced-tee
 - Tè réduction

Serie Reihe Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₂	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₃	PN	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3	CH4	Simbolo di ordinazione Bestell-Nr. Part. No. Références	
L	6	8	6	315	29	29	29	12	12	12	14	17	14	12	T 6- 6- 8L	
	8	6	8		29	29	29	12	12	12	17	14	17	12	T 8- 8- 6L	
	6	10	6		30	30	30	15	15	15	14	19	14	14	T 6- 6- 10L	
	8	10	8		30	30	30	15	15	15	17	19	17	14	T 8- 8- 10L	
	10	6	10		30	30	30	15	15	15	19	14	19	14	T 10- 10- 6L	
	10	8	10		30	30	30	15	15	15	19	17	19	14	T 10- 10- 8L	
	10	10	6		30	30	30	15	15	15	19	19	14	14	T 10- 6- 10L	
	8	12	8		32	32	32	17	17	17	17	22	17	17	17	T 8- 8- 12L
	12	6	12		32	32	32	17	17	17	22	14	22	17	17	T 12- 12- 6L
	12	8	8		32	32	32	17	17	17	22	17	17	17	17	T 12- 8- 8L
	12	8	12		32	32	32	17	17	17	22	17	22	17	17	T 12- 12- 8L
	12	10	10		32	32	32	17	17	17	22	19	19	17	17	T 12- 10- 10L
	12	10	12		32	32	32	17	17	17	22	19	22	17	17	T 12- 12- 10L
	12	12	10		32	32	32	17	17	17	22	22	19	17	17	T 12- 10- 12L
	10	15	10		36	36	36	21	21	21	19	27	19	19	19	T 10- 10- 15L
	12	15	12		36	36	36	21	21	21	22	27	22	19	19	T 12- 12- 15L
	15	6	15		36	36	36	21	21	21	27	14	27	19	19	T 15- 15- 6L
	15	10	15		36	36	36	21	21	21	27	19	27	19	19	T 15- 15- 10L
	15	12	12		36	36	36	21	21	21	27	22	22	19	19	T 15- 12- 12L
	15	12	15		36	36	36	21	21	21	27	22	27	19	19	T 15- 15- 12L
15	15	12	36	36	36	21	21	21	27	27	22	19	19	T 15- 12- 15L		
12	18	12	38,5	40	38,5	23,5	23,5	23,5	22	32	22	24	24	T 12- 12- 18L		
18	10	10	40	38,5	38,5	23,5	23,5	23,5	32	19	19	24	24	T 18- 10- 10L		
18	10	18	40	38,5	40	23,5	23,5	23,5	32	19	32	24	24	T 18- 18- 10L		
18	12	18	40	38,5	40	23,5	23,5	23,5	32	22	32	24	24	T 18- 18- 12L		
18	15	18	40	38,5	40	23,5	23,5	23,5	32	27	32	24	24	T 18- 18- 15L		
18	18	10	40	40	38,5	23,5	23,5	23,5	32	32	19	24	24	T 18- 10- 18L		
22	10	22	44	42,5	44	27,5	27,5	27,5	36	19	36	27	27	T 22- 22- 10L		
22	12	22	44	42,5	44	27,5	27,5	27,5	36	22	36	27	27	T 22- 22- 12L		
22	15	15	44	42,5	42,5	27,5	27,5	27,5	36	27	27	27	27	T 22- 15- 15L		
22	15	22	44	42,5	44	27,5	27,5	27,5	36	27	36	27	27	T 22- 22- 15L		
22	18	18	44	44	44	27,5	27,5	27,5	36	32	32	27	27	T 22- 18- 18L		
22	18	22	44	44	44	27,5	27,5	27,5	36	32	36	27	27	T 22- 22- 18L		
22	22	18	44	44	44	27,5	27,5	27,5	36	36	32	27	27	T 22- 18- 22L		
28	10	28	47	45,5	47	30,5	30,5	30,5	41	19	41	36	36	T 28- 28- 10L		
28	12	28	47	45,5	47	30,5	30,5	30,5	41	22	41	36	36	T 28- 28- 12L		
28	15	28	47	45,5	47	30,5	30,5	30,5	41	27	41	36	36	T 28- 28- 15L		
28	18	28	47	47	47	30,5	30,5	30,5	41	32	41	36	36	T 28- 28- 18L		
28	22	22	47	47	47	30,5	30,5	30,5	41	36	36	36	36	T 28- 22- 22L		
28	22	28	47	47	47	30,5	30,5	30,5	41	36	41	36	36	T 28- 28- 22L		

T T koppeling verlopend



- T**
- T koppeling verlopend
 - T-Reducierung
 - Reduced-tee
 - Té réduction

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₂	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₃	PN	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3	CH4	Simbolo di ordinazione Bestell-Nr. Part. No. Références
S	10	6	10	630	34	32,5	34	17,5	17,5	17,5	22	17	22	17	T10-10-6S
	12	8	8		38	36,5	36,5	21,5	21,5	21,5	24	19	19	17	T12-8-8S
	12	8	12		38	36,5	38	21,5	21,5	21,5	24	19	24	17	T12-12-8S
	12	10	12		38	38	38	21,5	21,5	21,5	24	22	24	17	T12-12-10S
	12	16	12	400	41	43	41	24,5	24,5	24,5	24	30	24	24	T12-12-16S
	16	6	16		43	40	43	24,5	24,5	24,5	30	17	30	24	T16-16-6S
	16	8	16		43	40	43	24,5	24,5	24,5	30	19	30	24	T16-16-8S
	16	10	16		43	41	43	24,5	24,5	24,5	30	22	30	24	T16-16-10S
	16	12	16		43	41	43	24,5	24,5	24,5	30	24	30	24	T16-16-12S
	16	20	16		45	48	45	26,5	26,5	26,5	30	36	30	27	T16-16-20S
	20	10	20		48	43	48	26,5	26,5	26,5	36	22	36	27	T20-20-10S
	20	12	20		48	43	48	26,5	26,5	26,5	36	24	36	27	T20-20-12S
	20	16	20		48	45	48	26,5	26,5	26,5	36	30	36	27	T20-20-16S
	20	25	20		51,5	54	51,5	30	30	30	36	46	36	36	T20-20-25S
	25	16	25		54	49	54	30	30	30	46	30	46	36	T25-25-16S
	25	20	25		54	52	54	30	30	30	46	36	46	36	T25-25-20S
25	30	25	60	62	60	35,5	35,5	35,5	46	50	46	41	T25-25-30S		

de maten zijn met gemonteerde moer



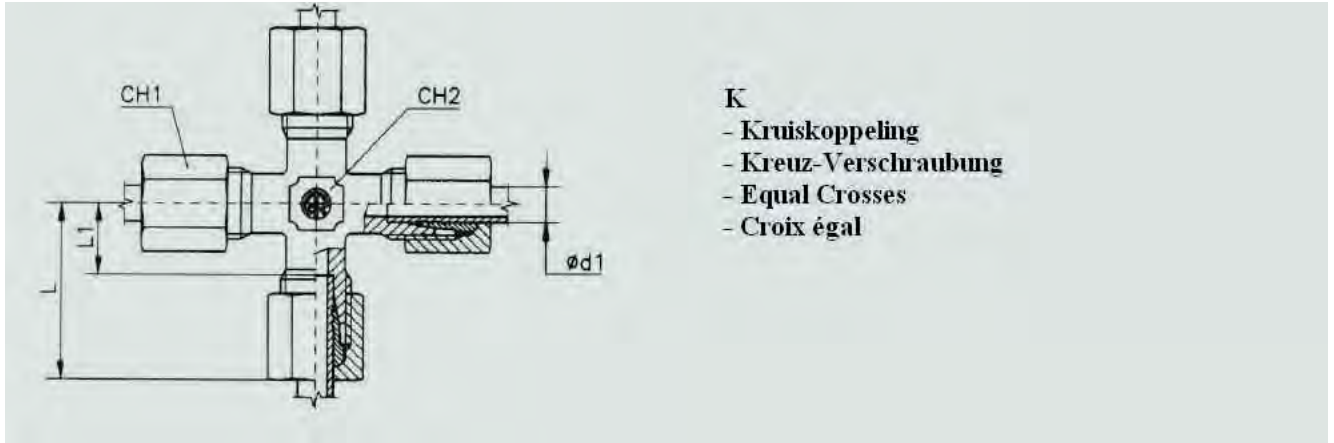
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



K

Kruiskoppeling

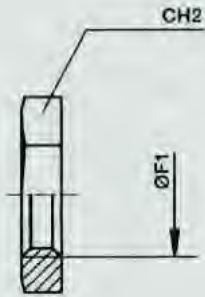


Serie Reihe Series Série	∅ Tubo Rohr AD Tube O.D. ∅ Tube d ₁	PN	L	L1	CH1	CH2		Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x 100 P.
LL	4	100	21	11	10	9		K 4LL	3,0
	5		21	9,5	12	9		K 5LL	4,0
	6		21	9,5	12	9		K 6LL	4,0
	8		23	11,5	14	12		K 8LL	6,0
L	6	315	27	12	14	12		K 6L	7,8
	8		29	14	17	12		K 8L	11,0
	10		30	15	19	14		K10L	15,7
	12		32	17	22	17		K12L	19,5
	15		36	21	27	19		K15L	31,5
	18		40	23,5	32	24		K18L	48,7
	22	160	44	27,5	36	27		K22L	73,0
	28		47	30,5	41	36		K28L	101,5
	35		56	34,5	50	41		K35L	123,5
	42		63	40	60	50		K42L	176,5
S	6	630	31	16	17	12		K 6S	13,0
	8		32	17	19	14		K 8S	17,0
	10		34	17,5	22	17		K10S	24,2
	12		38	21,5	24	17		K12S	30,1
	14		40	22	27	19		K14S	39,0
	16	400	43	24,5	30	24		K16S	49,0
	20		48	26,5	36	27		K20S	76,0
	25		54	30	46	36		K25S	138,0
	30		62	35,5	50	41		K30S	172,0
	38		72	41	60	50		K38S	269,0

de maten zijn met gemonteerde moer

AMLN

Schotmoer, zeskant volgens DIN 80705 – uni EN ISO 8434-1



AMLN
- Schotmoer
- Gegenmutter
- Bulkhead nut
- Contre Ecrou

Filettatura:
Metrica cilindrica

Einschraubgewinde:
Metrisches Feingewinde zylindrisch

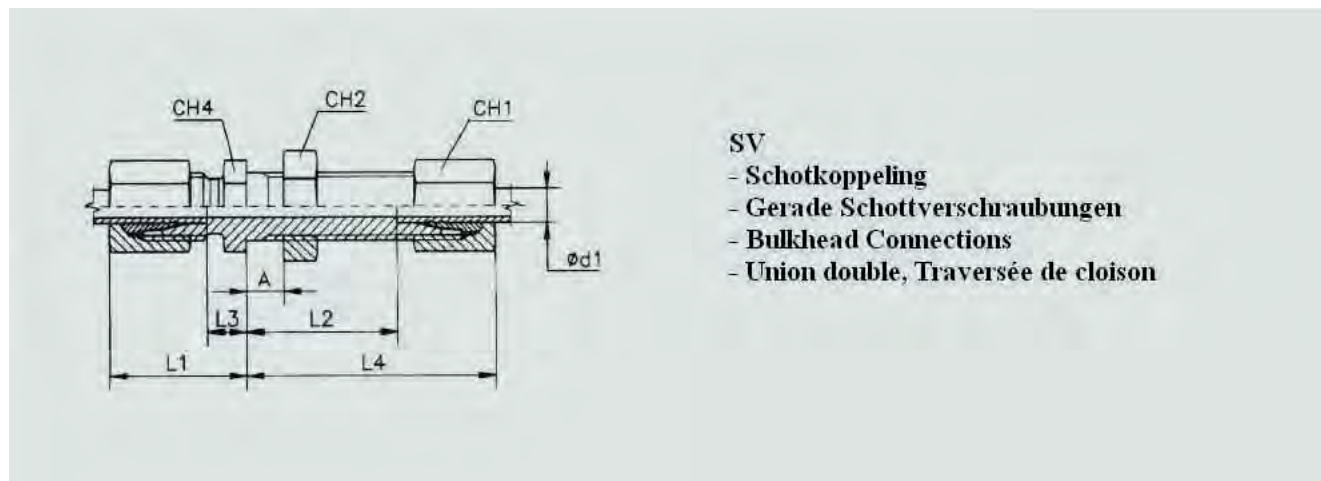
Thread:
Metric parallel

Filetage:
Métrique cylindrique

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	Ø F1	CH2 ★	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.×100 P.
L	6	S	—	12×1,5	17	AMLN M12X1.5	0,7
	8		6	14×1,5	19	AMLN M14X1.5	0,8
	10		8	16×1,5	22	AMLN M16X1.5	1,1
	12		10	18×1,5	24	AMLN M18X1.5	1,2
	—		12	20×1,5	27	AMLN M20X1.5	1,6
	15		14	22×1,5	30	AMLN M22X1.5	2,3
	—		16	24×1,5	32	AMLN M24X1.5	2,5
	18		—	26×1,5	36	AMLN M26X1.5	4,0
	22		20	30×2	41	AMLN M30X2	5,0
	28		25	36×2	46	AMLN M36X2	6,2
	—		30	42×2	50	AMLN M42X2	5,9
	35		—	45×2	55	AMLN M45X2	7,7
	42		38	52×2	65	AMLN M52X2	11,2

SV

Schotkoppeling, zeskant volgens DIN 80705 – uni EN ISO 8434-1



- SV**
- Schotkoppeling
 - Gerade Schottverschraubungen
 - Bulkhead Connections
 - Union double, Traversée de cloison

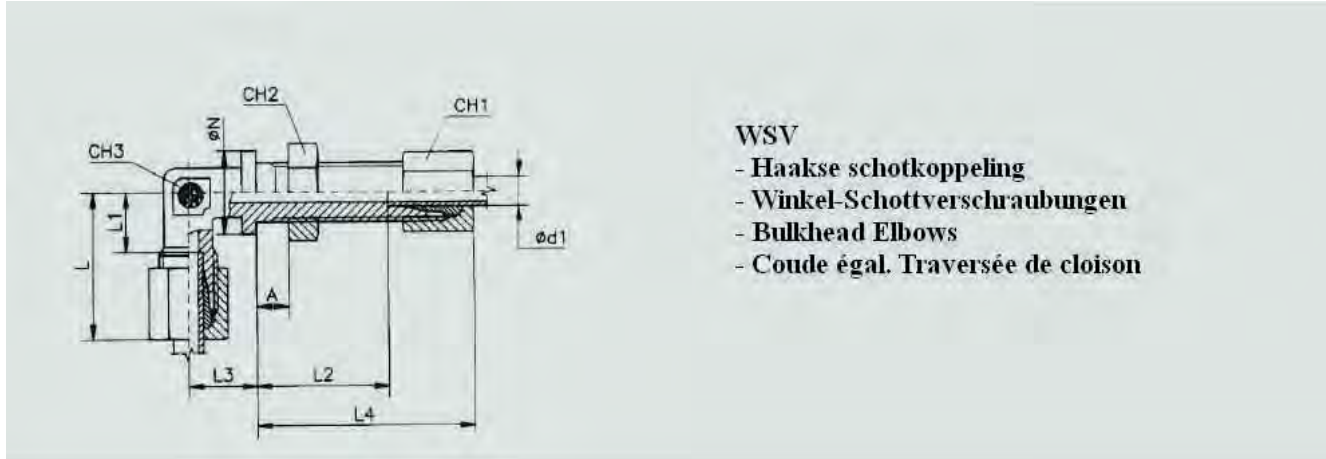
A= 16mm MAX.

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	L1	L2	L3	L4	CH1	CH2 ★	CH4	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.×100 P.
L	6	315	22	27	7	42	14	17	17	SV6L	7,0
	8		23	27	8	42	17	19	19	SV8L	8,5
	10		25	28	10	43	19	22	22	SV10L	12,7
	12		25	29	10	44	22	24	24	SV12L	15,0
	15		27	31	12	46	27	30	27	SV15L	23,0
	18		30	32,5	13,5	49	32	36	32	SV18L	33,0
	22	160	33	34,5	16,5	51	36	41	36	SV22L	41,0
	28		35	35,5	18,5	52	41	46	41	SV28L	53,0
	35		40	36,5	18,5	58	50	55	50	SV35L	80,0
	42		42	36	19	59	60	65	60	SV42L	120,0
S	6	630	27	29	12	44	17	19	19	SV6S	10,0
	8		28	29	13	44	19	22	22	SV8S	13,0
	10		31	29,5	14,5	46	22	24	24	SV10S	19,0
	12		31	30,5	14,5	47	24	27	27	SV12S	22,0
	14		35	32	17	50	27	30	30	SV14S	27,0
	16	400	35	31,5	16,5	50	30	32	32	SV16S	32,0
	20		39	33,5	17,5	55	36	41	41	SV20S	55,0
	25		44	35	20	59	46	46	46	SV25S	91,0
	30		48	37,5	21,5	64	50	50	50	SV30S	110,0
	38		315	53	37	22	68	60	65	65	SV38S

de maten zijn met gemonteerde moer

WSV

Haakse schotkoppeling, zeskant volgens DIN 80705 – uni EN ISO 8434-1



WSV

- Haakse schotkoppeling
- Winkel-Schottverschraubungen
- Bulkhead Elbows
- Coude égal. Traversée de cloison

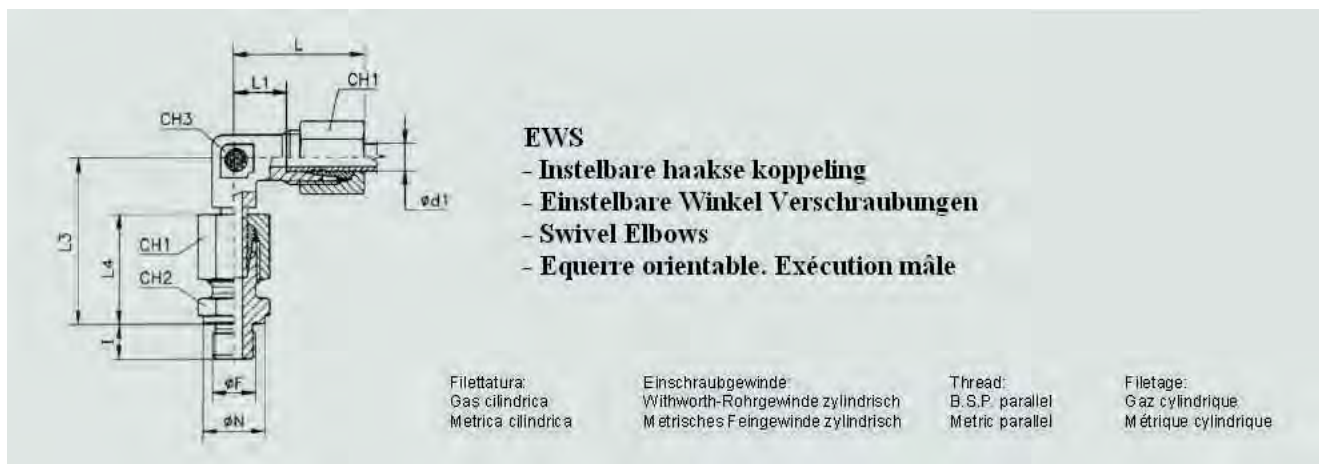
A= 16mm MAX.

Serie Reihe Series Série	∅ Tubo Rohr AD Tube O.D. ∅ Tube d ₁	PN	L	L1	L2	L3	L4	∅ N	CH1	CH2 *	CH3		Simbolo di ordinazione Bestel-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.×100 P.
L	6	315	27	12	27	14	42	17	14	17	12		WSV6L	7
	8		29	14	27	17	42	19	17	19	12		WSV8L	10
	10		30	15	28	18	43	22	19	22	14		WSV10L	13
	12		32	17	29	20	44	24	22	24	17		WSV12L	19
	15		36	21	31	23	46	27	27	30	19		WSV15L	28
	18		40	23,5	32,5	24	49	32	32	36	24		WSV18L	38
	22	160	44	27,5	34,5	30	51	36	36	41	27		WSV22L	49
	28		47	30,5	35,5	34	52	42	41	46	36		WSV28L	70
	35		56	34,5	36,5	39	58	50	50	55	41		WSV35L	103
	42		63	40	36	43	59	60	60	65	50		WSV42L	160
S	6	630	31	16	29	17	44	19	17	19	12		WSV6S	10
	8		32	17	29	18	44	22	19	22	14		WSV8S	13
	10		34	17,5	29,5	20	46	24	22	24	17		WSV10S	20
	12		38	21,5	30,5	21	47	27	24	27	17		WSV12S	24
	14		40	22	32	23	50	27	27	30	19		WSV14S	30
	16	400	43	24,5	31,5	24	50	30	30	32	24		WSV16S	37
	20		48	26,5	33,5	30	55	36	36	41	27		WSV20S	60
	25		54	30	35	34	59	42	46	46	36		WSV25S	108
	30		62	35,5	37,5	39	64	50	50	50	41		WSV30S	120
	38		315	72	41	37	43	68	60	60	65	50		WSV38S

de maten zijn met gemonteerde moer

EWS

Instelbare haakse koppeling, type B volgens DIN 3852 deel 2

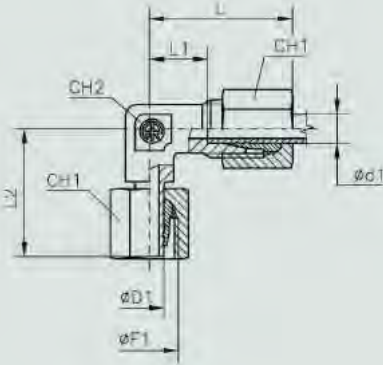


Serie Reihe Series Série	Ø Tubo Rohr AD Tube O. D. Ø Tub d _i	PN PE	l	L	L1	b) L3	L4	CH1	CH3	R				M			Peso Gewicht Weight Poids kg × 100 P.	
										CH2	Ø F	Ø N	Simbolo di ordinazione Bestell-Nr. Part. No. Références	CH2	Ø F	Ø N		Simbolo di ordinazione Bestell-Nr. Part. No. Références
L	6	PN 315	8	27	12	34,5	23	14	12	14	1/8"	14	EWS 6LR 1/8	14	10 × 1	14	EWS 6LM 10	5,4
	8		12	29	14	37,5	25	17	12	19	1/4"	18	EWS 8LR 1/4	17	12 × 1,5	17	EWS 8LM 12	7,5
	10		12	30	15	40	26	19	14	19	1/4"	18	EWS10LR 1/4	19	14 × 1,5	19	EWS10LM 14	9,2
	12		12	32	17	42	27	22	17	22	3/8"	22	EWS12LR 3/8	22	16 × 1,5	21	EWS12LM 16	13,2
	15		14	36	21	46,5	29	27	19	27	1/2"	26	EWS15LR 1/2	24	18 × 1,5	23	EWS15LM 18	22,0
	18		14	40	23,5	50	31	32	24	27	1/2"	26	EWS18LR 1/2	27	22 × 1,5	27	EWS18LM 22	28,0
	22	PN 160	16	44	27,5	55	33	36	27	32	3/4"	32	EWS22LR 3/4	32	26 × 1,5	31	EWS22LM 26	37,5
	28		18	47	30,5	59	34	41	36	41	1"	39	EWS28LR 1	41	33 × 2	39	EWS28LM 33	55,8
	35		20	56	34,5	68,5	39	50	41	50	1" 1/4	49	EWS35LR 1 1/4	50	42 × 2	49	EWS35LM 42	90,8
	42		22	63	40	79	42	60	50	55	1" 1/2	55	EWS42LR 1 1/2	55	48 × 2	55	EWS42LM 48	121,0
S	6	a) PE 630	12	31	16	40	28	17	12	19	1/4"	18	EWS 6SR 1/4	17	12 × 1,5	17	EWS 6SM 12	8,3
	8		12	32	17	42,5	30	19	14	19	1/4"	18	EWS 8SR 1/4	19	14 × 1,5	19	EWS 8SM 14	10,8
	10		12	34	17,5	45	31	22	17	22	3/8"	22	EWS10SR 3/8	22	16 × 1,5	21	EWS10SM 16	14,9
	12		12	38	21,5	48	33	24	17	22	3/8"	22	EWS12SR 3/8	24	18 × 1,5	23	EWS12SM 18	19,2
	14		14	40	22	54	37	27	19	27	1/2"	26	EWS14SR 1/2	27	20 × 1,5	25	EWS14SM 20	25,8
	16	PE 400	14	43	24,5	55	37	30	24	27	1/2"	26	EWS16SR 1/2	27	22 × 1,5	27	EWS16SM 22	31,9
	20		16	48	26,5	65	42	36	27	32	3/4"	32	EWS20SR 3/4	32	27 × 2	32	EWS20SM 27	48,2
	25		18	54	30	73	47	46	36	41	1"	39	EWS25SR 1	41	33 × 2	39	EWS25SM 33	92,7
	30	PE 250	20	62	35,5	78,5	50	50	41	50	1" 1/4	49	EWS30SR 1 1/4	50	42 × 2	49	EWS30SM 42	137,0
	38		22	72	41	90,5	57	60	50	55	1" 1/2	55	EWS38SR 1 1/2	55	48 × 2	55	EWS38SM 48	196,7

de maten zijn met gemonteerde moer

EWS

Instelbare haakse koppeling



EWS

- Instelbare haakse koppeling
- Einstelbare Winkel Anschlussverschraubungen
- Swivel rotary fitting
- Equerre orientable. Exécution femelle

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L	L1	L2	Ø D1	Ø F1	CH1	CH2		Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	27	12	26	6	12 × 1,5	14	12		EWS 6L	4,0
	8		29	14	27,5	8	14 × 1,5	17	12		EWS 8L	4,6
	10		30	15	29	10	16 × 1,5	19	14		EWS10L	6,5
	12		32	17	29,5	12	18 × 1,5	22	17		EWS12L	9,0
	15		36	21	32,5	15	22 × 1,5	27	19		EWS15L	14,9
	18		40	23,5	35,5	18	26 × 1,5	32	24		EWS18L	21,5
	22	160	44	27,5	38,5	22	30 × 2	36	27		EWS22L	28,5
	28		47	30,5	41,5	28	36 × 2	41	36		EWS28L	41,0
	35		56	34,5	51	35	45 × 2	50	41		EWS35L	65,5
	42		63	40	60	42	52 × 2	60	50		EWS42L	99,0
S	6	630	31	16	27	6	14 × 1,5	17	12		EWS 6S	5,1
	8		32	17	27,5	8	16 × 1,5	19	14		EWS 8S	7,4
	10		34	17,5	30	10	18 × 1,5	22	17		EWS10S	10,0
	12		38	21,5	31	12	20 × 1,5	24	17		EWS12S	13,3
	14		40	22	35	14	22 × 1,5	27	19		EWS14S	16,5
	16	400	43	24,5	36,5	16	24 × 1,5	30	24		EWS16S	23,5
	20		48	26,5	44,5	20	30 × 2	36	27		EWS20S	34,0
	25		54	30	50	25	36 × 2	46	36		EWS25S	68,0
	30		62	35,5	55	30	42 × 2	50	41		EWS30S	97,0
	38		315	72	41	64,5	38	52 × 2	60	50		EWS38S

de maten zijn met gemonteerde moer

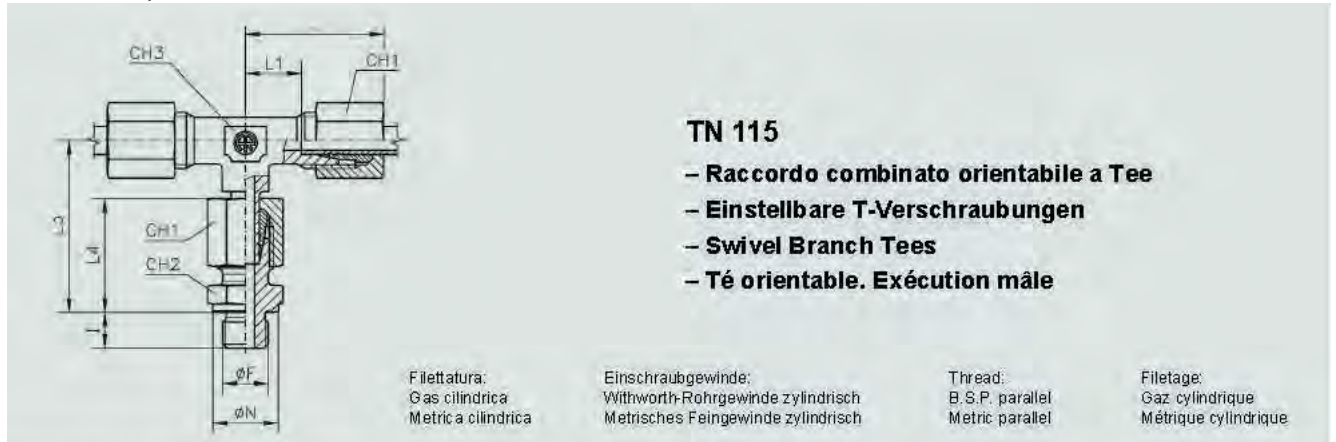


RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



TN115, Op aanvraag leverbaar



Forma B DIN 3852 Foglio 2

Form B DIN 3852 Teil 2

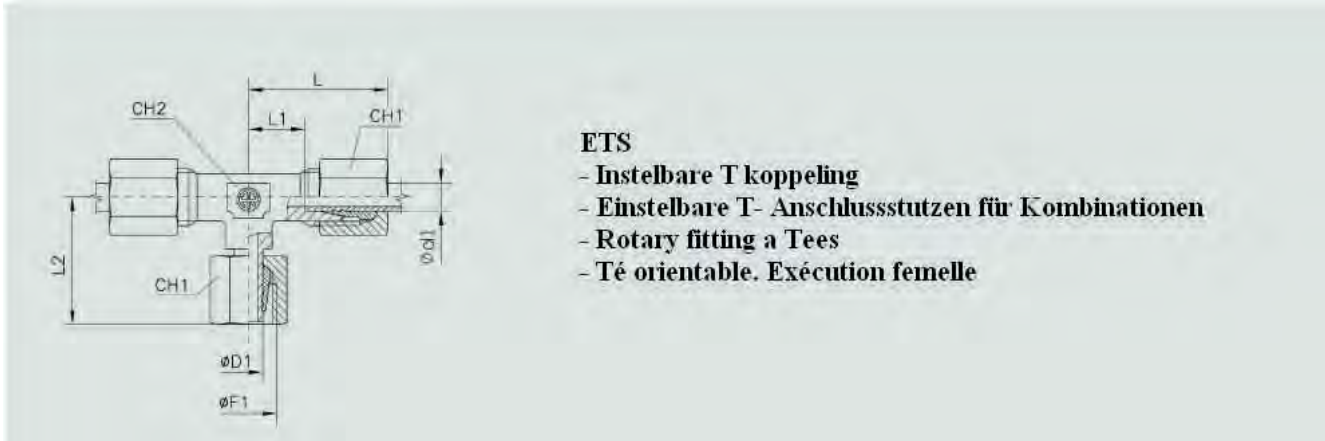
Type B DIN 3852 Part 2

Forme B DIN 3852 Partie 2

Serie Reihe Séries Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN PE	l	L	L1	b) L3	L4	CH1	CH3	R				M			Peso Gewicht Weight Poids kg.×100 P.	
										CH2	Ø F	Ø N	Simbolo di ordinazione Bestell-Nr. Part. No. Références	CH2	Ø F	Ø N		Simbolo di ordinazione Bestell-Nr. Part. No. Références
L	6	PN 315	8	27	12	34,5	23	14	12	14	1/8"	14	TN 115 - 6 LR	14	10×1	14	TN 115 - 6 LM	7,0
	8		12	29	14	37,5	25	17	12	19	1/4"	18	TN 115 - 8 LR	17	12×1,5	17	TN 115 - 8 LM	9,5
	10		12	30	15	40	26	19	14	19	1/4"	18	TN 115 - 10 LR	19	14×1,5	19	TN 115 - 10 LM	11,7
	12		12	32	17	42	27	22	17	22	3/8"	22	TN 115 - 12 LR	22	16×1,5	21	TN 115 - 12 LM	17,2
	15		14	36	21	46,5	29	27	19	27	1/2"	26	TN 115 - 15 LR	24	18×1,5	23	TN 115 - 15 LM	28,0
	18		14	40	23,5	50	31	32	24	27	1/2"	26	TN 115 - 18 LR	27	22×1,5	27	TN 115 - 18 LM	38,5
	22	PN 160	16	44	27,5	55	33	36	27	32	3/4"	32	TN 115 - 22 LR	32	26×1,5	31	TN 115 - 22 LM	51,0
	28		18	47	30,5	59	34	41	36	41	1"	39	TN 115 - 28 LR	41	33×2	39	TN 115 - 28 LM	74,8
	35		20	56	34,5	68,5	39	50	41	50	1" 1/4	49	TN 115 - 35 LR	50	42×2	49	TN 115 - 35 LM	117,8
	42		22	63	40	79	42	60	50	55	1" 1/2	55	TN 115 - 42 LR	55	48×2	55	TN 115 - 42 LM	127,8
S	6	a) PE 630	12	31	16	40	28	17	12	19	1/4"	18	TN 115 - 6 SR	17	12×1,5	17	TN 115 - 6 SM	11,3
	8		12	32	17	42,5	30	19	14	19	1/4"	18	TN 115 - 8 SR	19	14×1,5	19	TN 115 - 8 SM	15,3
	10		12	34	17,5	45	31	22	17	22	3/8"	22	TN 115 - 10 SR	22	16×1,5	21	TN 115 - 10 SM	18,9
	12		12	38	21,5	48	33	24	17	22	3/8"	22	TN 115 - 12 SR	24	18×1,5	23	TN 115 - 12 SM	25,7
	14		14	40	22	54	37	27	19	27	1/2"	26	TN 115 - 14 SR	27	20×1,5	25	TN 115 - 14 SM	36,3
	16	PE 400	14	43	24,5	55	37	30	24	27	1/2"	26	TN 115 - 16 SR	27	22×1,5	27	TN 115 - 16 SM	44,9
	20		16	48	26,5	65	42	36	27	32	3/4"	32	TN 115 - 20 SR	32	27×2	32	TN 115 - 20 SM	68,2
	25		18	54	30	73	47	46	36	41	1"	39	TN 115 - 25 SR	41	33×2	39	TN 115 - 25 SM	126,7
	30	PE 250	20	62	35,5	78,5	50	50	41	50	1" 1/4	49	TN 115 - 30 SR	50	42×2	49	TN 115 - 30 SM	173,0
	38		22	72	41	90,5	57	60	50	55	1" 1/2	55	TN 115 - 38 SR	55	48×2	55	TN 115 - 38 SM	264,7

ETS

Instelbare T koppeling



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	L	L1	L2	Ø D1	Ø F1	CH1	CH2		Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.×100 P.
L	6	315	27	12	26	6	12 × 1,5	14	12		ETS 6L	5,6
	8		29	14	27,5	8	14 × 1,5	17	12		ETS 8L	6,6
	10		30	15	29	10	16 × 1,5	19	14		ETS10L	9,0
	12		32	17	29,5	12	18 × 1,5	22	17		ETS12L	13,0
	15		36	21	32,5	15	22 × 1,5	27	19		ETS15L	20,9
	18		40	23,5	35,5	18	26 × 1,5	32	24		ETS18L	32,0
	22	160	44	27,5	38,5	22	30 × 2	36	27		ETS22L	42,0
	28		47	30,5	41,5	28	36 × 2	41	36		ETS28L	60,0
	35		56	34,5	51	35	45 × 2	50	41		ETS35L	92,5
	42		63	40	60	42	52 × 2	60	50		ETS42L	136,0
S	6	630	31	16	27	6	14 × 1,5	17	12		ETS 6S	8,6
	8		32	17	27,5	8	16 × 1,5	19	14		ETS 8S	11,9
	10		34	17,5	30	10	18 × 1,5	22	17		ETS10S	14,0
	12		38	21,5	31	12	20 × 1,5	24	17		ETS12S	19,8
	14		40	22	35	14	22 × 1,5	27	19		ETS14S	27,0
	16	400	43	24,5	36,5	16	24 × 1,5	30	24		ETS16S	36,5
	20		48	26,5	44,5	20	30 × 2	36	27		ETS20S	54,0
	25		54	30	50	25	36 × 2	46	36		ETS25S	102,0
	30		62	35,5	55	30	42 × 2	50	41		ETS30S	133,0
	38		315	72	41	64,5	38	52 × 2	60	50		ETS38S

de maten zijn met gemonteerde moer

TN116

Op aanvraag leverbaar



Forma B DIN 3852 Foglio 2

Form B DIN 3852 Teil 2

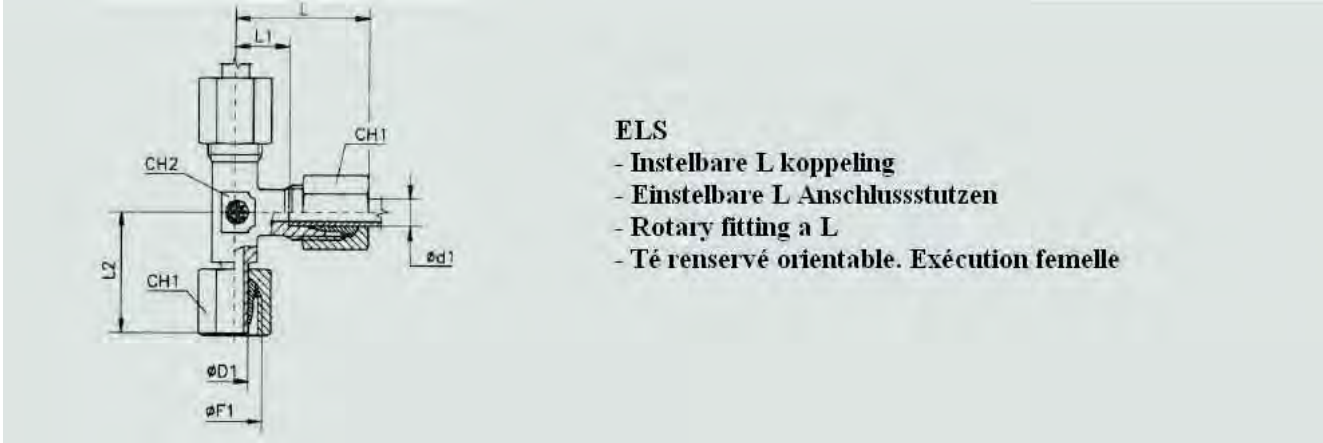
Type B DIN 3852 Part 2

Forme B DIN 3852 Partie 2

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN PE	I	L	L ₁	b) L ₃	L ₄	CH1	CH3	R			M			Peso Gewicht Weight Poids kg. x100 P.		
										CH2	Ø F	Ø N	CH2	Ø F	Ø N			
L	6	PN 315	8	27	12	34,5	23	14	12	14	1/8"	14	TN 116 - 6 LR	14	10 × 1	14	TN 116 - 6 LM	6,9
	8		12	29	14	37,5	25	17	12	19	1/4"	18	TN 116 - 8 LR	17	12 × 1,5	17	TN 116 - 8 LM	10,0
	10		12	30	16	40	26	19	14	19	1/4"	18	TN 116 - 10 LR	19	14 × 1,5	19	TN 116 - 10 LM	12,2
	12		12	32	17	42	27	22	17	22	3/8"	22	TN 116 - 12 LR	22	16 × 1,5	21	TN 116 - 12 LM	16,7
	15		14	36	21	46,5	29	27	19	27	1/2"	26	TN 116 - 15 LR	24	18 × 1,5	23	TN 116 - 15 LM	27,0
	18		14	40	23,5	50	31	32	24	27	1/2"	26	TN 116 - 18 LR	27	22 × 1,5	27	TN 116 - 18 LM	36,5
	22	PN 160	16	44	27,5	55	33	36	27	32	3/4"	32	TN 116 - 22 LR	32	26 × 1,5	31	TN 116 - 22 LM	49,0
	28		18	47	30,5	59	34	41	36	41	1"	39	TN 116 - 28 LR	41	33 × 2	39	TN 116 - 28 LM	69,3
	35		20	56	34,5	68,5	39	50	41	50	1" 1/4	49	TN 116 - 35 LR	50	42 × 2	49	TN 116 - 35 LM	124,8
	42		22	63	40	79	42	60	50	55	1" 1/2	55	TN 116 - 42 LR	55	48 × 2	55	TN 116 - 42 LM	157,0
S	6	a) PE 630	12	31	16	40	28	17	12	19	1/4"	18	TN 116 - 6 SR	17	12 × 1,5	17	TN 116 - 6 SM	10,8
	8		12	32	17	42,5	30	19	14	19	1/4"	18	TN 116 - 8 SR	19	14 × 1,5	19	TN 116 - 8 SM	14,3
	10		12	34	17,5	45	31	22	17	22	3/8"	22	TN 116 - 10 SR	22	16 × 1,5	21	TN 116 - 10 SM	20,9
	12		12	38	21,5	48	33	24	17	22	3/8"	22	TN 116 - 12 SR	24	18 × 1,5	23	TN 116 - 12 SM	25,2
	14		14	40	22	54	37	27	19	27	1/2"	26	TN 116 - 14 SR	27	20 × 1,5	25	TN 116 - 14 SM	34,3
	16	PE 400	14	43	24,5	55	37	30	24	27	1/2"	26	TN 116 - 16 SR	27	22 × 1,5	27	TN 116 - 16 SM	42,9
	20		16	48	26,5	65	42	36	27	32	3/4"	32	TN 116 - 20 SR	32	27 × 2	32	TN 116 - 20 SM	64,7
	25		18	54	30	73	47	46	36	41	1"	39	TN 116 - 25 SR	41	33 × 2	39	TN 116 - 25 SM	121,7
	30	PE 250	20	62	35,5	78,5	50	50	41	50	1" 1/4	49	TN 116 - 30 SR	50	42 × 2	49	TN 116 - 30 SM	172,0
	38		22	72	41	90,5	57	60	50	55	1" 1/2	55	TN 116 - 38 SR	55	48 × 2	55	TN 116 - 38 SM	246,2

ELS

Instelbare L koppeling



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L	L1	L2	Ø D1	Ø F1	CH1	CH2		Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	27	12	26	6	12 × 1,5	14	12		ELS 6L	5,5
	8		29	14	27,5	8	14 × 1,5	17	12		ELS 8L	7,1
	10		30	15	29	10	16 × 1,5	19	14		ELS10L	9,5
	12		32	17	29,5	12	18 × 1,5	22	17		ELS12L	12,5
	15		36	21	32,5	15	22 × 1,5	27	19		ELS15L	19,9
	18		40	23,5	35,5	18	26 × 1,5	32	24		ELS18L	30,0
	22	160	44	27,5	38,5	22	30 × 2	36	27		ELS22L	40,0
	28		47	30,5	41,5	28	36 × 2	41	36		ELS28L	54,5
	35		56	34,5	51	35	45 × 2	50	41		ELS35L	90,5
	42		63	40	60	42	52 × 2	60	50		ELS42L	135,0
S	6	630	31	16	27	6	14 × 1,5	17	12		ELS 6S	7,6
	8		32	17	27,5	8	16 × 1,5	19	14		ELS 8S	10,9
	10		34	17,5	30	10	18 × 1,5	22	17		ELS10S	16,0
	12		38	21,5	31	12	20 × 1,5	24	17		ELS12S	19,3
	14		40	22	35	14	22 × 1,5	27	19		ELS14S	25,0
	16	400	43	24,5	36,5	16	24 × 1,5	30	24		ELS16S	34,5
	20		48	26,5	44,5	20	30 × 2	36	27		ELS20S	50,5
	25		54	30	50	25	36 × 2	46	36		ELS25S	97,0
	30		62	35,5	55	30	42 × 2	50	41		ELS30S	132,0
	38		315	72	41	64,5	38	52 × 2	60	50		ELS38S

de maten zijn met gemonteerde moer



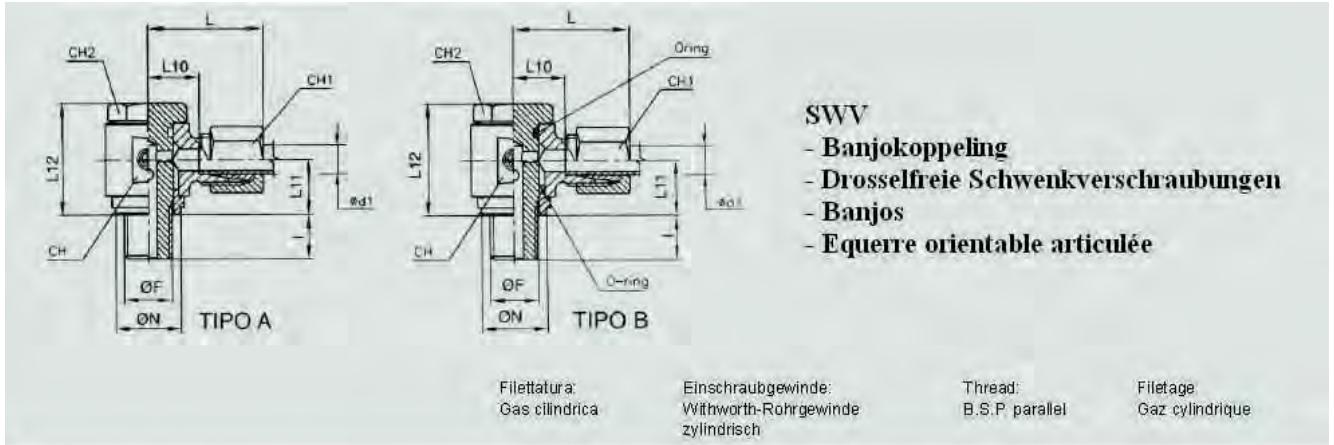
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



SWV

Banjokoppeling bsp



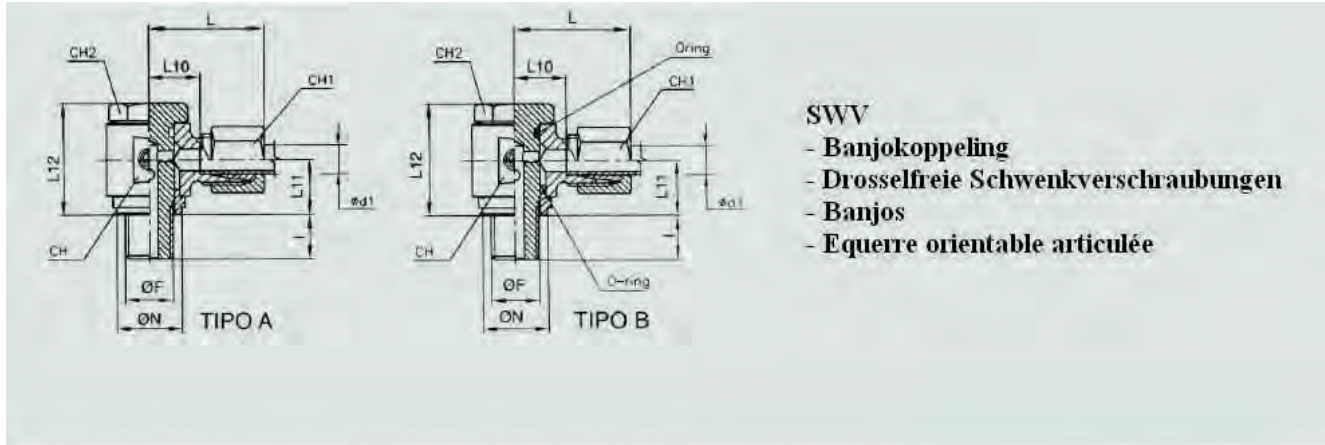
- * KOPPELING MET ROND HUIS - VERSCHRAUBUNGEN MIT RUNDEM GEHÄUSE - FITTINGS WITH ROUND BODY - RACCORDS À CORPS ROND = ●
- * KOPPELING MET HOEKIG HUIS - VERSCHRAUBUNGEN MIT ECKIGEM GEHÄUSE - FITTINGS WITH SQUARE BODY - RACCORDS À CORPS CARRÉE = ■

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PE	I	L	L10	L11	L12	Ø N	CH1	CH2	CH	Ø F	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.×100 P.	*	Tipo
LL	4	100	6	24,5	13	10	22	14	10	14	18	1/8"	SWV4LLR 1/8	4,7	■	A
	5		6	25	11,5	10	22	14	12	14	18	1/8"	SWV5LRL 1/8	4,8	■	A
	6		6	25	11,5	10	22	14	12	14	18	1/8"	SWV6LLR 1/8	4,9	■	A
	8		6	26	12,5	10	22	14	14	14	18	1/8"	SWV8LLR 1/8	5,1	■	A
L	6	315	8	29	13	12,5	27	15	14	17	19	1/8"	SWV6LR 1/8	7,4	●	A
	8		12	30,5	14,5	15	30,5	18	17	19	22	1/4"	SWV8LR 1/4	11,0	●	A
	10		12	32	15,5	15	30,5	18	19	19	22	1/4"	SWV10LR 1/4	11,6	●	A
	12		12	36	19,5	19	38,5	22	22	24	30	3/8"	SWV12LR 3/8	20,9	●	A
	15		14	39	22,5	23	48	26	27	27	36	1/2"	SWV15LR 1/2	32,7	●	A
	18		14	40	22	23	48	26	32	27	36	1/2"	SWV18LR 1/2	36,1	●	A
	22	160	16	47	28	26	56	32	36	32	41	3/4"	SWV22LR 3/4	55,5	●	A
	28		18	51	31,5	32	69,5	39	41	41	50	1"	SWV28LR 1	95,6	●	B
	35		20	60	35,5	37	80,5	49	50	50	60	1" 1/4	SWV35LR 1 1/4	154,2	●	B
	42		22	66,5	41,5	43,5	93	55	60	55	70	1" 1/2	SWV42LR 1 1/2	238,7	●	B
S	6	400	12	33	16,5	15	30,5	18	17	19	22	1/4"	SWV6SR 1/4	11,7	●	A
	8		12	32,5	16,5	15	30,5	18	19	19	22	1/4"	SWV8SR 1/4	12,2	●	A
	10		12	38	20	19	38,5	22	22	24	30	3/8"	SWV10SR 3/8	23,0	●	A
	12		12	38	20	19	38,5	22	24	24	30	3/8"	SWV12SR 3/8	23,7	●	A
	14		14	42,5	23,5	23	48	26	27	27	36	1/2"	SWV14SR 1/2	36,9	●	A
	16		14	43	23	23	48	26	30	27	36	1/2"	SWV16SR 1/2	38,6	●	A
	20	16	51,5	27	26	56	32	36	32	41	3/4"	SWV20SR 3/4	61,9	●	A	
	25	250	18	58	31	32	69,5	39	46	41	50	1"	SWV25SR 1	111,9	●	B
	30		20	66	36,5	37	80,5	49	50	50	60	1" 1/4	SWV30SR 1 1/4	177,0	●	B
	38		22	75,5	42,5	43,5	93	55	60	55	70	1" 1/2	SWV38SR 1 1/2	273,4	●	B

de maten zijn met gemonteerde moer

SWV

Banjokoppeling metrisch



SWV

- Banjokoppeling
- Drosselfreie Schwenkverschraubungen
- Banjos
- Equerre orientable articulée

- * KOPPELING MET ROND HUIS - VERSCHRAUBUNGEN MIT RUNDEM GEHÄUSE - FITTINGS WITH ROUND BODY - RACCORDS À CORPS ROND = ●
- * KOPPELING MET HOEKIG HUIS - VERSCHRAUBUNGEN MIT ECKIGEM GEHÄUSE - FITTINGS WITH SQUARE BODY - RACCORDS À CORPS CARRÉE = ■

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PE	l	L	L10	L11	L12	Ø N	CH1	CH2	CH	Ø F	Simbolo di ordinazione Bestell.Nr. Part. No. Références	Peso Gewicht Weight Poids kg.×100 P.	*	Tipo
LL	4	100	6	24,5	13	10	22	14	10	14	18	8 × 1	SWV4LLM 8	4,6	■	A
	5		6	25	11,5	10	22	14	12	14	18	8 × 1	SWV5LLM 8	4,8	■	A
	6		6	25	11,5	10	22	14	12	14	18	10 × 1	SWV6LLM 10	4,9	■	A
	8		6	26	12,5	10	22	14	14	14	18	10 × 1	SWV8LLM 10	5,1	■	A
L	6	315	8	29	13	12,5	27	15	14	17	19	10 × 1	SWV6LM 10	7,3	●	A
	8		12	30,5	14,5	15	30,5	17	17	19	22	12 × 1,5	SWV8LM 12	11,0	●	A
	10		12	32	15,5	15	30,5	18	19	19	22	14 × 1,5	SWV10LM 14	11,8	●	A
	12		12	36	19,5	19	38,5	22	22	24	30	16 × 1,5	SWV12LM 16	21,3	●	A
	15		14	39	22,5	21,5	44,5	22	27	24	36	18 × 1,5	SWV15LM 18	29,6	●	A
	18		14	40	22	23	48	26	32	27	36	22 × 1,5	SWV18LM 22	36,0	●	A
	22	160	16	47	28	26	56	32	36	32	41	26 × 1,5	SWV22LM 26	55,5	●	A
	28		18	51	31,5	32	69,5	39	41	41	50	33 × 2	SWV28LM 33	95,2	●	B
	35		20	60	35,5	37	80,5	49	50	50	60	42 × 2	SWV35LM 42	154,9	●	B
	42		22	66,5	41,5	43,5	93	55	60	55	70	48 × 2	SWV42LM 48	239,4	●	B
S	6	400	12	33	16,5	15	30,5	17	17	19	22	12 × 1,5	SWV6SM 12	11,6	●	A
	8		12	32,5	16,5	15	30,5	18	19	19	22	14 × 1,5	SWV8SM 14	12,4	●	A
	10		12	38	20	19	38,5	22	22	24	30	16 × 1,5	SWV10SM 16	22,4	●	A
	12		12	38	20	18	37,5	22	24	24	30	18 × 1,5	SWV12SM 18	24,0	●	A
	14		14	42,5	23,5	23	48	26	27	27	36	20 × 1,5	SWV14SM 20	36,7	●	A
	16		14	43	23	23	48	26	30	27	36	22 × 1,5	SWV16SM 22	39,8	●	A
	20		16	51,5	27	26	56	32	36	32	41	27 × 2	SWV20SM 27	62,4	●	A
	25		250	18	58	31	32	69,5	39	46	41	50	32 × 2	SWV25SM 33	113,2	●
	30	20		66	36,5	37	80,5	49	50	50	60	42 × 2	SWV30SM 42	177,5	●	B
	38	22		75,5	42,5	43,5	93	55	60	55	70	48 × 2	SWV38SM 48	273,7	●	B

de maten zijn met gemonteerde moer



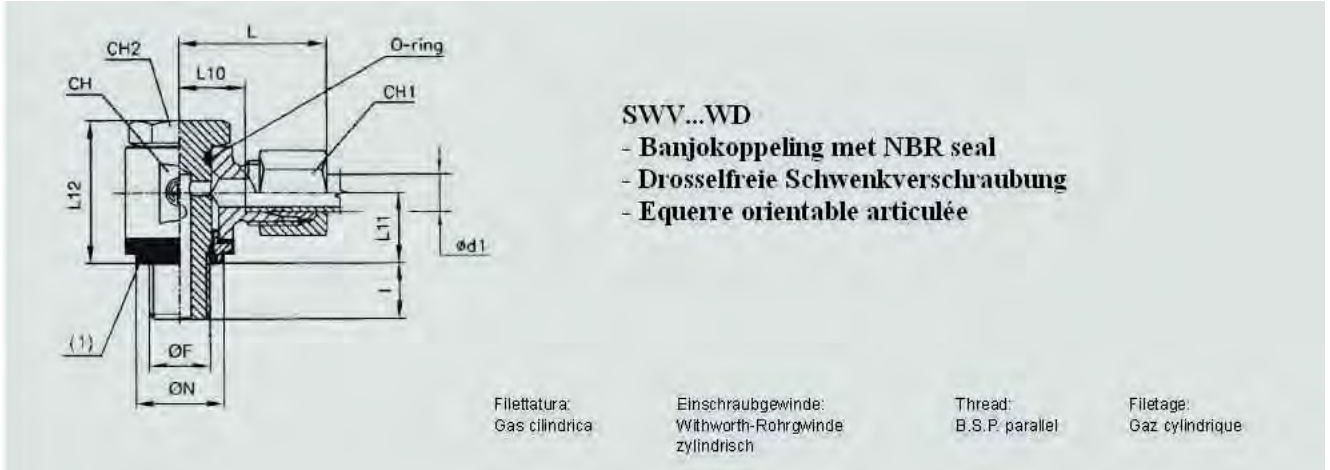
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



SWV...WD

Banjokoppeling met NBR dichting -35 tot 100gr C BSP

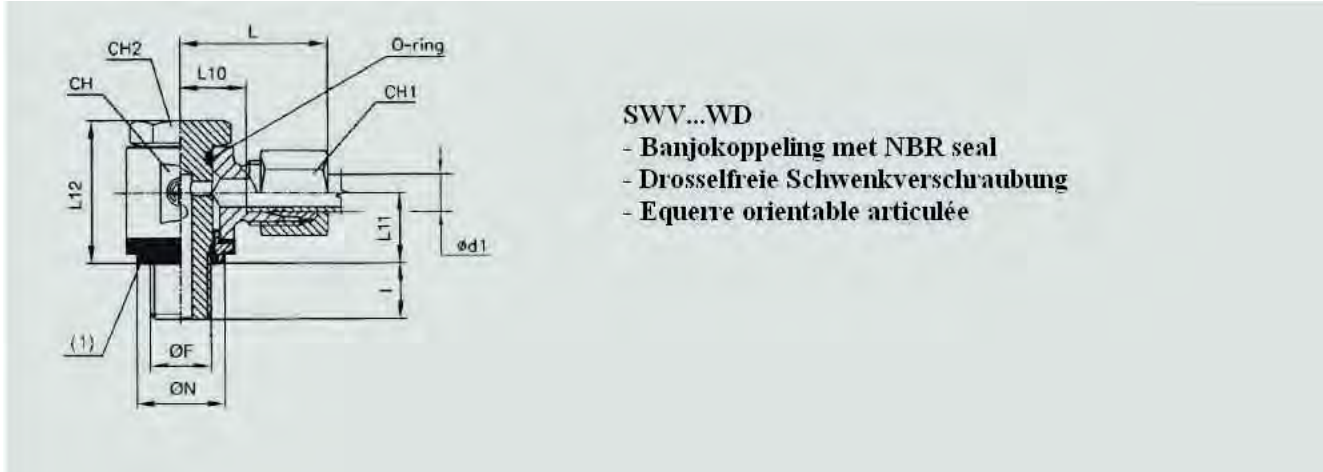


Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PE	I	L	L10	L11	L12	Ø N	CH1	CH2	CH	Ø F	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	8	29	13	12,5	27	15	14	17	19	1/8"	SWV6LR 1/8 WD	7,4
	8		12	30,5	14,5	15	30,5	19	17	19	22	1/4"	SWV8LR 1/4 WD	11,0
	10		12	32	15,5	15	30,5	19	19	19	22	1/4"	SWV10LR 1/4 WD	11,6
	12		12	36	19,5	19	38,5	22	22	24	30	3/8"	SWV12LR 3/8 WD	20,9
	15		14	39	22,5	23	48	27	27	27	36	1/2"	SWV15LR 1/2 WD	32,7
	18		14	40	22	23	48	27	32	27	36	1/2"	SWV18LR 1/2 WD	36,1
	22	160	16	47	28	26	56	33	36	32	41	3/4"	SWV22LR 3/4 WD	55,5
	28		18	51	31,5	32	69,5	40	41	41	50	1"	SWV28LR 1 WD	95,6
	35		20	60	35,5	37	80,5	50	50	50	60	1" 1/4	SWV35LR 1 1/4 WD	154,2
	42		22	66,5	41,5	43,5	93	56	60	55	70	1" 1/2	SWV42LR 1 1/2 WD	238,7
S	6	400	12	33	16,5	15	30,5	19	17	19	22	1/4"	SWV6SR 1/4 WD	11,7
	8		12	32,5	16,5	15	30,5	19	19	19	22	1/4"	SWV8SR 1/4 WD	12,2
	10		12	38	20	19	38,5	22	22	24	30	3/8"	SWV10SR 3/8 WD	23,0
	12		12	38	20	19	38,5	22	24	24	30	3/8"	SWV12SR 3/8 WD	23,7
	14		14	42,5	23,5	23	48	27	27	27	36	1/2"	SWV14SR 1/2 WD	36,9
	16		14	43	23	23	48	27	30	27	36	1/2"	SWV16SR 1/2 WD	38,6
	20		16	51,5	27	26	56	33	36	32	41	3/4"	SWV20SR 3/4 WD	61,9
	25		250	18	58	31	32	69,5	40	46	41	50	1"	SWV25SR 1 WD
	30	20		66	36,5	37	80,5	50	50	50	60	1" 1/4	SWV30SR 1 1/4 WD	177,0
	38	22		75,5	42,5	43,5	93	56	60	55	70	1" 1/2	SWV38SR 1 1/2 WD	273,4

de maten zijn met gemonteerde moer

SWV...WD

Banjokoppeling metrisch met NBR dichting -35 tot 100gr C metrisch



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PE	l	L	L10	L11	L12	Ø N	CH1	CH2	CH	Ø F	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	8	29	13	12,5	27	15	14	17	19	10 × 1	SWV6LM 10 WD	7,3
	8		12	30,5	14,5	15	30,5	18	17	19	22	12 × 1,5	SWV8LM 12 WD	11,0
	10		12	32	15,5	15	30,5	19	19	19	22	14 × 1,5	SWV10LM 14 WD	11,9
	12		12	36	19,5	19	38,5	22	22	24	30	16 × 1,5	SWV12LM 16 WD	21,3
	15		14	39	22,5	21,5	44,5	24	27	24	36	18 × 1,5	SWV15LM 18 WD	29,6
	18		14	40	22	23	48	27	32	27	36	22 × 1,5	SWV18LM 22 WD	36,0
	22	160	16	47	28	26	56	33	36	32	41	26 × 1,5	SWV22LM 26 WD	55,5
	28		18	51	31,5	32	69,5	40	41	41	50	33 × 2	SWV28LM 33 WD	95,2
	35		20	60	35,5	37	80,5	50	50	50	60	42 × 2	SWV35LM 42 WD	154,9
	42		22	66,5	41,5	43,5	93	56	60	55	70	48 × 2	SWV42LM 48 WD	239,4
S	6	400	12	33	16,5	15	30,5	18	17	19	22	12 × 1,5	SWV6SM 12 WD	11,6
	8		12	32,5	16,5	15	30,5	19	19	19	22	14 × 1,5	SWV8SM 14 WD	12,4
	10		12	38	20	19	38,5	22	22	24	30	16 × 1,5	SWV10SM 16 WD	22,4
	12		12	38	20	18	37,5	24	24	24	30	18 × 1,5	SWV12SM 18WD	24,0
	14		14	42,5	23,5	23	48	27	27	27	36	20 × 1,5	SWV14SM 20 WD	36,7
	16		14	43	23	23	48	27	30	27	36	22 × 1,5	SWV16SM 22 WD	39,8
	20		16	51,5	27	26	56	33	36	32	41	27 × 2	SWV20SM 27 WD	62,4
	25		250	18	58	31	32	69,5	40	46	41	50	32 × 2	SWV25SM 32 WD
	30	20		66	36,5	37	80,5	50	50	50	60	42 × 2	SWV30SM 42 WD	177,5
	38	22		75,5	42,5	43,5	93	56	60	55	70	48 × 2	SWV38SM 48 WD	273,7

de maten zijn met gemonteerde moer



RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



TN 130 R

Op aanvraag leverbaar



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PE	Ø F	Ø N	l	L	L10	L11	L12	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x100 P.
L	6	250	1/8"	14	8	27	12,5	12	24	14	6	19	TN 130 - 6 LR	5,9
	8		1/4"	18	12	29	14,5	16	30	17	8	22	TN 130 - 8 LR	10,5
	10		1/4"	18	12	30	15,5	16	30	19	8	22	TN 130 - 10 LR	11,3
	12		3/8"	22	12	33	18	18	37	22	10	27	TN 130 - 12 LR	18,0
	15		1/2"	26	14	37	22	21	42	27	12	32	TN 130 - 15 LR	24,7
	18	100	1/2"	26	14	38	21,5	23	46	32	12	36	TN 130 - 18 LR	26,9
	22		3/4"	32	16	45	28,5	28	58	36	17	46	TN 130 - 22 LR	54,6
	28		1"	39	18	48	31,5	32	64	41	22	50	TN 130 - 28 LR	83,0
	35		1" 1/4	49	20	57	35,5	37	76	50	27	60	TN 130 - 35 LR	117,3
	42		1" 1/2	55	22	63	40	42	85	60	32	70	TN 130 - 42 LR	224,4
S	6	* 400	1/4"	18	12	31	16,5	16	30	17	8	22	TN 130 - 6 SR	10,9
	8		1/4"	18	12	31	16,5	16	30	19	8	22	TN 130 - 8 SR	11,4
	10		3/8"	22	12	35	18,5	18	37	22	10	27	TN 130 - 10 SR	19,0
	12		3/8"	22	12	35	18,5	18	37	24	10	27	TN 130 - 12 SR	19,6
	14		1/2"	26	14	41	23	21	42	27	12	32	TN 130 - 14 SR	29,7
	16		1/2"	26	14	41	22,5	23	46	30	12	36	TN 130 - 16 SR	30,7
	20		3/4"	32	16	49	27,5	28	58	36	17	46	TN 130 - 20 SR	75,3
	25	* 250	1"	39	18	55	31	32	64	46	22	50	TN 130 - 25 SR	101,9
	30		1" 1/4	49	20	63	36,5	37	76	50	27	60	TN 130 - 30 SR	158,0
	38		1" 1/2	55	22	72	41	42	85	60	32	70	TN 130 - 38 SR	243,2

* Fattore di sicurezza a 1,6

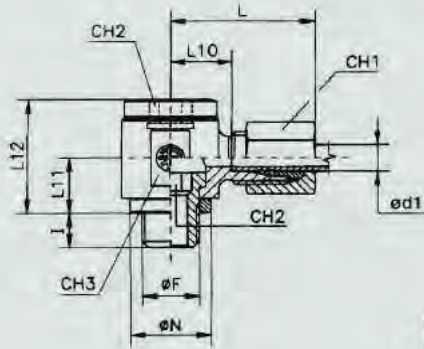
* Sicherheitsfaktor 1,6

* Safety factor 1,6

* Facteur de sécurité 1,6

TN 130 M

Op aanvraag leverbaar



TN 130 M

- Raccordo orientabile senza strozzatura
- Drosselfreie Schwenkverschraubungen
- Rotary fitting without neck
- Té orientable sans étranglement

Filettatura:
Metrica cilindrica

Einschraubgewinde:
Metrisches-Feingewinde zylindrisch

Thread:
Metric parallel

Filetage:
Métrique cylindrique

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PE	Ø F	Ø N	I	L	L10	L11	L12	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x 100 P.
L	6	250	M 10 × 1	14	8	27	12,5	12	24	14	6	19	TN 130 - 6 LM	6,2
	8		M 12 × 1,5	17	12	29	14,5	15	30	17	6	22	TN 130 - 8 LM	10,0
	10		M 14 × 1,5	19	12	30	15,5	16	30	19	8	22	TN 130 - 10 LM	11,4
	12		M 16 × 1,5	21	12	33	18	18	37	22	10	27	TN 130 - 12 LM	17,9
	15		M 18 × 1,5	23	12	36	21	20	40	27	12	30	TN 130 - 15 LM	24,1
	18	100	M 22 × 1,5	27	14	38	21,5	23	46	32	14	36	TN 130 - 18 LM	30,1
	22		M 26 × 1,5	31	16	42	26	25	51	36	17	41	TN 130 - 22 LM	39,9
	28		M 33 × 2	39	18	48	31,5	32	64	41	22	50	TN 130 - 28 LM	82,5
	35		M 42 × 2	49	20	57	35,5	37	76	50	27	60	TN 130 - 35 LM	116,1
	42		M 48 × 2	55	22	63	40	42	85	60	32	70	TN 130 - 42 LM	224,0
S	6	* 400	M 12 × 1,5	17	12	31	16,5	15	30	17	6	22	TN 130 - 6 SM	9,2
	8		M 14 × 1,5	19	12	31	16,5	16	30	19	8	22	TN 130 - 8 SM	11,6
	10		M 16 × 1,5	21	12	35	18,5	18	37	22	10	27	TN 130 - 10 SM	18,9
	12		M 18 × 1,5	23	12	37	20,5	20	41	24	12	30	TN 130 - 12 SM	24,0
	14		M 20 × 1,5	25	14	41	23	21	42	27	12	32	TN 130 - 14 SM	30,2
	16		M 22 × 1,5	27	14	41	22,5	23	46	30	14	36	TN 130 - 16 SM	38,9
	20		M 27 × 2	32	16	49	27,5	28	58	36	17	46	TN 130 - 20 SM	75,8
	25	* 250	M 33 × 2	39	18	55	31	32	64	46	22	50	TN 130 - 25 SM	101,4
	30		M 42 × 2	49	20	63	36,5	37	76	50	27	60	TN 130 - 30 SM	156,8
	38		M 48 × 2	55	22	72	41	42	85	60	32	70	TN 130 - 38 SM	242,8

* Fattore di sicurezza 1,6

* Sicherheitsfaktor 1,6

* Safety factor 1,6

* Facteur de sécurité 1,6

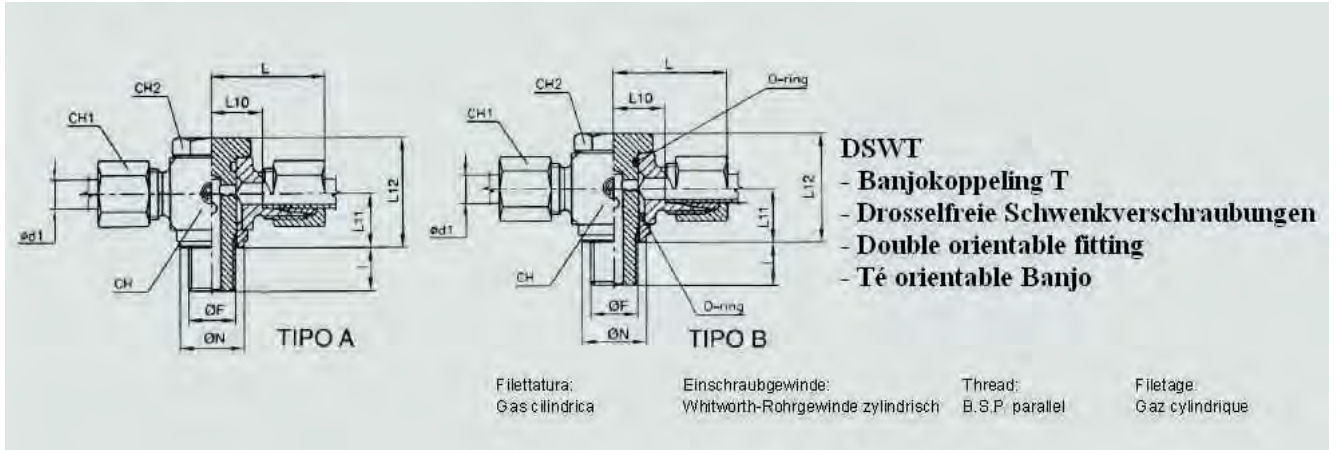


RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



DSWT Banjokoppeling T

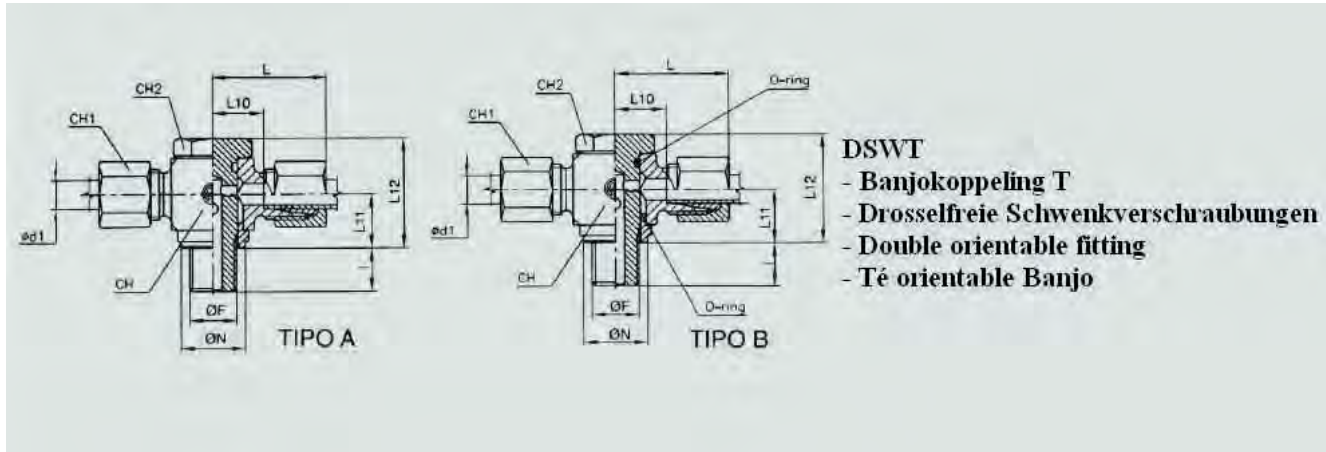


Serie Reihe Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PE	I	L	L10	L11	L12	Ø N	CH1	CH2	CH	Ø F	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x100 P.	Tipo
LL	4	100	6	24,5	13	10	22	14	10	14	18	1/8"	DSWT 4LLR 1/8	5,3	A
	5		6	25	11,5	10	22	14	12	14	18	1/8"	DSWT 5LLR 1/8	5,8	A
	6		6	25	11,5	10	22	14	12	14	18	1/8"	DSWT 6LLR 1/8	6,7	A
	8		6	26	12,5	10	22	14	14	14	18	1/8"	DSWT 8LLR 1/8	6,6	A
L	6	315	8	29	13	12,5	27	15	14	17	20	1/8"	DSWT 6LR 1/8	9,8	A
	8		12	30	14	15	30,5	18	17	19	22	1/4"	DSWT 8LR 1/4	13,6	A
	10		12	31,5	15	15	30,5	18	19	19	22	1/4"	DSWT10LR 1/4	14,7	A
	12		12	34	17,5	19	38,5	22	22	24	27	3/8"	DSWT12LR 3/8	23,4	A
	15		14	36,5	20	23	48	26	27	27	36	1/2"	DSWT15LR 1/2	38,4	A
	18	14	39	21	23	48	26	32	27	36	1/2"	DSWT18LR 1/2	44,0	A	
	22	160	16	46	27	26	56	32	36	32	41	3/4"	DSWT22LR 3/4	73,8	A
	28		18	51	31,5	32	69,5	39	41	41	50	1"	DSWT28LR 1	114,5	B
	35		20	60	35,5	37	80,5	49	50	50	60	1" 1/4	DSWT35LR 1 1/4	194,1	B
	42		22	65	40	43,5	93	55	60	55	70	1" 1/2	DSWT42LR 1 1/2	275,4	B
S	6	400	12	32,5	16	15	30,5	18	17	19	22	1/4"	DSWT 6SR 1/4	14,9	A
	8		12	32	16	15	30,5	18	19	19	22	1/4"	DSWT 8SR 1/4	15,9	A
	10		12	36	18	19	38,5	22	22	24	27	3/8"	DSWT10SR 3/8	26,6	A
	12		12	36	18	19	38,5	22	24	24	27	3/8"	DSWT12SR 3/8	27,9	A
	14		14	41	22	23	48	26	27	27	36	1/2"	DSWT14SR 1/2	42,0	A
	16		14	41,5	21,5	23	48	26	30	27	36	1/2"	DSWT16SR 1/2	45,3	A
	20		16	52,5	28	26	56	32	36	32	45	3/4"	DSWT20SR 3/4	92,5	A
	25	250	18	58	31	32	69,5	39	46	41	50	1"	DSWT25SR 1	149,9	B
	30		20	66	36,5	37	80,5	49	50	50	60	1" 1/4	DSWT30SR 1 1/4	227,4	B
	38		22	74	41	43,5	93	55	60	55	70	1" 1/2	DSWT38SR 1 1/2	324,9	B

de maten zijn met gemonteerde moer

DSWT

Banjokoppeling T metrisch



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PE	I	L	L10	L11	L12	Ø N	CH1	CH2	CH	Ø F	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x100 P.	Tipo
LL	4	100	6	24,5	13	10	22	14	10	14	18	8 × 1	DSWT 4LLM 8	5,2	A
	5		6	25	11,5	10	22	14	12	14	18	8 × 1	DSWT 5LLM 8	5,6	A
	6		6	25	11,5	10	22	14	12	14	18	10 × 1	DSWT 6LLM 10	5,6	A
	8		6	26	12,5	10	22	14	14	14	18	10 × 1	DSWT 8LLM 10	6,7	A
L	6	315	8	29	13	12,5	27	15	14	17	20	10 × 1	DSWT 6LM 10	9,7	A
	8		12	30	14	15	30,5	17	17	19	22	12 × 1,5	DSWT 8LM 12	13,4	A
	10		12	31,5	15	15	30,5	18	19	19	22	14 × 1,5	DSWT10LM 14	15,0	A
	12		12	34	17,5	19	38,5	22	22	24	27	16 × 1,5	DSWT12LM 16	23,8	A
	15		14	36,5	20	21,5	44,5	22	27	24	36	18 × 1,5	DSWT15LM 18	35,1	A
	18		14	39	21	23	48	26	32	27	36	22 × 1,5	DSWT18LM 22	44,7	A
	22	160	16	46	27	26	56	32	36	32	41	26 × 1,5	DSWT22LM 26	73,8	A
	28		18	51	31,5	32	69,5	39	41	41	50	33 × 2	DSWT28LM 33	114,1	B
	35		20	60	35,5	37	80,5	49	50	50	60	42 × 2	DSWT35LM 42	194,8	B
	42		22	65	40	43,5	93	55	60	55	70	48 × 2	DSWT42LM 48	276,1	B
S	6	400	12	32,5	16	15	30,5	17	17	19	22	12 × 1,5	DSWT 6SM 12	14,7	A
	8		12	32	16	15	30,5	18	19	19	22	14 × 1,5	DSWT 8SM 14	16,2	A
	10		12	36	18	19	38,5	22	22	24	27	16 × 1,5	DSWT10SM 16	26,1	A
	12		12	36	18	18	37,5	22	24	24	27	18 × 1,5	DSWT12SM 18	28,4	A
	14		14	41	22	23	48	26	27	27	36	20 × 1,5	DSWT14SM 20	43,6	A
	16		14	41,5	21,5	23	48	26	30	27	36	22 × 1,5	DSWT16SM 22	48,5	A
	20		16	52,5	28	26	56	32	36	32	45	27 × 2	DSWT20SM 27	93,0	A
	25	250	18	58	31	32	69,5	39	46	41	50	32 × 2	DSWT25SM 32	151,2	B
	30		20	66	36,5	37	80,5	49	50	50	60	42 × 2	DSWT30SM 42	227,8	B
	38		22	74	41	43,5	93	55	60	55	70	48 × 2	DSWT38SM 48	325,0	B

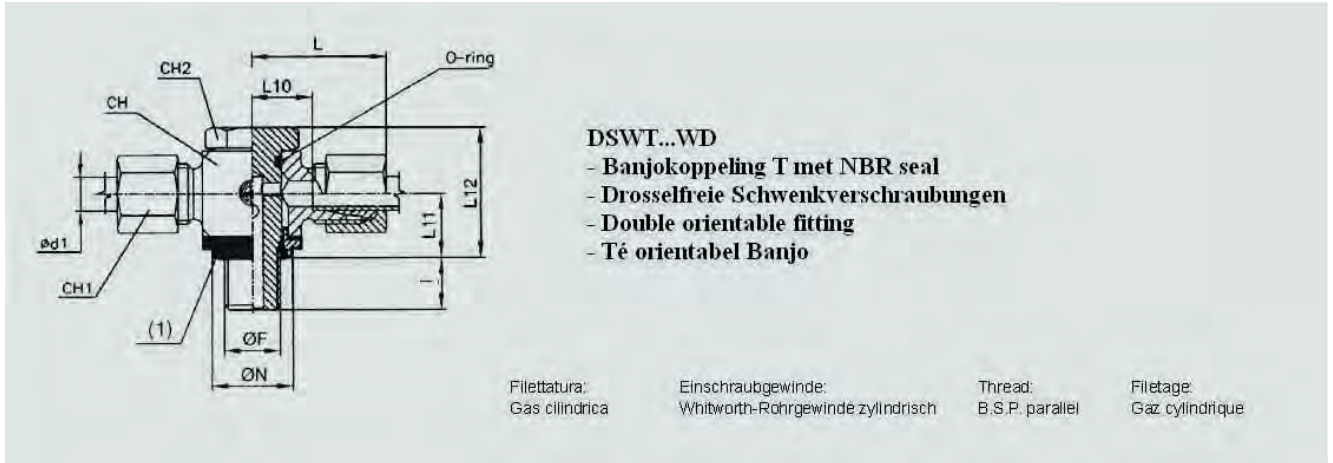
de maten zijn met gemonteerde moer



HYDRAULIEK SNIJRINGKOPPELINGEN



DSWT...WD Banjokoppeling T

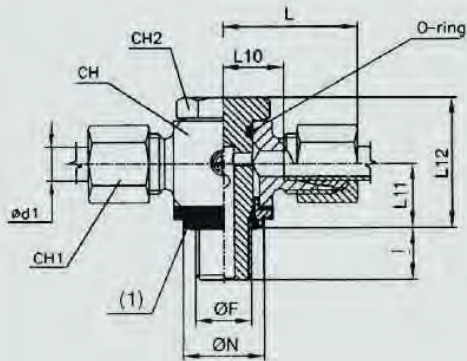


Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PE	l	L	L10	L11	L12	Ø N	CH1	CH2	CH	Ø F	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	8	29	13	12,5	27	15	14	17	20	1/8"	DSWT6LR 1/8WD	9,8
	8		12	30	14	15	30,5	19	17	19	22	1/4"	DSWT8LR 1/4WD	13,6
	10		12	31,5	15	15	30,5	19	19	19	22	1/4"	DSWT10LR 1/4WD	14,7
	12		12	34	17,5	19	38,5	22	22	24	27	3/8"	DSWT12LR 3/8WD	23,4
	15		14	36,5	20	23	48	27	27	27	36	1/2"	DSWT15LR 1/2WD	38,4
	18		14	39	21	23	48	27	32	27	36	1/2"	DSWT18LR 1/2WD	44,0
	22	160	16	46	27	26	56	33	36	32	41	3/4"	DSWT22LR 3/4WD	73,8
	28		18	51	31,5	32	69,5	40	41	41	50	1"	DSWT28LR 1WD	114,5
	35		20	60	35,5	37	80,5	50	50	50	60	1" 1/4	DSWT35LR 1 1/4WD	194,1
	42		22	65	40	43,5	93	56	60	55	70	1" 1/2	DSWT42LR 1 1/2WD	275,4
S	6	400	12	32,5	16	15	30,5	19	17	19	22	1/4"	DSWT6SR 1/4WD	14,9
	8		12	32	16	15	30,5	19	19	19	22	1/4"	DSWT8SR 1/4WD	15,9
	10		12	36	18	19	38,5	22	22	24	27	3/8"	DSWT10SR 3/8WD	26,6
	12		12	36	18	19	38,5	22	24	24	27	3/8"	DSWT12SR 3/8WD	27,9
	14		14	41	22	23	48	27	27	27	36	1/2"	DSWT14SR 1/2WD	42,0
	16		14	41,5	21,5	23	48	27	30	27	36	1/2"	DSWT16SR 1/2WD	45,3
	20		16	52,5	28	26	56	33	36	32	45	3/4"	DSWT20SR 3/4WD	92,5
	25	250	18	58	31	32	69,5	40	46	41	50	1"	DSWT25SR 1WD	149,9
	30		20	66	36,5	37	80,5	50	50	50	60	1" 1/4	DSWT30SR 1 1/4WD	227,4
	38		22	74	41	43,5	93	56	60	55	70	1" 1/2	DSWT38SR 1 1/2WD	324,9

de maten zijn met gemonteerde moer

DSWT...WD

Banjokoppeling T metrisch



DSWT...WD

- Banjokoppeling T met NBR seal
- Drosselfreie Schwenkverschraubungen
- Double orientable fitting
- Té orientabel Banjo

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PE	l	L	L10	L11	L12	Ø N	CH1	CH2	CH	Ø F	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	8	29	13	12,5	27	15	14	17	20	10 × 1	DSWT 6LM 10WD	9,7
	8		12	30	14	15	30,5	18	17	19	22	12 × 1,5	DSWT 8LM 12WD	13,4
	10		12	31,5	15	15	30,5	19	19	19	22	14 × 1,5	DSWT 10LM 14WD	15,0
	12		12	34	17,5	19	38,5	22	22	24	27	16 × 1,5	DSWT 12LM 16WD	23,8
	15		14	36,5	20	21,5	44,5	24	27	24	36	18 × 1,5	DSWT 15LM 18WD	35,1
	18		14	39	21	23	48	27	32	27	36	22 × 1,5	DSWT 18LM 22WD	44,7
	22	160	16	46	27	26	56	33	36	32	41	26 × 1,5	DSWT 22LM 26WD	73,8
	28		18	51	31,5	32	69,5	40	41	41	50	33 × 2	DSWT 28LM 33WD	114,1
	35		20	60	35,5	37	80,5	50	50	50	60	42 × 2	DSWT 35LM 42WD	194,8
	42		22	65	40	43,5	93	56	60	55	70	48 × 2	DSWT 42LM 48WD	276,1
S	6	400	12	32,5	16	15	30,5	18	17	19	22	12 × 1,5	DSWT 6SM 12WD	14,7
	8		12	32	16	15	30,5	19	19	19	22	14 × 1,5	DSWT 8SM 14WD	16,2
	10		12	36	18	19	38,5	22	22	24	27	16 × 1,5	DSWT 10SM 16WD	26,1
	12		12	36	18	18	37,5	24	24	24	27	18 × 1,5	DSWT 12SM 18WD	28,4
	14		14	41	22	23	48	27	27	27	36	20 × 1,5	DSWT 14SM 20WD	43,6
	16		14	41,5	21,5	23	48	27	30	27	36	22 × 1,5	DSWT 16SM 22WD	48,5
	20		16	52,5	28	26	56	33	36	32	45	27 × 2	DSWT 20SM 27WD	93,0
	25	250	18	58	31	32	69,5	40	46	41	50	32 × 2	DSWT 25SM 32WD	151,2
	30		20	66	36,5	37	80,5	50	50	50	60	42 × 2	DSWT 30SM 42WD	227,8
	38		22	74	41	43,5	93	56	60	55	70	48 × 2	DSWT 38SM 48WD	325,0

de maten zijn met gemonteerde moer



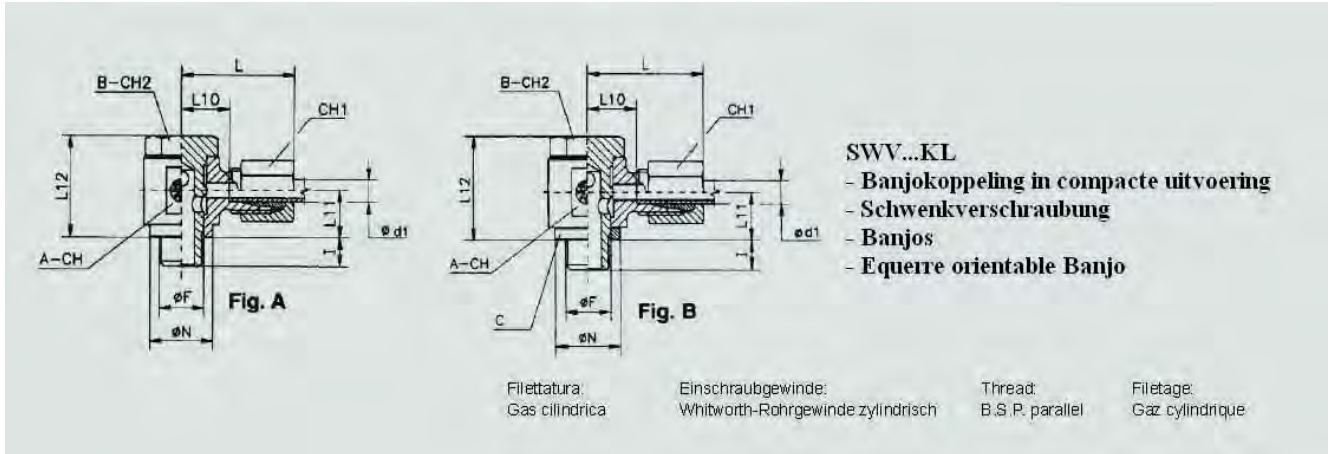
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HYDRAULIEK SNIJRINGKOPPELINGEN



SWV...KL

Banjokoppeling compacte uitvoering

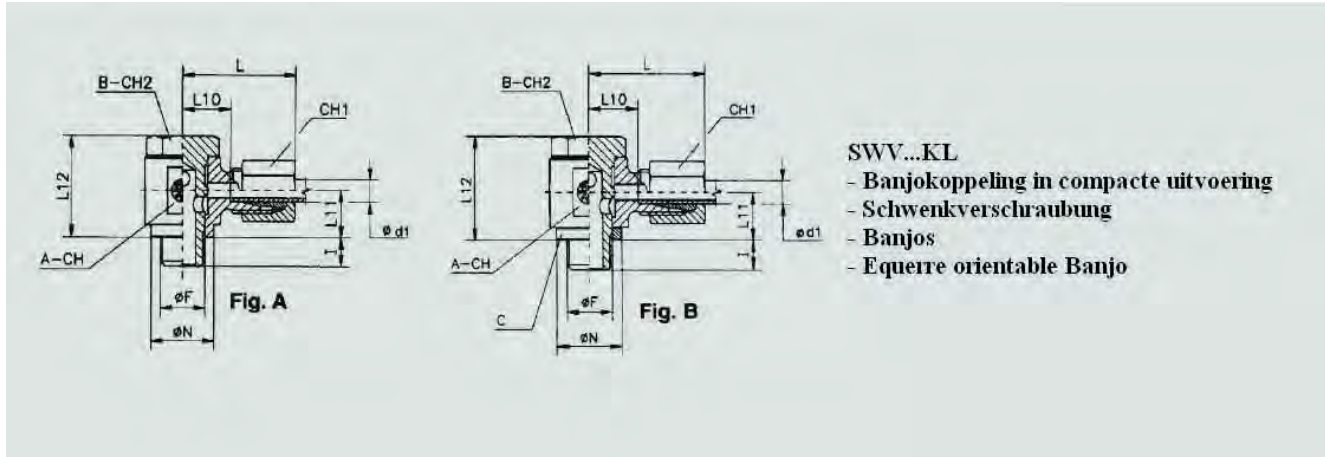


Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PE	CH	CH1	CH2	I	ØF	ØN	L	L10	L11	L12	Simbolo di ordinazione Bestell-Nr. - Part. No. - Références				Peso Gewicht Weight Poids kg.x100 P.
													Racc. completo Kompl. Verschraub. Complete fitting Raccord complet	Corpo A Gehäus-A Body A Corps A	Perno B Höhlenschraube B Pin B Pivot B	Anello C Dichtkantering C Ring C Bague C	
LL	4	100	14	10	14	6	1/8"	14,5	20	13	10	21,5	SWV4LLR 1/8-KL			-	3,0
	5		14	12	14	6	1/8"	14,5	20	11,5	10	21,5	SWV5LLR 1/8-KL			-	3,3
	6		14	12	14	6	1/8"	14,5	20	11,5	10	21,5	SWV6LLR 1/8-KL			-	3,4
	8		14	14	14	6	1/8"	14,5	21	12,5	10	21,5	SWV8LLR 1/8-KL			-	3,7
L	6	250	14	14	14	8	1/8"	14,5	28	11	10	21,5	SWV6LR 1/4-KL			-	4,2
	8		18	17	19	9	1/4"	18,5	28	14	13	27,5	SWV8LR 1/4-KL			-	7,8
	10		18	19	19	9	1/4"	18,5	29	13,5	13	27,5	SWV10LR 1/4-KL			-	8,5
	12		22	22	22	9	3/8"	22,5	30	16	16	34	SWV12LR 3/8-KL			-	14,5
	15		30	27	27	11	1/2"	26,5	34	19,5	22	45	SWV15LR 1/2-KL			-	19,5
	18		30	32	27	11	1/2"	26	36	19,5	21	44	SWV18LR 1/2-KL			-	21,0
	22	36	36	32	13	3/4"	32	42	25,5	23	48	SWV22LR 3/4-KL			-	39,0	
S	6	250	19	17	19	9	1/4"	18,5	30	14,5	13	27,5	SWV6SR 1/4-KL			-	8,0
	8		19	19	19	9	1/4"	18,5	30	14,5	13	27,5	SWV8SR 1/4-KL			-	9,7
	10		22	22	22	9	3/8"	22,5	33	15,5	16	34	SWV10SR 3/8-KL			-	12,5
	12		22	24	22	9	3/8"	22,5	33	15,5	16	34	SWV12SR 3/8-KL			-	14,5
	14		30	27	27	11	1/2"	26,5	38	19,5	22	45	SWV14SR 1/2-KL			-	21,8
	16		30	30	27	11	1/2"	26	38	19	21	44	SWV16SR 1/2-KL			-	28,0
	20	36	36	32	13	3/4"	32	45	22,5	23	48	SWV20SR 3/4-KL			-	43,0	

de maten zijn met gemonteerde moer

SWV...KL

Banjokoppeling compacte uitvoering metrisch



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PE	CH	CH1	CH2	I	Ø F	Ø N	L	L10	L11	L12	Simbolo di ordinazione Bestell-Nr. - Part. No. - Références				Peso Gewicht Weight Poids Kg. x100 P.
													Racc. completo Kömpl. Verschraub. Complete fitting Raccord complet	Corpo A Gehäus-A Body A Corps A	Perno B Hohlschraube B Pin B Pivot B	Anello C Dichtkartering C Ring C Bague C	
LL	4	100	12	10	14	6	8 × 1	12,5	21	13	10	21,5	SWV4LLM 8-KL				2,7
	5		14	12	14	6	8 × 1	14,5	22	11,5	10	21,5	SWV5LLM 8-KL				3,2
	6		14	12	14	6	10 × 1	14,5	22	11,5	10	21,5	SWV6LLM 10-KL				3,4
	8		14	14	14	6	10 × 1	14,5	23	12,5	10	21,5	SWV8LLM 10-KL				3,7
L	6	250	14	14	14	6	10 × 1	14,5	25	11	10	21,5	SWV6LM 10-KL				3,9
	8		17	17	19	9	12 × 1,5	18,5	27	14	13	27,5	SWV8LM 12-KL				7,0
	10		19	19	19	9	14 × 1,5	18,5	27	13,5	13	27,5	SWV10LM 14-KL				8,5
	12	22	22	22	9	16 × 1,5	21,5	30	16	16	34	SWV12LM 16-KL				11,3	
	15	24	27	24	9	18 × 1,5	23,5	32	17	17	37	SWV15LM 18-KL				16,5	
	18	30	32	27	11	22 × 1,5	27	35	19,5	21	44	SWV18LM 22-KL				27,0	
22	36	36	32	13	26 × 1,5	32	40	25,5	23	48	SWV22LM 26-KL				36,0		
S	6	250	17	17	19	9	12 × 1,5	18,5	28	14,5	13	27,5	SWV6SM 12-KL				6,8
	8		19	19	19	9	14 × 1,5	18,5	29	14,5	13	27,5	SWV8SM 14-KL				9,5
	10		22	22	22	9	16 × 1,5	22,5	33	15,5	16	34	SWV10SM 16-KL				12,5
	12	24	24	22	9	18 × 1,5	23,5	34	15,5	16	34	SWV12SM 18-KL				17,0	
	14	27	27	27	10	20 × 1,5	26,5	36	19,5	22	45	SWV14SM 20-KL				21,0	
	16	30	30	27	11	22 × 1,5	27	40	19	21	44	SWV16SM 22-KL				28,0	
	20	36	36	32	13	27 × 2	32	46	22,5	23	48	SWV20SM 27-KL				43,0	

de maten zijn met gemonteerde moer



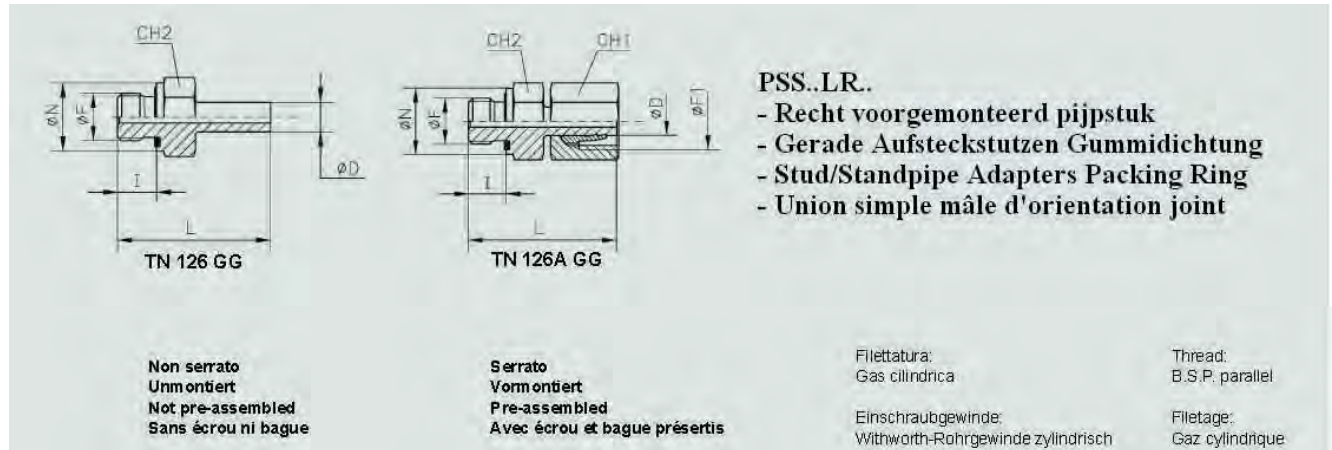
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PSS..LR..

Recht voorgemonteerd pijpstuk, type E DIN 3852 deel 11



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _i	PN	L	Ø F	Ø D	I	CH2	Ø N	Ø F1	CH1	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.x100 P.	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.x100 P.
L	6	315	32,5	1/8"	6	8	14	14	12 × 1,5	14	PS 6LR 1/8WD	1,5	PSS 6LR 1/8	2,5
	8		41,5	1/4"	8	12	19	19	14 × 1,5	17	PS 8LR 1/4WD	2,5	PSS 8LR 1/4	4,3
	10		39,5	1/4"	10	12	19	19	16 × 1,5	19	PS 10LR 1/4WD	2,7	PSS 10LR 1/4	4,8
	12		46	3/8"	12	12	22	22	18 × 1,5	22	PS 12LR 3/8WD	3,7	PSS 12LR 3/8	6,4
	15		46	1/2"	15	14	27	27	22 × 1,5	27	PS 15LR 1/2WD	7,2	PSS 15LR 1/2	11,5
	18		45,5	1/2"	18	14	27	27	26 × 1,5	32	PS 18LR 1/2WD	7,5	PSS 18LR 1/2	13,8
	22	160	48,5	3/4"	22	16	32	32	30 × 2	36	PS 22LR 3/4WD	9,0	PSS 22LR 3/4	17,5
	28		53	1"	28	18	41	40	36 × 2	41	PS 28LR 1WD	15,7	PSS 28LR 1	24,8
	35		62,5	1" 1/4	35	20	50	50	45 × 2	50	PS 35LR 1 1/4WD	26,2	PSS 35LR 1 1/4	40,7
	42		68,5	1" 1/2	42	22	55	55	52 × 2	60	PS 42LR 1 1/2WD	29,3	PSS 42LR 1 1/2	46,3
S	6	630	39	1/4"	6	12	19	19	14 × 1,5	17	PS 6SR 1/4WD	3,5	PSS 6SR 1/4	5,0
	8		41,5	1/4"	8	12	19	19	16 × 1,5	19	PS 8SR 1/4WD	3,7	PSS 8SR 1/4	5,5
	10		44,5	3/8"	10	12	22	22	18 × 1,5	22	PS 10SR 3/8WD	4,9	PSS 10SR 3/8	8,2
	12		46	3/8"	12	12	22	22	20 × 1,5	24	PS 12SR 3/8WD	5,6	PSS 12SR 3/8	9,5
	14		51	1/2"	14	14	27	27	22 × 1,5	27	PS 14SR 1/2WD	9,0	PSS 14SR 1/2	14,5
	16	400	50,5	1/2"	16	14	27	27	24 × 1,5	30	PS 16SR 1/2WD	9,4	PSS 16SR 1/2	15,8
	20		59	3/4"	20	16	32	32	30 × 2	36	PS 20SR 3/4WD	15,0	PSS 20SR 3/4	25,3
	25		66	1"	25	18	41	40	36 × 2	46	PS 25SR 1WD	26,0	PSS 25SR 1	46,5
	30		71	1" 1/4	30	20	50	50	42 × 2	50	PS 30SR 1 1/4WD	41,4	PSS 30SR 1 1/4	64,5
	38		315	82	1" 1/2	38	22	55	55	52 × 2	60	PS 38SR 1 1/2WD	56,0	PSS 38SR 1 1/2

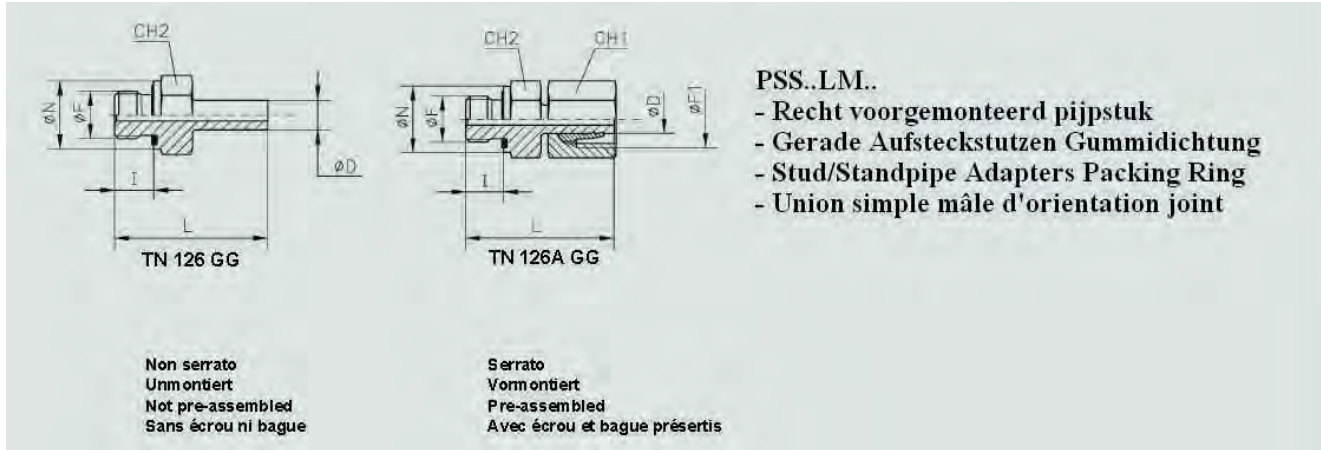
RACCORDI SPECIALI – SONDERVERSCHRAUBUNGEN - SPECIAL FITTINGS - RACCORDS SPECIAUX

L	12	315	46	1/4"	12	12	19	19	18 × 1,5	22	PS 12LR 1/4WD	3,5	PSS 12LR 1/4	6,2
	12		48,5	1/2"	12	14	27	27	18 × 1,5	22	PS 12LR 1/2WD	5,5	PSS 12LR 1/2	8,2
	15		43,5	3/8"	15	12	22	22	22 × 1,5	27	PS 15LR 3/8WD	7,2	PSS 15LR 3/8	11,5
S	12	630	49,5	1/2"	12	14	27	27	20 × 1,5	24	PS 12SR 1/2WD	9,7	PSS 12SR 1/2	13,6

de maten zijn met gemonteerde moer

PSS..LM..

Recht voorgemonteerd pijpstuk metrisch, type E DIN 3852 deel 11

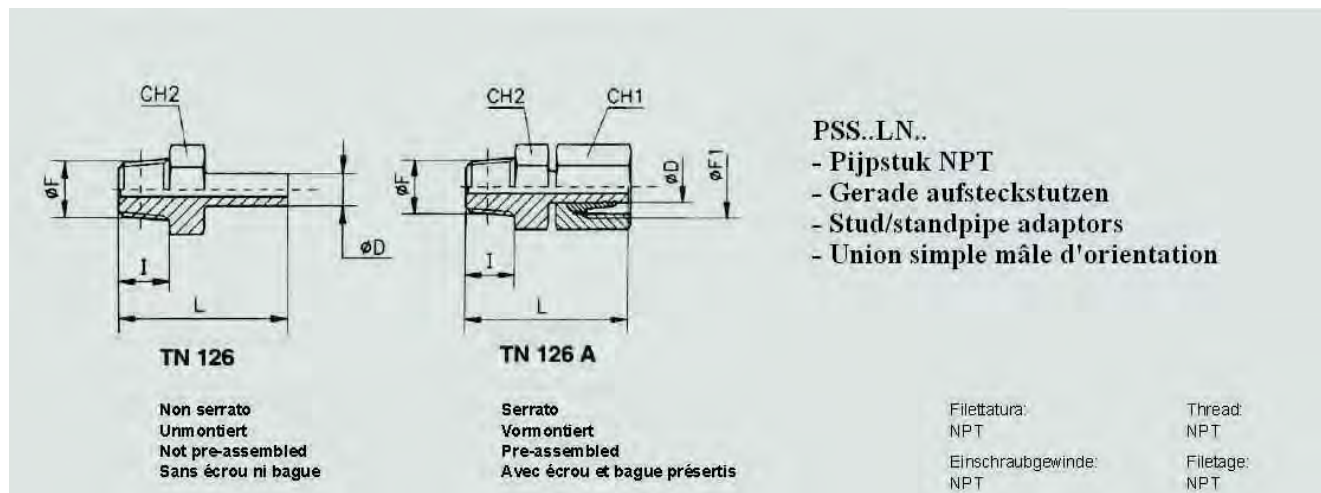


Serie Reihe Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L	Ø F	Ø D	I	CH2	Ø N	Ø F1	CH1	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.x100 P.	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.x100 P.
L	6	315	32,5	10 × 1	6	8	14	14	12 × 1,5	14	PS 6LM 10	1,5	PSS 6LM 10	2,5
	8		38,5	12 × 1,5	8	12	17	17	14 × 1,5	17	PS 8LM 12	2,5	PSS 8LM 12	3,9
	10		39	14 × 1,5	10	12	19	19	16 × 1,5	19	PS10LM 14	2,7	PSS10LM 14	4,9
	12		42,5	16 × 1,5	12	12	22	22	18 × 1,5	22	PS12LM 16	3,7	PSS12LM 16	6,4
	15		43,5	18 × 1,5	15	12	24	24	22 × 1,5	27	PS15LM 18	7,2	PSS15LM 18	9,8
	18		45,5	22 × 1,5	18	14	27	27	26 × 1,5	32	PS18LM 22	7,5	PSS18LM 22	13,0
	22	160	48,5	26 × 1,5	22	16	32	32	30 × 2	36	PS22LM 26	9,0	PSS22LM 26	17,5
	28		53,5	33 × 2	28	18	41	40	36 × 2	41	PS28LM 33	15,7	PSS28LM 33	24,8
	35		62,5	42 × 2	35	20	50	50	45 × 2	50	PS35LM 42	26,2	PSS35LM 42	40,7
	42		68,5	48 × 2	42	22	55	55	52 × 2	60	PS42LM 48	29,3	PSS42LM 48	46,0
S	6	630	39	12 × 1,5	6	12	17	17	14 × 1,5	17	PS 6SM 12	3,5	PSS 6SM 12	4,6
	8		41,5	14 × 1,5	8	12	19	19	16 × 1,5	19	PS 8SM 14	3,7	PSS 8SM 14	5,5
	10		44	16 × 1,5	10	12	22	22	18 × 1,5	22	PS10SM 16	4,9	PSS10SM 16	8,2
	12		46	18 × 1,5	12	12	24	24	20 × 1,5	24	PS12SM 18	5,6	PSS12SM 18	10,4
	14		50,5	20 × 1,5	14	14	27	26	22 × 1,5	27	PS14SM 20	9,0	PSS14SM 20	14,5
	16	400	51	22 × 1,5	16	14	27	27	24 × 1,5	30	PS16SM 22	9,4	PSS16SM 22	15,8
	20		59	27 × 2	20	16	32	32	30 × 2	36	PS20SM 27	15,0	PSS20SM 27	25,3
	25		66	33 × 2	25	18	41	40	36 × 2	46	PS25SM 33	26,0	PSS25SM 33	46,5
	30		71	42 × 2	30	20	50	50	42 × 2	50	PS30SM 42	41,4	PSS30SM 42	64,5
	38		315	82	48 × 2	38	22	55	55	52 × 2	60	PS38SM 48	56,0	PSS38SM 48

de maten zijn met gemonteerde moer

PSS..LN..

Recht voorgemonteerd pijpstuk NPT

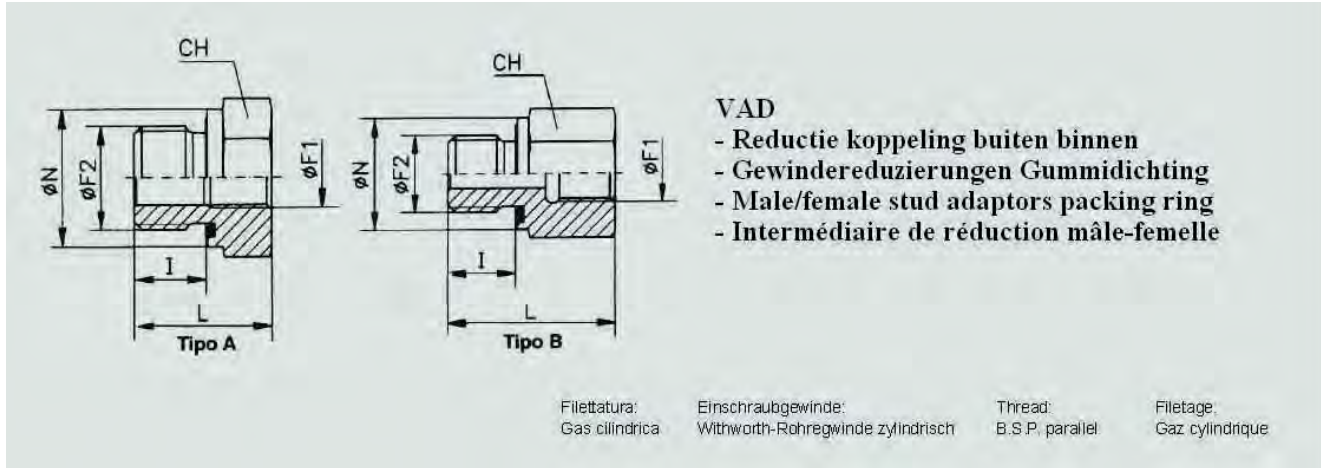


Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	L	øF	øD	I	CH2	øF1	CH1	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.x100 P.	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.x100 P.
L	6	315	33	1/8"	6	10	11	12 x 1,5	14	PS 6LN 1/8	1,5	PSS 6LN 1/8	2,4
	8		39	1/4"	8	15	14	14 x 1,5	17	PS 8LN 1/4	2,5	PSS 8LN 1/4	4,4
	10		40	1/4"	10	15	14	16 x 1,5	19	PS10LN 1/4	2,7	PSS10LN 1/4	4,7
	12		44,5	3/8"	12	15	19	18 x 1,5	22	PS12LN 3/8	3,7	PSS12LN 3/8	6,9
	15		48	1/2"	15	20	22	22 x 1,5	27	PS15LN 1/2	7,2	PSS15LN 1/2	10,6
	18		49	1/2"	18	20	22	26 x 1,5	32	PS18LN 1/2	7,5	PSS18LN 1/2	14,5
	22	160	49	3/4"	22	20	27	30 x 2	36	PS22LN 3/4	9,0	PSS22LN 3/4	17,9
	28		55,5	1"	28	25	36	36 x 2	41	PS28LN 1	15,7	PSS28LN 1	26,0
	35		63	1" 1/4	35	26	46	45 x 2	50	PS35LN 1 1/4	26,2	PSS35LN 1 1/4	41,7
	42		65	1" 1/2	42	26	50	52 x 2	60	PS42LN 1 1/2	29,3	PSS42LN 1 1/2	46,1
S	6	630	40	1/4"	6	15	14	14 x 1,5	17	PS 6SN 1/4	3,5	PSS 6SN 1/4	5,2
	8		40	1/4"	8	15	14	16 x 1,5	19	PS 8SN 1/4	3,7	PSS 8SN 1/4	5,4
	10		44	3/8"	10	15	19	18 x 1,5	22	PS10SN 3/8	4,9	PSS10SN 3/8	8,4
	12		44,5	3/8"	12	15	19	20 x 1,5	24	PS12SN 3/8	5,6	PSS12SN 3/8	9,2
	14		53,5	1/2"	14	20	22	22 x 1,5	27	PS14SN 1/2	9,0	PSS14SN 1/2	15,5
	16	400	53,5	1/2"	16	20	22	24 x 1,5	30	PS16SN 1/2	9,4	PSS16SN 1/2	16,8
	20		58	3/4"	20	20	27	30 x 2	36	PS20SN 3/4	15,0	PSS20SN 3/4	25,1
	25		68,5	1"	25	25	36	36 x 2	46	PS25SN 1	26,0	PSS25SN 1	47,7
	30		73,5	1" 1/4	30	26	46	42 x 2	50	PS30SN 1 1/4	41,4	PSS30SN 1 1/4	66,0
	38		315	78	1" 1/2	38	26	50	52 x 2	60	PS38SN 1 1/2	56,0	PSS38SN 1 1/2

de maten zijn met gemonteerde moer

VAD

Reductie koppeling buiten binnen



Tipo	Ø F2	Ø F1	L	I	CH	Ø N	PN	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg x100 P.
A	3/8"	1/8"	22,5	12	22	22	630	VAD3/8-1/8	4,0
	1/2"	1/8"	24	14	27	27		VAD1/2-1/8	6,7
	1/2"	1/4"	24	14	27	27		VAD1/2-1/4	5,7
	3/4"	1/4"	26	16	32	32	400	VAD3/4-1/4	10,4
	3/4"	3/8"	26	16	32	32		VAD3/4-3/8	8,8
	1"	1/4"	29	18	41	40		VAD1-1/4	19,6
	1"	3/8"	29	18	41	40		VAD1-3/8	18,0
	1"	1/2"	29	18	41	40	315	VAD1-1/2	15,8
	1" 1/4	1/2"	32	20	50	50		VAD1 1/4-1/2	31,0
	1" 1/4	3/4"	32	20	50	50		VAD1 1/4-3/4	27,0
	1" 1/2	1/2"	36	22	55	55		VAD1 1/2-1/2	47,0
1" 1/2	3/4"	36	22	55	55	VAD1 1/2-3/4		40,0	
1" 1/2	1"	36	22	55	55	VAD1 1/2-1	34,0		
B	1/8"	1/4"	31	8	19	14	630	VAD1/8-1/4	3,7
	1/8"	3/8"	32	8	24	14		VAD1/8-3/8	6,2
	1/4"	1/8"	29	12	19	19		VAD1/4-1/8	3,7
	1/4"	3/8"	36	12	24	19		VAD1/4-3/8	6,7
	1/4"	1/2"	40	12	30	19		VAD1/4-1/2	11,5
	1/4"	3/4"	43	12	36	19		VAD1/4-3/4	17,0
	3/8"	1/4"	36	12	22	22	400	VAD3/8-1/4	6,7
	3/8"	1/2"	41	12	30	22		VAD3/8-1/2	12,5
	3/8"	3/4"	44	12	36	22		VAD3/8-3/4	18,0
	1/2"	3/8"	37	14	27	27	630	VAD1/2-3/8	9,0
	1/2"	3/4"	46	14	36	27	400	VAD1/2-3/4	18,2
	1/2"	1"	49	14	41	27		VAD1/2-1	22,0
	1/2"	1" 1/4	53	14	55	27		VAD1/2-1 1/4	48,0
	3/4"	1/2"	43	16	32	32		VAD3/4-1/2	14,5
	3/4"	1"	51	16	41	32	315	VAD3/4-1	23,7
	3/4"	1" 1/4	55	16	55	32		VAD3/4-1 1/4	48,0
	3/4"	1" 1/2	57	16	60	32		VAD3/4-1 1/2	56,0
	1"	3/4"	49	18	41	40	400	VAD1-3/4	27,0
	1"	1" 1/4	57	18	55	40	315	VAD1-1 1/4	50,0
	1"	1" 1/2	59	18	60	40		VAD1-1 1/2	58,5
1" 1/4	1"	53	20	50	50	400	VAD1 1/4-1	45,9	
1" 1/4	1" 1/2	60	20	60	50	315	VAD1 1/4-1 1/2	61,5	
1" 1/2	1" 1/4	58	22	55	55		VAD1 1/2-1 1/4	54,0	



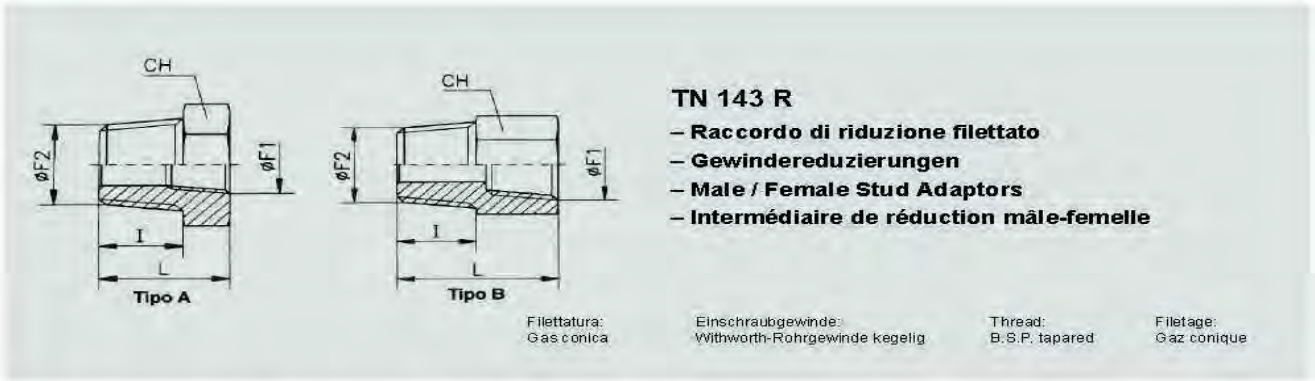
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



TN 143 R

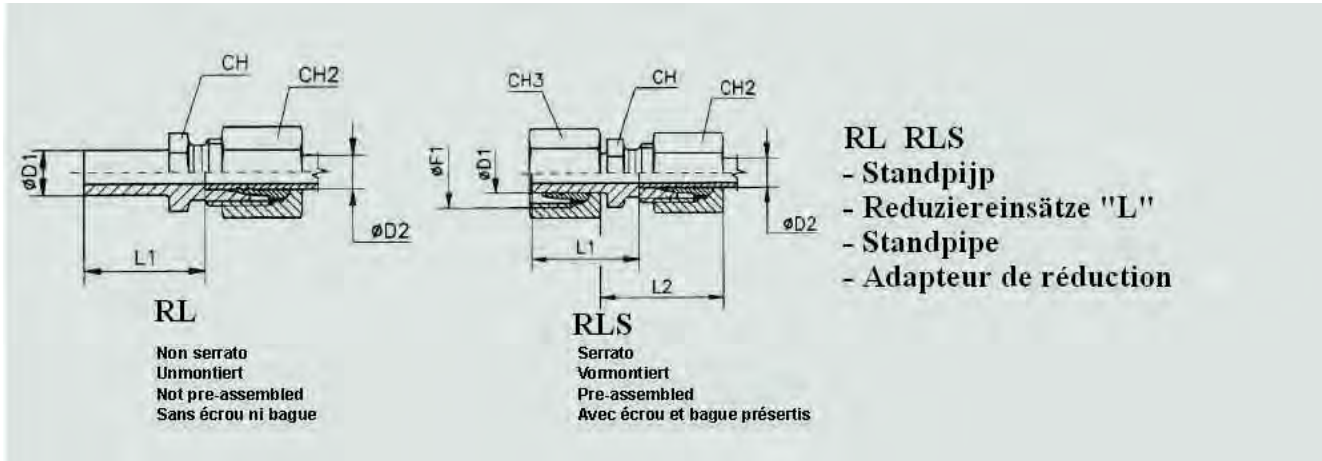
Op aanvraag leverbaar



Tipo	Ø F2	Ø F1	L	I	CH		Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x 100 P.
A	3/8"	1/8"	20	12	22		TN 143 - 3/8" x 1/8" R	4,4
	1/2"	1/8"	22	14	27		TN 143 - 1/2" x 1/8" R	7,0
	1/2"	1/4"	22	14	27		TN 143 - 1/2" x 1/4" R	6,4
	3/4"	1/4"	25	16	32		TN 143 - 3/4" x 1/4" R	9,9
	3/4"	3/8"	25	16	32		TN 143 - 3/4" x 3/8" R	9,5
	1"	1/4"	28	18	41		TN 143 - 1" x 1/4" R	20,7
	1"	3/8"	28	18	41		TN 143 - 1" x 3/8" R	18,7
	1"	1/2"	28	18	41		TN 143 - 1" x 1/2" R	16,6
	1" 1/4	1/2"	32	20	50		TN 143 - 1" 1/4 x 1/2" R	31,7
	1" 1/4	3/4"	32	20	50		TN 143 - 1" 1/4 x 3/4" R	27,7
B	1" 1/2	1/2"	37	22	55		TN 143 - 1" 1/2 x 1/2" R	48,0
	1" 1/2	3/4"	37	22	55		TN 143 - 1" 1/2 x 3/4" R	43,9
	1" 1/2	1"	37	22	55		TN 143 - 1" 1/2 x 1" R	34,3
	1/8"	1/4"	26	8	19		TN 143 - 1/8" x 1/4" R	4,0
	1/8"	3/8"	26	8	24		TN 143 - 1/8" x 3/8" R	5,0
	1/4"	1/8"	29	14	19		TN 143 - 1/4" x 1/8" R	4,1
	1/4"	3/8"	34	14	24		TN 143 - 1/4" x 3/8" R	7,1
	1/4"	1/2"	40	14	32		TN 143 - 1/4" x 1/2" R	9,6
	1/4"	3/4"	40	14	36		TN 143 - 1/4" x 3/4" R	17,9
	3/8"	1/4"	32	14	22		TN 143 - 3/8" x 1/4" R	3,7
	3/8"	1/2"	38	14	32		TN 143 - 3/8" x 1/2" R	9,7
	3/8"	3/4"	38	14	36		TN 143 - 3/8" x 3/4" R	18,2
	1/2"	3/8"	36	16	27		TN 143 - 1/2" x 3/8" R	10,1
	1/2"	3/4"	43	16	36		TN 143 - 1/2" x 3/4" R	18,5
	1/2"	1"	50	16	46		TN 143 - 1/2" x 1" R	23,1
	1/2"	1" 1/4	50	16	55		TN 143 - 1/2" x 1" 1/4 R	47,8
	3/4"	1/2"	43	18	32		TN 143 - 3/4" x 1/2" R	15,4
	3/4"	1"	50	18	46		TN 143 - 3/4" x 1" R	24,1
	3/4"	1" 1/4	50	18	55		TN 143 - 3/4" x 1" 1/4 R	49,0
	3/4"	1" 1/2	50	18	60		TN 143 - 3/4" x 1" 1/2 R	55,5
1"	3/4"	48	20	41		TN 143 - 1" x 3/4" R	28,7	
1"	1" 1/4	54	20	55		TN 143 - 1" x 1" 1/4 R	53,7	
1"	1" 1/2	54	20	60		TN 143 - 1" x 1" 1/2 R	57,5	
1" 1/4	1"	52	22	50		TN 143 - 1" 1/4 x 1" R	45,3	
1" 1/4	1" 1/2	57	22	60		TN 143 - 1" 1/4 x 1" 1/2 R	59,0	
1" 1/2	1" 1/4	57	24	55		TN 143 - 1" 1/2 x 1" 1/4 R	54,0	

RL... RLS...

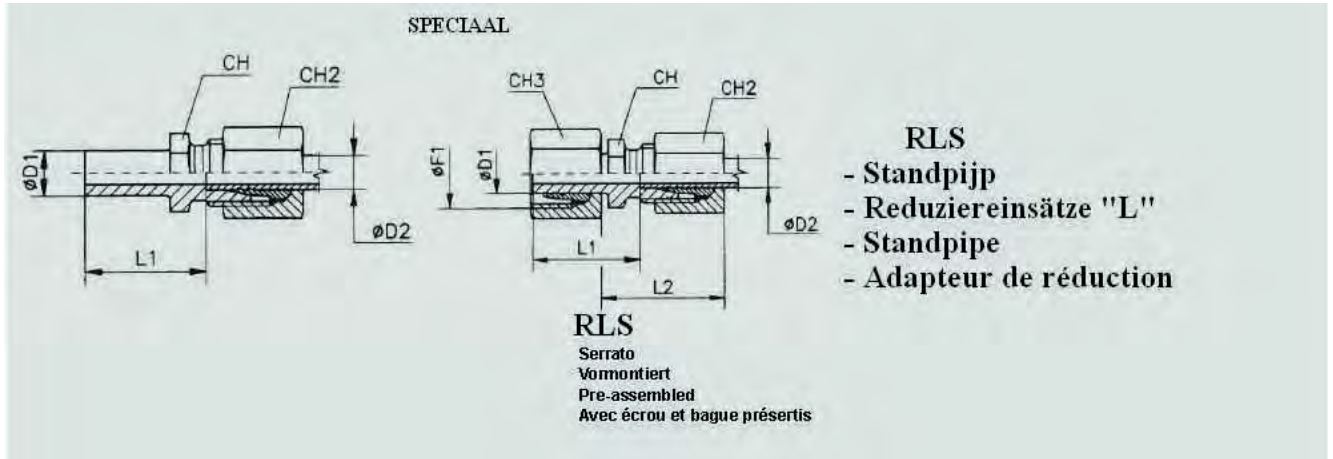
Standpijp



Serie Reihe Series Série	ØD1	ØD2	PN	L1	L2	CH2	CH3	ØF1	CH	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.x100 P.	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.x100 P.
L	8	6	315	29,5	30	14	17	14 x 1,5	14	RL 8- 6	2,7	RLS 8- 6	4,1
	10	6		29,5	30	14	19	16 x 1,5	14	RL10- 6	2,5	RLS10- 6	4,8
	10	8		29,5	30	17	19	16 x 1,5	17	RL10- 8	3,0	RLS10- 8	5,3
	12	6		29,5	30	14	22	18 x 1,5	14	RL12- 6	3,3	RLS12- 6	6,0
	12	8		29,5	30	17	22	18 x 1,5	17	RL12- 8	3,7	RLS12- 8	6,4
	12	10		31	31	19	22	18 x 1,5	17	RL12- 10	4,3	RLS12- 10	7,0
	15	6		29,5	29	14	27	22 x 1,5	17	RL15- 6	4,0	RLS15- 6	8,3
	15	8		29,5	29	17	27	22 x 1,5	17	RL15- 8	4,8	RLS15- 8	9,1
	15	10		31	30	19	27	22 x 1,5	17	RL15- 10	5,2	RLS15- 10	9,5
	15	12		31	30	22	27	22 x 1,5	19	RL15- 12	5,9	RLS15- 12	10,2
	18	6		30,5	29	14	32	26 x 1,5	19	RL18- 6	4,7	RLS18- 6	11,0
	18	8		30,5	29	17	32	26 x 1,5	19	RL18- 8	5,0	RLS18- 8	11,3
	18	10		32	30	19	32	26 x 1,5	19	RL18- 10	5,7	RLS18- 10	12,0
	18	12		32	30	22	32	26 x 1,5	19	RL18- 12	6,4	RLS18- 12	12,7
	18	15		32,5	32	27	32	26 x 1,5	24	RL18- 15	8,8	RLS18- 15	15,1
	22	6		33,5	32	14	36	30 x 2	24	RL22- 6	5,8	RLS22- 6	14,3
	22	8		33,5	32	17	36	30 x 2	24	RL22- 8	6,6	RLS22- 8	15,1
	22	10		35	33	19	36	30 x 2	24	RL22- 10	6,8	RLS22- 10	15,3
	22	12		35	33	22	36	30 x 2	24	RL22- 12	7,7	RLS22- 12	16,2
	22	15		35,5	35	27	36	30 x 2	24	RL22- 15	9,7	RLS22- 15	18,2
22	18	35	35	32	36	30 x 2	27	RL22- 18	11,5	RLS22- 18	20,0		
28	6	34,5	33	14	41	36 x 2	32	RL28- 6	9,6	RLS28- 6	18,7		
28	8	34,5	33	17	41	36 x 2	32	RL28- 8	10,4	RLS28- 8	19,5		
28	10	36	34	19	41	36 x 2	32	RL28- 10	11,1	RLS28- 10	20,2		
28	12	36	34	22	41	36 x 2	32	RL28- 12	11,6	RLS28- 12	20,7		
28	15	36,5	35	27	41	36 x 2	32	RL28- 15	13,6	RLS28- 15	22,7		
28	18	36	36	32	41	36 x 2	32	RL28- 18	15,6	RLS28- 18	24,7		
28	22	36	38	36	41	36 x 2	32	RL28- 22	17,9	RLS28- 22	27,0		
35	6	40,5	34	14	50	45 x 2	36	RL35- 6	16,5	RLS35- 6	31,0		
35	8	40,5	34	17	50	45 x 2	36	RL35- 8	16,9	RLS35- 8	31,4		
35	10	42	35	19	50	45 x 2	36	RL35- 10	17,7	RLS35- 10	32,2		
35	12	42	35	22	50	45 x 2	36	RL35- 12	17,7	RLS35- 12	32,2		
35	15	42,5	36	27	50	45 x 2	36	RL35- 15	20,5	RLS35- 15	35,0		
35	18	42	37	32	50	45 x 2	36	RL35- 18	21,9	RLS35- 18	36,4		
35	22	44	39	36	50	45 x 2	36	RL35- 22	23,5	RLS35- 22	38,0		
35	28	44	39	41	50	45 x 2	41	RL35- 28	25,2	RLS35- 28	39,7		
42	6	42,5	35	14	60	52 x 2	46	RL42- 6	21,2	RLS42- 6	44,2		
42	8	42,5	35	17	60	52 x 2	46	RL42- 8	22,2	RLS42- 8	45,2		
42	10	44	36	19	60	52 x 2	46	RL42- 10	22,2	RLS42- 10	45,2		
42	12	43	36	22	60	52 x 2	46	RL42- 12	23,1	RLS42- 12	46,1		
42	15	44,5	37	27	60	52 x 2	46	RL42- 15	24,2	RLS42- 15	47,2		
42	18	44	38	32	60	52 x 2	46	RL42- 18	26,1	RLS42- 18	49,1		
42	22	46	40	36	60	52 x 2	46	RL42- 22	28,2	RLS42- 22	51,2		
42	28	46	40	41	60	52 x 2	46	RL42- 28	30,2	RLS42- 28	53,2		
42	35	45	44	50	60	52 x 2	46	RL42- 35	35,5	RLS42- 35	58,5		

RL... RLS...

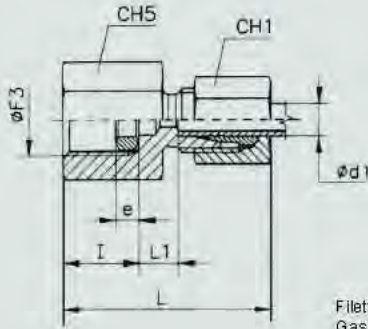
Standpijp afwijkende maten



Serie Reihe Series Série	Ø D1	Ø D2	PN	L1	CH2	CH3	Ø F1	CH	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. ×100 P.	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. ×100 P.
LL	6	4	100	23	10	12	10 × 1	11		1,0	RLS 6- 4LL	1,6
	8	4		23,5	10	14	12 × 1	11		1,2	RLS 8- 4LL	2,0
	8	6		22	12	14	12 × 1	11		1,3	RLS 8- 6LL	2,1
L/LL	6	4	315	23	10	14	12 × 1,5	11		1,0	RLS 6- 4LL	2,0
	8	4		23,5	10	17	14 × 1,5	11		1,4	RLS 8- 4LL	2,6
	10	4		28,5	10	19	16 × 1,5	11		1,5	RLS10- 4LL	3,8
	12	4		28,5	10	22	18 × 1,5	14		2,7	RLS12- 4LL	5,4
S/L	16	15	315	37	27	30	24 × 1,5	24		10,7	RSS16-15L	17,2
	20	15		43	27	36	30 × 2	24		12,7	RSS20-15L	23,0
	20	18		42,5	32	36	30 × 2	27		14,4	RSS20-18L	24,7
	25	22	160	48,5	36	46	36 × 2	32		22,5	RSS25-22L	43,0
	30	28		50,5	41	50	42 × 2	41		38,2	RSS30-28L	61,3
L/S	18	16	315	36	30	32	26 × 1,5	27		14,6	RLS18-16S	21,0
	22	16	160	38	30	36	30 × 2	27		17,0	RLS22-16S	25,5
	22	20		38	36	36	30 × 2	32		21,5	RLS22-20S	30,0
	28	16		39	30	41	36 × 2	32		17,3	RLS28-16S	26,5
	28	25		40,5	46	41	36 × 2	41		36,1	RLS28-25S	45,3

MAV

Manometer koppeling



MAV

- Manometer koppeling
- Manometer Verschraubung
- Gauge Couplings
- Union pour manomètre

Filettatura:
Gas cilindrica

Einschraubgewinde:
Whitworth-Rohrgewinde zylindrisch

Thread:
B.S.P. parallel

Filetage:
Gaz cylindrique

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	Ø F3	L	L1	CH1	CH5	e *	I		Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.×100 P.
LL	4	100	1/4"	33	8,5	10	19	4,5	14,5		MAV4LLR 1/4	3,6
L	6	315	1/4"	37	7,5	14	19	4,5	14,5		MAV6LR 1/4	4,9
	8		1/4"	37	7,5	17	19	4,5	14,5		MAV8LR 1/4	5,3
	10		1/4"	38	8,5	19	19	4,5	14,5		MAV10LR 1/4	6,0
	12		1/4"	38	8,5	22	19	4,5	14,5		MAV12LR 1/4	6,8
S	6	630	1/2"	46	11	17	27	5	20		MAV6SR 1/2	10,5
	8		1/2"	46	11	19	27	5	20		MAV8SR 1/2	10,5
	10		1/2"	47	10,5	22	27	5	20		MAV10SR 1/2	12,0
	12		1/2"	47	10,5	24	27	5	20		MAV12SR 1/2	12,8



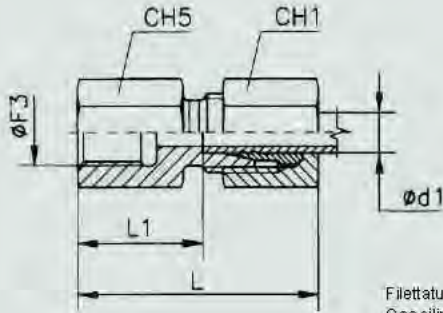
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



GAI

Opschroefkoppeling



GAI

- Opschroefkoppeling
- Gerade Aufschraubverschraubungen
- Female Stud Couplings
- Union simple femelle

Filettatura:
Gas cilindrica
Metrica cilindrica

Einschraubgewinde:
Withworth-Rohrgewinde zylindrisch
Metrisches Feingewinde zylindrisch

Thread:
B.S.P. parallel
Metric parallel

Filetage:
Gaz cylindrique
Métrique cylindrique

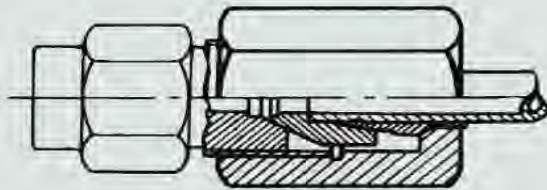
Serie Reihe Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L	L1	CH1	R			Peso Gewic ht Weight Poids kg.×100 P.	M			Peso Gewic ht Weight Poids kg.×100 P.
						Ø F3	CH5	Simbolo di ordinazione Bestell-Nr. Part. No. Références		Ø F3	CH5	Simbolo di ordinazione Bestell-Nr. Part. No. Références	
L	6	315	34	19	14	1/8"	14	GAI6LR 1/8	3,0	10x 1	14	GAI6LM 10	3,0
	8		39	24	17	1/4"	19	GAI8LR 1/4	5,5	12x 1,5	17	GAI8LM 12	4,7
	10		40	25	19	1/4"	19	GAI10LR 1/4	6,0	14x 1,5	19	GAI10LM 14	6,0
	12		41	26	22	3/8"	24	GAI12LR 3/8	9,0	16x 1,5	22	GAI12LM 16	8,0
	15		46	31	27	1/2"	27	GAI15LR 1/2	13,0	18x 1,5	24	GAI15LM 18	11,0
	18		47	30,5	32	1/2"	27	GAI18LR 1/2	15,0	22x 1,5	30	GAI18LM 22	17,0
	22	160	52	35,5	36	3/4"	36	GAI22LR 3/4	25,5	26x 1,5	32	GAI22LM 26	21,0
	28		55	38	41	1"	41	GAI28LR 1	30,5	33x 2	41	GAI28LM 33	30,5
	35		63	41	50	1" 1/4	55	GAI35LR 1 1/4	61,0	42x 2	55	GAI35LM 42	61,0
	42		65	42,5	60	1" 1/2	60	GAI42LR 1 1/2	75,0	48x 2	60	GAI42LM 48	75,0
S	6	630	41	26	17	1/4"	19	GAI6SR 1/4	6,0	12x 1,5	17	GAI6SM 12	5,2
	8		41	26	19	1/4"	19	GAI8SR 1/4	6,5	14x 1,5	19	GAI8SM 14	6,2
	10		43	26,5	22	3/8"	24	GAI10SR 3/8	10,0	16x 1,5	22	GAI10SM 16	9,0
	12		43	26,5	24	3/8"	24	GAI12SR 3/8	10,5	18x 1,5	24	GAI12SM 18	10,5
	14		50	32	27	1/2"	30	GAI14SR 1/2	18,0	20x 1,5	27	GAI14SM 20	15,0
	16	400	50	31,5	30	1/2"	30	GAI16SR 1/2	19,5	22x 1,5	30	GAI16SM 22	18,5
	20		56	34,5	36	3/4"	36	GAI20SR 3/4	30,0	27x 2	36	GAI20SM 27	30,0
	25		62	37,5	46	1"	41	GAI25SR 1	46,5	33x 2	41	GAI25SM 33	46,0
	30		69	42	50	1" 1/4	55	GAI30SR 1 1/4	74,0	42x 2	55	GAI30SM 42	73,0
	38		315	74	43,5	60	1" 1/2	60	GAI38SR 1 1/4	95,5	48x 2	60	GAI38SM 48

RACCORDI SPECIALI - SONDERVERSCHRAUBUNGEN - SPECIAL FITTINGS - RACCORDS SPECIAUX

L	8	315	40	25	17	3/8"	24	GAI8LR 3/8	7,8	-	-	-	-
	8		44	29	17	1/2"	27	GAI8LR 1/2	9,7	-	-	-	-
	10		41	26	19	3/8"	24	GAI10LR 3/8	8,4	-	-	-	-
	10		45	30	19	1/2"	27	GAI10LR 1/2	10,1	-	-	-	-
	12		45	30	22	1/2"	27	GAI12LR 1/2	10,5	-	-	-	-

TN258 diesel

Op aanvraag leverbaar



TN 258

- Raccordo alimentazione iniezione Diesel
- Rohrverschraubung mit Schneid-und Keilring für Diesel-Einspritzleitung
- Ring fitting Diesel injection feed
- Raccord alimentation par injection Diesel

- Questa giunzione è stata studiata per applicazioni antivibranti e quindi contro ogni causa di rottura di tubo, grazie alla forma di anello che lo guida lungo il tratto e con punti di snodatura agevolando l'accoppiamento.

Montaggio:

- 1) Preparare il tubo ad angolo retto.
- 2) Oleare tutte le parti.
- 3) Applicare boccola, anello, dado, come indicato nel disegno.
- 4) Spingere il tubo nella boccola e poi la stessa contro il raccordo avvitando il dado a mano e sentendolo in traggio con chiave.
- 5) Allentare e restringere prima del serraggio finale.

Normali misure:

Dado 12 x 1,5 - Sigla TN 258 - 6L;
Dado 14 x 1,5 - Sigla TN 258 - 6S.

Altre misure a richiesta.

- Diese Verschraubung ist studiert worden für schwingungsdämpfende Verwendung und somit gegen alle Ursachen für Rohrbrüche, Dank der Ringform der sie führt und Gelenkpunkten die Verbindung erleichtert.

Montage:

- 1) Das Rohr mit rechtem Winkel vorbereiten.
- 2) Alle Teile ölen.
- 3) Büchse, Ring, Mutter wie in der Zeichnung gezeigt anbringen.
- 4) Das Rohr in die Büchse zwingen und diese gegen die Verschraubung, die Mutter von Hand anziehen und wenn sie fest ist, mit dem Schlüssel.
- 5) Nochmals losmachen und fest anziehen bevor endgültig angezogen wird.

Normalmasse:

Mutter 12 x 1,5 - Zeichen TN 258 - 6L;
Mutter 14 x 1,5 - Zeichen TN 258 - 6S.

Andere Masse nach Anfrage.

- This fitting has been designed for antivibration appliances and, consequently, against all causes of pipe breakage thanks to the ring shape which guides it along the section and with articulation points which facilitate assembly.

Assembly:

- 1) Give the tube a right angle shape.
- 2) Oil all parts.
- 3) Mount bush, ring, and nut as shown on drawing.
- 4) Push pipe in bush and the latter against the fitting by manually screwing nut and by feeling it well tight with the wrench.
- 5) Loosen and tighten before final tightening.

Standard sizes:

12 x 1,5 nut - Symbol TN 258 - 6L;
14 x 1,5 nut - Symbol TN 258 - 6S.

On request, we can supply nuts with other sizes.

- Ce raccord a été projeté pour des applications à l'épreuve des vibrations et, par conséquent, contre toute cause de rupture du tube, grâce à la forme de bague qui le guide le long de la section et avec des points d'articulation qui facilitent l'assemblage.

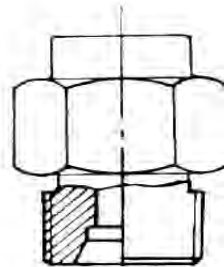
Montage:

- 1) Préparer le tube à angle droit.
- 2) Huiler toutes les parties.
- 3) Appliquer douille, bague, écrou, comme indiqué dans le dessin.
- 4) Pousser le tube dans la douille puis celle-ci contre le raccord en vissant l'écrou manuellement et en le sentant sous tirage au moyen de la clé.
- 5) Desserrer et serrer avant le serrage final.

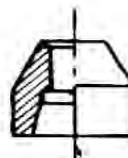
Mesures normales:

Ecrou de 12 x 1,5 - Symbole TN 258 - 6L;
Ecrou de 14 x 1,5 - Symbole TN 258 - 6S.

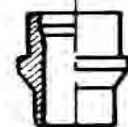
Sur demande, nous pouvons fournir des écrous ayant d'autres mesures.



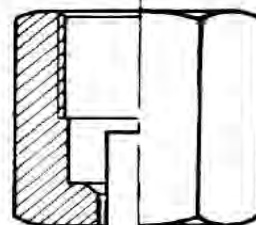
- Raccordo
- Verschraubung
- Fitting
- Raccord



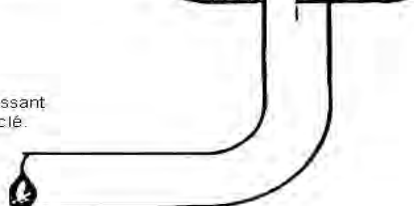
- Boccola di alloggiamento
- Lagerbüchse
- Housing bush
- Douille de logement



- Anello serrante sul tubo
- Rohrspanning
- Pipe tightening ring
- Bague de serrage sur tube



- Dado di serraggio
- Spannmutter
- Tightening nut
- Ecrou de serrage



- Tubo
- Rohr
- Tube
- Tube



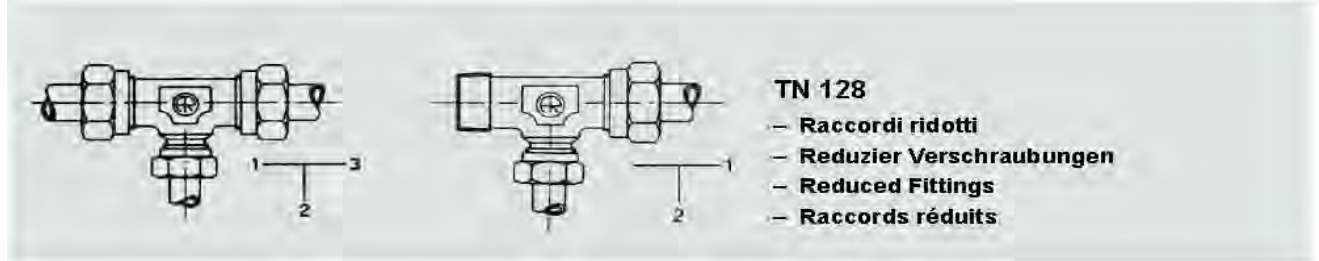
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN

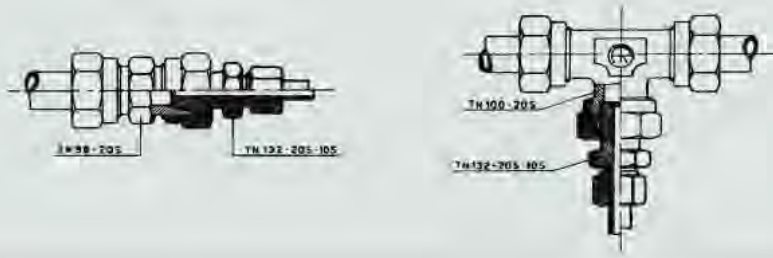


TN128

Op aanvraag leverbaar



- A) L'esecuzione di raccordi ridotti (cioè con derivazione di tubo minorato al \varnothing nominale del raccordo) è possibile solo per i quantitativi sottosegnati che valgono anche quando si voglia la variante al normale attacco di derivazione (attacco filettato o estremità di derivazione):
- raccordo con tubo nominale fino a 12 S (12 L) quantitativo minimo 500 pezzi
 - raccordo con tubo nominale fino a 20 S (22 L) quantitativo minimo 250 pezzi
 - raccordo con tubo nominale fino a 38 S (42 L) quantitativo minimo 50 pezzi.
- Per l'ordinazione di queste giunzioni, citare la sigla della tabella normale cui si riferisce la forma desiderata, aggiungendo una "R" (ridotta) e indicando nell'ordine dello schema sopra riportato la misura degli attacchi, esempio: giunzione ad anello intermedia TN 100 R - 20 S - 16 S - 20 S.
PREZZO: Listino netto (o breve sconto da pattuire).
- B) Per quantitativi inferiori ai sopra segnati, gli ordini saranno evasi applicando al raccordo normale la ns. riduzione TN 132, così possibile ad ottenere qualsiasi campo di riduzione, su qualsiasi forma di giunzione, e anche per piccoli quantitativi. Ecco alcuni esempi:
Per l'ordinazione di queste giunzioni citare la sigla della tabella normale cui si riferisce la forma, aggiungendo "132" (anziché "R") e indicando nell'ordine dello schema sopra riportato la misura degli attacchi, esempio: TN 100 - 132 - 20 S - 10 S - 20 S.
PREZZO: Listino della giunzione normale + listino della riduzione TN 132 relativa: il tutto scontato del normale sconto goduto dal Cliente.
- C) Dove si voglia la variante al normale attacco di derivazione (attacco filettato o estremità di derivazione) e sempre per minori quantitativi, gli ordini saranno evasi applicando al raccordo normale la riduzione filettata secondo TN 141 o TN 143 - del tipo A o tipo B secondo il rapporto della riduzione. Per l'ordinazione di queste giunzioni, citare la sigla della tabella normale cui si riferisce la forma, aggiungendo "141" (vale anche per "143") e indicando nell'ordine dello schema sopra riportato le misure degli attacchi, esempio: TN 94 - 143 - 20 S - 1" NPT (o gas).
PREZZO: Listino della giunzione normale + listino della riduzione TN 141 o TN 143 (tipo A o tipo B): il tutto scontato al normale sconto goduto dal Cliente.
- Consigliamo la Clientela di usare esclusivamente giunzioni normali. I Clienti godranno di materiali sempre pronti e soprattutto eviteranno maggiori costi nei loro impianti.**
- A) Die Ausführung der Reduzier-Verschraubungen (d.h. mit reduzierter Abzweigung des Rohres am Nominal \varnothing des Anschlusses) ist nur bei den unten verzeichneten Mengen möglich, die auch gültig sind falls die Variante des normalen Abzweigungsanschlusses gewünscht wird (mit Gewinde versehener Anschluss oder Abzweigungsende):
- Verschraubung mit Nominalrohr bis 12 S (12 L) Mindestmenge 500 Stück
 - Verschraubung mit Nominalrohr bis 20 S (22 L) Mindestmenge 250 Stück
 - Verschraubung mit Nominalrohr bis 38 S (42 L) Mindestmenge 50 Stück.
- Bei der Bestellung solcher Verschraubungen ist das Zeichen der Normaltabelle anzugeben auf die sich die gewünschte Form bezieht, mit dem Zusatz eines "R" (reduziert) und mit Angabe in der Bestellung des Schemas wie oben des Masses der Anschlüsse, Beispiel: Verschraubung mit Ring mittel TN 100 R - 20 S - 16 S - 20 S.
PREIS: Listenpreis netto.
- B) Bei geringeren als den oben erwähnten Mengen werden die Aufträge so ausgeführt dass an die normale Verschraubung unser Reduzierstück TN 132 angebracht wird, womit alle Reduziergebiete erreicht, werden bei allen Verschraubungsformen, auch bei kleinen Mengen.
Für die Bestellung dieser Verschraubungen ist das Zeichen der Normaltabelle auf die sich die Form bezieht anzugeben, unter Hinzufügung von "132" (anstatt "R") und im Sinne des obigen Schemas das Mass der Anschlüsse, Beispiel: TN 100 - 132 - 20 S - 10 S - 20 S.
PREIS: Preisliste der normalen Verschraubungen + Preisliste der Reduzierstücke TN 132: dies alles mit den normalen Rabatten die dem Kunden eingeräumt werden.
- C) Wo die Variante des normalen Anschlusses der Abzweigung gewünscht wird (mit Gewinde versehener Anschluss oder Abzweigungsende) und bei geringeren Mengen, werden die Aufträge so erledigt dass an der normalen Verschraubung das mit Gewinde versehene Reduzierstück nach TN 141 oder TN 143 - Type A oder B je nach Reduzierverhältnis angebracht wird.
Bei der Bestellung dieser Verschraubungen ist das Zeichen der Normaltabelle auf die sich die Form bezieht, unter Hinzufügung von "141" (auch bei "143") anzugeben und im Sinne des obigen Schemas die Masse der Anschlüsse, Beispiel: TN 94 - 143 - 20 S - 1" NPT (oder Gas).
PREIS: Preisliste der normalen Verschraubungen + Preisliste der Reduzierstücke TN 141 oder TN 143 (Type A oder B): all dies mit den normalen Rabatten die dem Kunden gewährt werden.
- Wir raten unseren Kunden ausschliesslich normale Verschraubungen zu verwenden. Die Kunden finden das Material stets lieferbereit und vermeiden höhere Kosten in Ihren Anlagen.**
- A) The manufacture of reduced fittings (i.e. with tube offtake reduced to the rated diameter of fitting) is possible only for the hereunder mentioned quantities, which are also valid when a modification of the standard offtake connection (threaded connection or offtake end) is desired:
- fitting with standard pipe up to 12 S (12 L) minimum quantity: 500 pieces
 - fitting with standard pipe up to 20 S (22 L) minimum quantity: 250 pieces
 - fitting with standard pipe up to 38 S (42 L) minimum quantity: 50 pieces.
- When ordering these fittings, please indicate the symbol of the standard table to which the desired form refers, by adding an "R" (reduced) and by indicating, in the order of the hereabove reported scheme, the size of the connections, for example: intermediate ring fitting TN 100 R - 20 S - 16 S - 20 S.
PRICE: net list price (or small discount to be agreed).
- B) For quantities lower than those indicated here above, orders will be carried out by applying to the standard fitting our reducing unit TN 132, in order to obtain whatever field of reduction, on any shape of fitting, for small quantities too.



For ordering these fittings, please indicate the symbol of the standard table to which the form refers, by adding "132" (instead of "R") and by indicating in the order of the hereabove reported scheme, the size of the connections; for example: TN 100 - 132 - 20 S - 10 S - 20 S.

PRICE: price list of standard fitting + price list of relative reducing unit TN 132: the normal discount granted to the customer will be applied on the total.

- C) In case the modified version of the standard offtake connection (threaded connection or offtake ends) would be desired and always for limited quantities, orders will be carried out by mounting on the standard fitting the threaded reduction fitting according to TN 141 or TN 143 - of type A or B in accordance with the reduction ratio.

For ordering these fittings please indicate the symbol of the standard table to which the form refers, by adding "141" (this is valid too for "143") and by indicating in the order of the hereabove mentioned scheme the sizes of the connection; for example: TN 94 -143 - 20 S - 1" NPT (or gas).

PRICE: Price list of the standard fitting + price list of the reducing unit TN 141 or TN 143 (type A or B): the usual discount granted to the client will be deducted from the total.

We recommend to our customers to use exclusively the standard fittings. Our clients will take advantage of our materials which are always ready for shipment. Above all, they will be in a position to avoid higher costs in their plants.

- = A) La fabrication de raccords réduits (c'est-à-dire avec dérivation de tube réduite au Ø nominal du raccord) n'est possible que pour les quantitatifs indiqués ci-dessous qui valent également lorsque l'on désire la variante à l'attelage normal de dérivation (attelage fileté ou extrémité de dérivation):

- raccord avec tube nominal jusqu'à 12 S (12 L) quantité minimale 500 pièces
- raccord avec tube nominal jusqu'à 20 S (22 L) quantité minimale 250 pièces
- raccord avec tube nominal jusqu'à 38 S (42 L) quantité minimale 50 pièces.

Pour commander ces raccords, ayez soin d'indiquer le symbole du tableau normal auquel la forme désirée se réfère, en ajoutant un "R" (réduit) et en indiquant, dans l'ordre du schéma ci-haut reporté, la mesure des attelages; par exemple: raccord à bague intermédiaire TN 100 R - 20 S - 16 S - 20 S.

PRICE: prix de liste net (ou petite somme à concorder).

- B) Pour des quantitatifs inférieurs à ceux indiqués ci-haut, les commandes seront effectuées en appliquant au raccord normal notre réduction TN 132, de manière à obtenir n'importe quel champ de réduction, sur n'importe quelle forme de raccord, pour de petites quantités aussi.

Voici quelques exemples:

Pour la commande de ces raccords, ayez soin d'indiquer le symbole du tableau normal à qui la forme se réfère, en ajoutant "132" (aux lieu de "R") et en indiquant dans l'ordre du schéma, ci-haut reporté, la mesure des attelages; par exemple: TN 100 - 132 - 20 S - 10 S - 20 S.

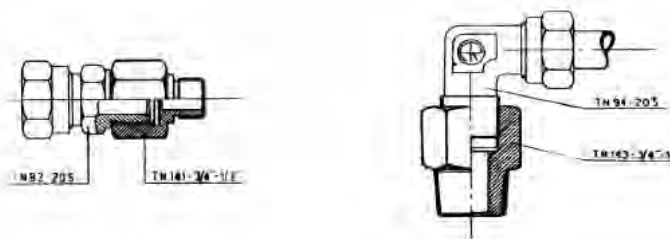
PRICE: Liste des prix du raccord normal + liste des prix du raccord de réduction TN 132 relatif: le tout diminué du rabais normal pratiqué en faveur du Client.

- C) Dans le cas où la variante à l'attelage normal de dérivation (attelage fileté ou extrémités de dérivation) serait désirellet toujours pour des quantitatifs réduits, les commandes seront effectuées en appliquant au raccord normal le raccord de réduction fileté suivant TN 141 ou TN 143 - du type A ou du type B suivant le rapport de la réduction.

Pour la commande de ces raccords, ayez soin d'indiquer le symbole du tableau normal à qui la forme se réfère, en ajoutant "141" (ceci vaut aussi pour "143") et en indiquant dans l'ordre du schéma ci-haut reporté les mesures des attelages; par exemple: TN 94 -143 - 20 S - 1" NPT (ou gaz).

PRICE: Liste des prix du raccord normal + liste des prix de la réduction TN 141 ou TN 143 (type A ou type B): du tout sera délaigué la rabais normal fait au client.

Nous conseillons à notre clientèle d'employer exclusivement les raccords normaux. Les Clients pourront tirer avantage de nos matériaux toujours prêts. Ils pourront surtout éviter des coûts majeurs dans leurs installations.





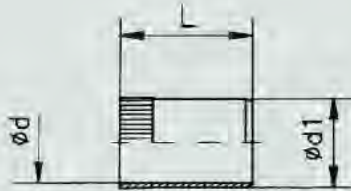
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



TN80

Op aanvraag leverbaar



TN 80

- Anello di rinforzo
- Verstärkungshülse
- Pipe inserts
- Bague de renforcement

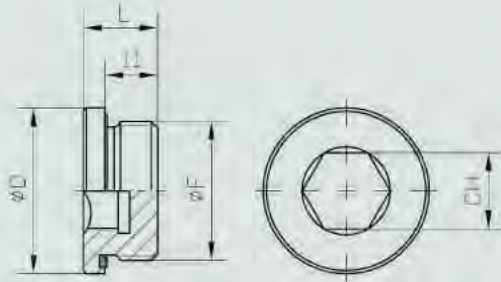
Ø ester. x spess. Rohr a Ø u wands Pipe diam. x thick. Ø Tube x épaisseur	Ø interno tubo Rohr innen Ø Tube Ø int. - Pipe ID	Ø d	Ø d1	L	Simbolo di ordinazione Bestell-Nr. Part. No. Références
6 x 1	4	2,6	3,8	15,5	TN 80 - 6 x 1
6 x 0,5	5	3,6	4,8	12,5	TN 80 - 6 x 0,5
8 x 1	6	4,6	5,8	15,5	TN 80 - 8 x 1
10 x 1,5	7	5,6	6,8	17	TN 80 - 10 x 1,5
10 x 1	8	6,6	7,8	16,5	TN 80 - 10 x 1
12 x 1,5	9	7,6	8,8	16,5	TN 80 - 12 x 1,5
12 x 1	10	8,6	9,8	16,5	TN 80 - 12 x 1
15 x 1,5	12	10,2	11,8	17	TN 80 - 15 x 1,5
15 x 1	13	11,2	12,8	17	TN 80 - 15 x 1
18 x 1,5	15	13,2	14,8	17,5	TN 80 - 18 x 1,5
18 x 1	16	14,2	15,8	17,5	TN 80 - 18 x 1
20 x 1	18	16,2	17,8	22	TN 80 - 20 x 1
22 x 1,5	19	17,2	18,8	18	TN 80 - 22 x 1,5
22 x 1	20	18,2	19,8	18	TN 80 - 22 x 1
25 x 1,5	22	20,2	21,8	23,5	TN 80 - 25 x 1,5
28 x 2	24	22,2	23,8	18	TN 80 - 28 x 2
28 x 1,5	25	23,2	24,8	18	TN 80 - 28 x 1,5
35 x 2	31	28,8	30,8	22,5	TN 80 - 35 x 2
42 x 2	38	35,8	37,8	23,5	TN 80 - 42 x 2

- Normalmente previste in magazzino le misure in neretto
- Die Masse in Fettdruck sind normalerweise verfügbare
- The measurements in bold type are normally expected to be in stock
- Les dimensions indiquées en caractère gras sont normalement prévues en stock

Mat. OT58 - UNI4838

PLUG

Plug met zeskant



PLUG

- Plug met zeskant
- Verschlussstopfen mit innensechskant
- Inner hexagon plug Packing ring
- Bouchon cylindriques a hexagone interne joint en caoutchouc

Filettatura:
Gas cilindrica
Metrica cilindrica

Einschraubgewinde:
Whitworth-Rohrgewinde zylindrisch
Metrisches Feingewinde zylindrisch

Thread:
B.S.P. parallel
Metric parallel

Filetage:
Gaz cylindrique
Métrique cylindrique

Ø F	Ø D	H	L	CH	MT Nm		Simbolo di ordinazione Bestell-Nr. Part. No. Références	PE	Peso Gewicht Weight Poids kg.×100 P.
10 x 1	14	8	12	5	10		PLUG M10X 1	400	0,7
12 x 1,5	17	12	17	6	20		PLUG M12X1.5		1,4
14 x 1,5	19	12	17	6	30		PLUG M14X1.5		2,0
16 x 1,5	22	12	17	8	35		PLUG M16X1.5		2,5
18 x 1,5	24	12	17	8	40		PLUG M18X1.5		3,2
20 x 1,5	26	14	19	10	50		PLUG M20X1.5		4,2
22 x 1,5	27	14	19	10	60		PLUG M22X1.5		5,1
26 x 1,5	32	16	21	12	70		PLUG M26X1.5		7,8
27 x 2	32	16	21	12	90		PLUG M27X2		7,9
33 x 2	40	16	22,5	17	140		PLUG M33X2		13,0
42 x 2	50	16	22,5	22	240		PLUG M42X2	250	19,8
48 x 2	55	16	22,5	24	300		PLUG M48X2		26,3

Ø F	Ø D	H	L	CH	MT Nm		Simbolo di ordinazione Bestell-Nr. Part. No. Références	PE	Peso Gewicht Weight Poids kg.×100 P.
1/8"	14	8	12	5	10		PLUG 1/8	400	0,7
1/4"	19	12	17	6	30		PLUG 1/4		1,8
3/8"	22	12	17	8	35		PLUG 3/8		2,7
1/2"	27	14	19	10	60		PLUG 1/2		4,5
3/4"	32	16	21	12	90		PLUG 3/4		7,1
1"	40	16	22,5	17	140		PLUG 1		13,3
1" 1/4	50	16	22,5	22	240		PLUG 1 1/4	250	20,1
1" 1/2	55	16	22,5	24	300		PLUG 1 1/2		25,9



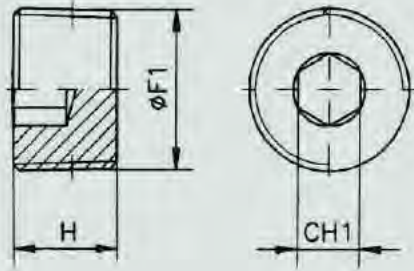
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



PLUG NPT

Plug npt met zeskant



PLUG NPT

- Plug met zeskant taps toelopen
- Verschlussstopfen mit Innensechskant
- Inner hexagon plug
- Bouchon coniques à hexagone interne

Filettatura:
Gas conica
NPT

Einschraubgewinde:
Whitworth-Rohrgewinde kegelig
NPT

Thread:
B.S.P. taper
NPT

Filetage:
Gaz conique
NPT

Ø F1	H	CH1	Simbolo di ordinazione Bestell-Nr. Part. No. Références
1/16"	7,9	5/32"	PLUG 1/16NPT
1/8"	7,9	3/16"	PLUG 1/8NPT
1/4"	11,1	1/4"	PLUG 1/4NPT
3/8"	12,7	5/16"	PLUG 5/16NPT
1/2"	14,3	3/8"	PLUG 3/8NPT
3/4"	15,9	9/16"	PLUG 3/4NPT
1"	19	5/8"	PLUG 1NPT
1"1/4	20,6	3/4"	PLUG 1 1/4NPT
1"1/2	20,6	1"	PLUG 1 1/2NPT

VMK

Voormontage koppeling



VMK

- Voormontage koppeling
- Vormontagegestutzen
- Pre-assembly adaptor
- Bloc de pre-sertissage

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	Simbolo di ordinazione Bestell-Nr. Part. No. Références
LL	4	VMK 4LL
	5	VMK 5LL
	6	VMK 6LL
	8	VMK 8LL
L	6	VMK 6L
	8	VMK 8L
	10	VMK10L
	12	VMK12L
	15	VMK15L
	18	VMK18L
	22	VMK22L
	28	VMK28L
	35	VMK35L
42	VMK42L	
S	6	VMK 6S
	8	VMK 8S
	10	VMK10S
	12	VMK12S
	14	VMK14S
	16	VMK16S
	20	VMK20S
	25	VMK25S
	30	VMK30S
38	VMK38S	

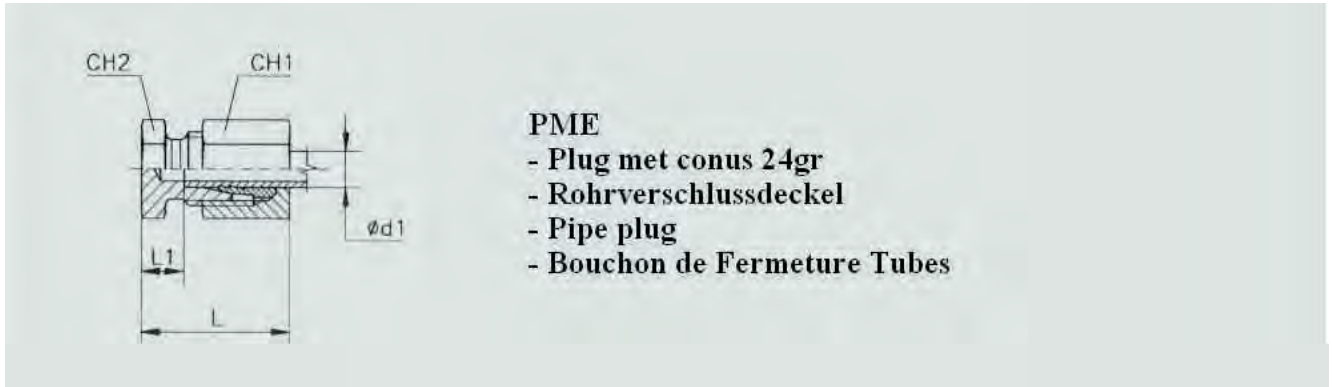


RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



PME Plug



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d_1	PN	L	L1	CH1	CH2		Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.x100 P.
L	6	315	22	7	14	12		PME 6L	2,0
	8		23	8	17	14		PME 8L	2,8
	10		24	9	19	17		PME10L	3,8
	12		25	10	22	19		PME12L	5,0
	15		26	11	27	24		PME15L	8,3
	18		28	11,5	32	27		PME18L	12,0
	22	160	30	13,5	36	32		PME22L	16,5
	28		31	14,5	41	41		PME28L	22,5
	35		36	14,5	50	46		PME35L	35,0
	42		39	16	60	55		PME42L	52,0
S	6	630	26	11	17	14		PME 6S	3,5
	8		28	13	19	17		PME 8S	4,8
	10		29	12,5	22	19		PME10S	6,5
	12		31	14,5	24	22		PME12S	8,5
	14		34	16	27	24		PME14S	11,5
	16	400	34	15,5	30	27		PME16S	14,0
	20		39	17,5	36	32		PME20S	22,8
	25		44	20	46	41		PME25S	43,0
	30		47	20,5	50	46		PME30S	52,0
	38		315	54	23	60	55		PME38S

Stop Stop met oring



Serie Reihe Series Série	Ø Tubo Rohr Ø Pipe Ø Ø Tube Ø D	PN	L	O-Ring * (Shore A ca. 90)	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	18,5	4 x 1,5	STOP 6L	0,6
	8		18,5	6 x 1,5	STOP 8L	0,9
	10		20	7,5 x 1,5	STOP10L	1,4
	12		20,5	9 x 1,5	STOP12L	1,9
	15		20,5	12 x 2	STOP15L	3,2
	18		22,5	15 x 2	STOP18L	6,2
	22	160	25	20 x 2	STOP22L	10,0
	28		25,5	26 x 2	STOP28L	15,0
	35		30	32 x 2,5	STOP35L	25,3
	42		30	38 x 2,5	STOP42L	36,0
S	6	630	18,5	4 x 1,5	STOP 6S	0,6
	8		18,5	6 x 1,5	STOP 8S	0,9
	10		20	7,5 x 1,5	STOP10S	1,4
	12		20,5	9 x 1,5	STOP12S	1,9
	14		22,5	10 x 2	STOP14S	2,7
	16	400	23,5	12 x 2	STOP16S	4,5
	20		28,5	16,3 x 2,4	STOP20S	7,8
	25		29	20,3 x 2,4	STOP25S	12,0
	30		30,5	25,3 x 2,4	STOP30S	18,0
	38		315	33	33,3 x 2,4	STOP38S



RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



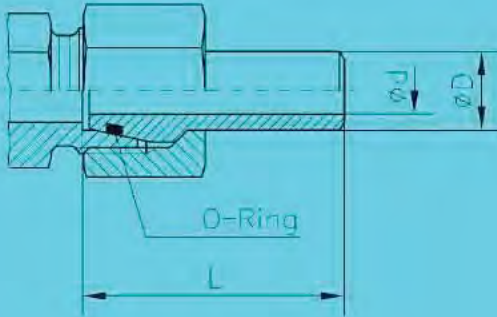
- Le ogive a saldare TN 299B sono realizzate secondo la normativa DIN 3865 forma A e vengono abbinare ai raccordi e dadi Rastelli della serie S per diametri dal Ø 10 al Ø 38. L'anello O-Ring è generalmente in NBR (Perbunan) idoneo per temperature da -35°C a +100°C. Per temperature superiori e fluidi particolari (a base di acidi fosfoesteri) si impiegano anelli O-Ring in FPM (Viton) forniti su specifica richiesta e idonei per temperature -25° a +120°C.
- Die Schweiß-Dichtkegel TN 299B sind nach DIN 3865 Form A hergestellt und werden mit Rastelli-Anschlußstücken und Muttern der S-Serie kombiniert, für Durchmesser von Ø10 bis Ø38. Der O-Ring ist normalerweise aus NBR (Perbunan) und für Temperaturen von -35°C bis +100°C geeignet. Für höhere Temperaturen und besondere Flüssigkeiten (auf der Grundlage von Phosphorsäureestern) werden O-Ring aus FPM (Viton) verwendet, die auf Anfrage lieferbar sind und für Temperaturen von -25° bis +120°C geeignet.
- Welding nipples for TN 299B couplings are manufactured to A-type DIN 3865 standards. They are used in conjunction with Rastelli couplings and nuts from the S series for diameters ranging from Ø10 to Ø38. The O-ring is generally made from NBR (Perbunan) which is ideal for temperatures ranging from -35°C to +100°C. For higher temperatures and special fluids (phosphorus-ester acid-based fluids), use FPM O-Rings (Viton) which are supplied on special request only which is ideal for temperatures ranging from -25° to +120°C.
- Les ogives à souder TN 299B sont réalisées suivant DIN 3865 forme A et sont associées aux raccords et aux écrous Rastelli de la série S pour diamètres de Ø10 au Ø38. Le joint torique est généralement en NBR (Perbunan) convenant à des températures de -35°C à +100°C. Pour des températures supérieures et des fluides particuliers (à base d'acides phosphore-esters) on utilise des joints toriques en FPM (Viton) livrés sur demande convenant à des températures de -25° à +120°C.

MONTAGGIO SUL CORPO DEL RACCORDO MONTAGE IN VERSCHRAUBUNGSSTUTZEN CONNECTION TO THE BODY OF THE UNION MONTAGE SUR LE CORPS DU RACCORD

- 1) Oleare il filetto del dado TN 81, la guarnizione O-Ring ed il filetto del raccordo.
 - Den Gewinde der Mutter TN 81, O-Ring Gummidichtung und das Verschraubungsgewinde einölen.
 - Oil the thread of the nut TN 81, O-Ring seal and the thread of the union.
 - Huiler le filetage de l'écrou TN 81, joint O-Ring ainsi que le filetage du raccord.
- 2) Inserire il cono 24° del TN 299 nella sede conica 24° del raccordo e serrare manualmente il dado TN 81 fino al totale avvitamento.
 - Den Konus 24° von TN 299 in der Verschraubung Konus 24° einführen und die Mutter TN 81 von Hand vollständig anziehen.
 - Insert the taperes 24° of TN 299 into the tapered seat 24° of the union and fully tighten the nut TN 81 by hand.
 - Introduir le cône 24° du TN 299 dans le cône 24° du raccord et serrer manuellement l'écrou TN 81 jusqu'au serrage complet.
- 3) Serrare il dado TN 81 da ¼ a ½ giro.
 - Die Mutter TN 81 um ¼ + ½ Umdrehungen anziehen.
 - Tighten the nut TN 81 by ¼ to ½ turn.
 - Serrer l'écrou TN 81 de ¼ à ½ tour.

SNO

Lasnippel met oring



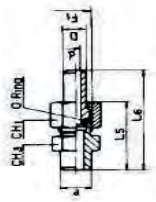
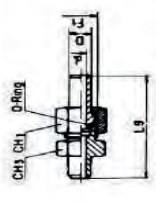
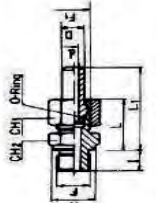
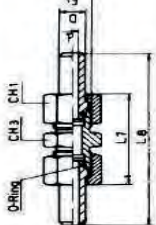
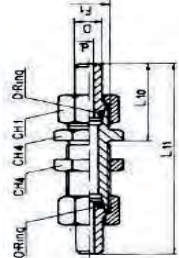
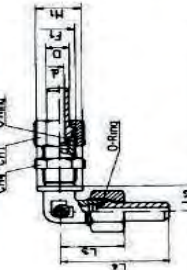
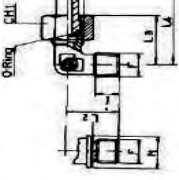
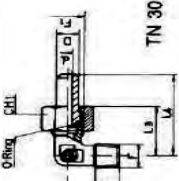
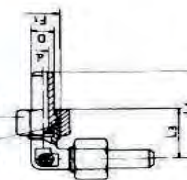
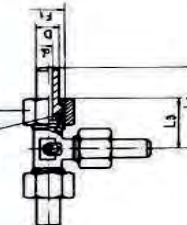
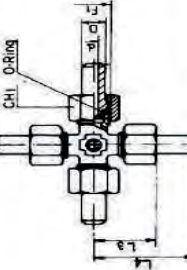
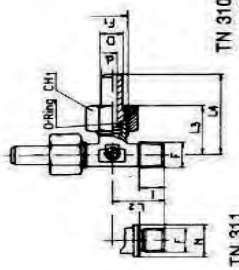
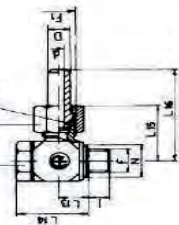
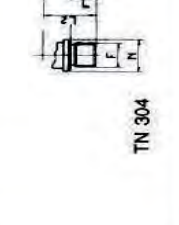
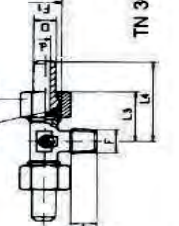

SNO

- Lasnippel met O-ring
- Schweissnippel mit O-ring Abdichtung
- Welding nipples with O-ring seal
- Embout à souder avec O-ring

Serie	Ø Tubo Rohr Ø Pipe Ø Ø Tube	PN	Ø Tubo e spessore Rohr Ø x Wandst Pipe Ø x thickness Ø Tube x épaisseur mm	Ø D	Ø d	L	O-Ring * (Shore A ca 90)	Simbolo di ordinazione Bestell-Nr Part. No. Références	Peso Gewicht Weight Poids kg. x 100 P.
L/S	10	315	10 x 1,5	10	7	33,5	7,5 x 1,5	SNO10L	1,3
	10	400	10 x 2	10	6	33,5	7,5 x 1,5	SNO10S	1,4
	12	315	12 X 1,5	12	9	33,5	9 x 1,5	SNO12L	2,1
	12	400	12 X 2	12	8	33,5	9 x 1,5	SNO12X2S	2,0
	12	630	12 x 2,5	12	7	33,5	9 x 1,5	SNO12S	2,1
L	15	315	15 x 2,5	15	10	35	12 x 2	SNO15L	3,1
	18	315	18 x 2,5	18	13	37	15 x 2	SNO18L	4,0
	22	160	22 x 2,5	22	17	39,5	20 x 2	SNO22L	5,7
	28	160	28 x 2,5	28	23	42,5	26 x 2	SNO28L	7,3
	35	160	35 x 3	35	29	49,5	32 x 2,5	SNO35L	13,0
	42	160	42 x 3	42	36	50	38 x 2,5	SNO42L	15,5
S	14	400	14 x 3	14	8	40	10 x 2	SNO14S	3,0
	16	250	16 x 2	16	12	40,5	12 x 2	SNO16X2S	3,1
	16	315	16 x 2,5	16	11	40,5	12 x 2	SNO16X2,5S	3,8
	16	400	16 x 3	16	10	40,5	12 x 2	SNO16S	3,8
	20	250	20 x 2,5	20	15	47	16,3 x 2,4	SNO20X2,5S	5,7
	20	315	20 x 3	20	14	47	16,3 x 2,4	SNO20X3S	6,4
	20	400	20 x 4	20	12	47	16,3 x 2,4	SNO20S	7,2
	25	250	25 x 3	25	19	53,5	20,3 x 2,4	SNO25X3S	8,9
	25	315	25 x 4	25	17	53,5	20,3 x 2,4	SNO25X4S	11,4
	25	400	25 x 5	25	15	53,5	20,3 x 2,4	SNO25S	12,5
	30	160	30 x 3	30	24	57,5	25,3 x 2,4	SNO30X3S	11,3
	30	250	30 x 4	30	22	57,5	25,3 x 2,4	SNO30X4S	14,1
	30	315	30 x 5	30	20	57,5	25,3 x 2,4	SNO30S	16,4
	30	315	30 x 6	30	18	57,5	20,3 x 2,4	SNO30X6S	18,8
	38	160	38 x 3	38	32	64,5	33,3 x 2,4	SNO38X3S	16,3
	38	250	38 x 5	38	28	64,5	33,3 x 2,4	SNO38X5S	24,7
38	315	38 x 6	38	26	64,5	33,3 x 2,4	SNO38S	27,0	
38	315	38 x 7	38	24	64,5	33,3 x 2,4	SNO38X7S	30,4	

TN300

Op aanvraag leverbaar

	<p>TN 313</p> <p>Giunzione di estremità saldabile Schweißbare Endarmatur Soldered terminal fitting Raccord d'extrémité soudable</p>		<p>TN 317</p> <p>Giunzione diretta saldabile Gerade Schweissarmatur Straight soldered fitting Raccord droit soudable</p>		<p>TN 300 RIM</p> <p>Giunzione di estremità dritta Gerade Endarmatur Straight terminal fitting Raccord d'extrémité droit</p>		<p>TN 305</p> <p>Giunzione intermedia dritta Gerade Zwischenarmatur Straight intermediate fitting Raccord intermédiaire droit</p>
	<p>TN 314</p> <p>Giunzione di attraversamento dritta Gerade Durchgangsarmatur Straight bulkhead fitting Raccord passant droit</p>		<p>TN 316</p> <p>Giunzione di attraversamento a gomito Gebogene Durchgangsarmatur Bulkhead elbow Raccord passant coude</p>		<p>TN 302 RIM</p> <p>Giunzione di estremità gomito Gebogene Endarmatur Terminal elbow Raccord d'extrémité coude</p>		<p>TN 301 RIM/NPT</p> <p>Giunzione di estremità a gomito Gebogene Endarmatur Terminal elbow Raccord d'extrémité coude</p>
	<p>TN 306</p> <p>Giunzione intermedia gomito Gebogene Zwischenarmatur Intermediate elbow Raccord intermédiaire coude</p>		<p>TN 307</p> <p>Giunzione intermedia a Tee T-Zwischenarmatur Intermediate Tee Raccord intermédiaire à Tee</p>		<p>TN 308</p> <p>Giunzione intermedia a croce Kreuz-Zwischenarmatur Intermediate cross Raccord intermédiaire à croix</p>		<p>TN 310 TN 311</p> <p>Giunzione di estremità a L L-Endarmatur Terminal bend Raccord d'extrémité à L</p>
	<p>TN 309 RIM</p> <p>Giunzione snodata Gelenkarmatur Hinged fitting Raccord à rotule</p>		<p>TN 304 RIM</p> <p>Giunzione di estremità a Tee T-Endarmatur Terminal Tee Raccord d'extrémité à Tee</p>		<p>TN 303 RIM/NPT</p> <p>Giunzione di estremità a Tee T-Endarmatur Terminal Tee Raccord d'extrémité à Tee</p>		<p>TN 310 TN 311</p> <p>Giunzione di estremità a L L-Endarmatur Terminal bend Raccord d'extrémité à L</p>

Ø Tube Rohr AD Tube O.D. Ø Tube DIN 2391	D	d	F1	F (M)	F (NPT)	CH2		CH3	CH4	CH7	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13		L14		L15		L16		N		N1	e	DISPONIBILITÀ - VERFÜGBARKEIT AVAILABILITY - A-DISPOSITION															
						M	R																	M	R	M	R	M	R	M	R	M	R			M	R	M	R	M	R	M	R	M	R	M	R	M	R	M	R
10x2	10	6	18x1,5	18x1,5	3/8"	22	22	19	24	24	33	57	26	26	69	41	51	62	100	65	56	143	20	18	35,5	36,5	63,5	12	21	22	24	16	•	•	•	•															
12x2,5	12	7	20x1,5	19x1,5	3/8"	24	24	22	22	27	24	35	59	31	29	65	42	55	63	101	65	56	144	21	19,5	18	42,5	38,5	37	36,5	61	59,5	12	22	22	27	17	•	•	•	•										
14x3	14	8	22x1,5	20x1,5	1/2"	27	27	24	30	27	38	64	32	41	67	46	74	60	112	70	65	156	23	20,5	21	45,5	41	67	14	26	26	27	19	•	•	•	•														
16x3	16	10	24x1,5	22x1,5	1/2"	30	27	27	32	27	38	67	32	44	75	46	77	61	119	75	67	163	24	22,5	21	48,5	45,5	43	41	72	70	14	27	26	30	21	•	•	•	•											
20x4	20	12	30x2	27x2	3/4"	36	32	32	41	32	44	77	42	50	85	53	57	71	157	85	74	191	25	28,5	28	51	52	85	16	32	36	26	•	•	•	•															
25x4	25	17	36x2	33x2	1"	46	41	41	46	41	48	84	42	55	91	57	55	76	148	95	81	193	34	31	68	56	92	18	39	42	31	•	•	•	•																
30x5	30	20	42x2	42x2	1 1/4"	60	60	46	60	60	53	92	54	65	114	65	108	87	186	106	92	224	39	35	36,5	79	66	115	20	49	60	36	•	•	•	•															
36x6	36	26	52x2	49x2	1 1/2"	60	66	55	66	55	56	107	61	71	122	65	118	90	192	120	102	236	42	41	41,5	90	71	122	22	55	60	44	•	•	•	•															

▪ **Natura della filettatura di estremità:**
 R = Gas cilindrica
 M = Metrica cilindrica
 NPT = ANSI/ASME
 B.1.20.1 (1983)

▪ **Beschaffenheit des Gewindeendes:**
 R = Whitworth-Rohrgewinde zylindrisch
 M = Metrisches Feingewinde zylindrisch
 NPT = ANSI/ASME
 B.1.20.1 (1983)

• **Nature of the end thread:**
 R = B.S.P. parallel
 M = Metric parallel
 NPT = ANSI/ASME
 B.1.20.1 (1983)

• **Type du filetage à l'extrémité:**
 R = Gaz cylindrique
 M = Métrique cylindrique
 NPT = ANSI/ASME
 B.1.20.1 (1983)



HYDRAULIEK SNIJRINGKOPPELINGEN



VU

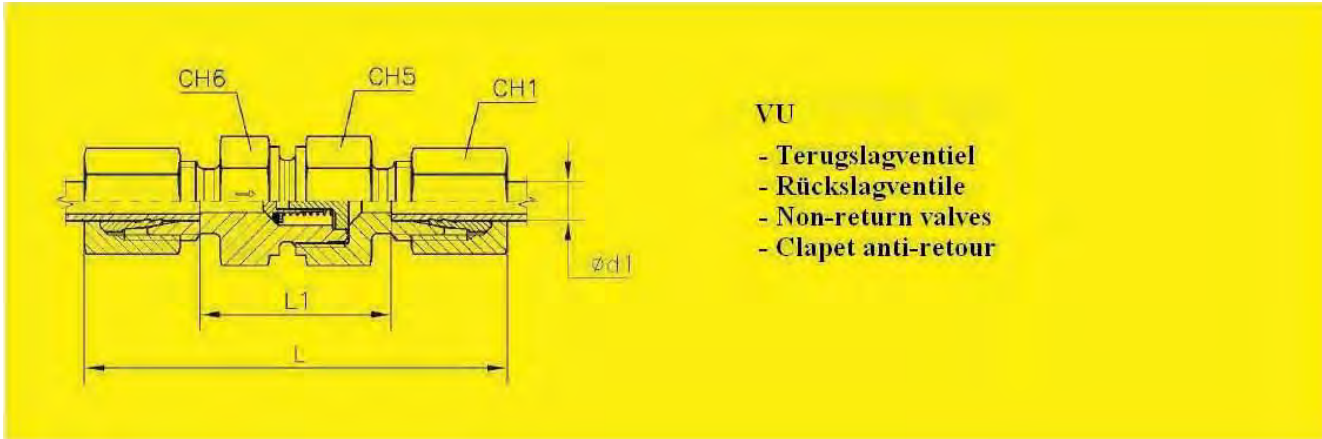
- Valvole di ritegno
- Rückschlagventile
- Non-return valves
- Clapet anti-retour

- Le valvole di ritegno semplici trovano impiego là dove il fluido ha corso unico e va mantenuto in pressione nell'ambiente utilizzatore (separandolo dalla fonte alimentatrice) dal quale esce poi per altra via.
Le nostre valvole di ritegno sono studiate in funzione delle particolari caratteristiche dei vari fluidi ed il loro perfetto funzionamento è garantito anche nelle più severe condizioni di esercizio dall'accuratissima lavorazione, dalla scelta dei materiali più adatti per i singoli organi e dal loro particolare trattamento termico, che li rende resistentissimi all'usura.
- Pressione di collaudo = PE x 1,3. Perdita della valvola di ritegno durante il collaudo idraulico con pressione di prova uguale alla pressione di esercizio ammissibile = 1 goccia in un tempo di prova di 1 minuto.
Velocità del flusso max 8 m/sec. Impieghi: Olii idraulici - liquidi idraulici non infiammabili.
- Die einfachen Rückschlagventile werden dort verwendet wo die Flüssigkeit eine einzige Laufrichtung hat oder an der Verbrauchsstelle Druck zu halten ist (der von der Speisequelle abzuschneiden ist), von wo er über andere Wege abläuft.
Unsere Rückschlagventile sind in Funktion den besonderen Charakteristiken der verschiedenen Flüssigkeiten angepasst und ihr perfektes Funktionieren ist garantiert. Auch unter den schwierigsten Betriebsbedingungen. Dies ist möglich durch sorgfältige Verarbeitung jedes einzelnen Teiles der Ventile.
- Prüfdruck = PE x 1,3. Zulässige Leckage des Rückschlagventils bei Hydraulikprüfung mit Prüfdruck gleich Betriebsdruck: 1 Tropfen in der Prüfzeit von 1 Minute.
Fließgeschwindigkeit max 8 m/sec. Anwendungen: Hydrauliköle, nicht-entzündliche - Hydraulikflüssigkeiten
- The simple check valves are used where the fluid has a unique flowing direction and when it is kept under pressure in the using environment (by separating it from the feed source) from which it subsequently comes out by another path.
Our check valves have been designed according to the special characteristics of the various fluids.
We guarantee their perfect operation in the most severe service conditions, thanks to very careful machining, selection of the materials more convenient for individual parts and thanks to their special thermal treatment which give them a high wear resistance.
- Test pressure = PE x 1,3. Check value leakage during hydraulic testing with test pressure equal to permissible operating pressure: 1 drop in test time of 1 minute
Max flow rate 8 m/sec. Applications: hydraulic oils and non flammable hydraulic liquids.
- Le clapet anti-retour simples sont employés là où le fluide à une direction d'écoulement unique et lorsqu'il est maintenu sous pression dans le milieu d'utilisation (en le séparant de la source d'alimentation) d'où il sort successivement par un autre voie.
Nos clapet anti-retour ont été étudiées en fonction des caractéristiques particulières des différents fluides.
Nous garantissons leur fonctionnement parfait dans les conditions de service les plus rigoureuses, grâce à l'usinage très soigné, au choix des matériaux les plus adaptés pour les pièces individuelles, et à leur traitement thermique particulier, qui les rend très résistantes à l'usage.
- Les données = PE x 1,3. Fuite au clapet anti-retour lors de l'essai hydraulique avec pression d'essai égale à la pression d'utilisation tolérée: 1 goutte dans un temps d'essai de 1 minute.
Vitesse de débit maximum 8 m/sec. Utilisations: huiles hydrauliques - liquides hydrauliques non inflammables.

TARATURE SPECIALI - SONDEREICHUNGEN - SPECIAL CALIBRATION - CALIBRAGES SPECIAUX

0,5 BAR ± 20%	6L + 42L	6S + 38S
2 BAR ± 20%	6L + 42L	6S + 38S
2,5 BAR ± 20%	28L + 35L + 42L	30S + 38S
3 BAR ± 20%	6L + 22L	6S + 25S

VU Terugslagklep metrisch



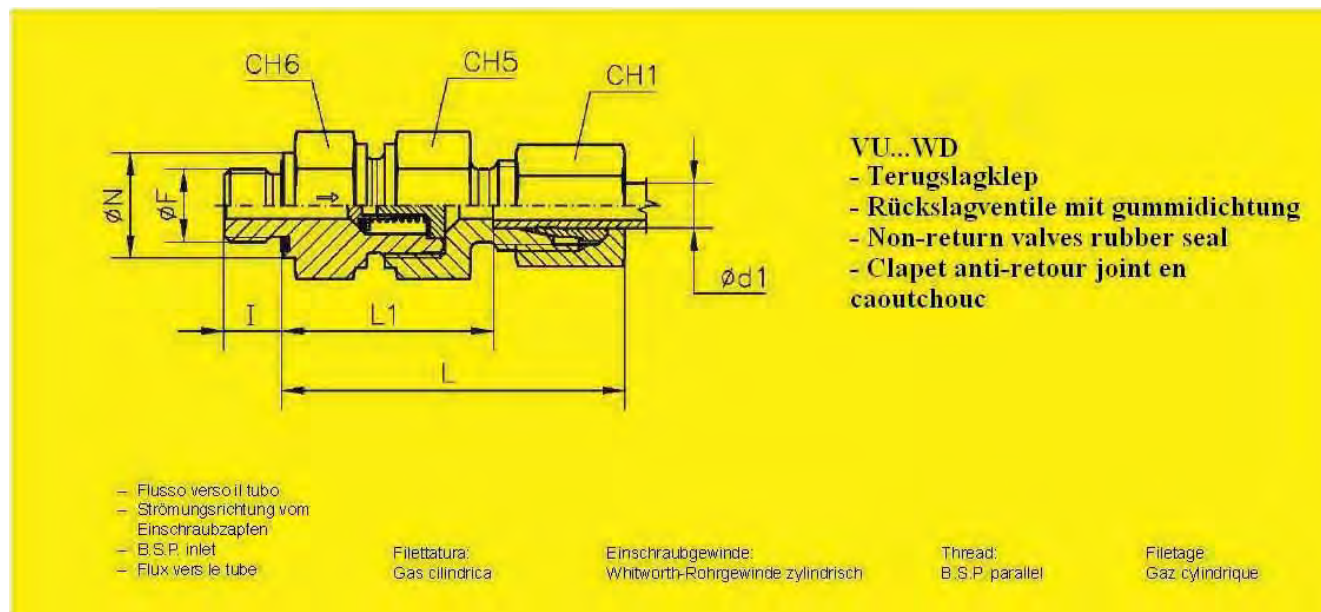
Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	L	L1	CH1	CH5	CH6	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg. x100 P.
L	6	250	58	29	14	17	17	VU 6L	6,6
	8		59	30	17	19	19	VU 8L	8,5
	10		69,5	40,5	19	24	22	VU10L	14,5
	12		72,5	43,5	22	30	27	VU12L	22,0
	15		77,5	47,5	27	32	27	VU15L	28,0
	18	160	83,5	51,5	32	36	36	VU18L	42,0
	22		93,5	61,5	36	46	41	VU22L	63,5
	28	100	102,5	69,5	41	55	50	VU28L	93,0
	35		117,5	74,5	50	60	60	VU35L	130,5
	42		119	74	60	70	65	VU42L	200,0
S	6	400	63,5	34,5	17	19	19	VU 6S	10,5
	8		63,5	34,5	19	19	19	VU 8S	11,5
	10		72,5	40,5	22	24	22	VU10S	18,2
	12		74,5	42,5	24	27	24	VU12S	21,5
	14		82,5	47,5	27	32	27	VU14S	31,0
	16		86,5	50,5	30	36	32	VU16S	42,0
	20		97,5	54,5	36	46	41	VU20S	72,0
	25	250	106,5	58,5	46	50	46	VU25S	108,0
	30		122,5	69,5	50	60	60	VU30S	156,0
	38		136,5	75,5	60	70	65	VU38S	233,0

– Le dimensioni di ingombro si intendono a raccordo chiuso.
 – Baumaße sind ca.-Maße bei angezogener Überwurfmutter.
 – Pressione di apertura 1 BAR ± 20%
 – Öffnungsdruck 1 BAR ± 20%

– Overall sizes are with closed fitting.
 – Les dimensions d'encombrement s'entendent raccord monté.
 – Opening pressure 1 BAR ± 20%
 – Pression d'ouverture 1 BAR ± 20%

VU...WD

Terugslag ventiel met rubber afdichting

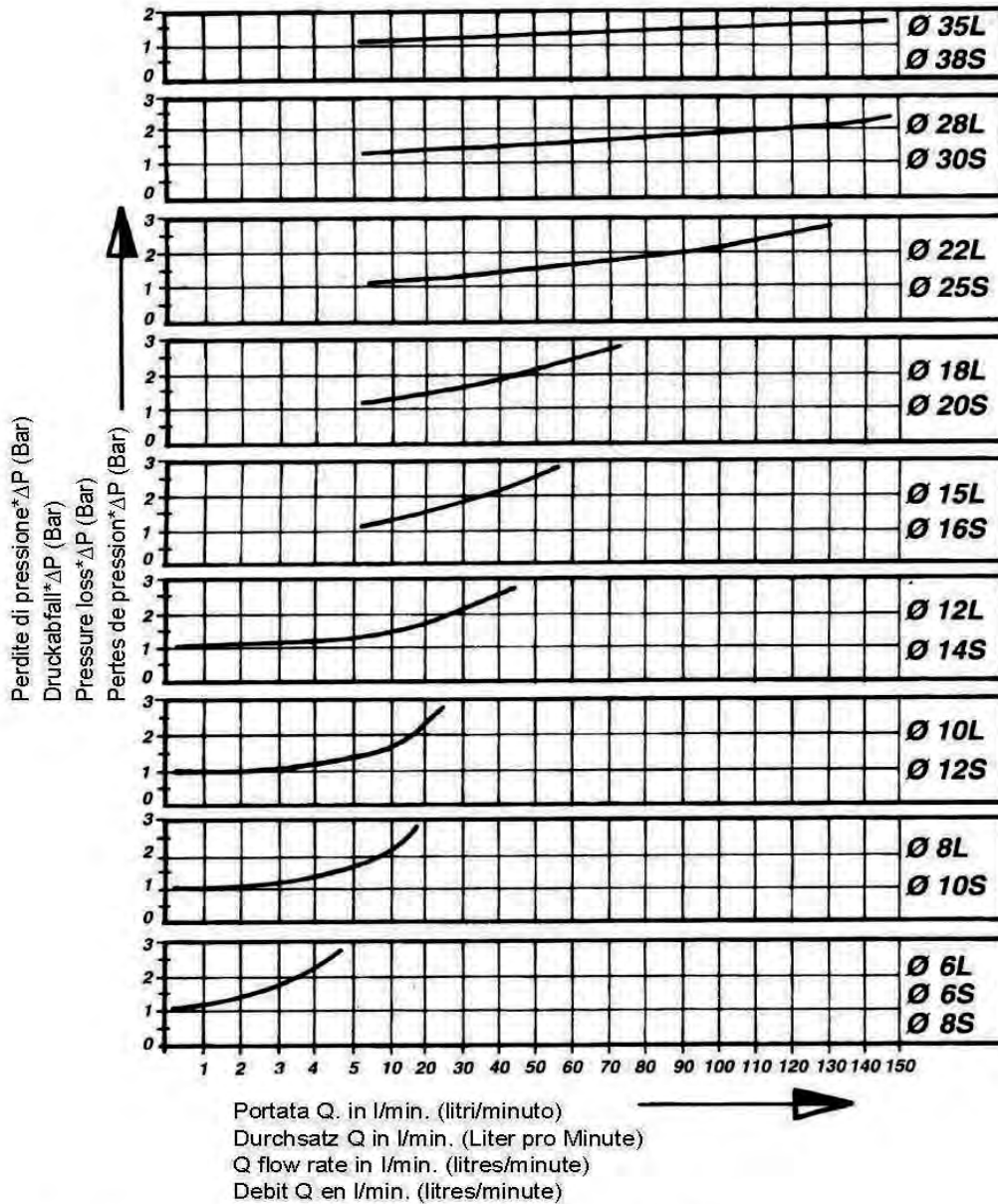


Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	Ø F	Ø N	I	L1	L	CH1	CH5	CH6	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.×100 P.
L	6	250	1/8"	14	8	28	42,5	14	17	17	VU6LR 1/8WD	5,5
	8		1/4"	19	12	30	44,5	17	19	19	VU8LR 1/4WD	8,0
	10		1/4"	19	12	38,5	53	19	24	22	VU10LR 1/4WD	12,5
	12		3/8"	22	12	42,5	57	22	30	27	VU12LR 3/8WD	20,0
	15		1/2"	27	14	45,5	60,5	27	32	27	VU15LR 1/2WD	25,0
	18	160	1/2"	27	14	50	66	32	36	36	VU18LR 1/2WD	35,6
	22		3/4"	32	16	55	71	36	46	41	VU22LR 3/4WD	53,0
	28	100	1"	40	18	63	79,5	41	55	50	VU28LR 1WD	80,5
	35		1" 1/4	50	20	69	90,5	50	60	60	VU35LR 1 1/4WD	115,2
42	1" 1/2		55	22	68,5	91	60	70	65	VU42LR 1 1/2WD	179,0	
S	6	400	1/4"	19	12	31,5	46	17	19	19	VU6SR 1/4WD	9,1
	8		1/4"	19	12	31,5	46	19	19	19	VU8SR 1/4WD	9,5
	10		3/8"	22	12	38	54	22	24	22	VU10SR 3/8WD	15,5
	12		3/8"	22	12	41	57	24	27	24	VU12SR 3/8WD	19,0
	14		1/2"	27	14	44,5	62	27	32	27	VU14SR 1/2WD	27,0
	16		1/2"	27	14	48	66	30	36	32	VU16SR 1/2WD	36,5
	20		3/4"	32	16	52	73,5	36	46	41	VU20SR 3/4WD	62,5
	25	250	1"	40	18	54,5	78,5	46	50	46	VU25SR 1WD	86,5
	30		1" 1/4	50	20	64	90,5	50	60	60	VU30SR 1 1/4WD	140,5
	38		1" 1/2	55	22	69,5	100	60	70	65	VU38SR 1 1/2WD	195,2

- Le dimensioni di ingombro si intendono a raccordo chiuso.
 - Baumaße sind ca.-Maße bei angezogener Überwurfmutter.
 - Pressione di apertura 1 BAR ± 20%
 - Öffnungsdruck 1 BAR ± 20%

- Overall sizes are with closed fitting.
 - Les dimensions d'encombrement s'entendent raccord monté.
 - Opening pressure 1 BAR ± 20%
 - Pression d'ouverture 1 BAR ± 20%

PERDITE DI CARICO - ENERGIEGEFÄLLE LOAD LOSS - PERTES DE CHARGE



- * Misurato con olio idraulico (viscosità cinematica) 33CST \approx 4,5° e a 55°C
- ** Valori misurati su TN 106, possono essere usati anche per TN 107 e TN 108. Pressione di apertura 1 Bar.
- * Gemessen mit Hydrauliköl (kinematische Viskosität) 33CST \approx 4,5° und bei 55°C
- ** An TN 106 gemessene Werte können auch für TN 107 und TN 108 verwendet werden. Öffnungsdruck 1 Bar.
- * Measured using hydraulic oil (kinematic viscosity) 33CST \approx 4,5° and at 55°C
- ** Values calculated for coupling TN 106 are also valid for TN 107 and TN 108 couplings. Cracking pressure 1 Bar.
- * Mesuré avec huile hydraulique (viscosité cinématique) 33CST \approx 4,5° et à 55°C
- ** Valeurs mesurées sur TN 106: elles peuvent être utilisées même pour TN 107 et TN 108. Pression d'ouverture 1 Bar.



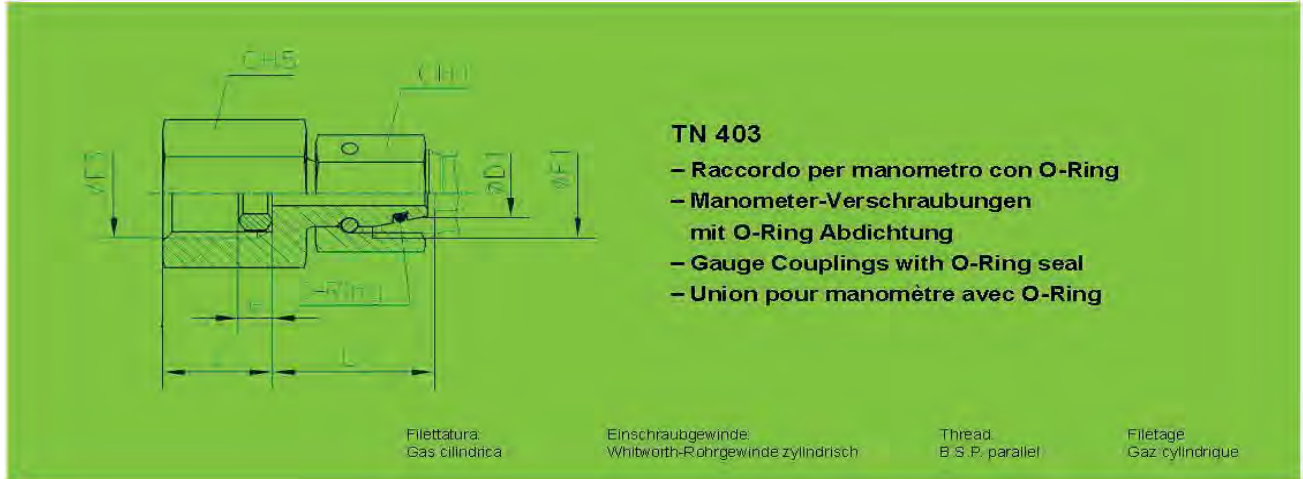
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



TN 403

Manometerkoppeling



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	Ø F3	Ø F1	L1	CH1	CH5	e *	l	* O-Ring (Shore A ca 90)	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.x100 P.
L	6	315	1/4"	12x1,5	21	14	19	4,5	14,5	4x1,5	TN 403 - 6 L	4,9
	8		1/4"	14x1,5	21,5	17	19	4,5	14,5	6x1,5	TN 403 - 8 L	5,3
	10		1/4"	16x1,5	22	19	19	4,5	14,5	7,5x1,5	TN 403 - 10 L	6,0
	12		1/4"	18x1,5	22	22	19	4,5	14,5	9,5x1,5	TN 403 - 12 L	6,8
S	6	630	1/2"	14x1,5	23	17	27	5	20	4x1,5	TN 403 - 6 S	10,5
	8		1/2"	16x1,5	23,5	19	27	5	20	6x1,5	TN 403 - 8 S	10,5
	10		1/2"	18x1,5	23,5	22	27	5	20	7,5x1,5	TN 403 - 10 S	12,0
	12		1/2"	20x1,5	25	24	27	5	20	9x1,5	TN 403 - 12 S	12,8

– Le dimensioni di ingombro si intendono a raccordo chiuso.
– Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

– Overall sizes are with closed fitting.
– Les dimensions d'encadrement s'entendent raccord monté.

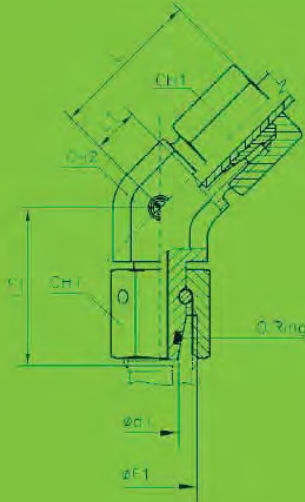
* Anello di tenuta con spigolo di incisione • Dichtring mit Einschnittkante • Seal ring with cutting ring • Joint d'étanchéité avec profil d'étanchéité

*

- Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta): NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch): NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order): NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande): NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C

EWS...45

Instelbare 45 graden koppeling



EWS...45

- Instelbare 45 graden koppeling
- Einstelbare Verschraubung 45gr mit O-ring
- Swivel Elbows with O-ring Seal
- 45gr renversé orientable avec O-ring

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	L ≈	L1	L2	Ø F1	CH1	CH2	* O-Ring (Shore A ca 90)	Simbolo di ordinazione Bestell-Nr Part No. Références	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	24,5	9,5	26	12 x 1,5	14	14	4 x 1,5	EWS 6L45	4,3
	8		27	12	27,5	14 x 1,5	17	14	6 x 1,5	EWS 8L45	5,7
	10		27	12	29	16 x 1,5	19	19	7,5 x 1,5	EWS 10L45	7,3
	12		29	14	29,5	18 x 1,5	22	19	9 x 1,5	EWS 12L45	10,0
	15		32	17	32,5	22 x 1,5	27	22	12 x 2	EWS 15L45	16,8
	18		33	17	35,5	26 x 1,5	32	27	15 x 2	EWS 18L45	24,1
	22	160	35,5	19,5	38,5	30 x 2	36	33	20 x 2	EWS 22L45	42,1
	28		39	23	41,5	36 x 2	41	41	26 x 2	EWS 28L45	55,9
	35		48	27	51	45 x 2	50	48	32 x 2,5	EWS 35L45	67,8
	42		49	26	56	52 x 2	60	48	38 x 2,5	EWS 42L45	75,9
S	6	630	26	11	27	14 x 1,5	17	14	4 x 1,5	EWS 6S45	6,4
	8		28	13	27,5	16 x 1,5	19	19	6 x 1,5	EWS 8S45	8,4
	10		29	13	30	18 x 1,5	22	19	7,5 x 1,5	EWS 10S45	11,5
	12		33	17	31	20 x 1,5	24	22	9 x 1,5	EWS 12S45	15,4
	16	400	34	16	36,5	24 x 1,5	30	27	12 x 2	EWS 16S45	22,4
	20		40	19	44,5	30 x 2	36	33	16,3 x 2,4	EWS 20S45	33,1
	25		46	22	50	36 x 2	46	41	20,3 x 2,4	EWS 25S45	68,5
	30		50	24	55	42 x 2	50	48	25,3 x 2,4	EWS 30S45	75,2
	38		315	55	24	63	52 x 2	60	48	33,3 x 2,4	EWS 38S45



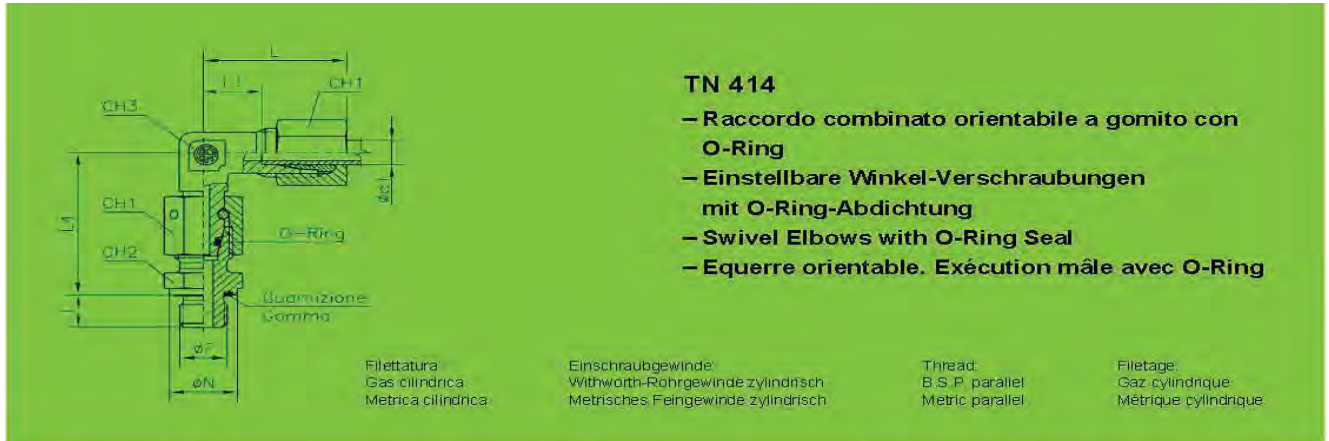
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



TN 414

Instelbare haakse koppeling met o-ring



Forma E DIN 3852 Foglio 11

Form E DIN 3852 Teil 11

Type E DIN 3852 Part 11

Forme E DIN 3852 Partie 11

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	I	L	L1	L4	CH1	CH3	R				Peso Gewicht Poids kg x100 P.	M				Peso Gewicht Poids kg x100 P.	
									CH2	Ø F	Ø N	Simbolo di ordinazione Bestell-Nr Part. No. Références		CH2	Ø F	Ø N	I		Simbolo di ordinazione Bestell-Nr Part. No. Références
L	6	315	8	27	12	34,5	14	12	14	1/8"	14	TN 414 - 6 LR	5,3	14	10 x 1	14	8	TN 414 - 6 LM	5,3
	8		12	29	14	37,5	17	12	19	1/4"	19	TN 414 - 8 LR	8,2	17	12 x 1,5	17	12	TN 414 - 8 LM	7,5
	10		12	30	15	40	19	14	19	1/4"	19	TN 414 - 10 LR	9,8	19	14 x 1,5	19	12	TN 414 - 10 LM	10,0
	12		12	32	17	42	22	17	22	3/8"	22	TN 414 - 12 LR	13,7	22	16 x 1,5	22	12	TN 414 - 12 LM	13,5
	15		14	36	21	46	27	19	27	1/2"	27	TN 414 - 15 LR	23,7	24	18 x 1,5	24	12	TN 414 - 15 LM	21,5
	18		14	40	23,5	50	32	24	27	1/2"	27	TN 414 - 18 LR	30,5	27	22 x 1,5	27	14	TN 414 - 18 LM	31,0
	22	160	16	44	27,5	53	36	27	32	3/4"	32	TN 414 - 22 LR	43,0	32	26 x 1,5	32	16	TN 414 - 22 LM	43,0
	28		18	47	30,5	59	41	36	41	1"	40	TN 414 - 28 LR	69,5	41	33 x 2	40	18	TN 414 - 28 LM	69,2
	35		20	56	34,5	68,5	50	41	50	1" 1/4	50	TN 414 - 35 LR	95,5	50	42 x 2	50	20	TN 414 - 35 LM	97,0
	42		22	63	40	75	60	50	55	1" 1/2	55	TN 414 - 42 LR	142,5	55	48 x 2	55	22	TN 414 - 42 LM	143,5
S	6	630	12	31	16	40	17	12	19	1/4"	19	TN 414 - 6 SR	9,7	17	12 x 1,5	17	12	TN 414 - 6 SM	9,0
	8		12	32	17	42,5	19	14	19	1/4"	19	TN 414 - 8 SR	11,5	19	14 x 1,5	19	12	TN 414 - 8 SM	11,5
	10		12	34	17,5	45	22	17	22	3/8"	22	TN 414 - 10 SR	16,8	22	16 x 1,5	22	12	TN 414 - 10 SM	16,7
	12		12	38	21,5	48	24	17	22	3/8"	22	TN 414 - 12 SR	20,3	24	18 x 1,5	24	12	TN 414 - 12 SM	21,0
	14		14	40	22	54	27	19	27	1/2"	27	TN 414 - 14 SR	29,0	27	20 x 1,5	26	14	TN 414 - 14 SM	28,5
	16		400	14	43	24,5	55	30	24	27	1/2"	27	TN 414 - 16 SR	35,0	27	22 x 1,5	27	14	TN 414 - 16 SM
	20	16		48	26,5	65	36	27	32	3/4"	32	TN 414 - 20 SR	55,0	32	27 x 2	32	16	TN 414 - 20 SM	55,3
	25	18		54	30	73	46	36	41	1"	40	TN 414 - 25 SR	102,0	41	33 x 2	40	18	TN 414 - 25 SM	101,5
	30	20		62	35,5	78,5	50	41	50	1" 1/4	50	TN 414 - 30 SR	138,0	50	42 x 2	50	20	TN 414 - 30 SM	138,5
	38	315	22	72	41	89	60	50	55	1" 1/2	55	TN 414 - 38 SR	199,0	55	48 x 2	55	22	TN 414 - 38 SM	199,5

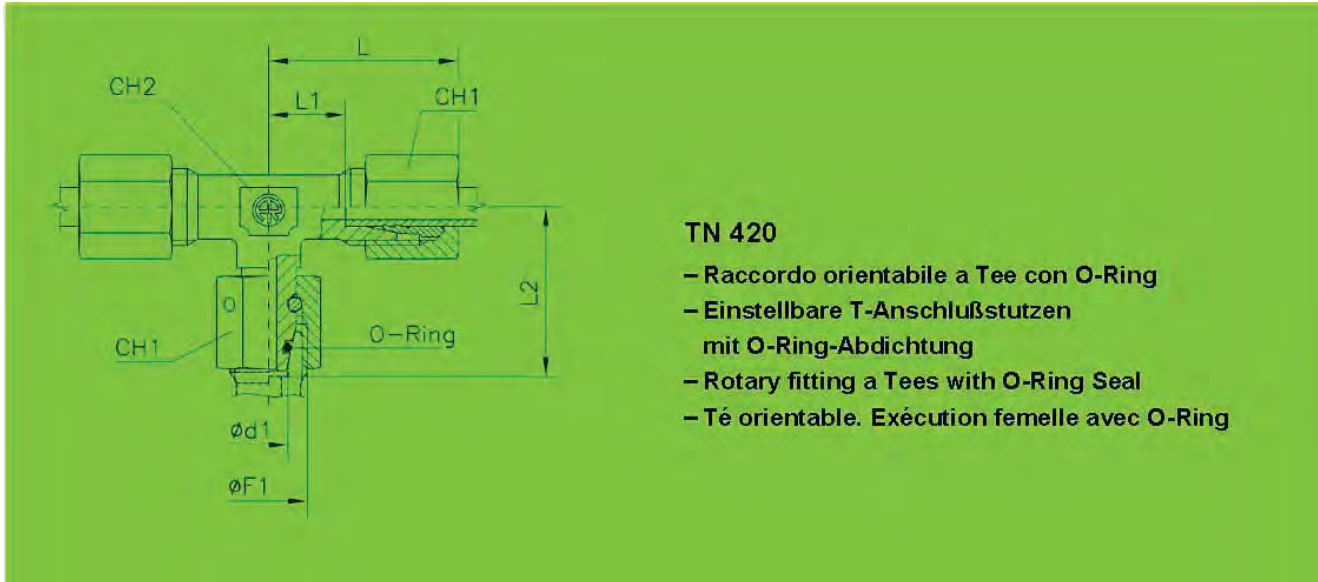
– Le dimensioni di ingombro si intendono a raccordo chiuso.
– Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

– Overall sizes are with closed fitting.
– Les dimensions d'encombrement s'entendent raccord monté.

- Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring Gummidichtung aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints caoutchouc O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C

EWS...WD

Instelbare haakse koppeling met O-ring afdichting. Standaard NBR.



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L	L1	L2	Ø F1	CH1	CH2	O-Ring * (Shore A ca.90)	Simbolo di ordinazione Bestell-Nr Part. No. Références	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	27	12	26	12 x 1,5	14	12	4 x 1,5	FWS 6LWD	4,0
	8		29	14	27,5	14 x 1,5	17	12	6 x 1,5	FWS 8LWD	5,5
	10		30	15	29	16 x 1,5	19	14	7,5 x 1,5	FWS 10LWD	7,0
	12		32	17	29,5	18 x 1,5	22	17	9 x 1,5	FWS 12LWD	9,5
	15		36	21	32,5	22 x 1,5	27	19	12 x 2	FWS 15LWD	16,5
	18		40	23,5	35,5	26 x 1,5	32	24	15 x 2	FWS 18LWD	23,5
	22	160	44	27,5	38,5	30 x 2	36	27	20 x 2	FWS 22LWD	32,5
	28		47	30,5	41,5	36 x 2	41	36	26 x 2	FWS 28LWD	52,5
	35		56	34,5	51	45 x 2	50	41	32 x 2,5	FWS 35LWD	69,0
	42		63	40	56	52 x 2	60	50	38 x 2,5	FWS 42LWD	105,0
S	6	630	31	16	27	14 x 1,5	17	12	4 x 1,5	FWS 6S	6,2
	8		32	17	27,5	16 x 1,5	19	14	6 x 1,5	FWS 8S	7,5
	10		34	17,5	30	18 x 1,5	22	17	7,5 x 1,5	FWS 10S	11,3
	12		38	21,5	31	20 x 1,5	24	17	9 x 1,5	FWS 12S	14,0
	14		40	22	35	22 x 1,5	27	19	10 x 2	FWS 14S	19,5
	16	400	43	24,5	36,5	24 x 1,5	30	24	12 x 2	FWS 16S	26,0
	20		48	26,5	44,5	30 x 2	36	27	16,3 x 2,4	FWS 20S	40,5
	25		54	30	50	36 x 2	46	36	20,3 x 2,4	FWS 25S	75,0
	30		62	35,5	55	42 x 2	50	41	25,3 x 2,4	FWS 30S	96,5
	38		315	72	41	63	52 x 2	60	50	33,3 x 2,4	FWS 38S



HYDRAULIEK SNIJRINGKOPPELINGEN



TN 415

Instelbare T koppeling met O-ring afdichting. Standaard NBR.



Forma E DIN 3852 Foglio 11

Form E DIN 3852 Teil 11

Type E DIN 3852 Part 11

Forme E DIN 3852 Partie 11

Serie Reine Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	I	L	L1	L4	CH1	CH3	CH2	Ø F	Ø N	R		Peso Gewicht Weight Poids kg.x100 P.	M				Peso Gewicht Weight Poids kg.x100 P.
												Simbolo di ordinazione Bestell-Nr. Part. No. Références			Simbolo di ordinazione Bestell-Nr. Part. No. Références				
L	6	315	8	27	12	34,5	14	12	14	1/8"	14	TN 415 - 6 LR	7,1	14	10 x 1	14	8	TN 415 - 6 LM	7,2
	8		12	29	14	37,5	17	12	19	1/4"	19	TN 415 - 8 LR	10,6	17	12 x 1,5	17	12	TN 415 - 8 LM	10,0
	10		12	30	15	40	19	14	19	1/4"	19	TN 415 - 10 LR	13,0	19	14 x 1,5	19	12	TN 415 - 10 LM	13,0
	12		12	32	17	42	22	17	22	3/8"	22	TN 415 - 12 LR	17,5	22	16 x 1,5	22	12	TN 415 - 12 LM	17,5
	15		14	36	21	46	27	19	27	1/2"	27	TN 415 - 15 LR	30,5	24	18 x 1,5	24	12	TN 415 - 15 LM	28,3
	18		14	40	23,5	50	32	24	27	1/2"	27	TN 415 - 18 LR	40,3	27	22 x 1,5	27	14	TN 415 - 18 LM	40,5
	22	160	16	44	27,5	55	36	27	32	3/4"	32	TN 415 - 22 LR	55,0	32	26 x 1,5	32	16	TN 415 - 22 LM	55,0
	28		18	47	30,5	59	41	36	41	1"	40	TN 415 - 28 LR	87,0	41	33 x 2	40	18	TN 415 - 28 LM	87,0
	35		20	56	34,5	68,5	50	41	50	1" 1/4	50	TN 415 - 35 LR	123,5	50	42 x 2	50	20	TN 415 - 35 LM	124,0
	42		22	63	40	75	60	50	55	1" 1/2	55	TN 415 - 42 LR	181,0	55	48 x 2	55	22	TN 415 - 42 LM	182,0
S	6	630	12	31	16	40	17	12	19	1/4"	19	TN 415 - 6 SR	12,2	17	12 x 1,5	17	12	TN 415 - 6 SM	11,5
	8		12	32	17	42,5	19	14	19	1/4"	19	TN 415 - 8 SR	16,0	19	14 x 1,5	19	12	TN 415 - 8 SM	16,0
	10		12	34	17,5	45	22	17	22	3/8"	22	TN 415 - 10 SR	22,0	22	16 x 1,5	22	12	TN 415 - 10 SM	21,7
	12		12	38	21,5	48	24	17	22	3/8"	22	TN 415 - 12 SR	27,0	24	18 x 1,5	24	12	TN 415 - 12 SM	28,0
	14	14	40	22	54	27	19	27	1/2"	27	TN 415 - 14 SR	37,7	27	20 x 1,5	26	14	TN 415 - 14 SM	37,5	
	16	400	14	43	24,5	55	30	24	27	1/2"	27	TN 415 - 16 SR	45,5	27	22 x 1,5	27	14	TN 415 - 16 SM	47,0
	20		16	48	26,5	65	36	27	32	3/4"	32	TN 415 - 20 SR	72,0	32	27 x 2	32	16	TN 415 - 20 SM	72,0
	25		18	54	30	73	46	36	41	1"	40	TN 415 - 25 SR	134,5	41	33 x 2	40	18	TN 415 - 25 SM	134,5
	30		20	62	35,5	78,5	50	41	50	1" 1/4	50	TN 415 - 30 SR	178,0	50	42 x 2	50	20	TN 415 - 30 SM	178,5
	38	315	22	72	41	89	60	50	55	1" 1/2	55	TN 415 - 38 SR	260,0	55	48 x 2	55	22	TN 415 - 38 SM	260,5

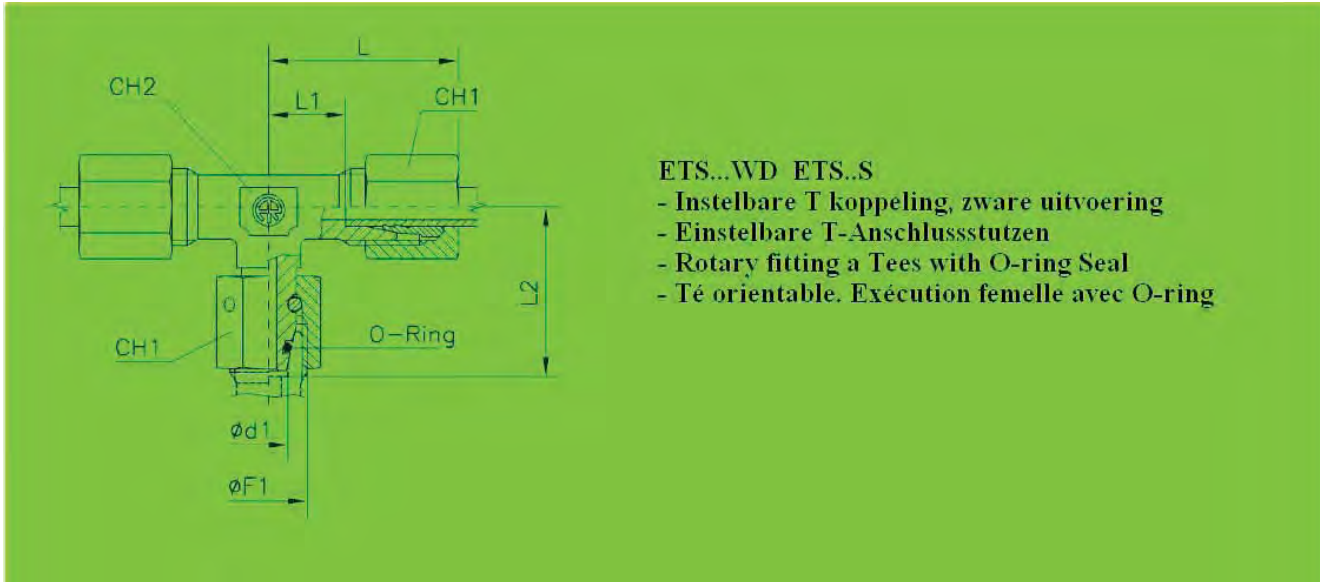
- Le dimensioni di ingombro si intendono a raccordo chiuso.
- Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

- Overall sizes are with closed fitting.
- Les dimensions d'encombrement s'entendent raccord monté.

- Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring e le guarnizioni gomma in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring Gummidichtung aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring and seals in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring et le joints caoutchouc en NBR (de série) et FPM (sur demande): NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C

ETS...WD/ETS..S

Instelbare T-koppeling, zware uitvoering



ETS...WD ETS..S

- Instelbare T koppeling, zware uitvoering
- Einstelbare T-Anschlusstutzen
- Rotary fitting a Tees with O-ring Seal
- Té orientable. Exécution femelle avec O-ring

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube ø _t	PN	L	L1	L2	ØF1	CH1	CH2	O-Ring * (Shore A ca. 90)	Simbolo di ordinazione Bestell-Nr Part No Références	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	27	12	26	12 x 1,5	14	12	4 x 1,5	ETS 6LWD	5,8
	8		29	14	27,5	14 x 1,5	17	12	6 x 1,5	ETS 8LWD	7,9
	10		30	15	29	16 x 1,5	19	14	7,5 x 1,5	ETS10LWD	10,0
	12		32	17	29,5	18 x 1,5	22	17	9 x 1,5	ETS12LWD	13,5
	15		36	21	32,5	22 x 1,5	27	19	12 x 2	ETS15LWD	23,3
	18		40	23,5	35,5	26 x 1,5	32	24	15 x 2	ETS18LWD	32,2
	22	160	44	27,5	38,5	30 x 2	36	27	20 x 2	ETS22LWD	44,5
	28		47	30,5	41,5	36 x 2	41	36	26 x 2	ETS28LWD	70,0
	35		56	34,5	51	45 x 2	50	41	32 x 2,5	ETS35LWD	96,0
	42		63	40	56	52 x 2	60	50	38 x 2,5	ETS42LWD	146,0
S	6	630	31	16	27	14 x 1,5	17	12	4 x 1,5	ETS 6S	8,7
	8		32	17	27,5	16 x 1,5	19	14	6 x 1,5	ETS 8S	11,8
	10		34	17,5	30	18 x 1,5	22	17	7,5 x 1,5	ETS10S	16,3
	12		38	21,5	31	20 x 1,5	24	17	9 x 1,5	ETS12S	20,5
	14		40	22	35	22 x 1,5	27	19	10 x 2	ETS14S	28,0
	16	400	43	24,5	36,5	24 x 1,5	30	24	12 x 2	ETS16S	37,3
	20		48	26,5	44,5	30 x 2	36	27	16,3 x 2,4	ETS20S	57,0
	25		54	30	50	36 x 2	46	36	20,3 x 2,4	ETS25S	108,0
	30		62	35,5	55	42 x 2	50	41	25,3 x 2,4	ETS30S	136,5
	38		315	72	41	63	52 x 2	60	50	33,3 x 2,4	ETS38S



RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



TN 416

Instelbare L-koppeling met O-ring afdichting. O-ring in NBR.

TN 416

- Raccordo combinato orientabile a L con O-Ring
- Einstellbare L-Verschraubungen mit O-Ring-Abdichtung
- Swivel Barrel Tees with O-Ring Seal
- Té renversé orientable. Exécution mâle avec O-Ring

Filettatura: Gas cilindrica / Metrica cilindrica
Einschraubgewinde: Withworth-Rohrgewinde zylindrisch / Metrisches Feingewinde zylindrisch
Thread: B.S.P. parallel / Metric parallel
Filetage: Gaz cylindrique / Métrique cylindrique

Forma E DIN 3852 Foglio 11

Form E DIN 3852 Teil 11

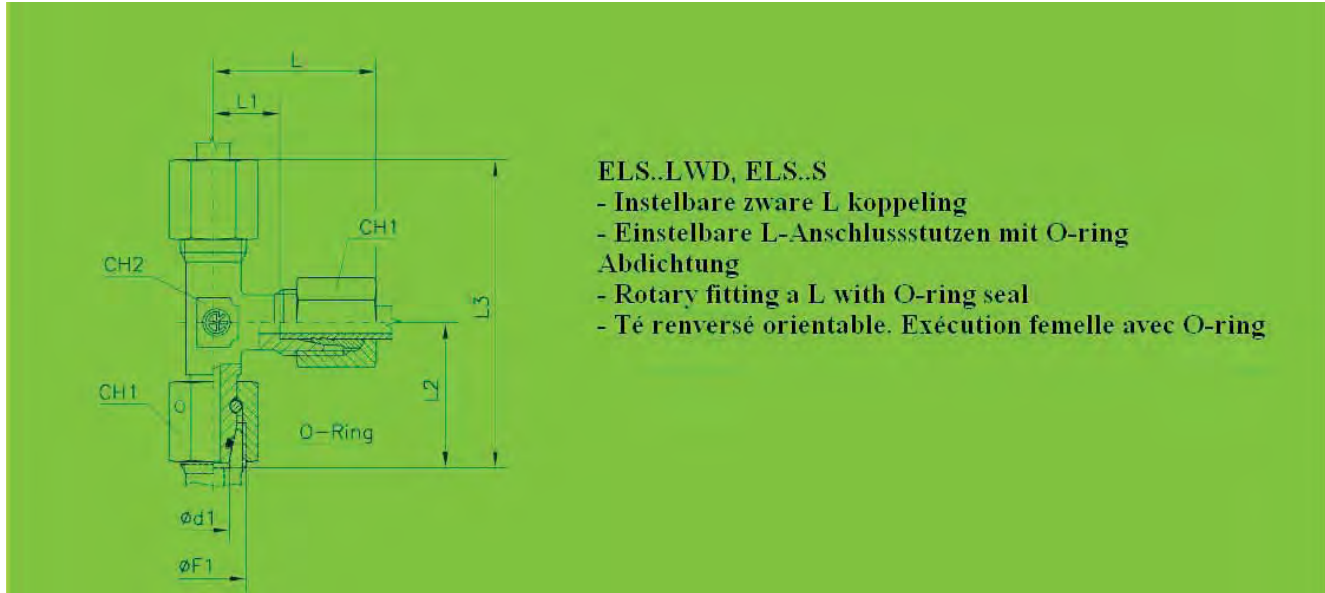
Type E DIN 3852 Part 11

Forme E DIN 3852 Partie 11

Serie Reihe Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	I	L	L1	L3	CH1	CH3	R				Peso Gewicht Weight Poids kg.x100 P.	M				Peso Gewicht Weight Poids kg.x100 P.	
									CH2	Ø F	Ø N	Simbolo di ordinazione Bestell-Nr. Part. No. Références		CH2	Ø F	Ø N	I		Simbolo di ordinazione Bestell-Nr. Part. No. Références
L	6	315	8	27	12	61,5	14	12	14	1/8"	14	TN 416 - 6 LR	7,1	14	10 x 1	14	8	TN 416 - 6 LM	7,0
	8		12	29	14	66,5	17	12	19	1/4"	19	TN 416 - 8 LR	10,5	17	12 x 1,5	17	12	TN 416 - 8 LM	10,0
	10		12	30	15	70	19	14	19	1/4"	19	TN 416 - 10 LR	12,7	19	14 x 1,5	19	12	TN 416 - 10 LM	12,7
	12		12	32	17	74	22	17	22	3/8"	22	TN 416 - 12 LR	17,5	22	16 x 1,5	22	12	TN 416 - 12 LM	17,5
	15		14	36	21	82	27	19	27	1/2"	27	TN 416 - 15 LR	30,5	24	18 x 1,5	24	12	TN 416 - 15 LM	28,3
	18		14	40	23,5	90	32	24	27	1/2"	27	TN 416 - 18 LR	40,3	27	22 x 1,5	27	14	TN 416 - 18 LM	40,5
	22	160	16	44	27,5	99	36	27	32	3/4"	32	TN 416 - 22 LR	54,5	32	26 x 1,5	32	16	TN 416 - 22 LM	54,5
	28		18	47	30,5	106	41	36	41	1"	40	TN 416 - 28 LR	87,2	41	33 x 2	40	18	TN 416 - 28 LM	87,0
	35		20	56	34,5	124,5	50	41	50	1" 1/4	50	TN 416 - 35 LR	121,5	50	42 x 2	50	20	TN 416 - 35 LM	121,5
	42		22	63	40	138	60	50	55	1" 1/2	55	TN 416 - 42 LR	180,5	55	48 x 2	55	22	TN 416 - 42 LM	182,0
S	6	630	12	31	16	71	17	12	19	1/4"	19	TN 416 - 6 SR	12,6	17	12 x 1,5	17	12	TN 416 - 6 SM	12,0
	8		12	32	17	74,5	19	14	19	1/4"	19	TN 416 - 8 SR	16,0	19	14 x 1,5	19	12	TN 416 - 8 SM	16,0
	10		12	34	17,5	79	22	17	22	3/8"	22	TN 416 - 10 SR	22,0	22	16 x 1,5	22	12	TN 416 - 10 SM	21,8
	12		12	38	21,5	86	24	17	22	3/8"	22	TN 416 - 12 SR	27,0	24	18 x 1,5	24	12	TN 416 - 12 SM	27,8
	14		14	40	22	94	27	19	27	1/2"	27	TN 416 - 14 SR	37,7	27	20 x 1,5	26	14	TN 416 - 14 SM	37,5
	16	400	14	43	24,5	98	30	24	27	1/2"	27	TN 416 - 16 SR	47,5	27	22 x 1,5	27	14	TN 416 - 16 SM	48,0
	20		16	48	26,5	113	36	27	32	3/4"	32	TN 416 - 20 SR	73,0	32	27 x 2	32	16	TN 416 - 20 SM	73,5
	25		18	54	30	127	46	36	41	1"	40	TN 416 - 25 SR	134,5	41	33 x 2	40	18	TN 416 - 25 SM	134,5
	30		20	62	35,5	140,5	50	41	50	1" 1/4	50	TN 416 - 30 SR	180,0	50	42 x 2	50	20	TN 416 - 30 SM	180,0
	38		315	22	72	41	161	60	50	55	1" 1/2	55	TN 416 - 38 SR	261,5	55	48 x 2	55	22	TN 416 - 38 SM

ELS...WD, ELS..S

Instelbare zware L-Koppeling. Met O-ring in NBR.



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	L	L1	L2	L3	Ø F1	CH1	CH2	O-Ring * (Shore A ca. 90)	Simbolo di ordinazione Bestell-Nr Part No. Références	Peso Gewicht Weight Poids kg.x100 P.
L	6	315	27	12	26	53	12x 1,5	14	12	4x 1,5	ELS 6LWD	5,8
	8		29	14	27,5	56	14x 1,5	17	12	6x 1,5	ELS 8LWD	7,9
	10		30	15	29	59	16x 1,5	19	14	7,5x 1,5	ELS10LWD	10,0
	12		32	17	29,5	61	18x 1,5	22	17	9x 1,5	ELS12LWD	13,5
	15		36	21	32,5	69	22x 1,5	27	19	12x 2	ELS15LWD	23,3
	18		40	23,5	35,5	75	26x 1,5	32	24	15x 2	ELS18LWD	32,2
	22	160	44	27,5	38,5	82	30x 2	36	27	20x 2	ELS22LWD	44,3
	28		47	30,5	41,5	89	36x 2	41	36	26x 2	ELS28LWD	70,0
	35		56	34,5	51	107	45x 2	50	41	32x 2,5	ELS35LWD	94,5
	42		63	40	56	119	52x 2	60	50	38x 2,5	ELS42LWD	146,5
S	6	630	31	16	27	58	14x 1,5	17	12	4x 1,5	ELS 6S	9,0
	8		32	17	27,5	59	16x 1,5	19	14	6x 1,5	ELS 8S	11,8
	10		34	17,5	30	64	18x 1,5	22	17	7,5x 1,5	ELS10S	16,5
	12		38	21,5	31	69	20x 1,5	24	17	9x 1,5	ELS12S	20,7
	14		40	22	35	75	22x 1,5	27	19	10x 2	ELS14S	28,0
	16	400	43	24,5	36,5	79	24x 1,5	30	24	12x 2	ELS16S	38,2
	20		48	26,5	44,5	93	30x 2	36	27	16,3x 2,4	ELS20S	58,3
	25		54	30	50	104	36x 2	46	36	20,3x 2,4	ELS25S	108,0
	30		62	35,5	55	117	42x 2	50	41	25,3x 2,4	ELS30S	138,0
	38		315	72	41	63	135	52x 2	60	50	33,3x 2,4	ELS38S



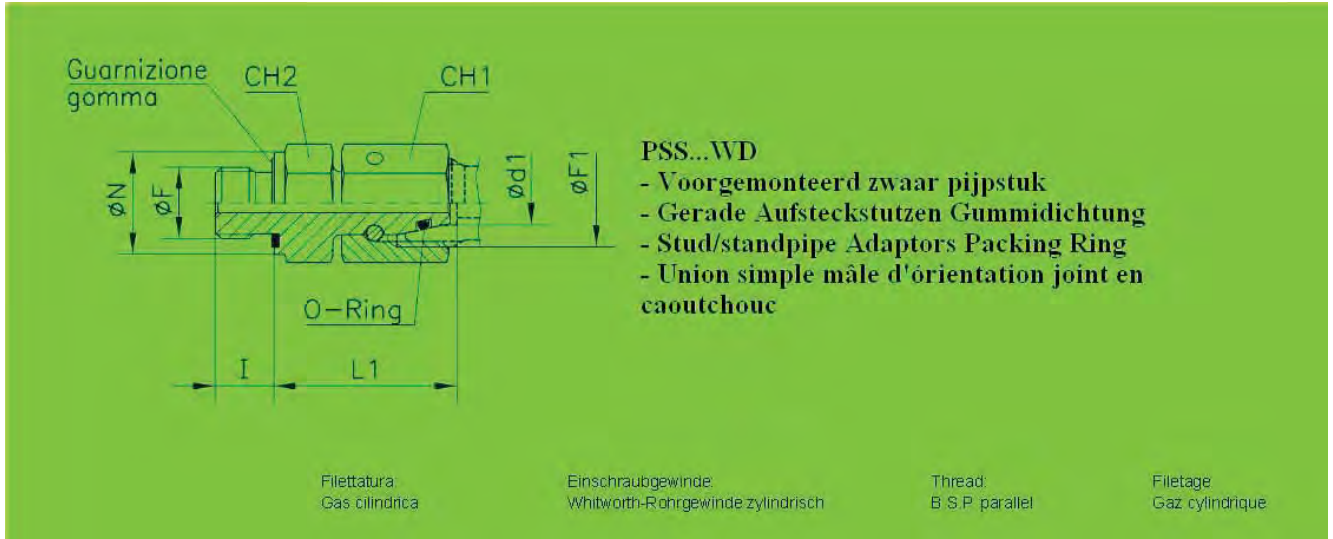
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



PSS...WD

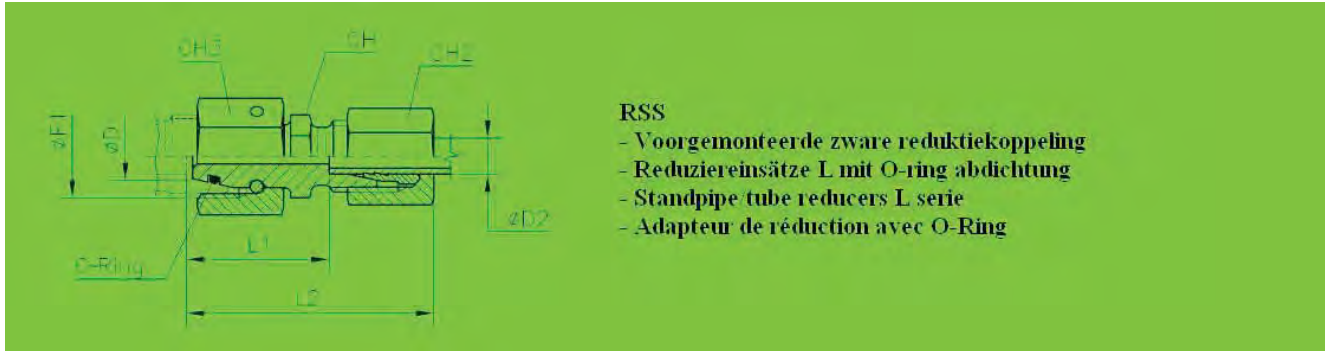
Voorgemonteerd zwaar pijpstuk. Met O-afdichting in NBR.



Serie Reihe Series Série	∅ Tubo Rohr AD Tube O.D. ∅ Tube d ₁	PN	L1	∅ F	I	CH2	∅ N	∅ F1	CH1	O-Ring * (Shore A ca. 90)	Simbolo di ordinazione Bestell-Nr Part. No References	Peso Gewicht Weight Poids kg.×100 P.
L	6	315	24,5	1/8"	8	14	14	12 x 1,5	14	4 x 1,5	PSS 6LRO 1/8	2,5
	8		29,5	1/4"	12	19	19	14 x 1,5	17	6 x 1,5	PSS 8LRO 1/4	4,3
	10		27,5	1/4"	12	19	19	16 x 1,5	19	7,5 x 1,5	PSS10LRO 1/4	4,8
	12		34	3/8"	12	22	22	18 x 1,5	22	9 x 1,5	PSS12LRO 3/8	6,9
	15		32	1/2"	14	27	27	22 x 1,5	27	12 x 2	PSS15LRO 1/2	12,0
	18		31,5	1/2"	14	27	27	26 x 1,5	32	15 x 2	PSS18LRO 1/2	13,5
	22	160	32,5	3/4"	16	32	32	30 x 2	36	20 x 2	PSS22LRO 3/4	19,5
	28		35	1"	18	41	40	36 x 2	41	26 x 2	PSS28LRO 1	36
	35		42,5	1" 1/4	20	50	50	45 x 2	50	32 x 2,5	PSS35LRO 1 1/4	45,5
	42		46,5	1" 1/2	22	55	55	52 x 2	60	38 x 2,5	PSS42LRO 1 1/2	66,0
S	6	630	27	1/4"	12	19	19	14 x 1,5	17	4 x 1,5	PSS 6SR 1/4	4,5
	8		29,5	1/4"	12	19	19	16 x 1,5	19	6 x 1,5	PSS 8SR 1/4	5,0
	10		32	3/8"	12	22	22	18 x 1,5	22	7,5 x 1,5	PSS10SR 3/8	7,5
	12		34	3/8"	12	22	22	20 x 1,5	24	9 x 1,5	PSS12SR 3/8	8,2
	14		36,5	1/2"	14	27	27	22 x 1,5	27	10 x 2	PSS14SR 1/2	12,5
	16	400	37	1/2"	14	27	27	24 x 1,5	30	12 x 2	PSS16SR 1/2	14,5
	20		43	3/4"	16	32	32	30 x 2	36	16,3 x 2,4	PSS20SR 3/4	22,0
	25		48	1"	18	41	40	36 x 2	46	20,3 x 2,4	PSS25SR 1	40,0
	30		51	1" 1/4	20	50	50	42 x 2	50	25,3 x 2,4	PSS30SR 1 1/4	58,0
	38		315	60	1" 1/2	22	55	55	52 x 2	60	33,3 x 2,4	PSS38SR 1 1/2

RSS

Voorgemonteerde zware reductiekoppeling. Met O-ring in NBR.



RSS

- Voorgemonteerde zware reductiekoppeling
- Reduziereinsätze L mit O-ring abdichtung
- Standpipe tube reducers L serie
- Adapteur de réduction avec O-Ring

Serie Reihe Series Série	Ø D1	Ø D2	PN	L1	L2	CH2	CH3	Ø F1	CH	O-Ring* (Shore A ca. 90)	Simbolo di ordinazione Bestell-Nr Part. No. Références	Peso Gewicht Weight Poids kg. x100 P.
S	8	6	630	27	42	17	19	16 x 1,5	14	6 x 1,5	RSS 8-6	3,5
	10	6		27,5	42	17	22	18 x 1,5	17	7,5 x 1,5	RSS10-6	7,1
	10	8		27,5	42	19	22	18 x 1,5	17	7,5 x 1,5	RSS10-8	7,7
	12	6		29	44	17	24	20 x 1,5	17	9 x 1,5	RSS12-6	8,2
	12	8		29	44	19	24	20 x 1,5	17	9 x 1,5	RSS12-8	9,2
	12	10		29,5	46	22	24	20 x 1,5	19	9 x 1,5	RSS12-10	10,7
	14	6		31,5	46	17	27	22 x 1,5	19	10 x 2	RSS14-6	9,1
	14	8		31,5	46	19	27	22 x 1,5	19	10 x 2	RSS14-8	10,0
	14	10		31	47	22	27	22 x 1,5	19	10 x 2	RSS14-10	11,0
	14	12		31	47	24	27	22 x 1,5	22	10 x 2	RSS14-12	12,0
	16	6		32	47	17	30	24 x 1,5	22	12 x 2	RSS16-6	12,6
	16	8		32	47	19	30	24 x 1,5	22	12 x 2	RSS16-8	14,7
	16	10	31,5	48	22	30	24 x 1,5	22	12 x 2	RSS16-10	14,7	
	16	12	31,5	48	24	30	24 x 1,5	22	12 x 2	RSS16-12	15,5	
	16	14	33	51	27	30	24 x 1,5	24	12 x 2	RSS16-14	16,5	
	20	6	36	51	17	36	30 x 2	27	16,3 x 2,4	RSS20-6	19,0	
	20	8	36	51	19	36	30 x 2	27	16,3 x 2,4	RSS20-8	20,5	
	20	10	35,5	52	22	36	30 x 2	27	16,3 x 2,4	RSS20-10	20,5	
	20	12	35,5	52	24	36	30 x 2	27	16,3 x 2,4	RSS20-12	21,5	
	20	14	37	55	27	36	30 x 2	27	16,3 x 2,4	RSS20-14	23,5	
	20	16	36,5	55	30	36	30 x 2	27	16,3 x 2,4	RSS20-16	26,0	
	25	6	38,5	53	17	46	36 x 2	32	20,3 x 2,4	RSS25-6	31,0	
	25	8	38,5	53	19	46	36 x 2	32	20,3 x 2,4	RSS25-8	32,0	
	25	10	38	54	22	46	36 x 2	32	20,3 x 2,4	RSS25-10	33,5	
	25	12	38	54	24	46	36 x 2	32	20,3 x 2,4	RSS25-12	33,5	
	25	14	39,5	57	27	46	36 x 2	32	20,3 x 2,4	RSS25-14	35,0	
	25	16	39	57	30	46	36 x 2	32	20,3 x 2,4	RSS25-16	37,5	
	25	20	39	61	36	46	36 x 2	32	20,3 x 2,4	RSS25-20	43,5	
	30	6	44	59	17	50	42 x 2	41	25,3 x 2,4	RSS30-6	43,0	
	30	8	44	59	19	50	42 x 2	41	25,3 x 2,4	RSS30-8	43,0	
	30	10	43,5	60	22	50	42 x 2	41	25,3 x 2,4	RSS30-10	43,5	
	30	12	43,5	60	24	50	42 x 2	41	25,3 x 2,4	RSS30-12	44,5	
	30	14	45	63	27	50	42 x 2	41	25,3 x 2,4	RSS30-14	46,0	
	30	16	44,5	63	30	50	42 x 2	41	25,3 x 2,4	RSS30-16	48,8	
	30	20	44,5	66	36	50	42 x 2	41	25,3 x 2,4	RSS30-20	53,5	
	30	25	45	69	46	50	42 x 2	41	25,3 x 2,4	RSS30-25	67,5	
	38	6	47,5	62	17	60	52 x 2	50	33,3 x 2,4	RSS38-6	71,0	
	38	8	47,5	62	19	60	52 x 2	50	33,3 x 2,4	RSS38-8	71,0	
	38	10	47	63	22	60	52 x 2	50	33,3 x 2,4	RSS38-10	71,5	
	38	12	47	63	24	60	52 x 2	50	33,3 x 2,4	RSS38-12	72,0	
	38	14	48,5	66	27	60	52 x 2	50	33,3 x 2,4	RSS38-14	74,5	
	38	16	48	66	30	60	52 x 2	50	33,3 x 2,4	RSS38-16	77,0	
38	20	48	70	36	60	52 x 2	50	33,3 x 2,4	RSS38-20	81,0		
38	25	48,5	73	46	60	52 x 2	50	33,3 x 2,4	RSS38-25	85,0		
38	30	49	76	50	60	52 x 2	50	33,3 x 2,4	RSS38-30	88,0		



HYDRAULIEK SNIJRINGKOPPELINGEN



GVO

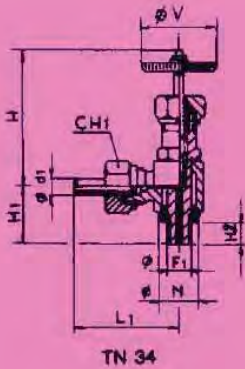
Verloop wartelkoppeling



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L2	L3	CH1	O-Ring * (Shore A ca. 90)		Simbolo di ordinazione Bestell-Nr Part No. Références	Peso Gewicht Weight Poids kg x 100 P.
L	6	315	34	35	14	4 x 1,5		GVO 6L-6L	2,8
	8		34	35	17	6 x 1,5		GVO 8L-8L	4,3
	10		36	37	19	7,5 x 1,5		GVO10L-10L	5,5
	12		36	37	22	9 x 1,5		GVO12L-12L	7,3
	15		39	40	27	12 x 2		GVO15L-15L	13,1
	18		40,5	41,5	32	15 x 2		GVO18L-18L	17,6
	22	160	45	46	36	20 x 2		GVO22L-22L	28,5
	28		47	48	41	26 x 2		GVO28L-28L	32,8
	35		53	56	50	32 x 2,5		GVO35L-35L	47,8
	42		53	57	60	38 x 2,5		GVO42L-42L	78,3
S	6	630	37	38	17	4 x 1,5		GVO 6S-6S	4,3
	8		37	38	19	6 x 1,5		GVO 8S-8S	5,7
	10		41	43	22	7,5 x 1,5		GVO10S-10S	8,0
	12		42	44	24	9 x 1,5		GVO12S-12S	9,8
	14		45	48	27	10 x 2		GVO14S-14S	14,1
	16	400	46	49	30	12 x 2		GVO16S-16S	17,8
	20		55	59	36	16,3 x 2,4		GVO20S-20S	29,1
	25		58	65	46	20,3 x 2,4		GVO25S-25S	53,1
	30		62	71	50	25,3 x 2,4		GVO30S-30S	65,8
	38		315	67	82	60	33,3 x 2,4		GVO38S-38S

MPBH

Kogelkraan voor de manometer



MPBH
- Manometer kraan

ORIENTABILE CON ATTACCHI AD ANELLO TN 87 - ORIENTERBARE MIT VERSCHRAUBUNG UND RING TN 87
 ROTARY WITH RING COUPLING TN 87 - ORIENTABLE AVEC ATTELAGE A BAGUE CONFORMEMENT AU TYPE TN 87

Ø Tubo Rohr AD Tube O.D. Ø Tube d _i	PE	L1	H	H1	H2	F1	N	ØV	CH1	Simbolo di ordinazione Bestell-Nr. Part. No. Références	Peso Gewicht Weight Poids kg.X1 P.
10	400	62,5	75	33	14	3/8"	21,5	45	22	MPBH 10S	0,550
12		62,5	75	33	14	3/8"	21,5	45	22	MPBH 12S	0,565



HYDRAULIEK SNIJRINGKOPPELINGEN



Minor variazione della portata
scarsissima perdita di pressione
sede conica conforme a DIN 3865
adatto per sollecitazioni estreme
minor potenza di serraggio
elevata sicurezza contro lo strappo
resistenza alle pressioni elevate
elevata tenuta grazie alla guarnizione
aggiuntiva O-Ring.

Geringe Querschnittsveränderung
sehr geringer Druckverlust
Dichtkegel nach DIN 3865
für extreme Beanspruchungen geeignet
geringeres Anzugsmoment
hohe Ausreißsicherheit
hohe Druckbelastbarkeit
hohe Dichtheit durch zusätzliche
Abdichtung mit O-Ring

Minor change in cross section
negligible pressure loss
taper to DIN 3865
appropriate for extreme load
conditions
low tightening torque
high tensile safety
high pressure strenght
high degree of sealing efficacy due to
additional O-Ring seal

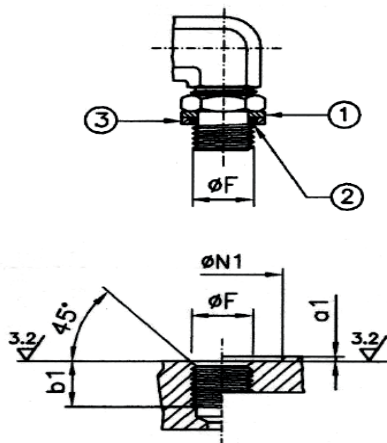
Faible changement de la coupe
transversale
perte minimale de pression
cône d'étanchéité suivant DIN 3865
approprié aux sollicitations extrêmes
faible couple de serrage
sécurité élevée à l'arrachement
sécurité élevée à la pression
étanchéité élevée par joint
torique supplémentaire

MONTAGGIO SUL CORPO DEL RACCORDO MONTAGE IN VERSCHRAUBUNGSSTUTZEN CONNECTION TO THE BODY OF THE UNION MONTAGE SUR LE CORPS DU RACCORD

- 1) Oleare il filetto del dado TN 400, la guarnizione O-Ring ed il filetto del raccordo.
 - Den Gewinde der Mutter TN 400, O-Ring Gummidichtung und das Verschraubungsgewinde einölen
 - Oil the thread of the nut TN 400, O-Ring seal and the thread of the union.
 - Huiler le filetage de l'écrou TN 400, joint O-Ring ainsi que le filetage du raccord.
- 2) Inserire il cono 24° del TN 400 nella sede conica 24° del raccordo e serrare manualmente il dado del TN 400 fino al totale avvitamento.
 - Den Konus 24° von TN 400 in der Verschraubung Konus 24° einführen und die Mutter TN 400 von Hand vollständig anziehen.
 - Insert the taperes 24° of TN 400 into the tapered seat 24° of the union and fully tighten the nut TN 400 by hand.
 - Introduir le cône 24° du TN 400 dans le cône 24° du raccord et serrer manuellement l'écrou TN 400 jusqu'au serrage complet.
- 3) Serrare il dado TN 400 da ¼ a ½ giro.
 - Die Mutter TN 400 um ¼ ÷ ½ umdrehungen anziehen.
 - Tighten the nut TN 400 by ¼ to ½ turn
 - Serrer l'écrou TN 400 de ¼ à ½ tour.

**TIPI DI FILETTATURE IMPIEGATE SU RACCORDI TN 500
AN TN 500 ANSCHLUBSTÜCKEN VERWENDETE GEWINDETYPEN
TYPES OF THREAD FOR TN 500 COUPLINGS
TYPES DE FILETAGE UTILISÉS POUR LES RACCORDS TN 500
TIPOS DE ROSCAS EMPLEADOS EN LOS RACORES TN 500**

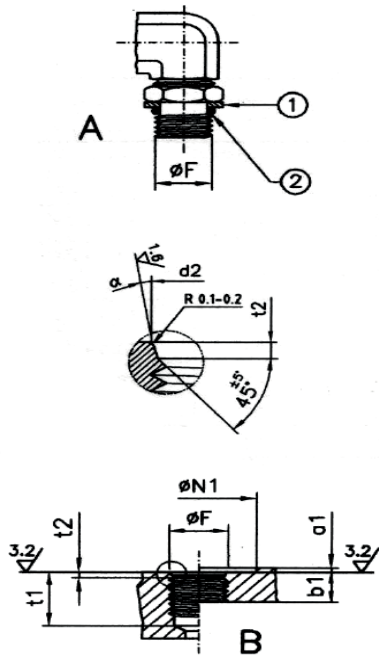
- FILETTATURA BSPP (GAS CILINDRICA) UNI EN ISO 228 - GEWINDE BSPP (ZYLINDER-GASGEWINDE) UNI EN ISO 228 - BSPP THREAD (GAS-TYPE CYLINDRICAL) UNI EN ISO 228 - FILETAGE BSPP (GAZ CYLINDRIQUE) UNI EN ISO 228 - ROSCADO BSPP (GAS CILINDRICO) UNI EN ISO 228



Ø F BSPP	max. a1	min. b1	min. Ø N1	O-Ring Jointe torique Junta tórica (Shore A ca. 90)
1/8" - 28	1,0	8	16,5	7,97 x 1,88
1/4" - 19	1,5	11	21,5	10,77 x 2,62
3/8" - 19	1,5	11	25,5	13,94 x 2,62
1/2" - 14	1,5	14	30,0	17,86 x 2,62
3/4" - 14	1,5	16	36,5	23,47 x 2,62
1" - 11	2,0	19	46,0	29,74 x 3,53
1" 1/4 - 11	2,0	21	57,0	37,69 x 3,53
1" 1/2 - 11	2,0	21	63,5	44,04 x 3,53

- ① - Rondella fissa antiestrusione / Feste Druckscheibe / Fixed anti-extrusion ring / Rondelle fixe anti-extrusion / Arandela fija a prueba de extrusión
- ② - O-Ring / Jointe torique / Junta tórica
- ③ - Rondella mobile tenuta O-Ring / Bewegliche Unterlegscheibe f. O-Ring / Mobile O-Ring seal ring / Rondelle mobile d'étanchéité (O-Ring) / Arandela móvil de retención junta tórica

- FILETTATURA UNF (ANSI/ASME B 1.1.1989) - GEWINDE UNF (ANSI/ASME B 1.1.1989) - UNF THREAD (ANSI/ASME B 1.1.1989) - FILETAGE UNF (ANSI/ASME B 1.1.1989) - ROSCADO UNF (ANSI/ASME B 1.1.1989)



Ø F UNF	max a1	min. b1	+0,1 d2	min. Ø N1	min. t1	+0,3 t2	±1° α	O-Ring Jointe torique Junta tórica (Shore A ca.90)
7/16 - 20	1,0	12	12,4	21	14	2,4	12°	8,92 x 1,83
9/16 - 18	1,0	13	15,6	26	16	2,5	12°	11,89 x 1,98
3/4 - 16	1,5	15	20,6	32	18	2,6	15°	16,36 x 2,21
7/8 - 14	1,5	17	23,9	35	20	2,6	15°	19,18 x 2,46
1" 1/16 - 12	1,5	20	29,2	42	24	3,3	15°	23,47 x 2,95
1" 5/16 - 12	2,0	20	35,5	50	24	3,3	15°	29,74 x 2,95
1" 5/8 - 12	2,5	20	43,5	60	24	3,4	15°	37,47 x 3,00
1" 7/8 - 12	2,5	20	49,8	65	24	3,4	15°	43,69 x 3,00

- ① - Rondella fissa antiestrusione / Feste Druckscheibe / Fixed anti-extrusion ring / Rondelle fixe anti-extrusion / Arandela fija a prueba de extrusión
- ② - O-Ring / Jointe torique / Junta tórica

- A** Perno filettato UNF-2A con guarnizione O-Ring (SAE J 514)
Einschraubzapfen UNF-2A mit O-Ring Dichtung (SAE J 514)
Male stud UNF-2A for O-Ring sealing (SAE J 514)
Filetage UNF-2A avec étanchéité par joint torique (SAE J 514)
Perno roscado UNF-2A con junta tórica (SAE J 514)
- B** Foro filettato UNF-2B per guarnizione O-Ring (SAE J 514)
Einschraubloch UNF-2B für O-Ring Dichtung (SAE J 514)
Port UNF-2B for O-Ring sealing (SAE J 514)
Taraudage UNF-2B pour étanchéité par joint torique (SAE J 514)
Orificio roscado UNF 2B para junta tórica (SAE J 514)

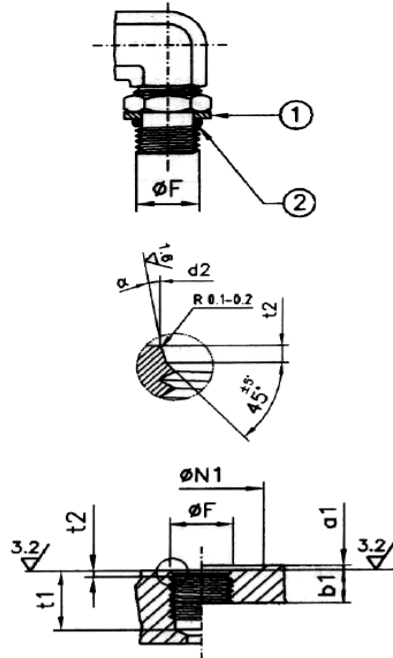


RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



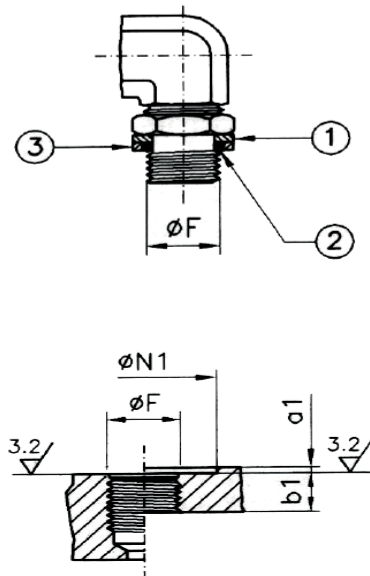
- FILETTATURA METRICA CILINDRICA (DIN EN ISO 6149) - METRISCHES ZYLINDERGEWINDE (DIN EN ISO 6149) - METRIC CYLINDRICAL THREAD (DIN EN ISO 6149) - FILETAGE METRIQUE CYLINDRIQUE (DIN EN ISO 6149) - ROSCADO MÉTRICO (DIN EN ISO 6149)



$\varnothing F$	max a1	min. b1	+0,1 d2	min. $\varnothing N1$	min. t1	+0,4 t2	$\pm 1^\circ$ α	O-Ring Jointe torique Junta tórica (Shore A ca.90)
10 x 1	1,0	10,0	11,1	20	11,5	1,6	12°	8,1 x 1,6
12 x 1,5	1,5	11,5	13,8	23	14,0	2,4	15°	9,3 x 2,2
14 x 1,5	1,5	11,5	15,8	25	14,0	2,4	15°	11,3 x 2,2
16 x 1,5	1,5	13,0	17,8	28	15,5	2,4	15°	13,3 x 2,2
18 x 1,5	2,0	14,5	19,8	30	17,0	2,4	15°	15,3 x 2,2
22 x 1,5	2,0	15,5	23,8	34	18,0	2,4	15°	19,3 x 2,2
27 x 2	2,0	19,0	29,4	40	22,0	3,1	15°	23,6 x 2,9
33 x 2	2,5	19,0	35,4	49	22,0	3,1	15°	29,6 x 2,9
42 x 2	2,5	19,5	44,4	60	22,5	3,1	15°	38,6 x 2,9
48 x 2	2,5	22,0	50,4	66	25,0	3,1	15°	44,6 x 2,9

- ① - Rondella fissa antiestrusione / Feste Druckscheibe / Fixed anti-extrusion ring / Rondelle fixe anti-extrusion / Arandela fija a prueba de extrusión
- ② - O-Ring / Jointe torique / Junta tórica

- FILETTATURA METRICA CILINDRICA - METRISCHES ZYLINDERGEWINDE - METRIC CYLINDRICAL THREAD
- FILETAGE METRIQUE CYLINDRIQUE - ROSCADO MÉTRICO CILINDRICO.

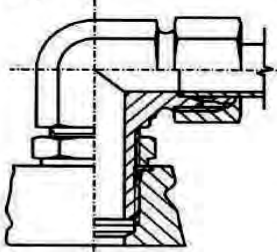


$\varnothing F$	max a1	min. b1	min. $\varnothing N1$	O-Ring Jointe torique Junta tórica (Shore A ca.90)
10 x 1	1,0	8	15	8,1 x 1,6
12 x 1,5	1,5	12	18	9,3 x 2,2
14 x 1,5	1,5	12	20	11,3 x 2,2
16 x 1,5	1,5	12	23	13,3 x 2,2
18 x 1,5	2,0	12	25	15,3 x 2,2
22 x 1,5	2,0	14	28	19,3 x 2,2
27 x 2	2,5	16	33	23,6 x 2,9
33 x 2	2,5	18	41	29,6 x 2,9
42 x 2	2,5	20	51	38,6 x 2,9
48 x 2	2,5	22	56	44,6 x 2,9

- ① - Rondella fissa antiestrusione / Feste Druckscheibe / Fixed anti-extrusion ring / Rondelle fixe anti-extrusion / Arandela fija a prueba de extrusión
- ② - O-Ring / Jointe torique / Junta tórica
- ③ - Rondella mobile tenuta O.Ring / Bewegliche Unterlegscheibe f. O-Ring / Mobile O.Ring. seal ring / Rondelle mobile d étanchéité (O-Ring) / Arandela móvil de retencion junta tórica

ISTRUZIONI DI MONTAGGIO - MONTAGEANLEITUNG - ASSEMBLY INSTRUCTIONS - INSTRUCTIONS DE MONTAGE - INSTRUCCIONES DE MONTAJE

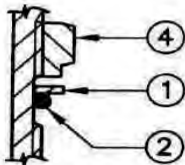
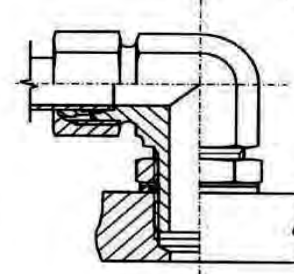
A



- Versione con filetto UNF/UN e Metrico cilindrico DIN EN ISO 6149
- Ausführungen UNF/UN-Gewinde Metrisches Zylindrisch DIN EN ISO 6149
- Version with UNF/UN-thread Metric parallel-thread DIN EN ISO 6149
- Version avec Filetage UNF/UN et Métrique cylindrique DIN EN ISO 6149
- Versiones con rosca UNF/UN y Metrica cilíndrica ISO 6149

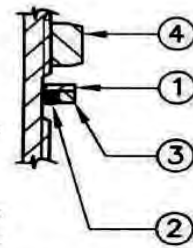
- Versione con filetto Gas cilindrico (BSPP) Metrico cilindrico
- Ausführungen Gewinde BSPP Metrisches Zylindrisch
- Version with BSP parallel Cylindrical thread
- Version avec Filetage Gaz cylindrique (BSPP) Métrique cylindrique
- Versiones con rosca Gas cilindrico (BSPP) Metrico cilindrico

B



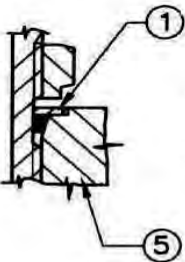
- Svitare il più possibile il controdado ④
- La guarnizione O-Ring ② e la rondella fissa, antiestrusione ④ devono trovarsi alla estremità superiore della gola di scarico filetto.
- Clean the O-Ring.
- Nella versione con filetto gas e filetto metrico cilindrico (W) infilare la rondella mobile ③ sulla guarnizione O-Ring.
- Screw back bulkhead nut ④ as far as it goes.
- O-Ring ② and fixed anti-extrusion ④ should be at the upper end of the notch.
- Oil the O-Ring.
- In the versions with BSPP, Metric cylindrical (W) thread slip mobile ring ③ over O-Ring.

- Kontermutter ④ so weit wie möglich zurückschrauben.
- O-Ring ② und Feste Druckscheibe ④ müssen sich am oberen Ende des Freistichs befinden.
- O-Ring ölen.
- Bei den Ausführungen mit withworth-Rohrgewinde, Metrisches Zylindrischgewinde (W) den Bewegliche Unterlegscheibe über ② O-Ring schieben.



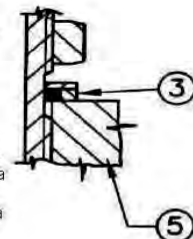
- Dévisser le contre-écrou ④ le plus possible.
- Jointe torique ② et rondelle fixe anti-extrusion ④ doivent se trouver tout au bout haut de l'entaille.
- Huiler la Jointe torique.
- Dans le version avec filet GAZ, Métrique cylindrique (W) mettre la rondelle mobile d'étanchéité ③ sur la Jointe torique.

- Desenroscar la contratuercia ④ lo más posible.
- Junta tórica ② y arandela fija a prueba de extrusión ④ debe encontrarse en la extremidad superior de la muesca.
- Lubrificar la junta tórica.
- En las versiones con rosca GAS Metrico cilindrico (W) poner la arandela móvil ③ sobre la junta tórica.



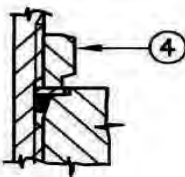
- Avvitare manualmente il raccordo nella sede filettata ⑤ fino a quando la rondella mobile ③ o la rondella fissa antiestrusione ④ non appoggia sulla superficie lavorata.
- Per regolare il raccordo nella posizione desiderata farlo girare in senso antiorario di un giro al massimo.
- Manually screw the fitting into the screwing hole ⑤ till mobile ring ③ or fixed anti-extrusion ④ comes to rest.
- To adjust in the wanted position turnback by maximum one turn.

- Verschraubung in das Einschraubloch ⑤ von Hand, endrehen, bis Feste Druckscheibe ④ oder Bewegliche Unterlegscheibe ③ aufliegt.
- Einteilung in die gewünschte Richtung durch Zurückdrehen um höchstens eine Umdrehung.



- Visser manuellement le raccord dans le trou de vissage ⑤ jusqu'à ce que la rondelle mobile ③ ou la rondelle fixe anti-extrusion ④ appuie.
- Pour le régler dans la position voulue, le tourner à lèr d'un tour au maximum.

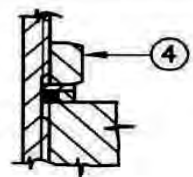
- Atornillar manualmente el racor en el agujero de atornillamiento ⑤ hasta que la arandela móvil ③ o la arandela fija a prueba de extrusión, apoye.
- Para ajustarlo en la posición deseada, hacer girar hacia atrás una vuelta al máximo.



- Serrare completamente il controdado ④ tenendo il corpo del raccordo, con una chiave fissa, nella posizione desiderata.
- Tighten bulkhead nut ④ completely while keeping the fitting body in the wanted position.

- Kontermutter ④ festziehen und dabei den Verschraubungskörper in der gewünschten Richtung halten.

- Serrer complètement le contre-écrou ④ tout en tenant le corps du raccord dans la position voulue.



- Apretar completamente la contratuercia ④ teniendo el cuerpo del racor en la posición deseada.



RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



TN 514

Op aanvraag leverbaar



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L ≈	L1	L2	I	Ø F	Ø N	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg.x100 P.
LL	4	250	21	11,3	20,7	6,3	1/8"	16	10	11	14	TN 514 - 4 LLR	7,97 × 1,88	3,0
	6		21	11,3	20,7	6,3	1/8"	16	12	11	14	TN 514 - 6 LLR	7,97 × 1,88	3,2
L	6	315	29	14	20,2	6,3	1/8"	16	14	14	14	TN 514 - 6 LR	7,97 × 1,88	6,5
	8		31	16	22,5	9,5	1/4"	20,5	17	14	19	TN 514 - 8 LR	10,77 × 2,62	6,6
	10		32	17	24,5	9,5	1/4"	20,5	19	19	19	TN 514 - 10 LR	10,77 × 2,62	12,0
	12		34	19	27,5	9,5	3/8"	24	22	19	22	TN 514 - 12 LR	13,94 × 2,62	13,8
	15	250	36	21	30	13	1/2"	29	27	22	27	TN 514 - 15 LR	17,86 × 2,62	28,5
	18		40	24	36,5	13	1/2"	29	32	27	27	TN 514 - 18 LR	17,86 × 2,62	34,5
	22	160	44	28	37,5	13	3/4"	35	36	33	36	TN 514 - 22 LR	23,47 × 2,62	46,3
	28		47	31	41	16	1"	44,5	41	41	41	TN 514 - 28 LR	29,74 × 3,53	68,7
	35		59	38	49	16	1" 1/4	53	50	48	50	TN 514 - 35 LR	37,69 × 3,53	109,0
	42		61	38	51	16	1" 1/2	58,5	60	48	55	TN 514 - 42 LR	44,04 × 3,53	118,0
S	6	315	30,5	15,5	22,5	9,5	1/4"	20,5	17	14	19	TN 514 - 6 SR	10,77 × 2,62	6,9
	8		33	18	26,5	9,5	1/4"	20,5	19	19	19	TN 514 - 8 SR	10,77 × 2,62	12,2
	10	250	34	18	28,5	9,5	3/8"	24	22	19	22	TN 514 - 10 SR	13,94 × 2,62	13,8
	12		38	22	28,5	9,5	3/8"	24	24	22	22	TN 514 - 12 SR	13,94 × 2,62	20,5
	16		43	25	36	13	1/2"	29	30	27	27	TN 514 - 16 SR	17,86 × 2,62	30,6
	20		49	28	38	13	3/4"	35	36	33	36	TN 514 - 20 SR	23,47 × 2,62	50,0
	25		54,5	30,5	41	16	1"	44,5	46	41	41	TN 514 - 25 SR	29,74 × 3,53	80,7
	30	160	62	36	48	16	1" 1/4	53	50	48	50	TN 514 - 30 SR	37,69 × 3,53	105,5
	38		65	34	53	16	1" 1/2	58,5	60	48	55	TN 514 - 38 SR	44,04 × 3,53	129,0

– Le dimensioni di ingombro si intendono a raccordo chiuso.
– Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

– Overall sizes are with closed fitting.
– Les dimensions d'encombrement s'entendent raccord monté.
– Las dimensiones exteriores se refieren al racor montado.

* – Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
– Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
– Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
– Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
– Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C

TN 514

Op aanvraag leverbaar



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L ≈	L1	L2	I	Ø F	Ø N	CH1	CH2	CH3	Simbolo di ordinazione Bestel-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	29	14	20	9	7/16 - 20 UNF	16,2	14	14	14	TN 514 - 6L - 7/16 - 20 UNF	8,92 × 1,83	6,5
	8		31	16	20	9	7/16 - 20 UNF	16,2	17	14	14	TN 514 - 8L - 7/16 - 20 UNF	8,92 × 1,83	7,1
	10		32	17	24	10	9/16 - 18 UNF	21,2	19	19	17	TN 514 - 10L - 9/16 - 18 UNF	11,89 × 1,98	9,1
	12		34	19	26	10	9/16 - 18 UNF	21,2	22	19	17	TN 514 - 12L - 9/16 - 18 UNF	11,89 × 1,98	10,9
	12		34	19	26,5	11	3/4 - 16 UNF	26,2	22	19	22	TN 514 - 12L - 3/4 - 16 UNF	16,36 × 2,21	19,5
	15		36	21	30	11	3/4 - 16 UNF	26,2	27	22	22	TN 514 - 15L - 3/4 - 16 UNF	16,36 × 2,21	18,5
	15		36	21	30,3	12,7	7/8 - 14 UNF	29,3	27	22	27	TN 514 - 15L - 7/8 - 14 UNF	19,18 × 2,46	19,0
	18		40	24	34,3	12,7	7/8 - 14 UNF	29,3	32	27	27	TN 514 - 18L - 7/8 - 14 UNF	19,18 × 2,46	28,5
	18		40,5	24,5	35	15	1"1/16 - 12 UN	37,5	32	33	32	TN 514 - 18L - 1"1/16 - 12 UN	23,47 × 2,95	32,9
	22		44	28	37	15	1"1/16 - 12 UN	37,5	36	33	32	TN 514 - 22L - 1"1/16 - 12 UN	23,47 × 2,95	55,5
S	6	400	30,5	15,5	23	9	7/16 - 20 UNF	16,2	17	14	14	TN 514 - 6S - 7/16 - 20 UNF	8,92 × 1,83	6,5
	8		33,5	18	27	10	9/16 - 18 UNF	21,2	19	19	17	TN 514 - 8S - 9/16 - 18 UNF	11,89 × 1,98	8,6
	10		34	18	27,5	10	9/16 - 18 UNF	21,2	22	19	17	TN 514 - 10S - 9/16 - 18 UNF	11,89 × 1,98	9,1
	12		38	22	33	11	3/4 - 16 UNF	26,2	24	22	22	TN 514 - 12S - 3/4 - 16 UNF	16,36 × 2,21	21,5
16	43		25	37,3	12,7	7/8 - 14 UNF	29,3	30	27	27	TN 514 - 16S - 7/8 - 14 UNF	19,18 × 2,46	28,5	
20	49		28	38	15	1"1/16 - 12 UN	37,5	36	33	32	TN 514 - 20S - 1"1/16 - 12 UN	23,47 × 2,95	57,5	
25	54,5		30,5	42	15	1"1/16 - 12 UN	37,5	46	41	32	TN 514 - 25S - 1"1/16 - 12 UN	23,47 × 2,95	72,8	
S	30	250	62	36	54	15	1"5/8 - 12 UN	54,5	50	48	50	TN 514 - 30S - 1"5/8 - 12 UN	37,47 × 3,00	91,5
	38		65	34	54	15	1"7/8 - 12 UN	56	60	48	55	TN 514 - 38S - 1"7/8 - 12 UN	43,69 × 3,00	102,5

- Le dimensioni di ingombro si intendono a raccordo chiuso.
- Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

- Overall sizes are with closed fitting.
- Les dimensions d'encombrement s'entendent raccord mo
- Las dimensiones exteriores se refieren al racor montado.

* - Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):

NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C

- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C

- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C

- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):

NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C

- Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C



RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



TN 514

Op aanvraag leverbaar

TN 514 M

- Raccordo orientabile a gomito con controdado
- Einstellbare Winkelverschraubung mit kontermutter
- Angular rotary fitting with bulkhead nut
- Coude orientable avec contre-écrou
- Racor orientable, codo con contratuercia

Filettatura: Metrica cilindrica ISO 6149-3 Einschraubgewinde: Metrisches-Feingewinde zylindrisch ISO 6149-3 Thread: Metric parallel ISO 6149-3 Filetage: Métrique cylindrique ISO 6149-3 Rosca: Métrica cilíndrica ISO 6149-3

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L mm	L1	L2	I	ØF	ØN	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg x100 P.
LL	4	250	21,5	11,5	18,5	8,5	10 × 1	15	10	11	14	TN 514 - 4 LLM 10×1	8,1 × 1,6	2,9
	6		25	13	16,5	8,5	10 × 1	15	12	14	14	TN 514 - 6 LLM 10×1	8,1 × 1,6	3,1
	6		25	13	21	11	12 × 1,5	18	12	14	17	TN 514 - 6 LLM 12×1,5	9,3 × 2,2	4,9
L	6	315	29	14	19	8,5	10 × 1	15	14	14	14	TN 514 - 6 LM	8,1 × 1,6	6,5
	8		31	16	21	11	12 × 1,5	18	17	14	17	TN 514 - 8 LM	9,3 × 2,2	6,7
	10		32	17	24	11	14 × 1,5	20	19	19	19	TN 514 - 10 LM	11,3 × 2,2	8,7
	12	250	34	19	24,5	11,5	16 × 1,5	23	22	19	22	TN 514 - 12 LM	13,3 × 2,2	9,6
	15		36	21	28,5	12,5	18 × 1,5	25	27	22	24	TN 514 - 15 LM	15,3 × 2,2	22,5
	18		40	24	32,5	12,5	22 × 1,5	28	32	27	27	TN 514 - 18 LM	19,3 × 2,2	28,5
	22	160	44	28	34	15,5	27 × 2	33	36	33	32	TN 514 - 22 LM	23,6 × 2,9	55,2
	28		47	31	38,5	15,5	33 × 2	42	41	41	41	TN 514 - 28 LM	29,6 × 2,9	63,5
	35		59	38	46,5	15,5	42 × 2	51	50	48	50	TN 514 - 35 LM	38,6 × 2,9	83,0
42	61		38	48	17	48 × 2	56	60	48	55	TN 514 - 42 LM	44,6 × 2,9	91,5	
S	6	400	30,5	15,5	22	11	12 × 1,5	18	17	14	17	TN 514 - 6 SM	9,3 × 2,2	7,5
	8		33	18	25	11	14 × 1,5	20	19	19	19	TN 514 - 8 SM	11,3 × 2,2	9,0
	10		34	18	25,5	12,5	16 × 1,5	23	22	19	22	TN 514 - 10 SM	13,3 × 2,2	9,9
	12		38	22	29	14	18 × 1,5	25	24	22	24	TN 514 - 12 SM	15,3 × 2,2	22,5
	16		43	25	35,5	14,5	22 × 1,5	28	30	27	27	TN 514 - 16 SM	19,3 × 2,2	28,5
	20		49	28	37,5	16	27 × 2	33	36	33	32	TN 514 - 20 SM	23,6 × 2,9	57,2
	25		54,5	30,5	41	16	33 × 2	42	46	41	41	TN 514 - 25 SM	29,6 × 2,9	75,5
	30	250	62	36	50	18	42 × 2	51	50	48	50	TN 514 - 30 SM	38,6 × 2,9	91,5
	38	200	65	34	49	20	48 × 2	56	60	48	55	TN 514 - 38 SM	44,6 × 2,9	102,5

- Le dimensioni di ingombro si intendono a raccordo chiuso.
- Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

- Overall sizes are with closed fitting.
- Les dimensions d'encombrement s'entendent raccord monté.
- Las dimensiones exteriores se refieren al racor montado.

- * - Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
- Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C

TN 514

Op aanvraag leverbaar.



Filettatura:
Metrica cilindrica

Einschraubgewinde:
Metrisches-Feingewinde zylindrisch

Thread:
Metric parallel

Filetage:
Métrique cylindrique

Rosca:
Métrica cilíndrica

TN 514 W-M

- Raccordo orientabile a gomito con controdado - Rondella tenuta O-Ring
- Einstellbare Winkelverschraubung mit Kontermutter - Bewegliche Unterlegscheibe f.O-Ring
- Angular rotary fitting with bulkhead nut - O-Ring seal ring
- Coude orientable avec contre-écrou - Rondelle d'étanchéité O-Ring
- Racor orientable, codo con contratuercas - Arandela de retención junta tórica

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L ≈	L1	L2	I	Ø F	Ø N	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg. x100 P.
LL	4	250	21,5	11,5	19,5	7,5	10 × 1	15	10	11	14	TN 514 W - 4 LLM 10×1	8,1 × 1,6	2,9
	6		25	13	17,5	7,5	10 × 1	15	12	14	14	TN 514 W - 6 LLM 10×1	8,1 × 1,6	3,1
	6		25	13	22,5	9,5	12 × 1,5	18	12	14	17	TN 514 W - 6 LLM 12×1,5	9,3 × 2,2	4,9
L	6	315	29	14	20	7,5	10 × 1	15	14	14	14	TN 514 W - 6 LM	8,1 × 1,6	6,5
	8		31	16	22,5	9,5	12 × 1,5	18	17	14	17	TN 514 W - 8 LM	9,3 × 2,2	6,7
	10		32	17	25,5	9,5	14 × 1,5	20	19	19	19	TN 514 W - 10 LM	11,3 × 2,2	8,7
	12		34	19	26	10	16 × 1,5	23	22	19	22	TN 514 W - 12 LM	13,3 × 2,2	9,6
	15		36	21	30	11	18 × 1,5	25	27	22	24	TN 514 W - 15 LM	15,3 × 2,2	22,5
	18	250	40	24	34	11	22 × 1,5	28	32	27	27	TN 514 W - 18 LM	19,3 × 2,2	28,5
	22	160	44	28	36	13,5	27 × 2	33	36	33	32	TN 514 W - 22 LM	23,6 × 2,9	55,2
	28		47	31	40,5	13,5	33 × 2	41	41	41	41	TN 514 W - 28 LM	29,6 × 2,9	63,5
	35		59	38	48,5	13,5	42 × 2	51	50	48	50	TN 514 W - 35 LM	38,6 × 2,9	83,0
	42		61	38	50	15	48 × 2	56	60	48	55	TN 514 W - 42 LM	44,6 × 2,9	91,5
S	6	315	30,5	15,5	23,5	9,5	12 × 1,5	18	17	14	17	TN 514 W - 6 SM	9,3 × 2,2	7,5
	8		33	18	26,5	9,5	14 × 1,5	20	19	19	19	TN 514 W - 8 SM	11,3 × 2,2	9,0
	10		34	18	27	11	16 × 1,5	23	22	19	22	TN 514 W - 10 SM	13,3 × 2,2	9,9
	12		38	22	30,5	12,5	18 × 1,5	25	24	22	24	TN 514 W - 12 SM	15,3 × 2,2	22,5
	16	250	43	25	37	13	22 × 1,5	28	30	27	27	TN 514 W - 16 SM	19,3 × 2,2	28,5
	20		49	28	39,5	14	27 × 2	33	36	33	32	TN 514 W - 20 SM	23,6 × 2,9	57,2
	25		54,5	30,5	43	14	33 × 2	41	46	41	41	TN 514 W - 25 SM	29,6 × 2,9	75,5
	30		62	36	52	16	42 × 2	51	50	48	50	TN 514 W - 30 SM	38,6 × 2,9	91,5
38	160	65	34	51	18	48 × 2	56	60	48	55	TN 514 W - 38 SM	44,6 × 2,9	102,5	

- Le dimensioni di ingombro si intendono a raccordo chiuso.
- Baumaße sind ca. -Maße bei angezogener Überwurfmutter.

- Overall sizes are with closed fitting.
- Les dimensions d'encombrement s'entendent raccord monté.
- Las dimensiones exteriores se refieren al racor montado.

* - Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
- Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C

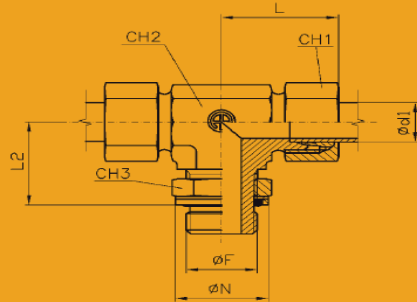


HYDRAULIEK SNIJRINGKOPPELINGEN



TN 515

Op aanvraag leverbaar



TN 515 R

- Raccordo orientabile a Tee con controdado
- Einstellbare T-Anschlußstutzen mit Kontermutter
- Rotary fitting a tees with bulkhead nut
- Té orientable avec contre-écrou
- Racor orientable en T con contratuercas

Filettatura:
Gas cilindrica

Einschraubgewinde:
Witworth-Rohrgewinde zylindrisch

Thread:
B.S.P. parallel

Filetage:
Gaz cylindrique

Rosca:
Gas cilíndrica

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L ≈	L1	L2	I	Ø F	Ø N	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg. x 100 P.
L	6	315	29	14	20,2	6,3	1/8"	16	14	14	14	TN 515 - 6 LR	7,97 × 1,88	9,4
	8		31	16	22,5	9,5	1/4"	20,5	17	14	19	TN 515 - 8 LR	10,77 × 2,62	10,3
	10		32	17	24,5	9,5	1/4"	20,5	19	19	19	TN 515 - 10 LR	10,77 × 2,62	17,0
	12	250	34	19	27,5	9,5	3/8"	24	22	19	22	TN 515 - 12 LR	13,94 × 2,62	20,5
	15		36	21	30	13	1/2"	29	27	22	27	TN 515 - 15 LR	17,86 × 2,62	31,3
	18		40	24	36,5	13	1/2"	29	32	27	27	TN 515 - 18 LR	17,86 × 2,62	43,0
	22	160	44	28	37,5	13	3/4"	35	36	33	36	TN 515 - 22 LR	23,47 × 2,62	74,3
	28		47	31	41	16	1"	44,5	41	41	41	TN 515 - 28 LR	29,74 × 3,53	85,0
	35		59	38	49	16	1" 1/4	53	50	48	50	TN 515 - 35 LR	37,69 × 3,53	124,5
42	61		38	51	16	1" 1/2	58,5	60	48	55	TN 515 - 42 LR	44,04 × 3,53	140,0	
S	6	315	30,5	15,5	22,5	9,5	1/4"	20,5	17	14	19	TN 515 - 6 SR	10,77 × 2,62	11,0
	8		33	18	26,5	9,5	1/4"	20,5	19	19	19	TN 515 - 8 SR	10,77 × 2,62	15,3
	10	250	34	18	28,5	9,5	3/8"	24	22	19	22	TN 515 - 10 SR	13,94 × 2,62	19,0
	12		38	22	28,5	9,5	3/8"	24	24	22	22	TN 515 - 12 SR	13,94 × 2,62	24,0
	16		43	25	36	13	1/2"	29	30	27	27	TN 515 - 16 SR	17,86 × 2,62	43,5
	20	250	49	28	38	13	3/4"	35	36	33	36	TN 515 - 20 SR	23,47 × 2,62	78,5
	25		54,5	30,5	41	16	1"	44,5	46	41	41	TN 515 - 25 SR	29,74 × 3,53	198,0
	30	160	62	36	48	16	1" 1/4	53	50	48	50	TN 515 - 30 SR	37,69 × 3,53	141,5
	38		65	34	53	16	1" 1/2	58,5	60	48	55	TN 515 - 38 SR	44,04 × 3,53	163,0

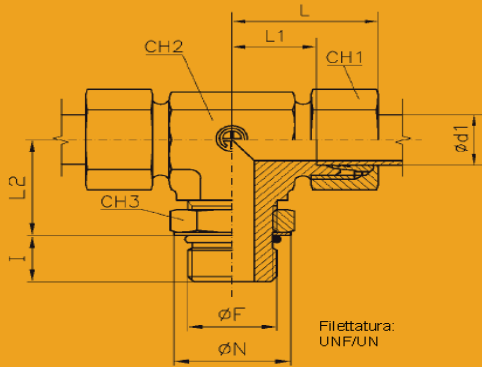
- Le dimensioni di ingombro si intendono a raccordo chiuso.
- Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

- Overall sizes are with closed fitting.
- Les dimensions d'encombrement s'entendent raccord monté.
- Las dimensiones exteriores se refieren al racor montado.

- * - Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
 NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
 - Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
 NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
 - Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
 NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
 - Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
 NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
 - Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
 NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C

TN 515

Op aanvraag leverbaar



TN 515 UNF/UN

- Raccordo orientabile a Tee con controdado
- Einstellbare T-Anschlußstutzen mit Kontermutter
- Rotary fitting a tees with bulkhead nut
- Té orientable avec contre-écrou
- Racor orientable en T con contratuercas

Filettatura:
UNF/UN

Einschraubgewinde:
UNF/UN

Thread:
UNF/UN

Filetage:
UNF/UN

Rosca:
UNF/UN

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O. D. Ø Tube d _t	PN	L ≈	L1	L2	I	Ø F	Ø N	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Referéncias Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg x 100 P
L	6	250	29	14	20	9	7/16 - 20 UNF	16,2	14	14	14	TN 515 - 6L - 7/16 - 20 UNF	8,92 × 1,83	9,0
	8		31	16	20	9	7/16 - 20 UNF	16,2	17	14	14	TN 515 - 8L - 7/16 - 20 UNF	8,92 × 1,83	10,0
	10		32	17	24	10	9/16 - 18 UNF	21,2	19	19	17	TN 515 - 10L - 9/16 - 18 UNF	11,89 × 1,98	17,5
	12		34	19	26	10	9/16 - 18 UNF	21,2	22	19	17	TN 515 - 12L - 9/16 - 18 UNF	11,89 × 1,98	19,0
	12		34	19	26,5	11	3/4 - 16 UNF	26,2	22	19	22	TN 515 - 12L - 3/4 - 16 UNF	16,36 × 2,21	24,9
	15		36	21	30	11	3/4 - 16 UNF	26,2	27	22	22	TN 515 - 15L - 3/4 - 16 UNF	16,36 × 2,21	33,0
	15		36	21	30,3	12,7	7/8 - 14 UNF	29,3	27	22	27	TN 515 - 15L - 7/8 - 14 UNF	19,18 × 2,46	42,0
	18		40	24	34,3	12,7	7/8 - 14 UNF	29,3	32	27	27	TN 515 - 18L - 7/8 - 14 UNF	19,18 × 2,46	58,0
	18		40,5	24,5	35	15	1"1/16 - 12 UN	37,5	32	33	32	TN 515 - 18L - 1"1/16 - 12 UN	23,47 × 2,95	60,0
	22		44	28	37	15	1"1/16 - 12 UN	37,5	36	33	32	TN 515 - 22L - 1"1/16 - 12 UN	23,47 × 2,95	65,0
	28		47	31	42	15	1"5/16 - 12 UN	44	41	41	41	TN 515 - 28L - 1"5/16 - 12 UN	29,74 × 2,95	78,6
	35		59	38	48	15	1"5/8 - 12 UN	54,5	50	48	50	TN 515 - 35L - 1"5/8 - 12 UN	37,47 × 3,00	124,5
42	61	38	49	15	1"7/8 - 12 UN	56	60	48	55	TN 515 - 42L - 1"7/8 - 12 UN	43,69 × 3,00	146,0		
S	6	400	30,5	15,5	23	9	7/16 - 20 UNF	16,2	17	14	14	TN 515 - 6S - 7/16 - 20 UNF	8,92 × 1,83	10,8
	8		33,5	18	27	10	9/16 - 18 UNF	21,2	19	19	17	TN 515 - 8S - 9/16 - 18 UNF	11,89 × 1,98	17,6
	10		34	18	27,5	10	9/16 - 18 UNF	21,2	22	19	17	TN 515 - 10S - 9/16 - 18 UNF	11,89 × 1,98	19,5
	12		38	22	33	11	3/4 - 16 UNF	26,2	24	22	22	TN 515 - 12S - 3/4 - 16 UNF	16,36 × 2,21	31,0
	16		43	25	37,3	12,7	7/8 - 14 UNF	29,3	30	27	27	TN 515 - 16S - 7/8 - 14 UNF	19,18 × 2,46	42,5
	20		49	28	38	15	1"1/16 - 12 UN	37,5	36	33	32	TN 515 - 20S - 1"1/16 - 12 UN	23,47 × 2,95	70,0
	25	54,5	30,5	42	15	1"1/16 - 12 UN	37,5	46	41	32	TN 515 - 25S - 1"1/16 - 12 UN	23,47 × 2,95	102,6	
	30	62	36	54	15	1"5/8 - 12 UN	54,5	50	48	50	TN 515 - 30S - 1"5/8 - 12 UN	37,47 × 3,00	141,5	
	38	65	34	54	15	1"7/8 - 12 UN	56	60	48	55	TN 515 - 38S - 1"7/8 - 12 UN	43,69 × 3,00	163,5	

- Le dimensioni di ingombro si intendono a raccordo chiuso.
- Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

- Overall sizes are with closed fitting.
- Les dimensions d'encombrement s'entendent raccord monté.
- Las dimensiones exteriores se refieren al racor montado.

* - Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
- Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C



RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



TN 515

Op aanvraag leverbaar



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L ≈	L1	L2	I	Ø F	Ø N	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	29	14	19	8,5	10 × 1	15	14	14	14	TN 515 - 6 LM	8,1 × 1,6	9,3
	8		31	16	21	11	12 × 1,5	18	17	14	17	TN 515 - 8 LM	9,3 × 2,2	10,5
	10		32	17	24	11	14 × 1,5	20	19	19	19	TN 515 - 10 LM	11,3 × 2,2	17,5
	12	250	34	19	24,5	11,5	16 × 1,5	23	22	19	22	TN 515 - 12 LM	13,3 × 2,2	19,0
	15		36	21	28,5	12,5	18 × 1,5	25	27	22	24	TN 515 - 15 LM	15,3 × 2,2	33,0
	18		40	24	32,5	12,5	22 × 1,5	28	32	27	27	TN 515 - 18 LM	19,3 × 2,2	42,5
	22	160	44	28	34	15,5	27 × 2	33	36	33	32	TN 515 - 22 LM	23,6 × 2,9	76,2
	28		47	31	38,5	15,5	33 × 2	42	41	41	41	TN 515 - 28 LM	29,6 × 2,9	81,3
	35		59	38	46,5	15,5	42 × 2	51	50	48	50	TN 515 - 35 LM	38,6 × 2,9	124,5
42	61		38	48	17	48 × 2	56	60	48	55	TN 515 - 42 LM	44,6 × 2,9	140,5	
S	6	400	30,5	15,5	22	11	12 × 1,5	18	17	14	17	TN 515 - 6 SM	9,3 × 2,2	10,5
	8		33	18	25	11	14 × 1,5	20	19	19	19	TN 515 - 8 SM	11,3 × 2,2	17,8
	10		34	18	25,5	12,5	16 × 1,5	23	22	19	22	TN 515 - 10 SM	13,3 × 2,2	19,5
	12		38	22	29	14	18 × 1,5	25	24	22	24	TN 515 - 12 SM	15,3 × 2,2	31,5
	16	43	25	35,5	14,5	22 × 1,5	28	30	27	27	TN 515 - 16 SM	19,3 × 2,2	42,8	
	20	49	28	37,5	16	27 × 2	33	36	33	32	TN 515 - 20 SM	23,6 × 2,9	80,0	
	25	315	54,5	30,5	41	16	33 × 2	42	46	41	41	TN 515 - 25 SM	29,6 × 2,9	105,5
	30	250	62	36	50	18	42 × 2	51	50	48	50	TN 515 - 30 SM	38,6 × 2,9	141,5
	38	200	65	34	49	20	48 × 2	56	60	48	55	TN 515 - 38 SM	44,6 × 2,9	163,0

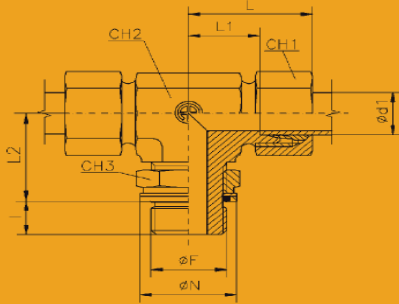
- Le dimensioni di ingombro si intendono a raccordo chiuso.
- Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

- Overall sizes are with closed fitting.
- Les dimensions d'encombrement s'entendent raccord monté.
- Las dimensiones exteriores se refieren al racor montado.

- * - Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
- Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C

TN 515

Op aanvraag leverbaar



TN 515 W-M

- Raccordo orientabile a Tee con controdado - Rondella tenuta O-Ring
- Einstellbare T-Anschlußstutzen mit Kontermutter - Bewegliche Unterlegscheibe f.O-Ring
- Rotary fitting a tees with bulkhead nut - O-Ring seal ring
- Té orientable avec contre-écrou - Rondelle d'étanchéité O-Ring
- Racor orientable en T con contratuercas - Arandela de retencion junta tórica

Filettatura:
Metrica cilindrica

Einschraubgewinde:
Metrisches-Feingewinde zylindrisch

Thread:
Metric parallel

Filetage:
Métrique cylindrique

Rosca:
Métrica cilíndrica

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	L ≈	L1	L2	I	Ø F	Ø N	CH1	CH2	CH3	Simbolo di ordinazione Bestel-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg.x100 P.
L	6	315	29	14	20	7,5	10 × 1	15	14	14	14	TN 515 W - 6 LM	8,1 × 1,6	9,3
	8		31	16	22,5	9,5	12 × 1,5	18	17	14	17	TN 515 W - 8 LM	9,3 × 2,2	10,5
	10		32	17	25,5	9,5	14 × 1,5	20	19	19	19	TN 515 W - 10 LM	11,3 × 2,2	17,5
	12		34	19	26	10	16 × 1,5	23	22	19	22	TN 515 W - 12 LM	13,3 × 2,2	19,0
	15		36	21	30	11	18 × 1,5	25	27	22	24	TN 515 W - 15 LM	15,3 × 2,2	33,0
	18	250	40	24	34	11	22 × 1,5	28	32	27	27	TN 515 W - 18 LM	19,3 × 2,2	42,5
	22	160	44	28	36	13,5	27 × 2	33	36	33	32	TN 515 W - 22 LM	23,6 × 2,9	76,2
	28		47	31	40,5	13,5	33 × 2	41	41	41	41	TN 515 W - 28 LM	29,6 × 2,9	81,3
	35		59	38	48,5	13,5	42 × 2	51	50	48	50	TN 515 W - 35 LM	38,6 × 2,9	124,5
42	61		38	50	15	48 × 2	56	60	48	55	TN 515 W - 42 LM	44,6 × 2,9	140,5	
S	6	315	30,5	15,5	23,5	9,5	12 × 1,5	18	17	14	17	TN 515 W - 6 SM	9,3 × 2,2	10,5
	8		33	18	26,5	9,5	14 × 1,5	20	19	19	19	TN 515 W - 8 SM	11,3 × 2,2	17,8
	10		34	18	27	11	16 × 1,5	23	22	19	22	TN 515 W - 10 SM	13,3 × 2,2	19,5
	12		38	22	30,5	12,5	18 × 1,5	25	24	22	24	TN 515 W - 12 SM	15,3 × 2,2	31,5
	16	250	43	25	37	13	22 × 1,5	28	30	27	27	TN 515 W - 16 SM	19,3 × 2,2	42,8
	20		49	28	39,5	14	27 × 2	33	36	33	32	TN 515 W - 20 SM	23,6 × 2,9	80,0
	25	160	54,5	30,5	43	14	33 × 2	41	46	41	41	TN 515 W - 25 SM	29,6 × 2,9	105,5
	30		62	36	52	16	42 × 2	51	50	48	50	TN 515 W - 30 SM	38,6 × 2,9	141,5
	38		65	34	51	18	48 × 2	56	60	48	55	TN 515 W - 38 SM	44,6 × 2,9	163,0

- Le dimensioni di ingombro si intendono a raccordo chiuso.
- Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

- Overall sizes are with closed fitting.
- Les dimensions d'encombrement s'entendent raccord monté.
- Las dimensiones exteriores se refieren al racor montado.

* - Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
- Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C



HYDRAULIEK SNIJRINGKOPPELINGEN



TN 516

Op aanvraag leverbaar.

TN 516 R

- Raccordo orientabile a L con controdado
- Einstellbare L-Verschraubung mit Kontermutter
- Rotary fitting a L with bulkhead nut
- Tê renversé orientable avec contre-écrou
- Racor orientable en L con contratuercia

Filettatura: Gas cilindrica Einschraubgewinde: Withworth-Rohrgewinde zylindrisch Thread: B.S.P parallel Filetage: Gaz cylindrique Rosca: Gas cilíndrica

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L ≈	L1	L2	I	ØF	ØN	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	29	14	20,2	6,3	1/8"	16	14	14	14	TN 516 - 6 LR	7,97 × 1,88	9,4
	8		31	16	22,5	9,5	1/4"	20,5	17	14	19	TN 516 - 8 LR	10,77 × 2,62	10,3
	10		32	17	24,5	9,5	1/4"	20,5	19	19	19	TN 516 - 10 LR	10,77 × 2,62	17,0
	12	250	34	19	27,5	9,5	3/8"	24	22	19	22	TN 516 - 12 LR	13,94 × 2,62	20,5
	15		36	21	30	13	1/2"	29	27	22	27	TN 516 - 15 LR	17,86 × 2,62	31,3
	18		40	24	36,5	13	1/2"	29	32	27	27	TN 516 - 18 LR	17,86 × 2,62	43,0
	22	160	44	28	37,5	13	3/4"	35	36	33	36	TN 516 - 22 LR	23,47 × 2,62	74,3
	28		47	31	41	16	1"	44,5	41	41	41	TN 516 - 28 LR	29,74 × 3,53	85,0
	35		59	38	49	16	1" 1/4	53	50	48	50	TN 516 - 35 LR	37,69 × 3,53	124,5
42	61		38	51	16	1" 1/2	58,5	60	48	55	TN 516 - 42 LR	44,04 × 3,53	140,0	
S	6	315	30,5	15,5	22,5	9,5	1/4"	20,5	17	14	19	TN 516 - 6 SR	10,77 × 2,62	11,0
	8		33	18	26,5	9,5	1/4"	20,5	19	19	19	TN 516 - 8 SR	10,77 × 2,62	15,3
	10		34	18	28,5	9,5	3/8"	24	22	19	22	TN 516 - 10 SR	13,94 × 2,62	19,0
	12	250	38	22	28,5	9,5	3/8"	24	24	22	22	TN 516 - 12 SR	13,94 × 2,62	24,0
	16		43	25	36	13	1/2"	29	30	27	27	TN 516 - 16 SR	17,86 × 2,62	43,5
	20		49	28	38	13	3/4"	35	36	33	36	TN 516 - 20 SR	23,47 × 2,62	78,5
	25	160	54,5	30,5	41	16	1"	44,5	46	41	41	TN 516 - 25 SR	29,74 × 3,53	109,0
	30		62	36	48	16	1" 1/4	53	50	48	50	TN 516 - 30 SR	37,69 × 3,53	141,5
	38		65	34	53	16	1" 1/2	58,5	60	48	55	TN 516 - 38 SR	44,04 × 3,53	163,0

- Le dimensioni di ingombro si intendono a raccordo chiuso.
- Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

- Overall sizes are with closed fitting.
- Les dimensions d'encombrement s'entendent raccord monté.
- Las dimensiones exteriores se refieren al racor montado.

* - Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
- Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C

TN 516

Op aanvraag leverbaar.



Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	L ≈	L1	L2	I	Ø F	Ø N	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg, x100 P.
L	6	315	29	14	20	9	7/16 - 20 UNF	16,2	14	14	14	TN 516 - 6L - 7/16 - 20 UNF	8,92 × 1,83	9,0
	8		31	16	20	9	7/16 - 20 UNF	16,2	17	14	14	TN 516 - 8L - 7/16 - 20 UNF	8,92 × 1,83	10,0
	10		32	17	24	10	9/16 - 18 UNF	21,2	19	19	17	TN 516 - 10L - 9/16 - 18 UNF	11,89 × 1,98	17,5
	12		34	19	26	10	9/16 - 18 UNF	21,2	22	19	17	TN 516 - 12L - 9/16 - 18 UNF	11,89 × 1,98	19,0
	12		34	19	26,5	11	3/4 - 16 UNF	26,2	22	19	22	TN 516 - 12L - 3/4 - 16 UNF	16,36 × 2,21	24,9
	15		36	21	30	11	3/4 - 16 UNF	26,2	27	22	22	TN 516 - 15L - 3/4 - 16 UNF	16,36 × 2,21	33,0
	15		36	21	30,3	12,7	7/8 - 14 UNF	29,3	27	22	27	TN 516 - 15L - 7/8 - 14 UNF	19,18 × 2,46	42,0
	18		40	24	34,3	12,7	7/8 - 14 UNF	29,3	32	27	27	TN 516 - 18L - 7/8 - 14 UNF	19,18 × 2,46	58,0
	18		40,5	24,5	35	15	1"1/16 - 12 UN	37,5	32	33	32	TN 516 - 18L - 1"1/16 - 12 UN	23,47 × 2,95	60,0
	22		44	28	37	15	1"1/16 - 12 UN	37,5	36	33	32	TN 516 - 22L - 1"1/16 - 12 UN	23,47 × 2,95	65,0
	28		47	31	42	15	1"5/16 - 12 UN	44	41	41	41	TN 516 - 28L - 1"5/16 - 12 UN	29,74 × 2,95	78,6
	35		59	38	48	15	1"5/8 - 12 UN	54,5	50	48	50	TN 516 - 35L - 1"5/8 - 12 UN	37,47 × 3,00	124,5
42	61	38	49	15	1"7/8 - 12 UN	56	60	48	55	TN 516 - 42L - 1"7/8 - 12 UN	43,69 × 3,00	146,0		
S	6	400	30,5	15,5	23	9	7/16 - 20 UNF	16,2	17	14	14	TN 516 - 6S - 7/16 - 20 UNF	8,92 × 1,83	10,8
	8		33,5	18	27	10	9/16 - 18 UNF	21,2	19	19	17	TN 516 - 8S - 9/16 - 18 UNF	11,89 × 1,98	17,6
	10		34	18	27,5	10	9/16 - 18 UNF	21,2	22	19	17	TN 516 - 10S - 9/16 - 18 UNF	11,89 × 1,98	19,5
	12		38	22	33	11	3/4 - 16 UNF	26,2	24	22	22	TN 516 - 12S - 3/4 - 16 UNF	16,36 × 2,21	31,0
	16		43	25	37,3	12,7	7/8 - 14 UNF	29,3	30	27	27	TN 516 - 16S - 7/8 - 14 UNF	19,18 × 2,46	42,5
	20		49	28	38	15	1"1/16 - 12 UN	37,5	36	33	32	TN 516 - 20S - 1"1/16 - 12 UN	23,47 × 2,95	70,0
	25		54,5	30,5	42	15	1"1/16 - 12 UN	37,5	46	41	32	TN 516 - 25S - 1"1/16 - 12 UN	23,47 × 2,95	102,6
	30		62	36	54	15	1"5/8 - 12 UN	54,5	50	48	50	TN 516 - 30S - 1"5/8 - 12 UN	37,47 × 3,00	141,5
38	65	34	54	15	1"7/8 - 12 UN	56	60	48	55	TN 516 - 38S - 1"7/8 - 12 UN	43,69 × 3,00	163,5		

- Le dimensioni di ingombro si intendono a raccordo chiuso.
- Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

- Overall sizes are with closed fitting.
- Les dimensions d'encombrement s'entendent raccord monté.
- Las dimensiones exteriores se refieren al racor montado.

* - Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
- Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C

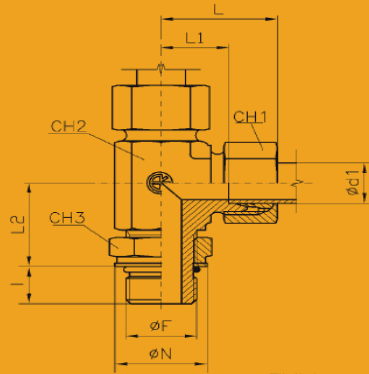


HYDRAULIEK SNIJRINGKOPPELINGEN



TN 516

Op aanvraag leverbaar.



TN 516 M

- Raccordo orientabile a L con controdado
- Einstellbare L-Verschraubung mit Kontermutter
- Rotary fitting a L with bulkhead nut
- Té renversé orientable avec contre-écrou
- Racor orientable en L con contratuercia

Filettatura:
Metrica cilindrica
ISO 6149-3

Einschraubgewinde:
Metrisches-Feingewinde zylindrisch
ISO 6149-3

Thread:
Metric parallel
ISO 6149-3

Filetage:
Métrique cylindrique
ISO 6149-3

Rosca:
Métrica cilíndrica
ISO 6149-3

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	L ≈	L1	L2	I	Ø F	Ø N	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg. x 100 P.
L	6	315	29	14	19	8,5	10 × 1	15	14	14	14	TN 516 - 6 LM	8,1 × 1,6	9,3
	8		31	16	21	11	12 × 1,5	18	17	14	17	TN 516 - 8 LM	9,3 × 2,2	10,5
	10		32	17	24	11	14 × 1,5	20	19	19	19	TN 516 - 10 LM	11,3 × 2,2	17,5
	12	250	34	19	24,5	11,5	16 × 1,5	23	22	19	22	TN 516 - 12 LM	13,3 × 2,2	19,0
	15		36	21	28,5	12,5	18 × 1,5	25	27	22	24	TN 516 - 15 LM	15,3 × 2,2	33,0
	18		40	24	32,5	12,5	22 × 1,5	28	32	27	27	TN 516 - 18 LM	19,3 × 2,2	42,5
	22	160	44	28	34	15,5	27 × 2	33	36	33	32	TN 516 - 22 LM	23,6 × 2,9	76,2
	28		47	31	38,5	15,5	33 × 2	42	41	41	41	TN 516 - 28 LM	29,6 × 2,9	81,3
	35		59	38	46,5	15,5	42 × 2	51	50	48	50	TN 516 - 35 LM	38,6 × 2,9	124,5
42	61		38	48	17	48 × 2	56	60	48	55	TN 516 - 42 LM	44,6 × 2,9	140,5	
S	6	400	30,5	15,5	22	11	12 × 1,5	18	17	14	17	TN 516 - 6 SM	9,3 × 2,2	10,5
	8		33	18	25	11	14 × 1,5	20	19	19	19	TN 516 - 8 SM	11,3 × 2,2	17,8
	10		34	18	25,5	12,5	16 × 1,5	23	22	19	22	TN 516 - 10 SM	13,3 × 2,2	19,5
	12		38	22	29	14	18 × 1,5	25	24	22	24	TN 516 - 12 SM	15,3 × 2,2	31,5
	16		43	25	35,5	14,5	22 × 1,5	28	30	27	27	TN 516 - 16 SM	19,3 × 2,2	42,8
	20	49	28	37,5	16	27 × 2	33	36	33	32	TN 516 - 20 SM	23,6 × 2,9	80,0	
	25	315	54,5	30,5	41	16	33 × 2	42	46	41	41	TN 516 - 25 SM	29,6 × 2,9	105,5
	30	250	62	36	50	18	42 × 2	51	50	48	50	TN 516 - 30 SM	38,6 × 2,9	141,5
	38	200	65	34	49	20	48 × 2	56	60	48	55	TN 516 - 38 SM	44,6 × 2,9	163,0

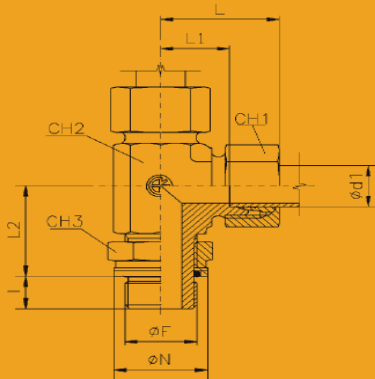
- Le dimensioni di ingombro si intendono a raccordo chiuso.
- Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

- Overall sizes are with closed fitting.
- Les dimensions d'encombrement s'entendent raccord monté.
- Las dimensiones exteriores se refieren al racor montado.

* - Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
- Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C

TN 516

Op aanvraag leverbaar.



TN 516 W-M

- Raccordo orientabile a L con controdado - Rondella tenuta O-Ring
- Einstellbare L-Verschraubung mit Kontermutter - Bewegliche Unterlegscheibe f.O-Ring
- Rotary fitting a L with bulkhead nut - O-Ring seal ring
- Té renversé orientable avec contre-écrou - Rondelle d'étanchéité O-Ring
- Racor orientable en L con contratuercas - Arandela de retencion junta tórica

Filettatura:
Metrica cilindrica

Einschraubgewinde:
Metrisches-Feingewinde zylindrisch

Thread:
Metric parallel

Filetage:
Métrique cylindrique

Rosca:
Métrica cilíndrica

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	PN	L ≈	L1	L2	I	Ø F	Ø N	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	29	14	20	7,5	10 × 1	15	14	14	14	TN 516 W - 6 LM	8,1 × 1,6	9,3
	8		31	16	22,5	9,5	12 × 1,5	18	17	14	17	TN 516 W - 8 LM	9,3 × 2,2	10,5
	10		32	17	25,5	9,5	14 × 1,5	20	19	19	19	TN 516 W - 10 LM	11,3 × 2,2	17,5
	12		34	19	26	10	16 × 1,5	23	22	19	22	TN 516 W - 12 LM	13,3 × 2,2	19,0
	15		36	21	30	11	18 × 1,5	25	27	22	24	TN 516 W - 15 LM	15,3 × 2,2	33,0
	18	250	40	24	34	11	22 × 1,5	28	32	27	27	TN 516 W - 18 LM	19,3 × 2,2	42,5
	22	160	44	28	36	13,5	27 × 2	33	36	33	32	TN 516 W - 22 LM	23,6 × 2,9	76,2
	28		47	31	40,5	13,5	33 × 2	41	41	41	41	TN 516 W - 28 LM	29,6 × 2,9	81,3
	35		59	38	48,5	13,5	42 × 2	51	50	48	50	TN 516 W - 35 LM	38,6 × 2,9	124,5
	42		61	38	50	15	48 × 2	56	60	48	55	TN 516 W - 42 LM	44,6 × 2,9	140,5
S	6	315	30,5	15,5	23,5	9,5	12 × 1,5	18	17	14	17	TN 516 W - 6 SM	9,3 × 2,2	10,5
	8		33	18	26,5	9,5	14 × 1,5	20	19	19	19	TN 516 W - 8 SM	11,3 × 2,2	17,8
	10		34	18	27	11	16 × 1,5	23	22	19	22	TN 516 W - 10 SM	13,3 × 2,2	19,5
	12		38	22	30,5	12,5	18 × 1,5	25	24	22	24	TN 516 W - 12 SM	15,3 × 2,2	31,5
	16	250	43	25	37	13	22 × 1,5	28	30	27	27	TN 516 W - 16 SM	19,3 × 2,2	42,8
	20		49	28	39,5	14	27 × 2	33	36	33	32	TN 516 W - 20 SM	23,6 × 2,9	80,0
	25	160	54,5	30,5	43	14	33 × 2	41	46	41	41	TN 516 W - 25 SM	29,6 × 2,9	105,5
	30		62	36	52	16	42 × 2	51	50	48	50	TN 516 W - 30 SM	38,6 × 2,9	141,5
	38		65	34	51	18	48 × 2	56	60	48	55	TN 516 W - 38 SM	44,6 × 2,9	163,0

- Le dimensioni di ingombro si intendono a raccordo chiuso.
- Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

- Overall sizes are with closed fitting.
- Les dimensions d'encombrement s'entendent raccord monté.
- Las dimensiones exteriores se refieren al racor montado.

- * - Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
- Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C



HYDRAULIEK SNIJRINGKOPPELINGEN



TN 517

Op aanvraag leverbaar.



TN 517 R

- Raccordo orientabile a 45° con controdado
- Einstellbare 45°-Verschraubung mit Kontermutter
- Rotary fitting a 45° with bulkhead nut
- 45° renversé orientable avec contre-écrou
- Racor orientable en 45° con contratuercia

Filettatura: Gas cilindrica Einschraubgewinde: Withworth-Rohrgewinde zylindrisch Thread: B.S.P. parallel Filetage: Gaz cylindrique Rosca: Gas cilíndrica

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube Ø _t	PN	L ~	L1	L2	I	Ø F	Ø N	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	24,5	9,5	21,7	6,3	1/8"	16	14	14	14	TN 517 - 6 LR	7,97 × 1,88	5,1
	8		27	12	19,5	9,5	1/4"	20,5	17	14	19	TN 517 - 8 LR	10,77 × 2,62	5,6
	10		27	12	24,5	9,5	1/4"	20,5	19	19	19	TN 517 - 10 LR	10,77 × 2,62	10,5
	12	250	29	14	27,5	9,5	3/8"	24	22	19	22	TN 517 - 12 LR	13,94 × 2,62	14,8
	15		32	17	26	13	1/2"	29	27	22	27	TN 517 - 15 LR	17,86 × 2,62	20,1
	18		33	17	32	13	1/2"	29	32	27	27	TN 517 - 18 LR	17,86 × 2,62	26,0
	22	160	35,5	19,5	37,5	13	3/4"	35	36	33	36	TN 517 - 22 LR	23,47 × 2,62	42,1
	28		39	23	36	16	1"	44,5	41	41	41	TN 517 - 28 LR	29,74 × 3,53	55,9
	35		48	27	38	16	1" 1/4	53	50	48	50	TN 517 - 35 LR	37,69 × 3,53	67,8
42	49		26	38	16	1" 1/2	58,5	60	48	55	TN 517 - 42 LR	44,04 × 3,53	75,9	
S	6	315	26	11	18,5	9,5	1/4"	20,5	17	14	19	TN 517 - 6 SR	10,77 × 2,62	5,7
	8		28	13	22,5	9,5	1/4"	20,5	19	19	19	TN 517 - 8 SR	10,77 × 2,62	10,5
	10	250	29	13	24,5	9,5	3/8"	24	22	19	22	TN 517 - 10 SR	13,94 × 2,62	12,7
	12		33	17	24,5	9,5	3/8"	24	24	22	22	TN 517 - 12 SR	13,94 × 2,62	15,4
	16		34	16	31	13	1/2"	29	30	27	27	TN 517 - 16 SR	17,86 × 2,62	22,4
	20	40	19	33	13	3/4"	35	36	33	36	TN 517 - 20 SR	23,47 × 2,62	33,1	
	25	46	22	35	16	1"	44,5	46	41	41	TN 517 - 25 SR	29,74 × 3,53	68,5	
	30	160	50	24	37	16	1" 1/4	53	50	48	50	TN 517 - 30 SR	37,69 × 3,53	75,2
38	55		24	37	16	1" 1/2	58,5	60	48	55	TN 517 - 38 SR	44,04 × 3,53	86,2	

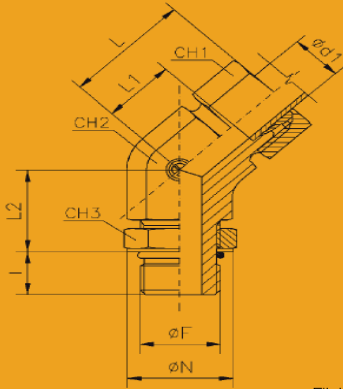
– Le dimensioni di ingombro si intendono a raccordo chiuso.
– Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

– Overall sizes are with closed fitting.
– Les dimensions d'encombrement s'entendent raccord monté.
– Las dimensiones exteriores se refieren al racor montado.

* – Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
– Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
– Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
– Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
– Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C

TN 517

Op aanvraag leverbaar.



TN 517 UNF/UN

- Raccordo orientabile a 45° con controdado
- Einstellbare 45°-Anschlußstutzen mit kontermutter
- Rotary fitting a 45° with bulkhead nut
- 45° orietanble avec contre-écrou
- Racor orientable en 45° con contratuercia

Filettatura:
UNF/UN

Einschraubgewinde:
UNF/UN

Thread:
UNF/UN

Filetage:
UNF/UN

Rosca:
UNF/UN

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L ≈	L1	L2	I	Ø F	Ø N	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg. x100 P.
L	6	315	24,5	9,5	20	9	7/16 - 20 UNF	16,2	14	14	14	TN 517 - 6L - 7/16 - 20 UNF	8,92 × 1,83	5,6
	8		27	12	20	9	7/16 - 20 UNF	16,2	17	14	14	TN 517 - 8L - 7/16 - 20 UNF	8,92 × 1,83	6,2
	10		27	12	24	10	9/16 - 18 UNF	21,2	19	19	17	TN 517 - 10L - 9/16 - 18 UNF	11,89 × 1,98	10,4
	12		29	14	26	10	9/16 - 18 UNF	21,2	22	19	17	TN 517 - 12L - 9/16 - 18 UNF	11,89 × 1,98	11,3
	12		29	14	26	11	3/4 - 16 UNF	26,2	22	19	22	TN 517 - 12L - 3/4 - 16 UNF	16,36 × 2,21	14,3
	15		32	17	26	11	3/4 - 16 UNF	26,2	27	22	22	TN 517 - 15L - 3/4 - 16 UNF	16,36 × 2,21	20,1
	15		32	17	26,3	12,7	7/8 - 14 UNF	29,3	27	22	27	TN 517 - 15L - 7/8 - 14 UNF	19,18 × 2,46	21,4
	18		33	17	32,3	12,7	7/8 - 14 UNF	29,3	32	27	27	TN 517 - 18L - 7/8 - 14 UNF	19,18 × 2,46	26,2
	18		34	18	32,5	15	1" 1/16 - 12 UN	37,5	32	33	32	TN 517 - 18L - 1" 1/16 - 12 UN	23,47 × 2,95	39,4
	22		35,5	19,5	35	15	1" 1/16 - 12 UN	37,5	36	33	32	TN 517 - 22L - 1" 1/16 - 12 UN	23,47 × 2,95	41,6
	28		39	23	37	15	1" 5/16 - 12 UN	44	41	41	41	TN 517 - 28L - 1" 5/16 - 12 UN	29,74 × 2,95	55,6
	35		48	27	39	15	1" 5/8 - 12 UN	54,5	50	48	50	TN 517 - 35L - 1" 5/8 - 12 UN	37,47 × 3,00	69,1
42	49	26	39	15	1" 7/8 - 12 UN	56	60	48	55	TN 517 - 42L - 1" 7/8 - 12 UN	43,69 × 3,00	77,2		
S	6	400	26	11	21	9	7/16 - 20 UNF	16,2	17	14	14	TN 517 - 6S - 7/16 - 20 UNF	8,92 × 1,83	6,6
	8		28	13	23	10	9/16 - 18 UNF	21,2	19	19	17	TN 517 - 8S - 9/16 - 18 UNF	11,89 × 1,98	10,4
	10		29	13	23	10	9/16 - 18 UNF	21,2	22	19	17	TN 517 - 10S - 9/16 - 18 UNF	11,89 × 1,98	11,5
	12		33	17	25	11	3/4 - 16 UNF	26,2	24	22	22	TN 517 - 12S - 3/4 - 16 UNF	16,36 × 2,21	17,0
	16		34	16	32,3	12,7	7/8 - 14 UNF	29,3	30	27	27	TN 517 - 16S - 7/8 - 14 UNF	19,18 × 2,46	26,4
	20		40	19	35	15	1" 1/16 - 12 UN	37,5	36	33	32	TN 517 - 20S - 1" 1/16 - 12 UN	23,47 × 2,95	43,7
	25		46	22	37	15	1" 1/16 - 12 UN	37,5	46	41	32	TN 517 - 25S - 1" 1/16 - 12 UN	23,47 × 2,95	62,5
	30	50	24	39	15	1" 5/8 - 12 UN	54,5	50	48	50	TN 517 - 30S - 1" 5/8 - 12 UN	37,47 × 3,00	77,6	
	38	55	24	39	15	1" 7/8 - 12 UN	56	60	48	55	TN 517 - 38S - 1" 7/8 - 12 UN	43,69 × 3,00	88,1	

- Le dimensioni di ingombro si intendono a raccordo chiuso.
- Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

- Overall sizes are with closed fitting.
- Les dimensions d'encombrement s'entendent raccord monté.
- Las dimensiones exteriores se refieren al racor montado.

- Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
- Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C



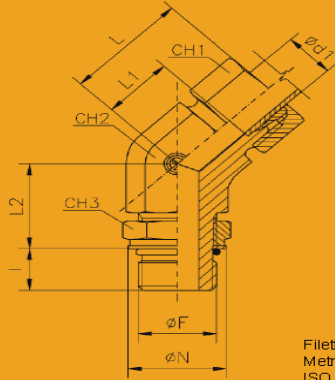
RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN



TN 517

Op aanvraag leverbaar.



TN 517 M

- Raccordo orientabile a 45° con controdado
- Einstellbare 45°-Verschraubung mit Kontermutter
- Rotary fitting a 45° with bulkhead nut
- 45° renversé orientable avec contre-écrou
- Racor orientable en 45° con contratuercas

Filettatura:
Metrica cilindrica
ISO 6149-3

Einschraubgewinde:
Metrisches-Feingewinde zylindrisch
ISO 6149-3

Thread:
Metric parallel
ISO 6149-3

Filetage:
Métrique cylindrique
ISO 6149-3

Rosca:
Métrica cilíndrica
ISO 6149-3

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube Ø d ₁	PN	L ≈	L1	L2	I	ØF	ØN	CH1	CH2	CH3	Simbolo di ordinazione Bestell-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg.x100 P.
L	6	315	29	14	19	8,5	10 × 1	15	14	14	14	TN 517 - 6 LM	8,1 × 1,6	5,6
	8		31	16	21	11	12 × 1,5	18	17	14	17	TN 517 - 8 LM	9,3 × 2,2	6,1
	10		32	17	24	11	14 × 1,5	20	19	19	19	TN 517 - 10 LM	11,3 × 2,2	10,5
	12	250	34	19	24,5	11,5	16 × 1,5	23	22	19	22	TN 517 - 12 LM	13,3 × 2,2	14,1
	15		36	21	28,5	12,5	18 × 1,5	25	27	22	24	TN 517 - 15 LM	15,3 × 2,2	19,6
	18		40	24	32,5	12,5	22 × 1,5	28	32	27	27	TN 517 - 18 LM	19,3 × 2,2	26,2
	22	160	44	28	34	15,5	27 × 2	33	36	33	32	TN 517 - 22 LM	23,6 × 2,9	42,0
	28		47	31	38,5	15,5	33 × 2	42	41	41	41	TN 517 - 28 LM	29,6 × 2,9	45,8
	35		59	38	46,5	15,5	42 × 2	51	50	48	50	TN 517 - 35 LM	38,6 × 2,9	69,8
	42		61	38	48	17	48 × 2	56	60	48	55	TN 517 - 42 LM	44,6 × 2,9	77,7
6	400		30,5	15,5	22	11	12 × 1,5	18	17	14	17	TN 517 - 6 SM	9,3 × 2,2	6,2
8		33	18	25	11	14 × 1,5	20	19	19	19	TN 517 - 8 SM	11,3 × 2,2	10,6	
10		34	18	25,5	12,5	16 × 1,5	23	22	19	22	TN 517 - 10 SM	13,3 × 2,2	11,3	
12		38	22	29	14	18 × 1,5	25	24	22	24	TN 517 - 12 SM	15,3 × 2,2	14,2	
16		43	25	35,5	14,5	22 × 1,5	28	30	27	27	TN 517 - 16 SM	19,3 × 2,2	22,0	
20		49	28	37,5	16	27 × 2	33	36	33	32	TN 517 - 20 SM	23,6 × 2,9	43,9	
25		315	54,5	30,5	41	16	33 × 2	42	46	41	41	TN 517 - 25 SM	29,6 × 2,9	58,9
30		250	62	36	50	18	42 × 2	51	50	48	50	TN 517 - 30 SM	38,6 × 2,9	78,4
38		200	65	34	49	20	48 × 2	56	60	48	55	TN 517 - 38 SM	44,6 × 2,9	88,7

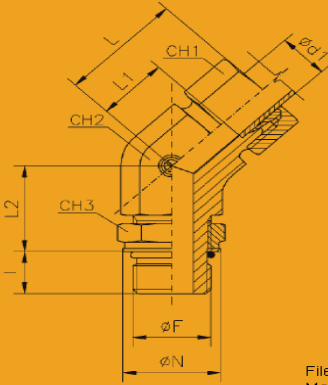
– Le dimensioni di ingombro si intendono a raccordo chiuso.
– Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

– Overall sizes are with closed fitting.
– Les dimensions d'encombrement s'entendent raccord monté.
– Las dimensiones exteriores se refieren al racor montado.

- * – Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
- Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C

TN 517

Op aanvraag leverbaar.



TN 517 W-M

- Raccordo orientabile a 45° con controdado - Rondella tenuta O-Ring
- Einstellbare 45°-Verschraubung mit Kontermutter - Bewegliche Unterlegscheibe f. O-Ring
- Rotary fitting a 45° with bulkhead nut - O-Ring seal ring
- 45° renversé orientable avec contre-écrou - Rondelle d'étanchéité O-Ring
- Racor orientable en 45° con contratuercas - Arandela de retención junta tórica

Filettatura:
Metrica cilindrica

Einschraubgewinde:
Metrisches-Feingewinde zylindrisch

Thread:
Metric parallel

Filetage:
Métrique cylindrique

Rosca:
Métrica cilíndrica

Serie Reihe Series Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d _t	PN	L ≈	L1	L2	I	Ø F	Ø N	CH1	CH2	CH3	Simbolo di ordinazione Bestel-Nr. Part. No. Références Referencias	* O-Ring (Shore A ca 90)	Peso Gewicht Weight Poids kg. x 100 P.
L	6	315	29	14	20	7,5	10 × 1	15	14	14	14	TN 517 W - 6 LM	8,1 × 1,6	5,6
	8		31	16	22,5	9,5	12 × 1,5	18	17	14	17	TN 517 W - 8 LM	9,3 × 2,2	6,1
	10		32	17	25,5	9,5	14 × 1,5	20	19	19	19	TN 517 W - 10 LM	11,3 × 2,2	10,5
	12		34	19	26	10	16 × 1,5	23	22	19	22	TN 517 W - 12 LM	13,3 × 2,2	14,1
	15		36	21	30	11	18 × 1,5	25	27	22	24	TN 517 W - 15 LM	15,3 × 2,2	19,6
	18	250	40	24	34	11	22 × 1,5	28	32	27	27	TN 517 W - 18 LM	19,3 × 2,2	26,2
	22	160	44	28	36	13,5	27 × 2	33	36	33	32	TN 517 W - 22 LM	23,6 × 2,9	42,0
	28		47	31	40,5	13,5	33 × 2	41	41	41	41	TN 517 W - 28 LM	29,6 × 2,9	45,8
	35		59	38	48,5	13,5	42 × 2	51	50	48	50	TN 517 W - 35 LM	38,6 × 2,9	69,8
42	61		38	50	15	48 × 2	56	60	48	55	TN 517 W - 42 LM	44,6 × 2,9	77,7	
S	6	315	30,5	15,5	23,5	9,5	12 × 1,5	18	17	14	17	TN 517 W - 6 SM	9,3 × 2,2	6,2
	8		33	18	26,5	9,5	14 × 1,5	20	19	19	19	TN 517 W - 8 SM	11,3 × 2,2	10,6
	10		34	18	27	11	16 × 1,5	23	22	19	22	TN 517 W - 10 SM	13,3 × 2,2	11,3
	12		38	22	30,5	12,5	18 × 1,5	25	24	22	24	TN 517 W - 12 SM	15,3 × 2,2	14,2
	16	250	43	25	37	13	22 × 1,5	28	30	27	27	TN 517 W - 16 SM	19,3 × 2,2	22,0
	20		49	28	39,5	14	27 × 2	33	36	33	32	TN 517 W - 20 SM	23,6 × 2,9	43,9
	25	160	54,5	30,5	43	14	33 × 2	41	46	41	41	TN 517 W - 25 SM	29,6 × 2,9	58,9
	30		62	36	52	16	42 × 2	51	50	48	50	TN 517 W - 30 SM	38,6 × 2,9	78,4
	38		65	34	51	18	48 × 2	56	60	48	55	TN 517 W - 38 SM	44,6 × 2,9	88,7

- Le dimensioni di ingombro si intendono a raccordo chiuso.
- Baumaße sind ca.-Maße bei angezogener Überwurfmutter.

- Overall sizes are with closed fitting.
- Les dimensions d'encombrement s'entendent raccord monté.
- Las dimensiones exteriores se refieren al racor montado.

- * - Gamma di temperature senza riduzioni di pressione con i raccordi con guarnizioni O-Ring in NBR (di serie) e FPM (su richiesta):
NBR (Perbunan): da -35 a +100°C - FPM (Viton): da -25 a +120°C
- Temperaturbereich ohne Druckabschläge bei Verschraubungen mit O-Ring aus NBR (serienmäßig) und FPM (auf Wunsch):
NBR (Perbunan): -35 bis +100°C - FPM (Viton): -25 bis +120°C
- Temperature range without pressure reductions with connections fitted with O-Ring in NBR (standard) and FPM (to order):
NBR (Perbunan): from -35 to +100°C - FPM (Viton): from -25 to +120°C
- Gamme de températures sans réductions de pression avec les raccords avec joints O-Ring en NBR (de série) et FPM (sur demande):
NBR (Perbunan): de -35 à +100°C - FPM (Viton): de -25 à +120°C
- Gama de temperaturas sin reducción de presión con los racores con juntas tóricas en NBR (de serie) y FPM (bajo pedido):
NBR (Perbunan): de -35 a +100°C - FPM (Viton): de -25 a +120°C



RASTELLI RACCORDI

HYDRAULIEK SNIJRINGKOPPELINGEN

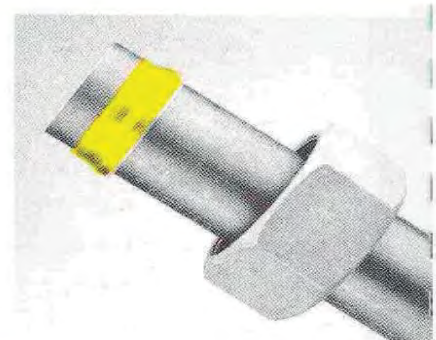
3

Voormontage machine
Op aanvraag leverbaar

I-27019 VILLANTERIO (PV)

SN

TN 294A



Attrezzatura pneumatica portatile, pratica, per il premontaggio degli anelli dei raccordi DIN 2353 - ISO 8434-1

Zweckmäßige und tragbare Luftvorrichtung zur Vormontage von Verschraubungs-Schneidringen nach DIN 2353 - ISO 8434-1

Pneumatic pre-assembly machine to attach cutting rings for pipe union to DIN 2353 - ISO 8434-1

Appareil pneumatique, portable, pratique, pour le prémontage des bagues des raccords DIN 2353 - ISO 8434-1

Voormontage machine *Op aanvraag leverbaar*

TN 285A

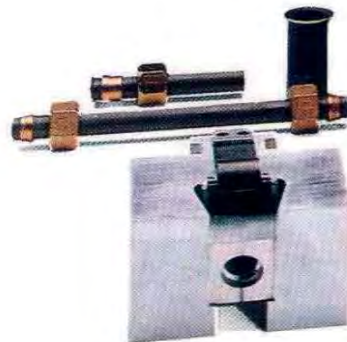
Attrezzature per il montaggio delle ogive dei raccordi
DIN 2353 - ISO 8434-1
Attrezzature per la svasatura a 37° dei tubi d'acciaio.

Vorrichtungen zur Vormontage von Schneidringen auf
Verschraubungen nach DIN 2353 - ISO 8434-1
Vorrichtungen zum Spitzsenken von Sthrohren auf 37°

Tools for the pre-fitting of the cutting ring for
DIN 2353 - ISO 8434-1
Tools for swaging steel tube at 37°

Appareils pour le pré-montage des olives des raccords
DIN 2353 - ISO 8434-1
Appareils pour l'évasement à 37° des tubes en acier.

FUNZIONAMENTO IDRAULICO
HYDRAULIBETRIEB
HYDRAULIC WORKING
FONCTIONNEMENT HYDRAULIQUE





HYDRAULIEK SNIJRINGKOPPELINGEN



Voormontage machine Op aanvraag leverbaar

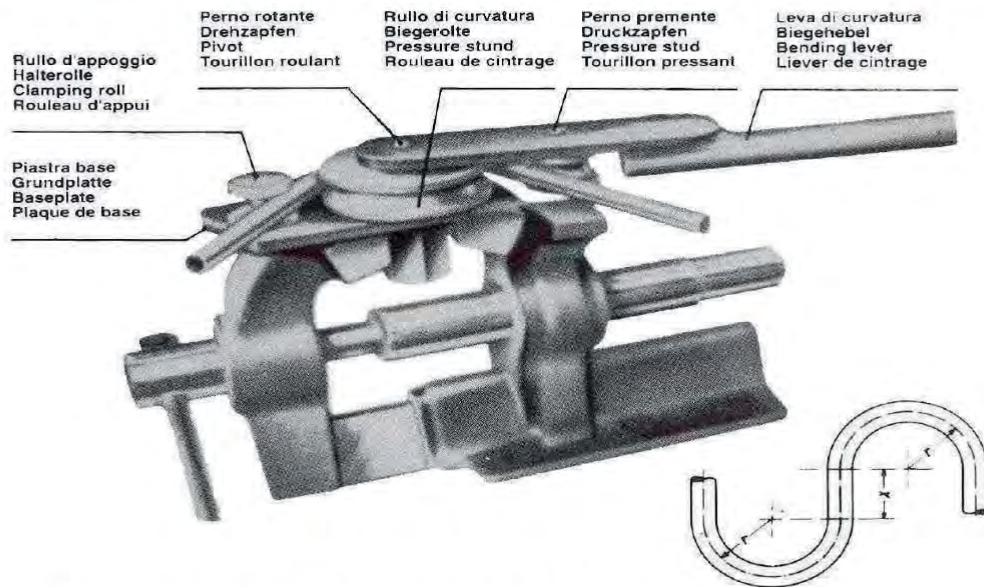
TN 285A

TABELLA ORIENTATIVA VALORI DI PRESSIONE ORIENTIERUNGSTAFEL ÜBER DRUCKWERTE			PRESSURE VALUE TABLE TABLEAU DES VALEURS DE PRESSION		
Serie Reihe Series Série	∅Tubo e spessore Rohr ∅ x Wandst Tube ∅ x thickness ∅ du tube x épaisseur mm.	Pressione di serraggio Spanndruck Tightening pressure Pression de serrage bars	Serie Reihe Series Série	∅Tubo e spessore Rohr ∅ x Wandst Tube ∅ x thickness ∅ du tube x épaisseur mm.	Pressione di serraggio Spanndruck Tightening pressure Pression de serrage bars
L	6 x 1	20	S	6 x 1,5	20
	8 x 1	30		8 x 1,5	30
	10 x 1	35		10 x 1,5	35
	12 x 1,5	35		12 x 2	35
	15 x 1,5	40		14 x 2	40
	18 x 1,5	60		16 x 2	55
	22 x 2	70		20 x 2,5	80
	28 x 2	80		25 x 2,5	105
	35 x 2	100		30 x 3	130
	42 x 3	160		38 x 5	160

UTENSILI E CALIBRI - WERKZEUGE UND LEHREN - TOOLS AND GAUGES - OUTILS ET CALIBRES				
TN 196		TN 286 A		TN 287 A
Serie Reihe Series Série	∅ Tubo Rohr AD Tube O.D. ∅ Tube d ₁	Simbolo di ordinazione - Bestell-Nr. - Part.No. - Références		
		Calibro conico - Kegellehre Tapered gauge - Calibre conique	Guida tubo - Rohrführung Tube guide - Guide tube	Forma conica - Kegelform Tapered form - Forme conique
L	6	TN 196 - 6 LS	TN 286 A - 6 L	TN 287 A - 6 L
	8	TN 196 - 8 LS	TN 286 A - 8 L	TN 287 A - 8 L
	10	TN 196 - 10 LS	TN 286 A - 10 L	TN 287 A - 10 L
	12	TN 196 - 12 LS	TN 286 A - 12 L	TN 287 A - 12 L
	15	TN 196 - 15 L	TN 286 A - 15 L	TN 287 A - 15 L
	18	TN 196 - 18 L	TN 286 A - 18 L	TN 287 A - 18 L
	22	TN 196 - 22 L	TN 286 A - 22 L	TN 287 A - 22 L
	28	TN 196 - 28 L	TN 286 A - 28 L	TN 287 A - 28 L
	35	TN 196 - 35 L	TN 286 A - 35 L	TN 287 A - 35 L
	42	TN 196 - 42 L	TN 286 A - 42 L	TN 287 A - 42 L
S	6	TN 196 - 6 LS	TN 286 A - 6 S	TN 287 A - 6 S
	8	TN 196 - 8 LS	TN 286 A - 8 S	TN 287 A - 8 S
	10	TN 196 - 10 LS	TN 286 A - 10 S	TN 287 A - 10 S
	12	TN 196 - 12 LS	TN 286 A - 12 S	TN 287 A - 12 S
	14	TN 196 - 14 S	TN 286 A - 14 S	TN 287 A - 14 S
	16	TN 196 - 16 S	TN 286 A - 16 S	TN 287 A - 16 S
	20	TN 196 - 20 S	TN 286 A - 20 S	TN 287 A - 20 S
	25	TN 196 - 25 S	TN 286 A - 25 S	TN 287 A - 25 S
	30	TN 196 - 30 S	TN 286 A - 30 S	TN 287 A - 30 S
	38	TN 196 - 38 S	TN 286 A - 38 S	TN 287 A - 38 S

BY Buigijzer

- BY*
- *Buigijzer*
 - *Rohrbiegverrichtung*
 - *Pipe bending machine*
 - *Plieuse des tubes*



- Con 6 rulli di curvatura per tubi con diametro esterno da 6 a 18 mm.
- Mit 6 auswechselbaren Biegerollen für Rohre mit einem Außendurchmesser von 6 - 18 mm.
- With 6 bending rollers for tubes with outside diameters from 6 to 18 mm.
- Avec 6 rouleaux de cintrage pour tubes avec diamètres mesure extérieure de 6 à 18 mm.

Rulli per tubo D.E. Rollen für Rohr-AD Rollers for tube O.D. Rouleaux pour tube D.E.	Tubo Gas Gasrohr Gas Tube Tube Gaz	r	- x
6	—	33	35
8	—	34	35
10	1/8"	35,5	35
12	1/8"	36,5	35
14	1/4"	36,5	35

Rulli per tubo D.E. Rollen für Rohr-AD Rollers for tube O.D. Rouleaux pour tube D.E.	Tubo Gas Gasrohr Gas Tube Tube Gaz	r	- x
15	—	44	38
16	—	44	38
18	3/8"	51,5	42



HYDRAULIEK SNIJRINGKOPPELINGEN



Technische Data

CERTIFICAZIONI DI QUALITA' QUALITÄTSZERTIFIKATE QUALITY CERTIFICATES CERTIFICATION DE QUALITE



RINA
www.rina.org

- CERTIFICATO N° 95/94/S
- SZERTIFIKATE N° 95/94/S
- CERTIFICATE N° 95/94/S
- CERTIFICATION N° 95/94/S



- CERTIFICATO N° IT 2633
- SZERTIFIKATE N° IT 2633
- CERTIFICATE N° IT 2633
- CERTIFICATION N° IT 2633

Technische Data

**CERTIFICAZIONI DI PRODOTTO
PRODUKTZERTIFIZIERUNGEN
PRODUCT APPROVALS
CERTIFICATION DE CONFORMITE PRODUIT
CERTIFICACIÓN DE PRODUCTO**



- CERTIFICATO N° 65 881 - 94 HH
- SZERTIFIKATE N° 65 881 - 94 HH
- CERTIFICATE N° 65 881 - 94 HH
- CERTIFICATION N° 65 881 - 94 HH
- CERTIFICADO N° 65 881 - 94 HH



- CERTIFICATO N° MAC/30199/1/TO/99
- SZERTIFIKATE N° MAC/30199/1/TO/99
- CERTIFICATE N° MAC/30199/1/TO/99
- CERTIFICATION N° MAC/30199/1/TO/99
- CERTIFICADO N° MAC/30199/1/TO/99



- CERTIFICATO N° MAC/30199/2/TO/99
- SZERTIFIKATE N° MAC/30199/2/TO/99
- CERTIFICATE N° MAC/30199/2/TO/99
- CERTIFICATION N° MAC/30199/2/TO/99
- CERTIFICADO N° MAC/30199/2/TO/99



DET NORSKE
VERITAS

- CERTIFICATO N° P-12795
- SZERTIFIKATE N° P-12795
- CERTIFICATE N° P-12795
- CERTIFICATION N° P-12795
- CERTIFICADO N° P-12795



- CERTIFICATO N° 05-0538-GN
- SZERTIFIKATE N° 05-0538-GN
- CERTIFICATE N° 05-0538-GN
- CERTIFICATION N° 05-0538-GN
- CERTIFICADO N° 05-0538-GN

Technische Data

TECHNICAL DATA

– **Surface finishes for steel couplings (DIN 3859).**

Series LLL/S (Bodies, Rings, Nuts): White passivation treatment Fe/Zn 8-UNI ISO 2081 with trivalent Chrome (free from hexavalent chrome) with sealer in compliance with the European Norm EC 200/53.

– **Pressure values indicated in the relative coupling tables in accordance with DIN 2401 STANDARDS**

- a) PN rated pressure corresponds to a safety factor of PN x 4 times.
- b) Maximum PE operating pressure corresponds to a safety factor of:
PE x 2,5 times for the complete coupling.
PE x 4 times for the ring pre-assembled on pipe.

The pressure values indicated in the relative coupling tables are understood as the maximum operating pressure values inclusive of peak values during standard operating conditions, with maximum permissible TB (DIN 2401) operating temperatures of:

- 40°C ÷ +120°C for steel (DIN 3859)
- 60°C ÷ + 20°C for AISI 316 Ti stainless steel (DIN 17122-W. No. 1.4571)

With stainless steel, pressure values must be reduced in accordance with increases in the operating temperature:

- + 50°C = - 4% ~ pressure
- +100°C = -10% ~ pressure
- +200°C = -20% ~ pressure
- +300°C = -30% ~ pressure
- +400°C = -35% ~ pressure

– **Materials and operating temperatures for DIN 2353 / ISO 8434-1 coupling seals**

NBR (Perbunan® - BAYER) = -35°C ÷ +100°C for steel (DIN 3859)
FPM (Viton® - DU PONT) = -25°C ÷ +200°C for AISI 316 Ti stainless steel
(DIN 17122-W. Nr. 1.4571).

For the fittings with seals attend to the instructions of NORM DIN 7716 "RUBBER PRODUCTS". Requirements for storage, cleaning and maintenance.



Technische Data

– Recommended torque wrench setting MT in Nm

For male stud couplings with DIN 3852 Type B Part 2 type seal and flat GG with DIN 3852 Type E Part 11

Series	Pipe Ø	THREADS – TORQUE WRENCH SETTINGS					
		B.S.P. Thread Ø	Type B MT (Nm)	Type E MT (Nm)	Metric Thread Ø	Type B MT (Nm)	Type E MT (Nm)
L	6	G 1/8"	25	20	M 10 x 1	25	20
	8	G 1/4"	45	40	M 12 x 1,5	30	30
	10	G 1/4"	45	40	M 14 x 1,5	50	50
	12	G 3/8"	85	80	M 16 x 1,5	80	60
	15	G 1/2"	160	100	M 18 x 1,5	90	80
	18	G 1/2"	105	100	M 22 x 1,5	150	140
	22	G 3/4"	230	200	M 26 x 1,5	240	200
	28	G 1"	390	380	M 33 x 2	400	380
	35	G 1" 1/4	600	500	M 42 x 2	600	500
	42	G 1" 1/2	800	600	M 48 x 2	800	600
S	6	G 1/4"	60	60	M 12 x 1,5	45	45
	8	G 1/4"	60	60	M 14 x 1,5	60	60
	10	G 3/8"	110	90	M 16 x 1,5	95	80
	12	G 3/8"	110	90	M 18 x 1,5	120	100
	14	G 1/2"	170	130	M 20 x 1,5	170	140
	16	G 1/2"	140	130	M 22 x 1,5	190	150
	20	G 3/4"	320	200	M 27 x 2	320	200
	25	G 1"	390	380	M 33 x 2	450	380
	30	G 1" 1/4	600	500	M 42 x 2	600	500
	38	G 1" 1/2	800	600	M 48 x 2	800	600

– The torque values given here are only approximate and referring to the assembly of steel fittings with a protective surface treatment of galvanizing of the components made of the same material by using a lubricant (or a special anti-seizure agent in case of stainless steel - values given on request), following the directions of the Assembly Instructions.

Said values can change according to materials employed, tolerances and surface finishing of the assembling components as well as the assembly method.

– Use the values relative to the S series for TN 141 couplings.

– Types of thread for DIN 2353 / ISO 8434-1 couplings

- B.S.P. PARALLEL = UNI EN ISO 228
- B.S.P. TAPER = UNI ISO 7/1 (UNI EN ISO 10226/1)
- METRIC PARALLEL = UNI 4535-64
- METRIC TAPER = DIN 158
- NPT = ANSI/ASME B.1.20.1 (1983)
- UNF-UN = ANSI/ASME B.1.1 (1989)

– Hermetic seals for taper threads

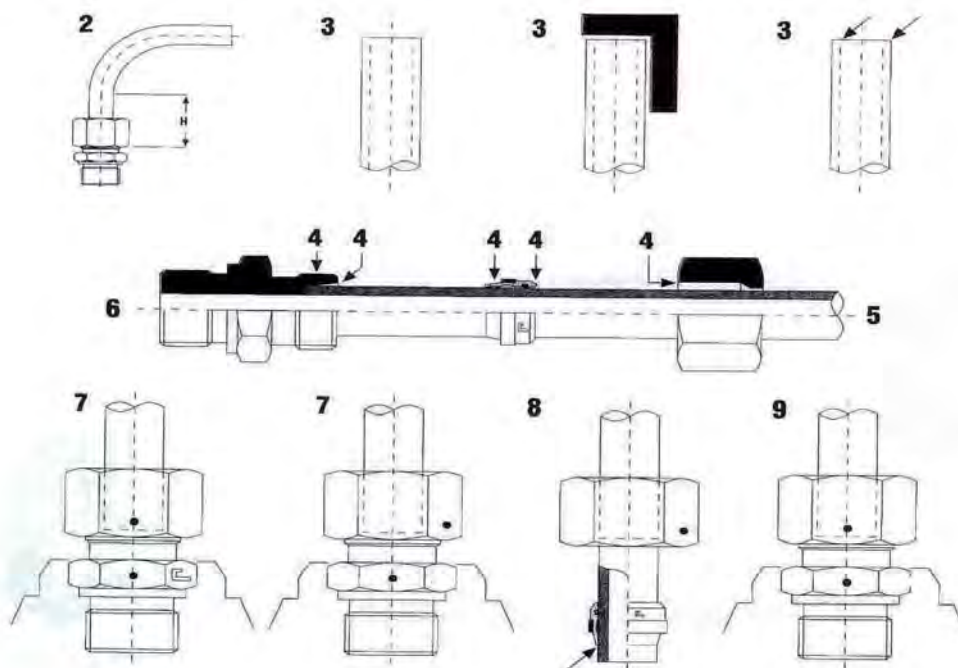
Taper threads are not hermetically sealed. To obtain a watertight hermetic seal additional sealing elements are required such as PTFE sealing tape (e. g.: TEFLON).



Technische Data

Montagevoorschrift vlg. DIN 3859-2 voor BU snijringverbindingen.

- 1 Voordat U voormonteert, zorg ervoor dat al het gereedschap in perfecte conditie is. Vervang ieder beschadigd of versleten stuk gereedschap.
- 2 Het deel van de pijp waarop u voormonteert moet minimaal een recht gedeelte hebben van 2 keer de lengte van de moer. Ronding van de pijp moet voldoen aan DIN 2391.
- 3 Zaag de pijp met een degelijke ijzerzaag recht af (gebruik geen pijpsnijder). Controleer de zaagsnede op een hoek van 90°. Verwijder bramen aan binnen en buitenzijde van de pijp.
- 4 Olie de 24° conus, draad van het huis, snijring en moer in met een goede kwaliteit snij-olie.
- 5 Breng de moer en snijring aan, zoals getoond wordt op de afbeelding. De grootste diameter van de snijring dient in de richting van de moer te worden aangebracht.
- 6 Plaats de pijp in de 24° conus, totdat deze in contact komt met de eindstop. Draai de moer met de hand tot dat de snijring stevig tegen de moer drukt. Daarna draait u de moer aan met een sleutel, tot dat de snijkant van de snijring contact maakt met de pijp en rotatie voorkomt.
- 7 Druk de pijp tegen de eindstop en zorg ervoor dat deze niet roteert, draai de moer 3/4 slag. Op deze manier snijdt de snijkant van de ring in de buitenkant van de pijp voor de nodige diepte en veroorzaakt een opstaande rand voor de insnijding van de snijring, terwijl gelijktijdig de tweede snijkant zich in de pijp hecht.
- 8 Draai de moer los en controleer of er een duidelijke opstaande rand over de gehele ronding van de pijp is ontstaan. De opstaande rand moet 70% van de kopse kant van de snijring bedekken. Deze controle is van essentieel belang voor alle veiligheidsfactoren. Als de opstaande rand niet correct is, moet de voormontage opnieuw worden uitgevoerd.
- 9 Indien de voormontage correct is uitgevoerd, plaats de pijp terug in de koppeling, draai de moer aan met een sleutel tot u een bepaalde weerstand hebt bereikt. Daarna draait u de moer nog 1/4 slag met één sleutel en contra-sleutel vast.
- 10 Alle voormontages van RVS-koppelingen dienen met een voormontage blok of machine te geschieden.



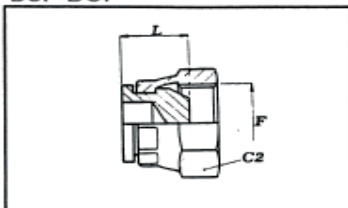
Voor verdere technische gegevens kijk op www.rastelliraccordi.it



HYDRAULIEK ADAPTERS

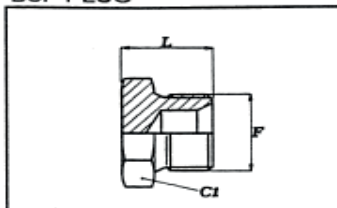
4

BSP DOP



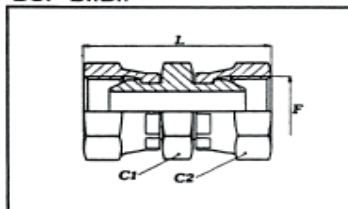
NUMMER	Draadmaat		Afm.	
	F	F	C2	L
ABF02	1/8		14	14
ABF04	1/4		19	14
ABF06	3/8		22	17
ABF08	1/2		27	18
ABF10	5/8		28	18
ABF12	3/4		32	20
ABF16	1"		40	20
ABF20	1 1/4		50	24
ABF24	1 1/2		55	28
ABF32	2"		70	30

BSP PLUG



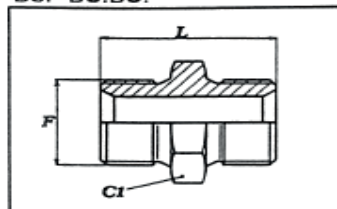
NUMMER	Draadmaat		Afm.	
	F	F	C1	L
ABM02	1/8		14	14
ABM04	1/4		19	18
ABM06	3/8		22	21
ABM08	1/2		27	24
ABM10	5/8		27	26
ABM12	3/4		32	27
ABM16	1"		40	31
ABM20	1 1/4		50	35
ABM24	1 1/2		55	36
ABM32	2"		70	43

BSP BI.BI.



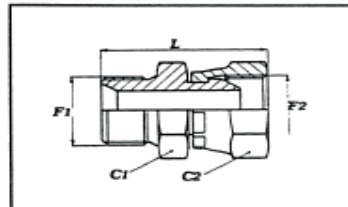
NUMMER	Draadmaat				
	F	F			
ABF02BF02	1/8	1/8	14	17	38
ABF04BF04	1/4	1/4	19	19	38
ABF06BF06	3/8	3/8	22	22	44
ABF08BF08	1/2	1/2	27	27	51
ABF10BF10	5/8	5/8	27	28	54
ABF12BF12	3/4	3/4	32	32	61
ABF16BF16	1"	1"	40	40	65
ABF20BF20	1 1/4	1 1/4	50	50	75
ABF24BF24	1 1/2	1 1/2	55	55	81
ABF32BF32	2"	2"	70	70	94

BSP BU.BU.



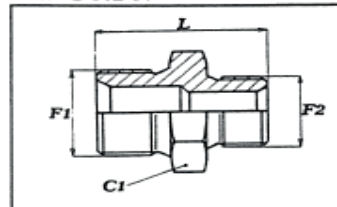
NUMMER	Draadmaat		Afm.	
	F	F	C1	L
ABM02BM02	1/8	1/8	14	20
ABM04BM04	1/4	1/4	19	22
ABM06BM06	3/8	3/8	22	34
ABM08BM08	1/2	1/2	27	38
ABM10BM10	5/8	5/8	27	42
ABM12BM12	3/4	3/4	32	44
ABM16BM16	1"	1"	40	50
ABM20BM20	1 1/4	1 1/4	50	56
ABM24BM24	1 1/2	1 1/2	55	57
ABM32BM32	2"	2"	70	60

BSP BI.BU.



NUMMER	Draadmaat				
	F	F			
ABF02BM02	1/8	1/8	14	17	28
ABF04BM04	1/4	1/4	19	19	33
ABF06BM06	3/8	3/8	22	22	39
ABF08BM08	1/2	1/2	27	27	44
ABF10BM10	5/8	5/8	27	28	48
ABF12BM12	3/4	3/4	32	32	53
ABF16BM16	1"	1"	40	40	58
ABF20BM20	1 1/4	1 1/4	50	50	66
ABF24BM24	1 1/2	1 1/2	55	55	68
ABF32BM32	2"	2"	70	70	77

BSP BU.BU.



NUMMER	Draadmaat		Afm.	
	F	F	C1	L
ABM02BM04	1/4	1/8	19	26
ABM02BM06	3/8	1/8	22	29
ABM04BM06	3/8	1/4	22	32
ABM02BM08	1/2	1/8	27	31
ABM04BM08	1/2	1/4	27	35
ABM06BM08	1/2	3/8	27	37
ABM04BM10	5/8	1/4	27	37
ABM06BM10	5/8	3/8	27	39
ABM08BM10	5/8	1/2	27	40
ABM04BM12	3/4	1/4	32	38

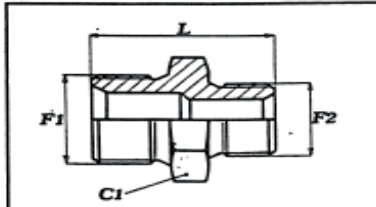


RASTELLI RACCORDI

HYDRAULIEK ADAPTERS

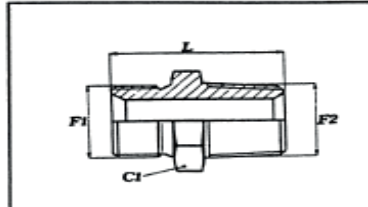


VERVOLG BSP BU.BU.



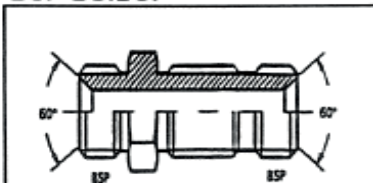
NUMMER	Draadmaat		Afm.	
	F	F	C1	L
ABM06BM12	3/4	3/8	32	40
ABM08BM12	3/4	1/2	32	41
ABM10BM12	3/4	5/8	32	43
ABM04BM16	1"	1/4	40	42
ABM06BM16	1"	3/8	40	44
ABM08BM16	1"	1/2	40	45
ABM10BM16	1"	5/8	40	46
ABM12BM16	1"	3/4	40	48
ABM08BM20	1 1/4	1/2	50	49
ABM10BM20	1 1/4	5/8	50	51
ABM12BM20	1 1/4	3/4	50	52
ABM16BM20	1 1/4	1"	50	54
ABM08BM24	1 1/2	1/2	55	50
ABM12BM24	1 1/2	3/4	55	53
ABM16BM24	1 1/2	1"	55	55
ABM20BM24	1 1/2	1 1/4	55	57
ABM16BM32	2"	1"	70	62
ABM20BM32	2"	1 1/4	70	65
ABM24BM32	2"	1 1/2	70	65

BSP BU.BU.CONISCH



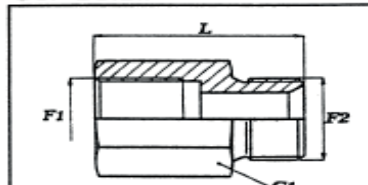
NUMMER	Draadmaat		Afm.	
	F	F	C1	L
ABM02BT02	1/8	1/8	12	24
ABM04BT04	1/4	1/4	15	32
ABM06BT06	3/8	3/8	19	35
ABM08BT08	1/2	1/2	24	43
ABM10BT10	5/8	5/8	25	48
ABM12BT12	3/4	3/4	30	46
ABM16BT16	1"	1"	36	55
ABM20BT20	1 1/4	1 1/4	46	60
ABM24BT24	1 1/2	1 1/2	50	62
ABM32BT32	2"	2"	65	71

BSP BU.BU.



NUMMER	Draadmaat	
	F	F
ABM02BML02	1/8	
ABM04BML04	1/4	
ABM06BML06	3/8	
ABM08BML08	1/2	
ABM10BML10	5/8	
ABM12BML12	3/4	
ABM16BML16	1"	
ABM20BML20	1 1/4	
ABM24BML24	1 1/2	
ABM32BML32	2"	

BSP BU.BI.



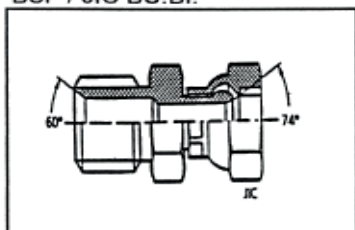
NUMMER	Draadmaat		Afm.	
	F	F	C1	L
ABM02BV02	1/8		14	28
			14	38
			14	48
ABM04BV04	1/4		19	33
			19	42
			19	55
			19	60
ABM06BV06	3/8		22	33
			22	45
			22	50
			22	57
ABM08BV08	1/2		27	35
			27	40
			27	50
			27	60
			27	80
ABM12BV12	3/4		32	48
			32	56
			32	73
ABM16BV16	1"		40	55
			40	85



HYDRAULIEK ADAPTERS

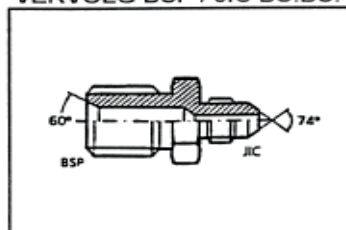


BSP / JIC BU.BI.



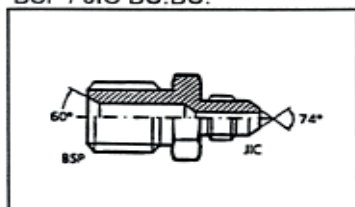
NUMMER	Draadmaat	
	F	F
ABM04JF07	1/4	7/16
ABM08JF07	1/2	7/16
ABM10JF12	5/8	3/4
ABM10JF14	5/8	7/8
ABM10JF17	5/8	1 1/16
ABM16JF21	1"	1 5/16

VERVOLG BSP / JIC BU.BU.



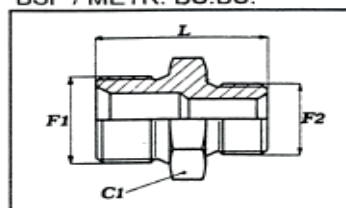
NUMMER	Draadmaat	
	F	F
ABM12JM19	3/4	1 3/16
ABM12JM21	3/4	1 5/16
ABM12JM26	3/4	1 5/8
ABM16JM12	1"	3/4
ABM16JM14	1"	7/8
ABM16JM17	1"	1 1/16
ABM16JM19	1"	1 3/16
ABM16JM21	1"	1 5/16
ABM16JM26	1"	1 5/8
ABM16JM30	1"	1 7/8
ABM16JM40	1"	2 1/2
ABM20JM17	1 1/4	1 1/16
ABM20JM21	1 1/4	1 5/16
ABM20JM26	1 1/4	1 5/8
ABM20JM30	1 1/4	1 7/8
ABM20JM40	1 1/4	2 1/2
ABM24JM21	1 1/2	1 5/16
ABM24JM26	1 1/2	1 5/8
ABM24JM30	1 1/2	1 7/8
ABM24JM40	1 1/2	2 1/2
ABM32JM30	2"	1 7/8
ABM32JM40	2"	2 1/2

BSP / JIC BU.BU.



NUMMER	Draadmaat	
	F	F
ABM02JM07	1/8	7/16
ABM02JM08	1/8	1/2
ABM02JM09	1/8	9/16
ABM04JM07	1/4	7/16
ABM04JM08	1/4	1/2
ABM04JM09	1/4	9/16
ABM04JM12	1/4	3/4
ABM04JM14	1/4	7/8
ABM04JM17	1/4	1 1/16
ABM04JM21	1/4	1 5/16
ABM06JM07	3/8	7/16
ABM06JM08	3/8	1/2
ABM06LM09	3/8	9/16
ABM06JM12	3/8	3/4
ABM06JM14	3/8	7/8
ABM06JM17	3/8	1 1/16
ABM06JM21	3/8	1 5/16
ABM08JM07	1/2	7/16
ABM08JM08	1/2	1/2
ABM08JM09	1/2	9/16
ABM08JM12	1/2	3/4
ABM08JM14	1/2	7/8
ABM08JM17	1/2	1 1/16
ABM08JM21	1/2	1 5/16
ABM10JM09	5/8	9/16
ABM10JM12	5/8	3/4
ABM10JM14	5/8	7/8
ABM10JM17	5/8	1 1/16
ABM10JM19	5/8	1 3/16
ABM10JM21	5/8	1 5/16
ABM12JM07	3/4	7/16
ABM12JM08	3/4	1/2
ABM12JM09	3/4	9/16
ABM12JM12	3/4	3/4
ABM12JM14	3/4	7/8
ABM12JM17	3/4	1 1/16

BSP / METR. BU.BU.



NUMMER	Draadmaat		Afm.	
	F	F	C1	L
ABM02M610	1/8	10x1	14	22
ABM02M612	1/8	12X1,5	17	26
ABM02M614	1/8	14X1,5	19	27
ABM04M610	1/4	10X1,5	19	26
ABM04M612	1/4	12X1,5	19	29
ABM04M614	1/4	14X1,5	19	30
ABM04M616	1/4	16X1,5	22	33
ABM04M618	1/4	18X1,5	24	33
ABM04M622	1/4	22X1,5	27	34
ABM06M610	3/8	10X1,5	22	29
ABM06M612	3/8	12X1,5	22	32
ABM06M614	3/8	14X1,5	22	33
ABM06M616	3/8	16X1,5	22	35
ABM06M618	3/8	18X1,5	24	35
ABM06M620	3/8	20X1,5	25	35
ABM06M622	3/8	22X1,5	27	36
ABM08M614	1/2	14X1,5	27	36
ABM08M616	1/2	16X1,5	27	38
ABM08M618	1/2	18X1,5	27	38
ABM08M620	1/2	20X1,5	27	38

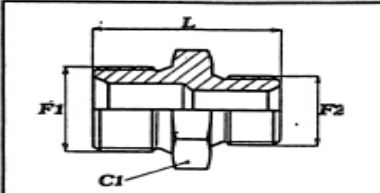


RASTELLI RACCORDI

HYDRAULIEK ADAPTERS

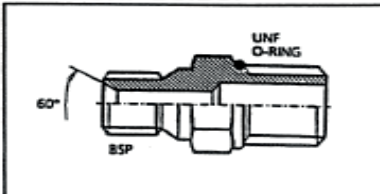


VERVOLG BSP / METR. BU.BU.



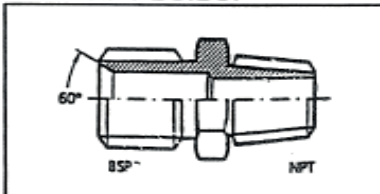
NUMMER	Draadmaat		Afm.	
	F	F	C1	L
ABM08M622	1/2	22X1,5	27	37
ABM08M624	1/2	24X1,5	30	39
ABM08M626	1/2	26X1,5	32	41
ABM10M618	5/8	18X1,5	27	40
ABM10M620	5/8	20X1,5	27	40
ABM10M622	5/8	22X1,5	27	41
ABM10M626	5/8	26X1,5	32	43
ABM12M618	3/4	18X1,5	32	41
ABM12M620	3/4	20X1,5	32	41
ABM12M622	3/4	22X1,5	32	42
ABM12M624	3/4	24X1,5	32	43
ABM12M626	3/4	26X1,5	32	44
ABM12M630	3/4	30X1,5	36	46
ABM16M626	1"	26X1,5	40	48
ABM16M628	1"	28X1,5	40	49
ABM16M630	1"	30X1,5	40	50
ABM16M638	1"	38X1,5	46	53
ABM20M630	1 1/4	30X1,5	50	54
ABM20M638	1 1/4	38X1,5	50	57

BSP / UNF BU.BU.



NUMMER	Draadmaat	
	F	F
ABM04MSO07	1/4	7/16
ABM06MSO09	3/8	9/16
ABM12MSO17	3/4	1 1/16

BSP / NPT BU.BU.

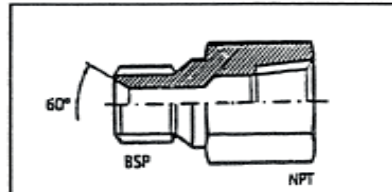


NUMMER	Draadmaat	
	F	F
ABM02NM02	1/8	1/8
ABM02NM04	1/8	1/4
ABM02NM06	1/8	3/8
ABM04NM02	1/4	1/8
ABM04NM04	1/4	1/4
ABM04NM06	1/4	3/8
ABM04NM08	1/4	1/2
ABM04NM12	1/4	3/4
ABM06NM02	3/8	1/8

VERVOLG BSP / NPT BU.BU.

NUMMER	Draadmaat	
	F	F
ABM06NM04	3/8	1/4
ABM06NM06	3/8	3/8
ABM06NM08	3/8	1/2
ABM06NM10	3/8	5/8
ABM06NM12	3/8	3/4
ABM06NM16	3/8	1"
ABM08NM02	1/2	1/8
ABM08NM04	1/2	1/4
ABM08NM06	1/2	3/8
ABM08NM08	1/2	1/2
ABM08NM10	1/2	5/8
ABM08NM12	1/2	3/4
ABM08NM16	1/2	1"
ABM10NM06	5/8	3/8
ABM10NM08	5/8	1/2
ABM10NM12	5/8	3/4
ABM12NM04	3/4	1/4
ABM12NM06	3/4	3/8
ABM12NM08	3/4	1/2
ABM12NM10	3/4	5/8
ABM12NM16	3/4	1"
ABM12NM20	3/4	1 1/4
ABM16NM04	1"	1/4
ABM16NM08	1"	1/2
ABM16NM12	1"	3/4
ABM16NM16	1"	1"
ABM16NM20	1"	1 1/4
ABM16NM24	1"	1 1/2
ABM16NM32	1"	2"
ABM20NM12	1 1/4	3/4
ABM20NM16	1 1/4	1"
ABM20NM24	1 1/4	1 1/2
ABM20NM32	1 1/4	2"
ABM24NM12	1 1/2	3/4
ABM24NM16	1 1/2	1"
ABM24NM20	1 1/2	1 1/4
ABM24NM32	1 1/2	2"

BSP / NPT BU.BI.



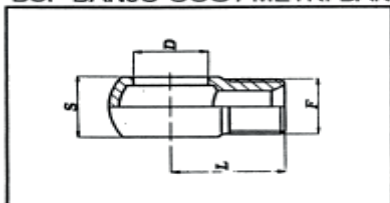
NUMMER	Draadmaat	
	F	F
ABM04NV04	1/4	1/4
ABM06NV06	3/8	3/8
ABM08NV08	1/2	1/2



HYDRAULIEK ADAPTERS

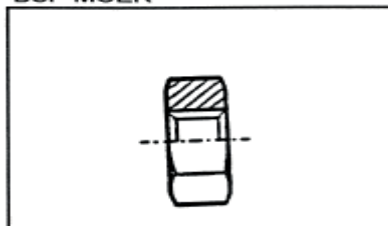
4

BSP BANJO-OOG / METR. BANJO-OOG



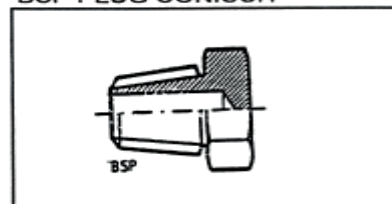
NUMMER	Draadmaat		Afmeting		
	F	F	D	S	L
ABM04QB04	1/4		13,1	14	24
ABM04QB06	1/4		16,6	17	26
ABM06QB06	3/8		16,6	17	26
ABM06QB08	3/8		20,9	22	30
ABM08QB08	1/2		20,9	22	32
ABM08QB10	1/2		23	24	34
ABM10QB10	5/8		23	24	35
ABM08QB12	1/2		26,5	28	37
ABM12QB12	3/4		26,5	28	37
ABM12QB16	3/4		33,2	34	42
ABM16QB16	1"		33,2	34	44
ABM04QE14	1/4		14	14	24
ABM06QE18	3/8		18	20	29
ABM08QE18	1/2		18	21	30
ABM08QE22	1/2		22	23	36

BSP MOER



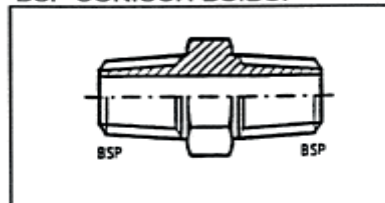
NUMMER	Draadmaat	
	F	
ABLN02	1/8	
ABLN04	1/4	
ABLN06	3/8	
ABLN08	1/2	
ABLN10	5/8	
ABLN12	3/4	
ABLN16	1"	
ABLN20	1 1/4	
ABLN24	1 1/2	
ABLN32	2"	

BSP PLUG CONISCH



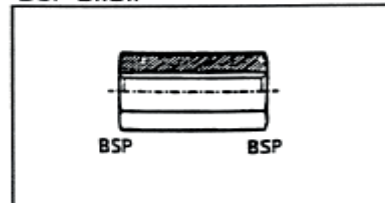
NUMMER	Draadmaat	
	F	
ABT04	1/4	
ABT06	3/8	
ABT08	1/2	
ABT12	3/4	

BSP CONISCH BU.BU.



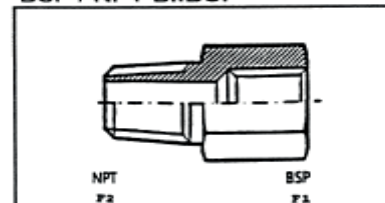
NUMMER	Draadmaat	
	F	F
ABT04BT04	1/4	1/4
ABT06BT06	3/8	3/8
ABT08BT08	1/2	1/2
ABT10BT10	5/8	5/8
ABT12BT12	3/4	3/4
ABT16BT16	1"	1"
ABT20BT20	1 1/4	1 1/4
ABT24BT24	1 1/2	1 1/2
ABT32BT32	2"	2"

BSP BI.BI.



NUMMER	Draadmaat	
	F	F
ABV02BV02	1/8	1/8
ABV04BV04	1/4	1/4
ABV04BV06	1/4	3/8
ABV06BV06	3/8	3/8
ABV06BV08	3/8	1/2
ABV08BV08	1/2	1/2
ABV08BV12	1/2	3/4
ABV12BV12	3/4	3/4

BSP / NPT BI.BU.



NUMMER	Draadmaat	
	F1	F2
ABV02NM04	1/8	1/4
ABV04NM04	1/4	1/4
ABV06NM08	3/8	1/2
ABV08NM08	1/2	1/2
ABV12NM12	3/4	3/4
ABV16NM16	1"	1"

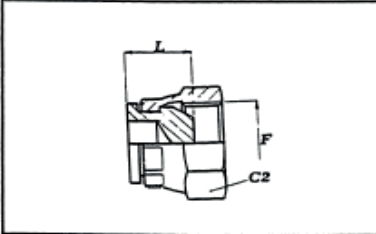


RASTELLI RACCORDI

HYDRAULIEK ADAPTERS

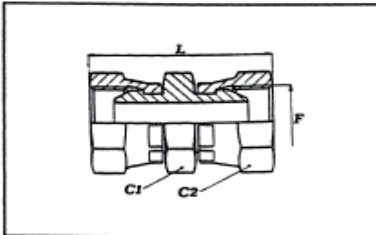


METR. DOP



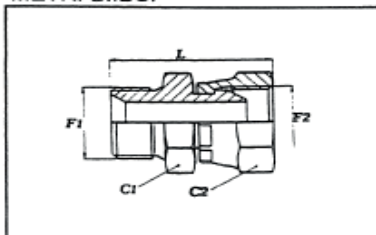
NUMMER	Draadmaat		Afm.	
	F		C2	L
AF610	10X1		15	14
AF612	12X1,5		17	14
AF614	14X1,5		19	14
AF616	16X1,5		22	17
AF618	18X1,5		24	17
AF620	20X1,5		27	18
AF622	22X1,5		27	18
AF624	24X1,5		30	18
AF626	26X1,5		32	20

METR. BI.BI.



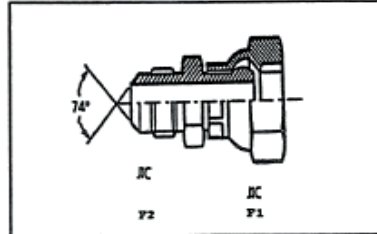
NUMMER	Draadmaat			C1	C2	L
	F	F				
AF614F614	14x1,5			19	19	28
AF616F616	16x1,5			22	22	44
AF618F618	18x1,5			24	24	46
AF622F622	22x1,5			27	27	52

METR. BI.BU.



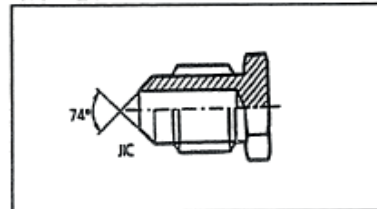
NUMMER	Draadmaat		C1	C2	L
	F	F			
AF614M614	14x1,5	14x1,5	19	19	33
AF616M616	16x1,5	16x1,5	22	22	39
AF618M618	18x1,5	18x1,5	24	24	42
AF622M622	22x1,5	22x1,5	27	27	46

JIC BI.BU.



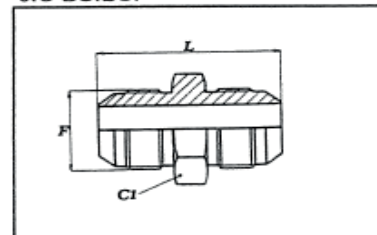
NUMMER	Draadmaat	
	F2	F1
AJF07JM07	7/16	7/16
AJF09JM07	9/16	7/16
AJF09JM09	9/16	9/16
AJF09JM12	9/16	3/4

JIC PLUG



NUMMER	Draadmaat	
	F	
AJM05	5/16	
AJM07	6/16	
AJM08	1/2	
AJM09	9/16	
AJM12	3/4	
AJM14	7/8	
AJM17	1 1/16	
AJM19	1 3/16	
AJM21	1 5/16	
AJM26	1 5/8	
AJM30	1 7/8	
AJM40	2 1/2	

JIC BU.BU.



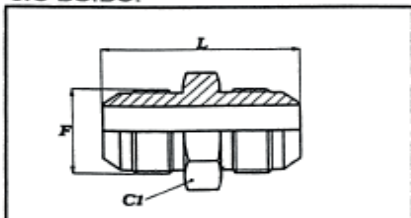
NUMMER	Draadmaat		Afm.	
	F	F	C1	L
AJM07JM07	7/16-20		14	35
AJM08JM08	1/2 -20		15	35
AJM09JM09	9/16-18		17	36
AJM10JM10	5/8-18		17	38
AJM12JM12	3/4-16		22	42
AJM14JM14	7/8-14		24	48
AJM17JM17	1 1/16-12		30	55
AJM19JM19	1 3/16-12		32	56
AJM21JM21	1 5/16-12		36	57
AJM26JM26	1 5/8-12		46	60
AJM30JM30	1 7/8-12		55	66
AJM40JM40	2 1/2-12		70	80



HYDRAULIEK ADAPTERS

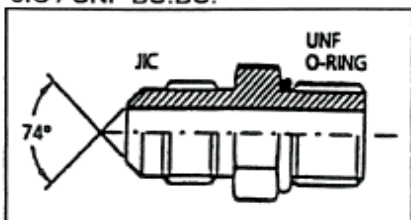
4

JIC BU.BU.



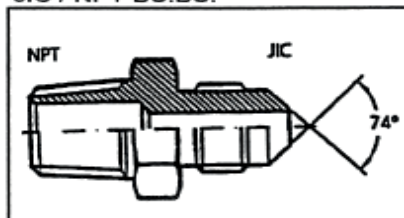
NUMMER	Draadmaat	
	F	F
AJM07JML07	7/16	7/16
AJM08JML08	1/2	1/2
AJM09JML09	9/16	9/16
AJM12JML12	3/4	3/4
AJM14JML14	7/8	7/8
AJM17JML17	1 1/16	1 1/16
AJM19JML19	1 3/16	1 3/16
AJM21JML21	1 5/16	1 5/16
AJM26JML26	1 5/8	1 5/8
AJM30JML30	1 7/8	1 7/8

JIC / UNF BU.BU.



NUMMER	Draadmaat	
	F	F
AJM07MSO07	7/16	7/16
AJM07MSO08	7/16	1/2
AJM07MSO09	7/16	9/16
AJM08MSO08	1/2	1/2
AJM09MSO07	9/16	7/16
AJM09SMO09	9/16	9/16
AJM09MSO12	9/16	3/4
AJM09MSO14	9/16	7/8
AJM12MSO09	3/4	9/16
AJM12MSO12	3/4	3/4
AJM12MSO14	3/4	7/8
AJM12MSO17	3/4	1 1/16
AJM14MSO12	7/8	3/4
AJM14MSO14	7/8	7/8
AJM14MSO17	7/8	1 1/16
AJM17MSO12	1 1/16	3/4
AJM17MSO14	1 1/16	7/8
AJM17MSO17	1 1/16	1 1/16
AJM17MSO21	1 1/16	1 5/16
AJM19MSO19	1 3/16	1 3/16
AJM21MSO17	1 5/16	1 1/16
AJM21MSO21	1 5/16	1 5/16
AJM21MSO26	1 5/16	1 5/8
AJM26MSO26	1 5/8	1 5/8
AJM30MSO30	1 7/8	1 7/8

JIC / NPT BU.BU.



NUMMER	Draadmaat	
	F	F
AJM07NM02	7/16	1/8
AJM07NM04	7/16	1/4
AJM07NM06	7/16	3/8
AJM07NM08	7/16	1/2
AJM07NM12	7/16	3/4
AJM08NM02	1/2	1/8
AJM08NM04	1/2	1/4
AJM08NM06	1/2	3/8
AJM08NM08	1/2	1/2
AJM09NM02	9/16	1/8
AJM09NM04	9/16	1/4
AJM09NM06	9/16	3/8
AJM09NM08	9/16	1/2
AJM09NM12	9/16	3/4
AJM12NM02	3/4	1/8
AJM12NM04	3/4	1/4
AJM12NM06	3/4	3/8
AJM12NM08	3/4	1/2
AJM12NM10	3/4	5/8
AJM12NM12	3/4	3/4
AJM12NM16	3/4	1"
AJM14NM04	7/8	1/4
AJM14NM06	7/8	3/8
AJM14NM08	7/8	1/2
AJM14NM10	7/8	5/8
AJM14NM12	7/8	3/4
AJM14NM16	7/8	1"
AJM17NM06	1 1/16	3/8
AJM17NM08	1 1/16	9/16
AJM17NM10	1 1/16	5/8
AJM17NM12	1 1/16	3/4
AJM17NM16	1 1/16	1"
AJM17NM20	1 1/16	1 1/4
AJM17NM24	1 1/16	1 1/2
AJM21NM08	1 5/16	1/2
AJM21NM12	1 5/16	3/4
AJM21NM16	1 5/16	1"
AJM21NM20	1 5/16	1 1/4
AJM21NM24	1 5/16	1 1/2
AJM26NM16	1 5/8	1"
AJM26NM20	1 5/8	1 1/4
AJM26NM24	1 5/8	1 1/2
AJM30NM16	1 7/8	1"
AJM30NM20	1 7/8	1 1/4
AJM30NM24	1 7/8	1 1/2
AJM30NM32	1 7/8	2"
AJM40NM20	2 1/2	1 1/4
AJM40NM24	2 1/2	1 1/2
AJM40NM32	2 1/2	2"

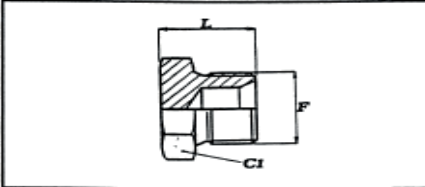


RASTELLI RACCORDI

HYDRAULIEK ADAPTERS

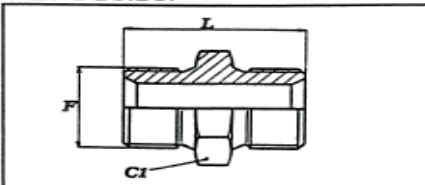


METR. PLUG



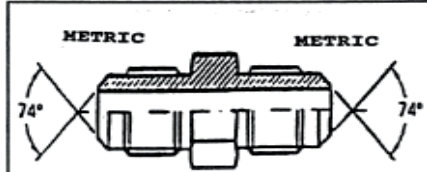
NUMMER	Draadmaat		Afm.	
	F	F	C1	L
AM610	10X1		14	14
AM612	12X1,5		17	18
AM614	14X1,5		19	19
AM616	16X1,5		22	21
AM618	18X1,5		24	22
AM620	20X1,5		25	22
AM622	22X1,5		27	23
AM624	24X1,5		30	25
AM626	26X1,5		32	27

METR. BU.BU.



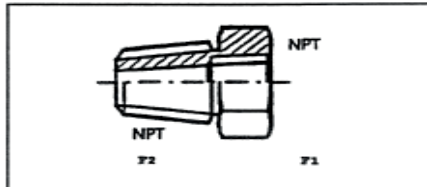
NUMMER	Draadmaat		Afm.	
	F	F	C1	L
AM610M610	10x1	10x1	14	22
AM612M612	12x1,5	12x1,5	17	29
AM614M614	14x1,5	14x1,5	19	31
AM616M616	16x1,5	16x1,5	22	35
AM618M618	18x1,5	18x1,5	24	36
AM620M620	20x1,5	20x1,5	25	36
AM622M622	22x1,5	22x1,5	27	38
AM624M624	24x1,5	24x1,5	30	40
AM626M626	26x1,5	26x1,5	32	43
AM630M630	30x1,5	30x1,5	36	47
AM638M638	38x1,5	38x1,5	46	55
AM610M612	12x1,5	10x1	17	26
AM610M614	14x1,5	10x1	19	26
AM612M614	14x1,5	12x1,5	19	30
AM612M616	16x1,5	12x1,5	22	32
AM614M616	16x1,5	14x1,5	22	33
AM612M618	18x1,5	12x1,5	24	33
AM614M618	18x1,5	14x1,5	24	34
AM616M618	18x1,5	16x1,5	24	36
AM614M620	20x1,5	14x1,5	25	34
AM616M620	20x1,5	16x1,5	25	36
AM618M620	20x1,5	18x1,5	25	36
AM614M622	22x1,5	14x1,5	27	35
AM616M622	22x1,5	16x1,5	27	37
AM618M622	22x1,5	18x1,5	27	37
AM620M622	22x1,5	20x1,5	27	37
AM618M624	24x1,5	18x1,5	30	39
AM620M624	24x1,5	20x1,5	30	39
AM622M624	24x1,5	22x1,5	30	40
AM618M626	26x1,5	18x1,5	32	41
AM620M626	26x1,5	20x1,5	32	41
AM622M626	26x1,5	22x1,5	32	42
AM624M626	26x1,5	24x1,5	32	42
AM626M630	30x1,5	26x1,5	36	45

METR. KOMATSU BU.BU.



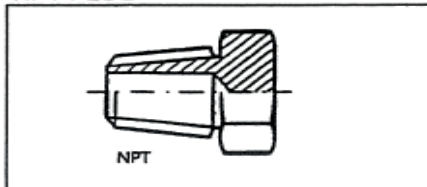
NUMMER	Draadmaat	
	F	
AMMJ12MMJ12	12X1,25	
AMMJ14MMJ14	14X1,5	
AMMJ16MMJ16	14X1,5	
AMMJ18MMJ18	18X1,5	
AMMJ20MMJ20	20X1,5	
AMMJ22MMJ22	22X1,5	

NPT BI.BU.



NUMMER	Draadmaat	
	F	F
ANF04NM04	1/4	1/4
ANF06NM04	3/8	1/4
ANF06NM06	3/8	3/8
ANF06NM08	3/8	1/2
ANF08NM06	1/2	3/8
ANF08NM08	1/2	1/2
ANF12NM12	3/4	3/4

NPT PLUG



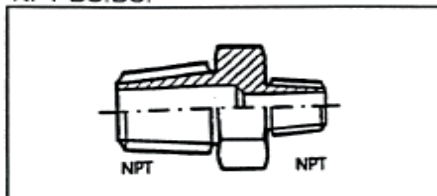
NUMMER	Draadmaat	
	F	
ANM02	1/8	
ANM04	1/4	
ANM06	3/8	
ANM08	1/2	
ANM10	5/8	
ANM12	3/4	
ANM16	1"	
ANM20	1 1/4	
ANM24	1 1/2	
ANM32	2"	
ANM40	2 1/2	



HYDRAULIEK ADAPTERS

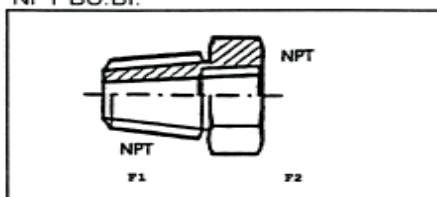


NPT BU.BU.



NUMMER	Draadmaat	
	F	F
ANM02NM02	1/8	1/8
ANM02NM04	1/8	1/4
ANM02NM06	1/8	3/8
ANM02NM08	1/8	1/2
ANM04NM04	1/4	1/4
ANM04NM06	1/4	3/8
ANM04NM08	1/4	1/2
ANM04NM12	1/4	3/4
ANM04NM16	1/4	1"
ANM06NM06	3/8	3/8
ANM06NM08	3/8	1/2
ANM06NM12	3/8	3/4
ANM08NM08	1/2	1/2
ANM08NM12	1/2	3/4
ANM08NM16	1/2	1"
ANM08NM20	1/2	1 1/4
ANM08NM24	1/2	1 1/2
ANM10NM10	5/8	5/8
ANM10NM12	5/8	3/4
ANM12NM12	3/4	3/4
ANM12NM16	3/4	1"
ANM12NM20	3/4	1 1/4
ANM12NM24	3/4	1 1/2
ANM16NM16	1"	1"
ANM16NM20	1"	1 1/4
ANM16NM24	1"	1 1/2
ANM20NM20	1 1/4	1 1/4
ANM20NM24	1 1/4	1 1/2
ANM20NM32	1 1/4	2"
ANM24NM24	1 1/2	1 1/2
ANM24NM32	1 1/2	2"
ANM32NM32	2"	2"

NPT BU.BI.

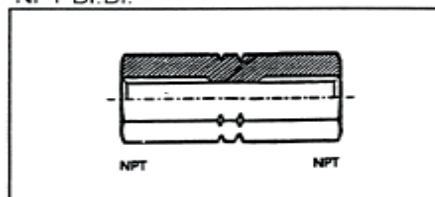


NUMMER	Draadmaat	
	F1	F2
ANM02NV02	1/8	1/8
ANM02NV04	1/8	1/4
ANM04NV02	1/4	1/8
ANM04NV04	1/4	1/4
ANM04NV06	1/4	3/8
ANM06NV02	3/8	1/8
ANM06NV04	3/8	1/4
ANM06NV06	3/8	3/8
ANM06NV08	3/8	1/2
ANM06NV12	3/8	3/4
ANM08NV02	1/2	1/8

VERVOLG NPT BU.BI.

NUMMER	Draadmaat	
	F1	F2
ANM08NV04	1/2	1/4
ANM08NV06	1/2	3/8
ANM08NV08	1/2	1/2
ANM08NV12	1/2	3/4
ANM08NV16	1/2	1"
ANM12NV04	3/4	1/4
ANM12NV06	3/4	3/8
ANM12NV08	3/4	1/2
ANM12NV12	3/4	3/4
ANM12NV16	3/4	1"
ANM12NV20	3/4	1 1/4
ANM16NV04	1"	1/4
ANM16NV06	1"	3/8
ANM16NV08	1"	1/2
ANM16NV12	1"	3/4
ANM16NV16	1"	1"
ANM20NV04	1 1/4	1/4
ANM20NV06	1 1/4	3/8
ANM20NV08	1 1/4	1/2
ANM20NV12	1 1/4	3/4
ANM20NV16	1 1/4	1"
ANM20NV20	1 1/4	1 1/4
ANM20NV24	1 1/4	1 1/2
ANM24NV04	1 1/2	1/4
ANM24NV06	1 1/2	3/8
ANM24NV08	1 1/2	1/2
ANM24NV12	1 1/2	3/4
ANM24NV16	1 1/2	1"
ANM24NV20	1 1/2	1 1/4
ANM24NV24	1 1/2	1 1/2
ANM24NV32	1 1/2	2"
ANM32NV08	2"	1/2
ANM32NV12	2"	3/4
ANM32NV16	2"	1"
ANM32NV20	2"	1 1/4
ANM32NV24	2"	1 1/2
ANM32NV32	2"	2"

NPT BI.BI.



NUMMER	Draadmaat	
	F	F
ANV02NV02	1/8	1/8
ANV02NV04	1/8	1/4
ANV04NV04	1/4	1/4
ANV04NV06	1/4	3/8
ANV06NV06	3/8	3/8
ANV06NV08	3/8	1/2
ANV08NV08	1/2	1/2
ANV12NV12	3/4	3/4
ANV12NV16	3/4	1"
ANV16NV16	1"	1"
ANV20NV20	1 1/4	1 1/4
ANV24NV24	1 1/2	1 1/2
ANV32NV32	2"	2"

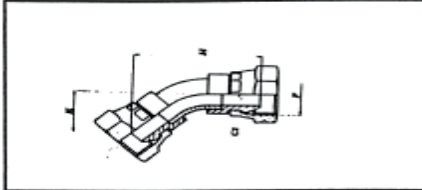


RASTELLI RACCORDI

HYDRAULIEK ADAPTERS

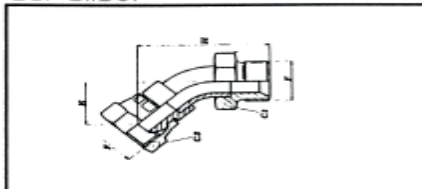


BSP BI.BI.



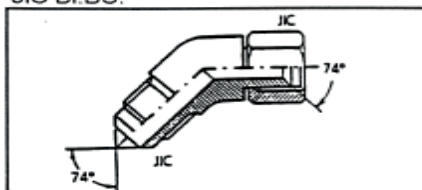
NUMMER	Draadmaat		Afm.		
	F	F	H	K	C2
ABF45L02BF02	1/8	1/8	35	21	17
ABF45L04BF04	1/4	1/4	35	21	19
ABF45L06BF06	3/8	3/8	44	24	22
ABF45L08BF08	1/2	1/2	48	26	27
ABF45L10BF10	5/8	5/8	51	28	28
ABF45L12BF12	3/4	3/4	60	32	32
ABF45L16BF16	1"	1"	70	35	40
ABF45L20BF20	1 1/4	1 1/4	79	40	50
ABF45L24BF24	1 1/2	1 1/2	98	48	55
ABF45L32BF32	2"	2"	119	55	70

BSP BI.BU.



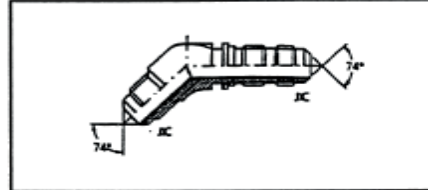
NUMMER	Draadmaat		Afmeting			
	F	F	H	K	C1	C2
ABF45L02BM02	1/8	1/8	43	21	14	17
ABF45L04BM04	1/4	1/4	47	21	19	19
ABF45L06BM06	3/8	3/8	57	24	22	22
ABF45L08BM08	1/2	1/2	59	26	27	27
ABF45L10BM10	5/8	5/8	69	28	27	28
ABF45L12BM12	3/4	3/4	73	32	32	32
ABF45L16BM16	1"	1"	88	35	40	40
ABF45L20BM20	1 1/4	1 1/4	98	40	50	50
ABF45L24BM24	1 1/2	1 1/2	116	48	55	55
ABF45L32M32	2"	2"	125	55	70	70

JIC BI.BU.



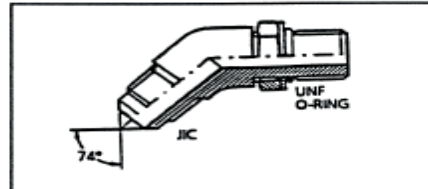
NUMMER	Draadmaat	
	F	F
AJF4507JM07	7/16	7/16
AJF4508JM08	1/2	1/2
AJF4509JM09	9/16	9/16
AJF4512JM12	3/4	3/4
AJF4514JM14	7/8	7/8
AJF4517JM17	1 1/16	1 1/16
AJF4521JM21	1 5/16	1 5/16

JIC BU.BU.



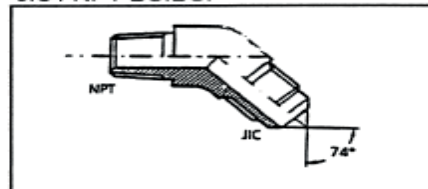
NUMMER	Draadmaat	
	F	F
AJM4507JML07	7/16	7/16
AJM4509JML09	9/16	9/16
AJM4512JML12	3/4	3/4
AJM4514JML14	7/8	7/8
AJM4517JML17	1 1/16	1 1/16
AJM4521JML21	1 5/16	1 5/16

JIC / UNF BU.BU.



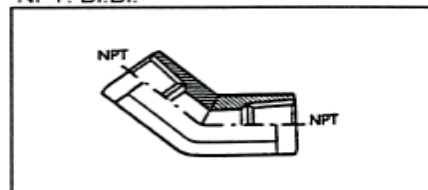
NUMMER	Draadmaat	
	F	F
AJM4507MSA07	7/16	7/16
AJM4508MSA08	1/2	1/2
AJM4509MSA09	9/16	9/16
AJM4512MSA12	3/4	3/4
AJM4514MSA14	7/8	7/8
AJM4517MSA17	1 1/16	1 1/16
AJM4521MSA21	1 5/16	1 5/16

JIC / NPT BU.BU.



NUMMER	Draadmaat	
	F	F
AJM4507NM02	7/16	1/8
AJM4507NM04	7/16	1/4
AJM4509NM04	9/16	1/4
AJM4509NM06	9/16	3/8
AJM4512NM08	3/4	1/2

NPT. BI.BI.



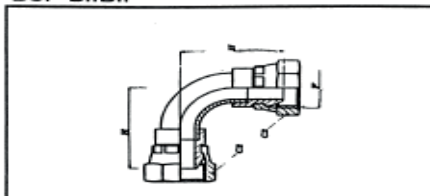
NUMMER	Draadmaat	
	F	F
ANV4504NV04	1/4	1/4
ANV4506NV06	3/8	3/8
ANV4508NV08	1/2	1/2
ANV4512NV12	3/4	3/4



HYDRAULIEK ADAPTERS

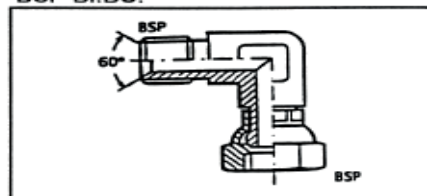
4

BSP BI.BI.



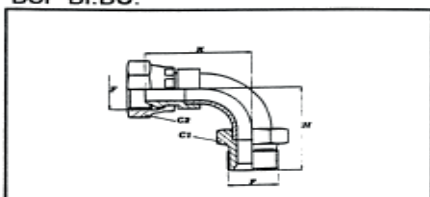
NUMMER	Draadmaat		Afm.	
	F	F	H	C2
ABF90L02BF02	1/8		28	17
ABF90L04BF04	1/4		33	19
ABF90J06BF06	3/8		42	22
ABF90L08BF08	1/2		47	27
ABF90L10BF10	5/8		54	28
ABF90L12BF12	3/4		59	32
ABF90L16BF16	1"		71	40
ABF90L20BF20	1 1/4		79	50
ABF90L24BF24	1 1/2		94	55
ABF90L32BF32	2"		118	70

BSP BI.BU.



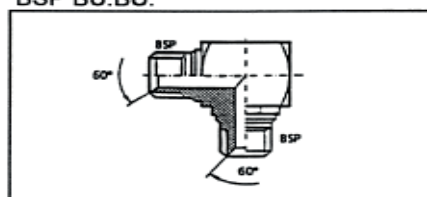
NUMMER	Draadmaat	
	F	F
ABF90K04BM04	1/4	1/4
ABF90K06BM06	3/8	3/8
ABF90K08BM08	1/2	1/2
ABF90K10BM10	5/8	5/8
ABF90K12BM12	3/4	3/4
ABF90K16BM16	1"	1"
ABF90K20BM20	1 1/4	1 1/4
ABF90K24BM24	1 1/2	1 1/2
ABF90K32BM32	2"	2"

BSP BI.BU.



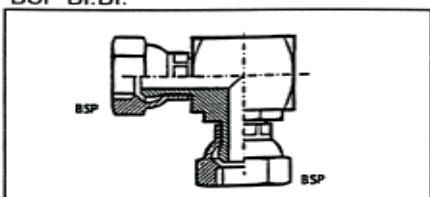
NUMMER	Draadmaat		Afmeting			
	F	F	H	K	C1	C2
ABF90L02BM02	1/8		28	35	14	17
ABF90L04BM04	1/4		33	35	19	19
ABF90L06BM06	3/8		42	44	22	22
ABF90L08BM08	1/2		47	48	27	27
ABF90L10BM10	5/8		54	52	27	28
ABF90L12BM12	3/4		50	60	32	32
ABF90L16BM16	1"		71	69	40	40
ABF90L20BM20	1 1/4		79	74	50	50
ABF90L24BM24	1 1/2		94	94	55	55
ABF90L32BM32	2"		118	109	70	70

BSP BU.BU.



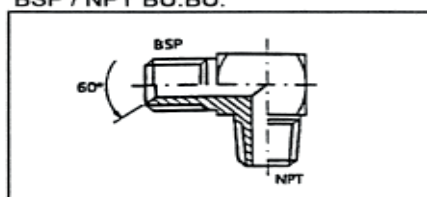
NUMMER	Draadmaat	
	F	F
ABM90K04BM04	1/4	1/4
ABM90K06BM06	3/8	3/8
ABM90K08BM08	1/2	1/2
ABM90K10BM10	5/8	5/8
ABM90K12BM12	3/4	3/4
ABM90K16BM16	1"	1"
ABM90K20BM20	1 1/4	1 1/4
ABM90K24BM24	1 1/2	1 1/2
ABM90K32BM32	2"	2"

BSP BI.BI.



NUMMER	Draadmaat	
	F	F
ABF90K02BF02	1/8	1/8
ABF90K04BF04	1/4	1/4
ABF90K06BF06	3/8	3/8
ABF90K08BF08	1/2	1/2
ABF90K10BF10	5/8	5/8
ABF90K12BF12	3/4	3/4
ABF90K16BF16	1"	1"
ABF90K20BF20	1 1/4	1 1/4
ABF90K24BF24	1 1/2	1 1/2
ABF90K32BF32	2"	2"

BSP / NPT BU.BU.



NUMMER	Draadmaat	
	F	F
ABM90K04NM04	1/4	1/4
ABM90K06NM06	3/8	3/8

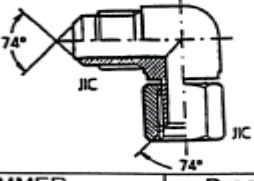


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HYDRAULIEK ADAPTERS

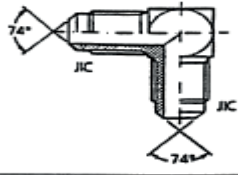


JIC BI.BU.



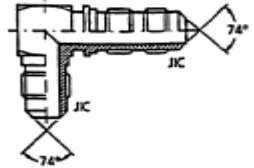
NUMMER	Draadmaat	
	F	F
AJF9008JM08	1/2	1/2
AJF9012JM12	3/4	3/4
AJF9014JM14	7/8	7/8
AJF9017JM17	1 1/16	1 1/16

JIC BU.BU.



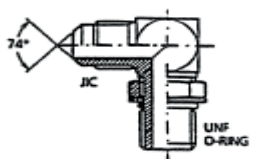
NUMMER	Draadmaat	
	F	F
AJM9007JM07	7/16	7/16
AJM9009JM09	9/16	9/16
AJM9012JM12	3/4	3/4
AJM9021JM21	1 5/16	1 5/16

JIC BU.BU.



NUMMER	Draadmaat	
	F	F
AJM9007JML07	7/16	
AJM9008JML08	1/2	
AJM9009JML09	9/16	
AJM9012JML12	3/4	
AJM9014JML14	7/8	
AJM9017JML17	1 1/16	
AJM9021JML21	1 5/16	
AJM9026JML26	1 5/8	

JIC / UNF BU.BU.

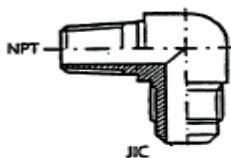


NUMMER	Draadmaat	
	F	F
AJM90K07MSA07	7/16	7/16
AJM90K07MSA08	7/16	1/2
AJM90K08MSA08	1/2	1/2
AJM90K09MSA09	9/16	9/16
AJM90K09MSA12	9/16	3/4
AJM90K12MSA12	3/4	3/4
AJM90K12MSA14	3/4	7/8

VERVOLG JIC / UNF BU.BU.

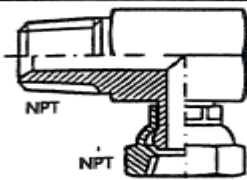
NUMMER	Draadmaat	
	F	F
AJM90K14MSA12	7/8	3/4
AJM90K14MSA14	7/8	7/8
AJM90K17MSA14	1 1/16	7/8
AJM90K17MSA17	1 1/16	1 1/16
AJM90K21MSA17	1 5/16	1 1/16
AJM90K21MSA21	1 5/16	1 5/16
AJM90K26MSA26	1 5/8	1 5/8

JIC / NPT BU.BU.



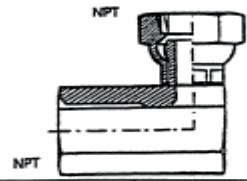
NUMMER	Draadmaat	
	F	F
AJM90K07NM02	7/16	1/8
AJM90K07NM04	7/16	1/4
AJM90K08NM02	1/2	1/8
AJM90K08NM04	1/2	1/4
AJM90K09NM04	9/16	1/4
AJM90K09NM06	9/16	3/8
AJM90K09NM08	9/16	1/2
AJM90K12NM04	3/4	1/4
AJM90K12NM06	3/4	3/8
AJM90K12NM08	3/4	1/2
AJM90K14NM06	7/8	3/8
AJM90K14NM08	7/8	1/2
AJM90K14NM12	7/8	3/4
AJM90K17NM08	1 1/16	1/2
AJM90K17NM12	1 1/16	3/4
AJM90K21NM12	1 5/16	3/4
AJM90K21NM16	1 5/16	1"
AJM90K26NM16	1 5/8	1"
AJM90K26NM20	1 5/8	1 1/4

NPT BI.BU.



NUMMER	Draadmaat	
	F	F
ANF9004NM04	1/4	1/4
ANF9006NM06	3/8	3/8
ANF9008NM08	1/2	1/2

NPT BI.BI.



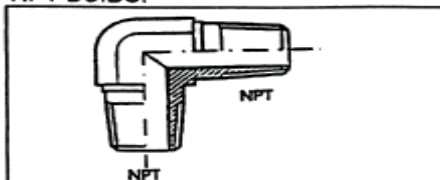
NUMMER	Draadmaat	
	F	F
ANF9006NV06	3/8	3/8
ANF9008NV08	1/2	1/2



HYDRAULIEK ADAPTERS

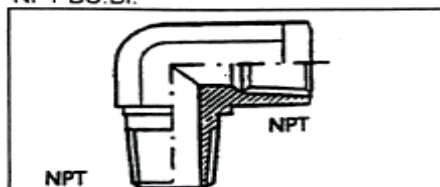
4

NPT BU.BU.



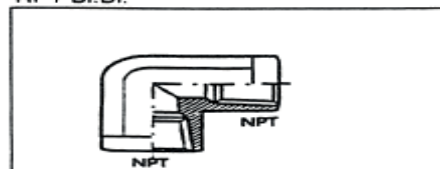
NUMMER	Draadmaat	
	F	F
ANM90K04NM04	1/4	1/4
ANM90K06NM06	3/8	3/8
ANM90K08NM08	1/2	1/2

NPT BU.BI.



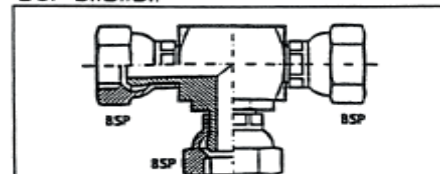
NUMMER	Draadmaat	
	F	F
ANM9002NV02	1/8	1/8
ANM9004NV04	1/4	1/4
ANM9006NV06	3/8	3/8
ANM9008NV08	1/2	1/2
ANM9012NV12	3/4	3/4
ANM9016NV16	1"	1"
ANM9020NV20	1 1/4	1 1/4

NPT BI.BI.



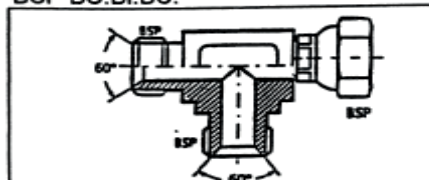
NUMMER	Draadmaat	
	F	F
ANV9004NV04	1/4	1/4
ANV9006NV06	3/8	3/8
ANV9008NV08	1/2	1/2
ANV9012NV12	3/4	3/4

BSP BI.BI.BI.



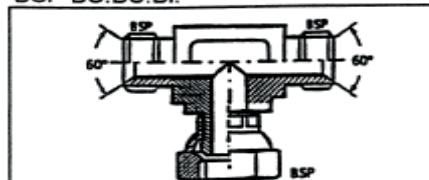
NUMMER	Draadmaat	
	F	F
ABF04BF04BF04	1/4	1/4
ABF06BF06BF06	3/8	3/8
ABF08BF08BF08	1/2	1/2
ABF10BF10BF10	5/8	5/8
ABF12BF12BF12	3/4	3/4
ABF16BF16BF16	1"	1"
ABF20BF20BF20	1 1/4	1 1/4
ABF24BF24BF24	1 1/2	1 1/2
ABF32BF32BF32	2"	2"

BSP BU.BI.BU.



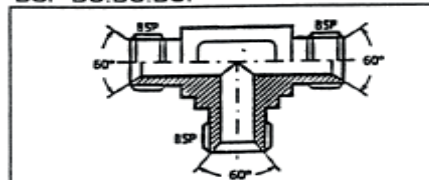
NUMMER	Draadmaat	
	F	F
ABM04BF04BM04	1/4	1/4
ABM06BF06BM06	3/8	3/8
ABM08BF08BM08	1/2	1/2
ABM10BF10BM10	5/8	5/8
ABM12BF12BM12	3/4	3/4
ABM20BF20BM20	1 1/4	1 1/4

BSP BU.BU.BI.



NUMMER	Draadmaat	
	F	F
ABM04BM04BF04	1/4	1/4
ABM06BM06BF06	3/8	3/8
ABM08BM08BF08	1/2	1/2
ABM10BM10BF10	5/8	5/8
ABM12BM12BF12	3/4	3/4
ABM16BM16BF16	1"	1"

BSP BU.BU.BU.



NUMMER	Draadmaat	
	F	F
ABM02BM02BM02	1/8	1/8
ABM04BM04BM04	1/4	1/4
ABM06BM06BM06	3/8	3/8
ABM08BM08BM08	1/2	1/2
ABM10BM10BM10	5/8	5/8
ABM12BM12BM12	3/4	3/4
ABM16BM16BM16	1"	1"
ABM20BM20BM20	1 1/4	1 1/4
ABM24BM24BM24	1 1/2	1 1/2
ABM32BM32BM32	2"	2"

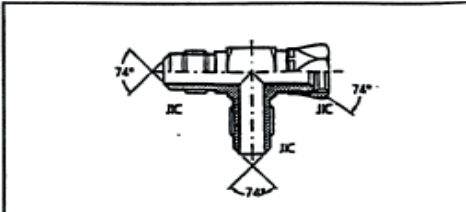


RASTELLI RACCORDI

HYDRAULIEK ADAPTERS

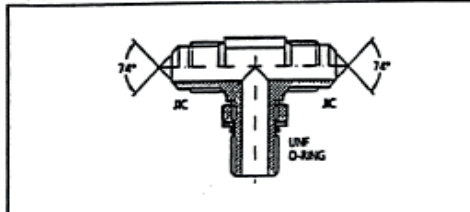


JIC BU.BI.BU.



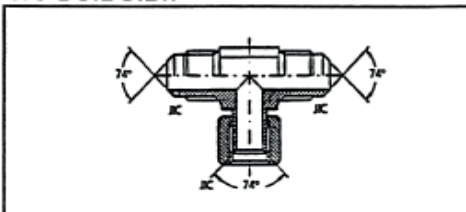
NUMMER	Draadmaat	
	F	F
AJM07JF07JM07	7/16	7/16
AJM08JF08JM08	1/2	1/2
AJM09JF09JM09	9/16	9/16
AJM12JF12JM12	3/4	3/4
AJM14JF14JM14	7/8	7/8
AJM17JF17JM17	1 1/16	1 1/16
AJM21JF21JM21	1 5/16	1 5/16
AJM26JF26JM26	1 5/8	1 5/8

JIC / JIC / UNF BU.BU.BU.



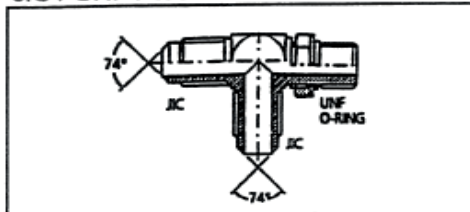
NUMMER	Draadmaat	
	F	F
AJM07JM07MSA07	7/16	7/16
AJM08JM08MSA08	1/2	1/2
AJM09JM09MSA09	9/16	9/16
AJM12JM12MSA12	3/4	3/4
AJM14JM14MSA14	7/8	7/8
AJM17JM17MSA17	1 1/16	1 1/16
AJM21JM21MSA21	1 5/16	1 5/16

JIC BU.BU.BI.



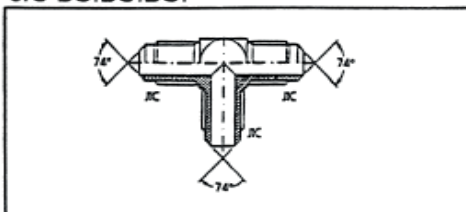
NUMMER	Draadmaat	
	F	F
AJM07JM07JF07	7/16	7/16
AJM08JM08JF08	1/2	1/2
AJM09JM09JF09	9/16	9/16
AJM12JM12JF12	3/4	3/4
AJM14JM14JF14	7/8	7/8
AJM17JM17JF17	1 1/16	1 1/16
AJM21JM21JF21	1 5/16	1 5/16
AJM26JM26JF26	1 5/8	1 5/8

JIC / UNF / JIC BU.BU.BU.



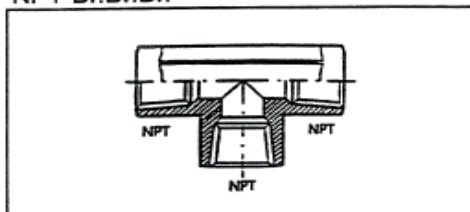
NUMMER	Draadmaat	
	F	F
AJM07MSA07JM07	7/16	7/16
AJM08MSA08JM08	1/2	1/2
AJM09MSA09JM09	9/16	9/16
AJM12MSA12JM12	3/4	3/4
AJM14MSA14JM14	7/8	7/8
AJM17MSA17JM17	1 1/16	1 1/16
AJM21MSA21JM21	1 5/16	1 5/16
AJM30MSA30JM30	1 7/8	1 7/8

JIC BU.BU.BU.



NUMMER	Draadmaat	
	F	F
AJM07JM07JM07	7/16	7/16
AJM08JM08JM08	1/2	1/2
AJM09JM09JM09	9/16	9/16
AJM12JM12JM12	3/4	3/4
AJM14JM14JM14	7/8	7/8
AJM17JM17JM17	1 1/16	1 1/16
AJM19JM19JM19	1 3/16	1 3/16
AJM21JM21JM21	1 5/16	1 5/16
AJM26JM26JM26	1 5/8	1 5/8
AJM30JM30JM30	1 7/8	1 7/8

NPT BI.BI.BI.



NUMMER	Draadmaat	
	F	F
ANV04NV04NV04	1/4	1/4
ANV06NV06NV06	3/8	3/8
ANV08NV08NV08	1/2	1/2
ANV12NV12NV12	3/4	3/4
ANV16NV16NV16	1"	1"
ANV20NV20NV20	1 1/4	1 1/4

A

Snelkoppeling A serie – vlakafdichtend volgens ISO 16028

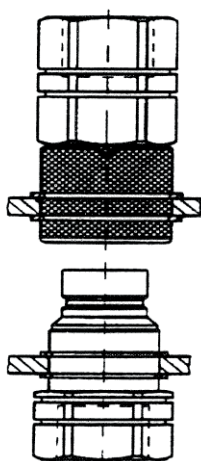
De serie “A” is de doorbraak van Stucchi in techniek en kwaliteit, waar het gaat om vlak afdichtende koppelingen. Deze serie heeft een intern ontwerp gecombineerd met hoogwaardige materialen om een hogere werkdruk en een minimaal drukverlies te realiseren. De modulaire opbouw geeft de mogelijkheid om verschillende draadsoorten of speciale aansluitingen te realiseren en toch een compacte opbouw te maken. Deze specificaties maken de serie “A” koppelingen tot een top product in vele hydraulische toepassingen waar hoge eisen worden gesteld en uitsluiting van vloeistof verlies is gewaarborgd in het systeem.



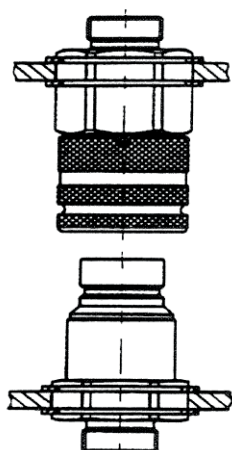
Uitwisselbaar: ISO16028 en NFPA T3.20.15 (HTMA)

Serie A in- en opbouw mogelijkheid

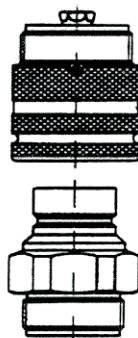
Binnendraad met schotverbinding aan voorzijde



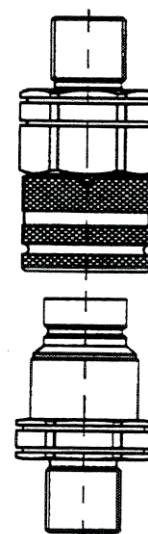
Schotverbinding volgens DIN 2353



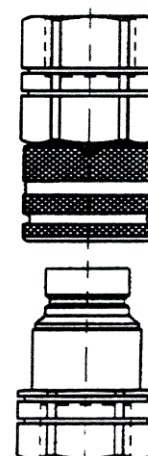
Zonder huis, direkt inschroefbaar



Schotverbinding volgens DIN 2353



Binnendraad met sleuven voor schotmontage



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it



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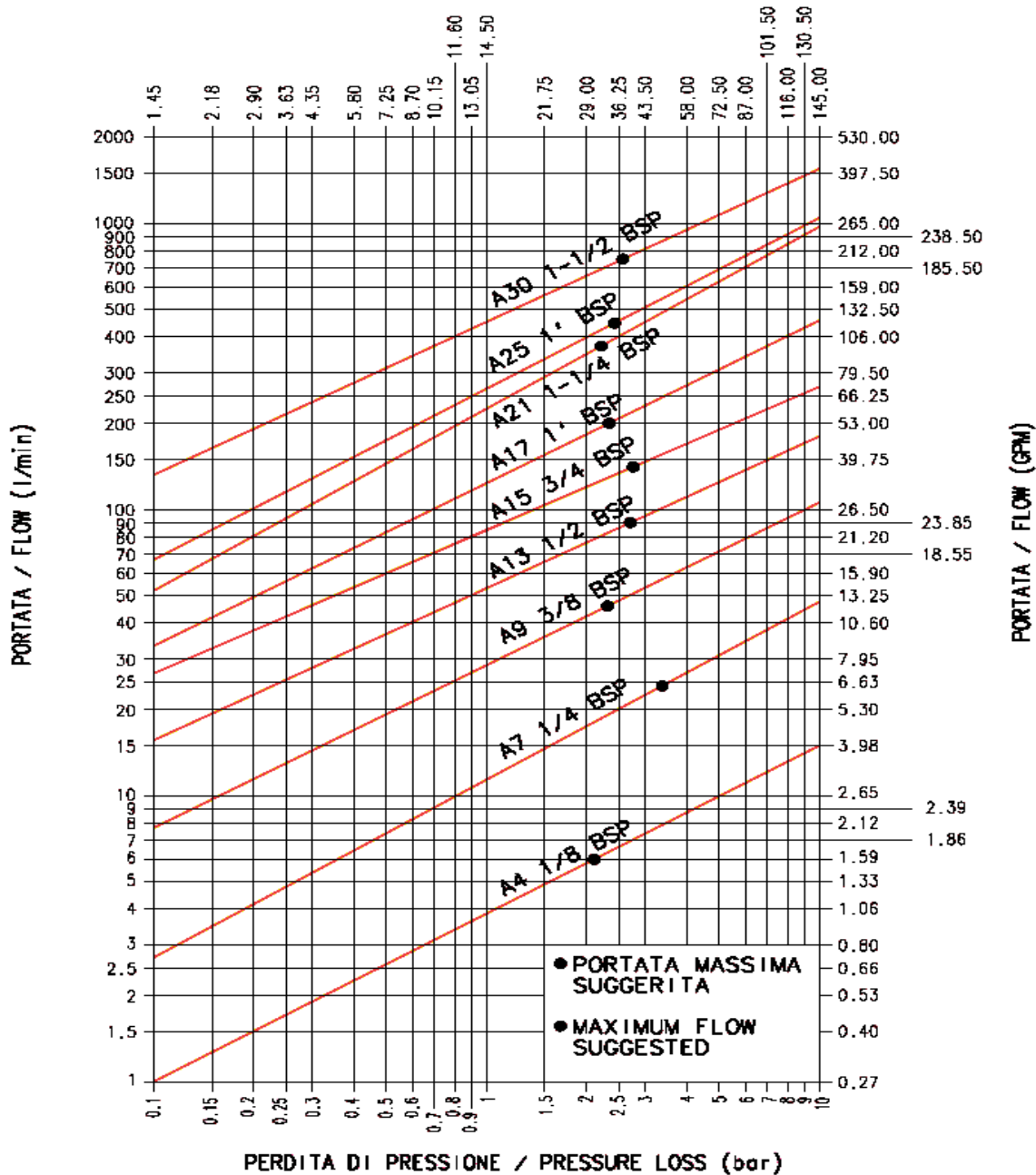
HYDRAULIEK SNELKOPPELINGEN FF



Grafiek drukverlies serie A

TESTS ESEGUITI IN CONFORMITA' A ISO 7241-2
TESTS IN ACCORDANCE WITH ISO 7241-2

PERDITA DI PRESSIONE / PRESSURE LOSS (psi)

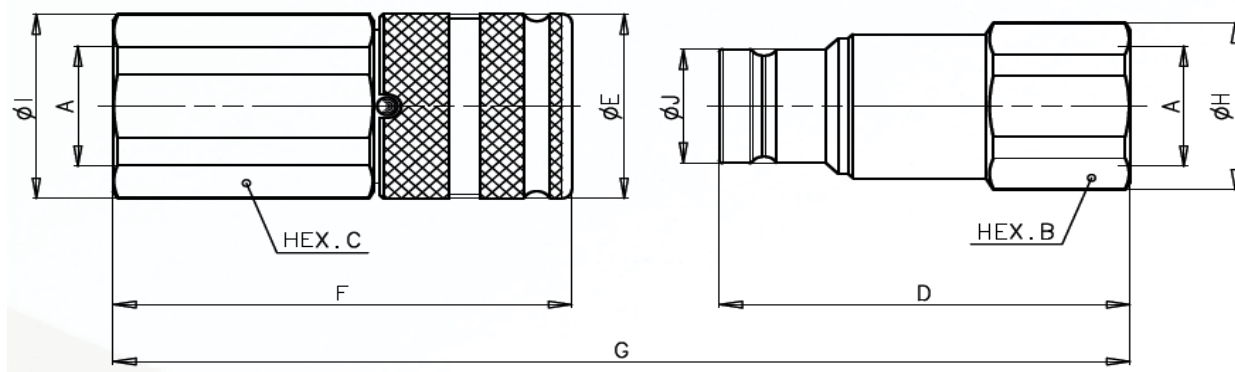


FLUIDO: OLIO ISO VG32
TEMPERATURA: 40°C
VISCOSITA': 28.8-35.2 mm²/s

FLUID: OIL ISO VG32
TEMPERATURE: 40°C
VISCOSITY: 28.8-35.2 mm²/s

A

Snelkoppeling A serie – vlakafdichtend volgens ISO 16028 – BSP binnendraad

Technische info
Uitwisselbaar: ISO 16028 (van A7 tot A21) HTMA (A9)
Mechanisch vergrendeld door kogels
Niet onder druk koppelbaar
Mogelijke draadsoorten zijn BSP, NPT, SAE, Metrisch en ORFS
Afdichting
Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk
Materiaal
Carbon staal, oppervlakte verzonken CR111. Veer C72 staal.
Kogels hard staal 100C6.


Bestelnummer		max. Werkdr. (bar)	A inch	B sw mm	C sw mm	D mm	E Ø mm	F mm	G mm	H Ø mm	I Ø mm	J Ø mm
Female	Male											
A 4 1/8-F	A 4 1/8-M	420	1/8	17	19	36,3	20,0	40,0	68,5	18,5	20,5	11,6
A 7 1/4-F	A 7 1/4-M	420	1/4	22	27	47,9	28,0	53,1	90,2	23,8	29,0	16,1
A 9 3/8-F	A 9 3/8-M	350	3/8	27	30	60,0	32,0	64,8	108,8	29,0	32,0	19,7
A 9 1/2-F	A 9 1/2-M	350	1/2	27	30	62,5	32,0	69,8	116,3	29,0	32,0	19,7
A13 1/2-F	A13 1/2-M	330	1/2	36	36	68,0	38,0	76,8	127,6	40,0	40,0	24,5
A13 3/4-F	A13 3/4-M	330	3/4	36	36	70,5	38,0	83,8	137,1	40,0	40,0	24,5
A15 3/4-F	A15 3/4-M	330	3/4	36	41	73,0	42,0	84,0	139,5	38,5	44,8	27,0
A17 1-F	A17 1-M	330	1	46	46	83,7	48,0	98,8	160,7	49,8	49,8	30,0
A21 1 1/4-F	A21 1 1/4-M	300	1 1/4	55	55	90,0	55,0	105,8	172,8	59,8	59,8	36,0
A25 1 1/4-F	A25 1 1/4-M	300	1 1/4	55	55	105,0	65,0	125,1		59,8	65,0	44,0
A30 1 1/2-F	A30 1 1/2-M	270	1 1/2	65	65	111,1	80,0	132,4	215,1	69,8	82,0	57,0

A

Snelkoppeling A serie – vlakafdichtend volgens ISO 16028 – draadaansluiting volgens Din 2353S- Metrisch lichte serie CEL

Technische info

Uitwisselbaar: ISO 16028 (van A7 tot A21) HTMA (A9)

Mechanisch vergrendeld door kogels, Niet onder druk koppelbaar

Mogelijke draadsoorten zijn BSP, NPT, SAE, Metrisch en ORFS

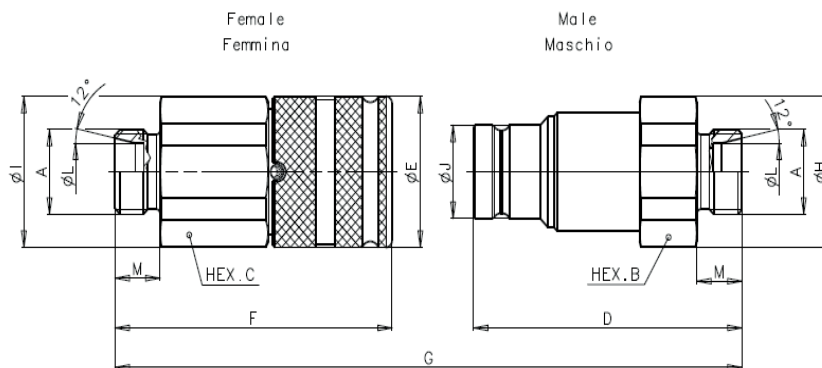
Afdichting

Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Carbon staal, oppervlaktee verzonken CRIII. Veer C72 staal.

Kogels hard staal 100C6.



Bestelnummer		max. werkd. (bar)	A mm	L	M	B sw mm	C sw mm	D mm	E Ø mm	F mm	G mm	H Ø mm	I Ø mm	J Ø mm
Female	Male													
A 4 06L-F	A 4 06L-M	420	M12X1,5	6	10	17	19	39,3	20,0	42,8	74,3	18,5	20,5	11,6
A 7 08L-F	A 7 08L-M	420	M14X1,5	8	10	22	27	52,1	28,0	52,1	93,2	23,8	29,0	16,1
A 7 10L-F	A 7 10L-M	420	M16X1,5	10	11	22	27	52,9	28,0	53,1	99,2	23,8	29,0	16,1
A 9 08L-F	A 9 08L-M	350	M14X1,5	8	10	30	30	64,5	32,0	68,6	117,1	32,0	32,0	19,7
A 9 10L-F	A 9 10L-M	350	M16X1,5	10	11	30	30	65,5	32,0	69,6	119,1	32,0	32,0	19,7
A 9 12L-F	A 9 12L-M	350	M18X1,5	12	11	30	30	65,5	32,0	67,6	117,1	32,0	32,0	19,7
A 9 15L-F	A 9 15L-M	350	M22X1,5	15	12	30	30	66,5	32,0	68,6	119,1	32,0	32,0	19,7
A 9 18L-F	A 9 18L-M	350	M26X1,5	18	12	30	30	66,5	32,0	68,6	119,1	32,0	32,0	19,7
A13 12L-F	A13 12L-M	330	M18X1,5	12	11	36	36	71,0	38,0	79,1	132,9	40,0	40,0	24,5
A13 15L-F	A13 15L-M	330	M22X1,5	15	12	36	36	72,0	38,0	80,1	134,9	40,0	40,0	24,5
A13 18L-F	A13 18L-M	330	M26X1,5	18	12	36	36	72,0	38,0	80,1	135,2	40,0	40,0	24,5
A13 22L-F	A13 22L-M	330	M30X2	22	14	36	36	74,0	38,0	82,1	135,9	40,0	40,0	24,5
A15 15L-F	A15 15L-M	330	M22X1,5	15	12	36	41	73,0	42,0	84,5	140,0	38,5	44,8	27,0
A15 18L-F	A15 18L-M	330	M26X1,5	18	12	36	41	73,0	42,0	84,5	140,0	38,5	44,8	27,0
A15 22L-F	A15 22L-M	330	M30X2	22	14	36	41	74,0	42,0	81,5	138,0	38,5	44,8	27,0
A17 18L-F	A17 18L-M	330	M26X1,5	18	12	46	46	87,0	48,0	96,3	163,5	49,8	49,8	30,0
A17 22L-F	A17 22L-M	330	M30X2	22	14	46	46	89,0	48,0	100,3	167,8	49,8	49,8	30,0
A21 22L-F	A21 22L-M	300	M30X2	22	14	55	55	100,3	55,0	105,8	183,1	59,8	59,8	36,0
A21 28L-F	A21 28L-M	300	M36X2	28	14	55	55	100,3	55,0	111,8	195,1	59,8	59,8	36,0
A30 28L-F	A30 28L-M	270	M36X2	28	14	65	65	107,6	80,0	138,4	215,6	69,8	82,0	57,0
A30 35L-F	A30 35L-M	270	M45X2	35	16	65	65	108,6	80,0	138,4	219,6	69,8	82,0	57,0



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HYDRAULIEK SNELKOPPELINGEN FF



A

Snelkoppeling A serie – vlakafdichtend volgens ISO 16028 – draadaansluiting volgens Din 2353S- metrisch zwaar CES

Technische info

Uitwisselbaar: ISO 16028 (van A7 tot A21) HTMA (A9)

Mechanisch vergrendeld door kogels. Niet onder druk koppelbaar

Mogelijke draadsoorten zijn BSP, NPT, SAE, Metrisch en ORFS

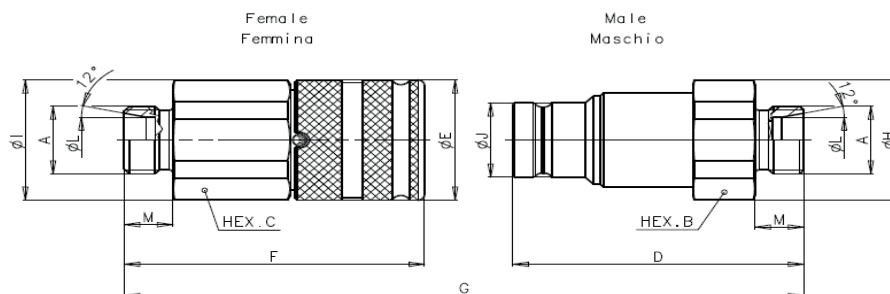
Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Afdichting

Materiaal

Carbon staal, oppervlakte verzonken CRIII. Veer C72 staal.

Kogels hard staal 100C6.



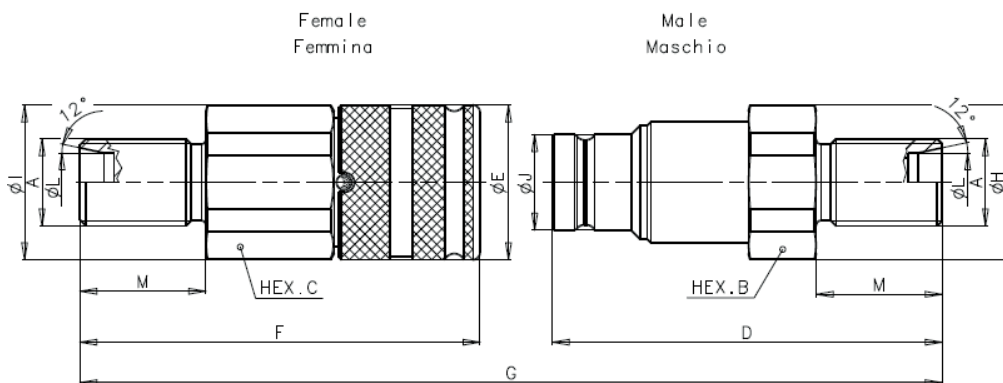
Bestelnummer		max. werkd. (bar)	A mm	S	M	B sw mm	C sw mm	D mm	E Ø mm	F mm	G mm	H Ø mm	I Ø mm	J Ø mm
Female	Male													
A 4 06S-F	A 4 06S-M	420	M14X1,5	6	12	17	19	41,3	20,0	44,8	78,3	18,5	20,5	11,6
A 7 08S-F	A 7 08S-M	420	M16X1,5	8	12	22	27	53,9	28,0	54,1	97,2	23,8	29,0	16,1
A 7 10S-F	A 7 10S-M	420	M18X1,5	10	12	22	27	53,9	28,0	54,1	97,2	23,8	29,0	16,1
A 9 10S-F	A 9 10S-M	350	M18X1,5	10	12	27	30	66,5	32,0	70,6	121,1	32,0	32,0	19,7
A 9 12S-F	A 9 12S-M	350	M20X1,5	12	12	30	30	66,5	32,0	68,6	119,1	32,0	32,0	19,7
A 9 14S-F	A 9 14S-M	350	M22X1,5	14	14	30	30	68,5	32,0	72,6	125,1	32,0	32,0	19,7
A 9 16S-F	A 9 16S-M	350	M24X1,5	16	14	30	30	68,5	32,0	72,6	125,1	32,0	32,0	19,7
A13 12S-F	A13 12S-M	330	M20X1,5	12	12	36	36	72,0	38,0	80,1	134,9	40,0	40,0	24,5
A13 14S-F	A13 14S-M	330	M22X1,5	14	14	36	36	74,0	38,0	82,1	138,9	40,0	40,0	24,5
A13 16S-F	A13 16S-M	330	M24X1,5	16	14	36	36	74,0	38,0	82,1	138,9	40,0	40,0	24,5
A15 14S-F	A15 14S-M	330	M22X1,5	14	14	36	41	75,0	38,0	86,5	144,0	38,5	44,8	27,0
A15 16S-F	A15 16S-M	330	M24X1,5	16	14	36	41	75,0	42,0	86,5	144,0	38,5	44,8	27,0
A15 20S-F	A15 20S-M	330	M30X2	20	16	36	41	77,0	42,0	88,5	148,0	38,5	44,8	27,0
A15 25S-F	A15 25S-M	330	M36X2	25	18	36	41	79,0	42,0	85,9	145,0	38,5	44,8	27,0
A17 20S-F	A17 20S-M	330	M30X2	20	16	46	46	91,0	48,0	102,3	171,5	49,8	49,8	30,0
A17 25S-F	A17 25S-M	330	M36X2	25	18	46	46	93,0	48,0	104,3	175,5	49,8	49,8	30,0
A17 30S-F	A17 30S-M	300	M42X2	30	20	46	46	95,0	48,0	106,8	179,5	49,8	49,8	30,0
A21 20S-F	A21 20S-M	300	M30X2	20	16	55	55	102,3	55,0	107,8	187,1	59,8	59,8	36,0
A21 25S-F	A21 25S-M	300	M36X2	25	18	55	55	104,3	55,0	109,8	191,1	59,8	59,8	36,0
A21 30S-F	A21 30S-M	300	M42X2	30	20	55	55	106,3	55,0	111,8	195,1	59,8	59,8	36,0
A30 30S-F	A30 30S-M	270	M42X2	30	20	65	65	113,6	80,0	142,4	227,6	69,8	82,0	57,0
A30 38S-F	A30 38S-M	270	M52X2	38	22	65	65	122,0	80,0	144,4	231,6	69,8	82,0	57,0

A

Snelkoppeling A serie – vlakafdichtend volgens ISO 16028 – draadaansluiting volgens Din 2353S- metrisch schotuitvoering licht CEL

Technische info *Uitwisselbaar: ISO 16028 (van A7 tot A21) HTMA (A9)*
Mechanisch vergrendeld door kogels
Niet onder druk koppelbaar
Mogelijke draadsoorten zijn BSP, NPT, SAE, Metrisch en ORFS

Afdichting *Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk*
Materiaal *Carbon staal, oppervlakte verzonken CRIII. Veer C72 staal.*
Kogels hard staal 100C6.



Bestelnummer		max. werkdr. (bar)	A mm	L	M	B sw mm	C sw mm	D mm	E Ø mm	F mm	G mm	H Ø mm	I Ø mm	J Ø mm
Female	Male													
A 4 06L SC-F	A 4 06L SC-M	420	M12X1,5	6	25	17	19	52,3	20,0	57,8	104,3	18,5	20,5	11,6
A 7 08L SC-F	A 7 08L SC-M	420	M14X1,5	8	25	22	27	66,9	28,0	67,1	123,2	23,8	29,0	16,1
A 7 10L SC-F	A 7 10L SC-M	420	M16X1,5	10	26	22	27	67,9	28,0	68,1	123,2	23,8	29,0	16,1
A 9 08L SC-F	A 9 08L SC-M	350	M14X1,5	8	26	30	30	80,5	32,0	84,6	149,1	32,0	32,0	19,7
A 9 10L SC-F	A 9 10L SC-M	350	M16X1,5	10	26	30	30	80,5	32,0	84,6	149,1	32,0	32,0	19,7
A 9 12L SC-F	A 9 12L SC-M	350	M18X1,5	12	26	30	30	80,5	32,0	82,6	147,1	32,0	32,0	19,7
A 9 15L SC-F	A 9 15L SC-M	350	M22X1,5	15	27	30	30	81,5	32,0	83,6	149,1	32,0	32,0	19,7
A 9 18L SC-F	A 9 18L SC-M	350	M26X1,5	18	27	30	30	81,5	32,0	83,6	149,1	32,0	32,0	19,7
A13 12L SC-F	A13 12L SC-M	330	M18X1,5	12	26	36	36	86,0	38,0	94,1	162,9	40,0	40,0	24,5
A13 15L SC-F	A13 15L SC-M	330	M22X1,5	15	27	36	36	87,0	38,0	95,1	164,9	40,0	40,0	24,5
A13 18L SC-F	A13 18L SC-M	330	M26X1,5	18	27	36	36	87,0	38,0	95,1	164,9	40,0	40,0	24,5
A13 22L SC-F	A13 22L SC-M	330	M30X2	22	34	36	36	94,0	38,0	102,1	178,9	40,0	40,0	24,5
A15 15L SC-F	A15 15L SC-M	330	M22X1,5	15	27	36	41	88,0	42,0	99,5	170,0	38,5	44,8	27,0
A15 18L SC-F	A15 18L SC-M	330	M26X1,5	18	27	36	41	88,0	42,0	99,5	170,0	38,5	44,8	27,0
A15 22L SC-F	A15 22L SC-M	330	M30X2	22	34	36	41	95,0	42,0	106,5	184,0	38,5	44,8	27,0
A17 18L SC-F	A17 18L SC-M	330	M26X1,5	18	27	46	46	102,0	48,0	113,3	193,5	49,8	49,8	30,0
A17 22L SC-F	A17 22L SC-M	330	M30X2	22	34	46	46	109,0	48,0	120,3	207,4	49,8	49,8	30,0
A21 22L SC-F	A21 22L SC-M	300	M30X2	22	34	55	55	120,3	55,0	125,8	223,1	59,8	59,8	36,0
A21 28L SC-F	A21 28L SC-M	300	M36X2	28	34	55	55	120,3	55,0	125,8	223,1	59,8	59,8	36,0
A30 28L SC-F	A30 28L SC-M	270	M36X2	28	34	65	65	127,6	80,0	156,4	255,6	69,8	82,0	57,0
A30 35L SC-F	A30 35L SC-M	270	M45X2	35	36	65	65	129,6	80,0	158,4	259,6	69,8	82,0	57,0



Stucchi®

HYDRAULIEK SNELKOPPELINGEN FF



A

Snelkoppeling A serie – vlakafdichtend volgens ISO 16028 – draadaansluiting volgens Din 2353S- metrisch schotuitvoering zwaar CES

Technische info

Uitwisselbaar: ISO 16028 (van A7 tot A21) HTMA (A9)

Mechanisch vergrendeld door kogels

Niet onder druk koppelbaar

Mogelijke draadsoorten zijn BSP, NPT, SAE, Metrisch en ORFS

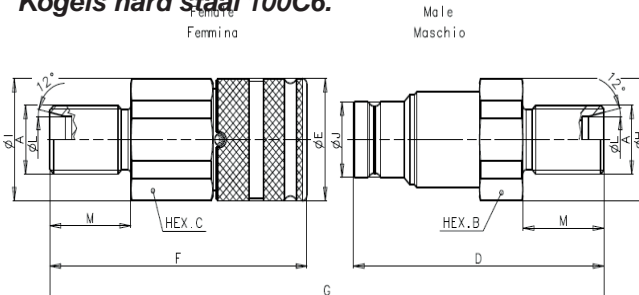
Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Afdichting

Materiaal

Carbon staal, oppervlakte verzonken CR111. Veer C72 staal.

Kogels hard staal 100C6.



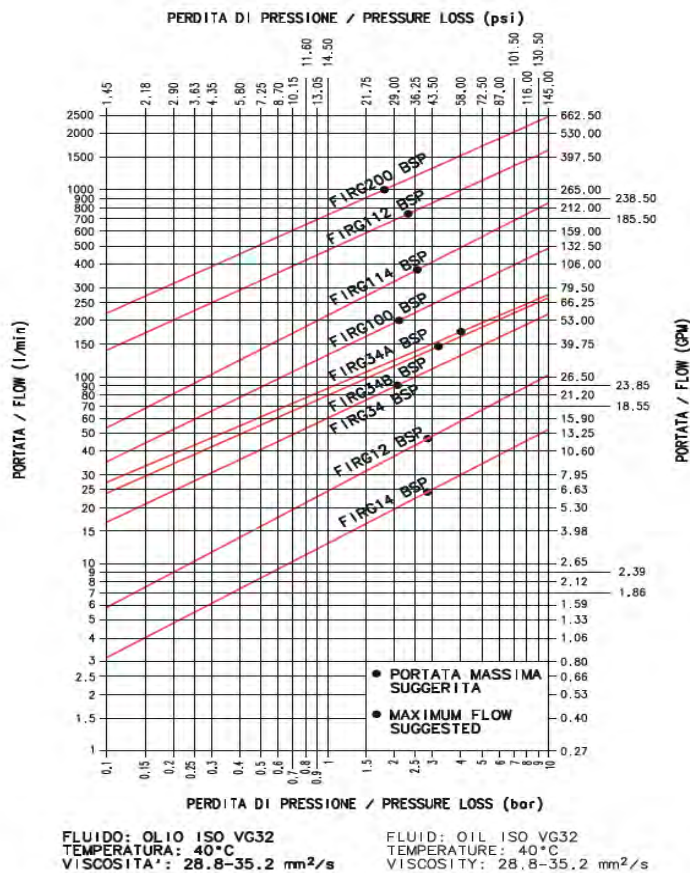
Bestelnummer		max. werkd. (bar)	A mm	S	M mm	B sw mm	C sw mm	D mm	E Ø mm	F mm	G mm	H Ø mm	I Ø mm	J Ø mm
Female	Male													
A 4 06S SC-F	A 4 06S SC-M	420	M14X1,5	6	12	17	19	56,3	20,0	59,8	78,3	18,5	20,5	11,6
A 7 08S SC-F	A 7 08S SC-M	420	M16X1,5	8	27	22	27	68,9	28,0	69,1	97,2	23,8	29,0	16,1
A 7 10S SC-F	A 7 10S SC-M	420	M18X1,5	10	27	22	27	68,9	28,0	69,1	97,2	23,8	29,0	16,1
A 9 10S SC-F	A 9 10S SC-M	350	M18X1,5	10	27	30	30	81,5	32,0	83,6	121,1	32,0	32,0	19,7
A 9 12S SC-F	A 9 12S SC-M	350	M20X1,5	12	27	30	30	81,5	32,0	83,6	119,1	32,0	32,0	19,7
A 9 14S SC-F	A 9 14S SC-M	350	M22X1,5	14	29	30	30	83,5	32,0	87,6	125,1	32,0	32,0	19,7
A 9 16S SC-F	A 9 16S SC-M	350	M24X1,5	16	29	30	30	83,5	32,0	87,6	125,1	32,0	32,0	19,7
A13 12S SC-F	A13 12S SC-M	330	M20X1,5	12	27	36	36	87,0	38,0	95,1	134,9	40,0	40,0	24,5
A13 14S SC-F	A13 14S SC-M	330	M22X1,5	14	29	36	36	89,0	38,0	82,1	138,9	40,0	40,0	24,5
A13 16S SC-F	A13 16S SC-M	330	M24X1,5	16	29	36	36	89,0	38,0	82,1	138,9	40,0	40,0	24,5
A13 20S SC-F	A13 20S SC-M	330	M30X2	22	34	36	36	94,0	38,0	102,1	178,9	40,0	40,0	24,5
A15 14S SC-F	A15 14S SC-M	330	M22X1,5	14	29	36	41	90,0	42,0	86,5	144,0	38,5	44,8	27,0
A15 16S SC-F	A15 16S SC-M	330	M24X1,5	16	29	36	41	90,0	42,0	86,5	144,0	38,5	44,8	27,0
A15 20S SC-F	A15 20S SC-M	330	M30X2	20	36	36	41	97,0	42,0	88,5	148,0	38,5	44,8	27,0
A15 25S SC-F	A15 25S SC-M	330	M36X2	25	38	36	41	99,0	42,0	85,9	145,0	38,5	44,8	27,0
A17 20S SC-F	A17 20S SC-M	330	M30X2	20	36	46	46	111,0	48,0	102,3	171,5	49,8	49,8	30,0
A17 25S SC-F	A17 25S SC-M	330	M36X2	25	38	46	46	113,0	48,0	104,3	175,5	49,8	49,8	30,0
A17 30S SC-F	A17 30S SC-M	300	M42X2	30	40	46	46	115,0	48,0	106,8	179,5	49,8	49,8	30,0
A21 20S SC-F	A21 20S SC-M	300	M30X2	20	36	55	55	122,3	55,0	107,8	187,1	59,8	59,8	36,0
A21 25S SC-F	A21 25S SC-M	300	M36X2	25	38	55	55	124,3	55,0	109,8	191,1	59,8	59,8	36,0
A21 30S SC-F	A21 30S SC-M	300	M42X2	30	40	55	55	126,3	55,0	111,8	195,1	59,8	59,8	36,0
A30 30S SC-F	A30 30S SC-M	270	M42X2	30	40	65	65	133,6	80,0	142,4	227,6	69,8	82,0	57,0
A30 38S SC-F	A30 38S SC-M	270	M52X2	38	50	65	65	143,6	80,0	144,4	231,6	69,8	82,0	57,0

FIRG

Snelkoppeling FIRG serie – vlakafdichtend volgens ISO 16028 – BSP

“FIRG” is het “origineel” van de vlakafdichtende koppelingen. Ontwikkelt in 1983 heeft de “FIRG”- serie een grote omwenteling te weeg gebracht in de markt van snelkoppelingen. De “FIRG”- serie wordt in een breed marktsegment gebruikt voor hydraulische toepassingen. De “FIRG”- serie ligt aan de grondslag van de ISO 16028 wat betreft de uitwisselbaarheid. Gebaseerd op de duurzame prestaties en vele voordelen is de “FIRG”- serie wereldwijd de meest toegepaste en goedgekeurde snelkoppeling in de markt voor fabrikanten van hydraulische machines. Deze koppeling vindt zijn goedkeuring bij toepassing waar vloeistofverlies en calamiteiten in hydraulische systemen moeten worden uitgesloten.

Uitwisselbaar: ISO 16028 en NFPA T3.20.15 (HTMA)



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it

FIRG

Snelkoppeling FIRG serie – vlakafdichtend volgens ISO 16028 – BSP

Technische info

Uitwisselbaar: ISO 16028 (van 1/4 tot 1 1/4) HTMA (3/8)

Mechanisch vergrendeld door kogels

Niet onder druk koppelbaar

Mogelijke draadsoorten zijn BSP, NPT

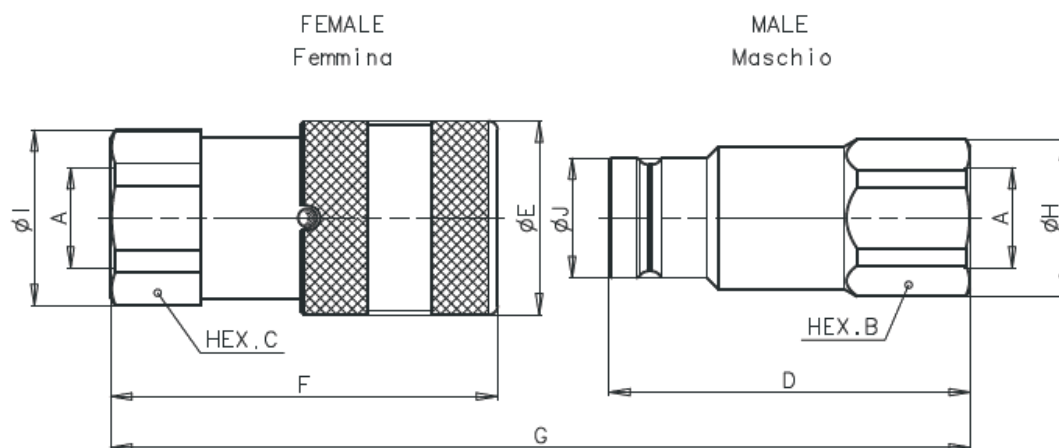
Afdichting

Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Carbon staal, oppervlakte verzonken CR111. Veer C72 staal.

Kogels hard staal 100C6.



Bestelnummer		max. werkdruk (bar)	A	B	C	D	E	F	G	H	I	J
Female	Male		inch	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	Ø mm	Ø mm
FIRG 14-F	FIRG 14-M	300	1/4	22	22	47,9	28,0	48,1	85,2	23,8	23,8	16,1
FIRG 38-F	FIRG 38-M	300	3/8	24	27	60,0	32,0	64,2	108,7	26,0	29,0	19,7
FIRG 12-F	FIRG 12-M	300	1/2	27	27	62,5	32,0	69,2	116,2	29,0	29,0	19,7
FIRG 34-F	FIRG 34-M	250	3/4	36	36	70,5	38,0	80,8	134,0	38,5	38,5	24,5
FIRG 34B-F	FIRG 34B-M	250	3/4	36	36	70,5	42,0	78,5	131,4	38,5	38,5	27,0
FIRG 1-F	FIRG 1-M	250	1	45	45	82,3	48,0	93,2	153,5	47,8	47,8	30,0
FIRG 1 1/4-F	FIRG 1 1/4-M	250	1 1/4	55	55	89,8	55,0	106,0	172,8	59,8	59,8	36,0
FIRG 1 1/2-F	FIRG 1 1/2-M	200	1 1/2	65	65	111,1	80,0	132,4	214,9	69,8	72,0	57,0
FIRG 2-F	FIRG 2-M	200	2	75	80	123,8	100,0	156,6	241,5	83,5	88,5	73,0

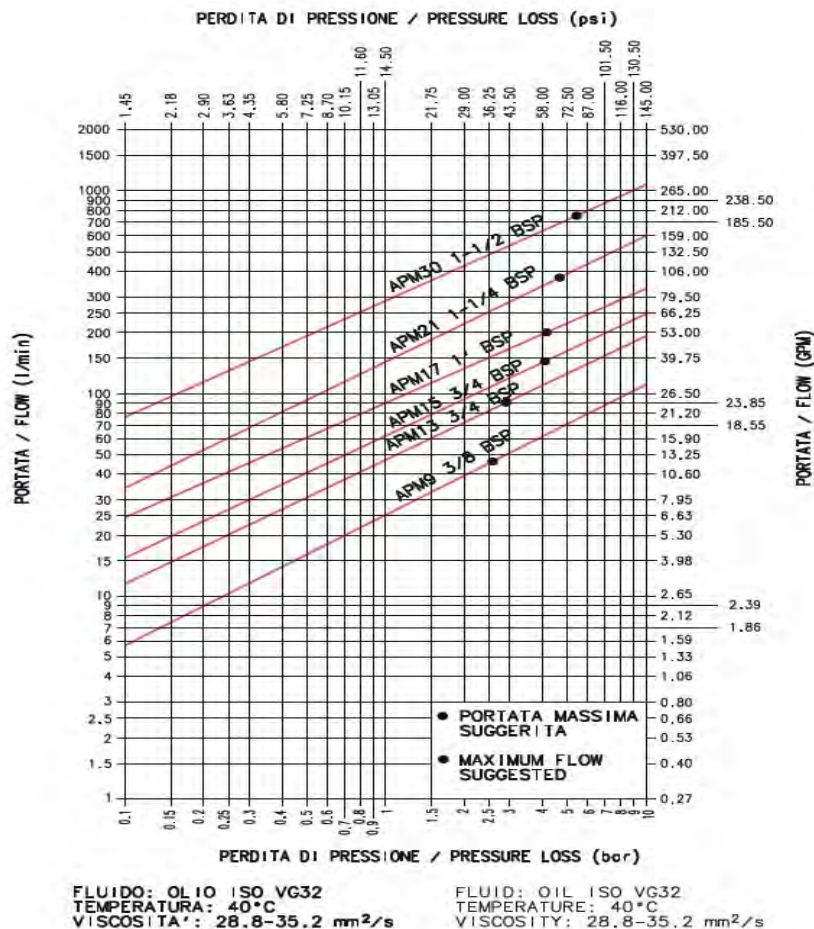
Tabel NPT op aanvraag leverbaar

APM

Snelkoppeling APM serie – vlakafdichtend volgens ISO 16028 – BSP

De serie mannelijke vlakafdichtende koppelingen “APM” is de Stucchi oplossing voor het handmatig aankoppelen onder restdruk in het systeem. De koppeling heeft een driedubbel klepsysteem: dubbele interne druk ontlastingsklep en de vlak afdichtende klep. Dit systeem heeft de mogelijkheid om gemakkelijk onder hoge restdruk gekoppeld te worden zonder verlies van vloeistof. Met deze belangrijke eigenschappen van de “APM” koppelingen is dit de ideale oplossing voor het koppelen in systemen met interne restdruk.

Uitwisselbaar: ISO 16028 en NTFA T3.20.15 (HTMA)



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it



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HYDRAULIEK SNELKOPPELINGEN FF



APM

Snelkoppeling APM serie – vlakafdichtend volgens ISO 16028 – BSP

Technische info

Uitwisselbaar: ISO 16028 (van 1/4 tot 1 1/4) HTMA (3/8)

Mechanisch vergrendeld door kogels

Onder restdruk koppelbaar

Mogelijke draadsoorten zijn BSP, NPT

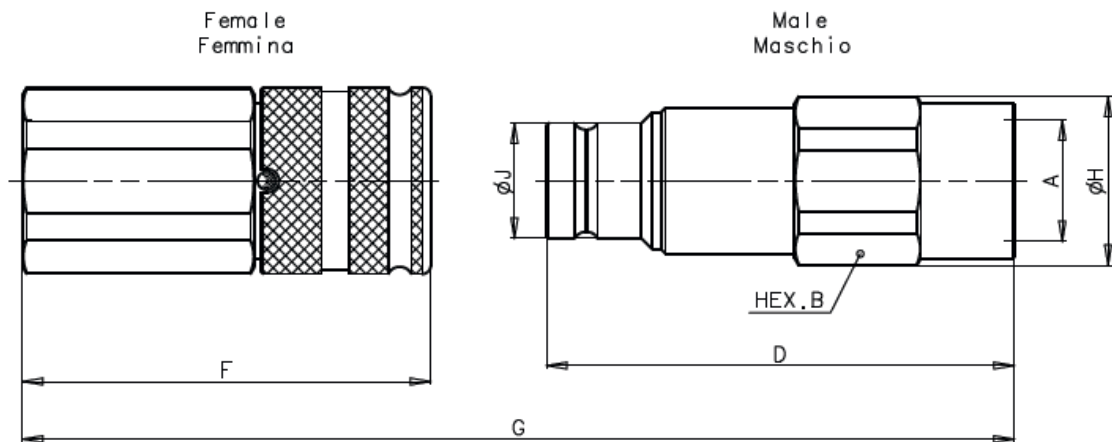
Afdichting

Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Carbon staal, oppervlakte verzonken CR111. Veer C72 staal.

Kogels hard staal 100C6.

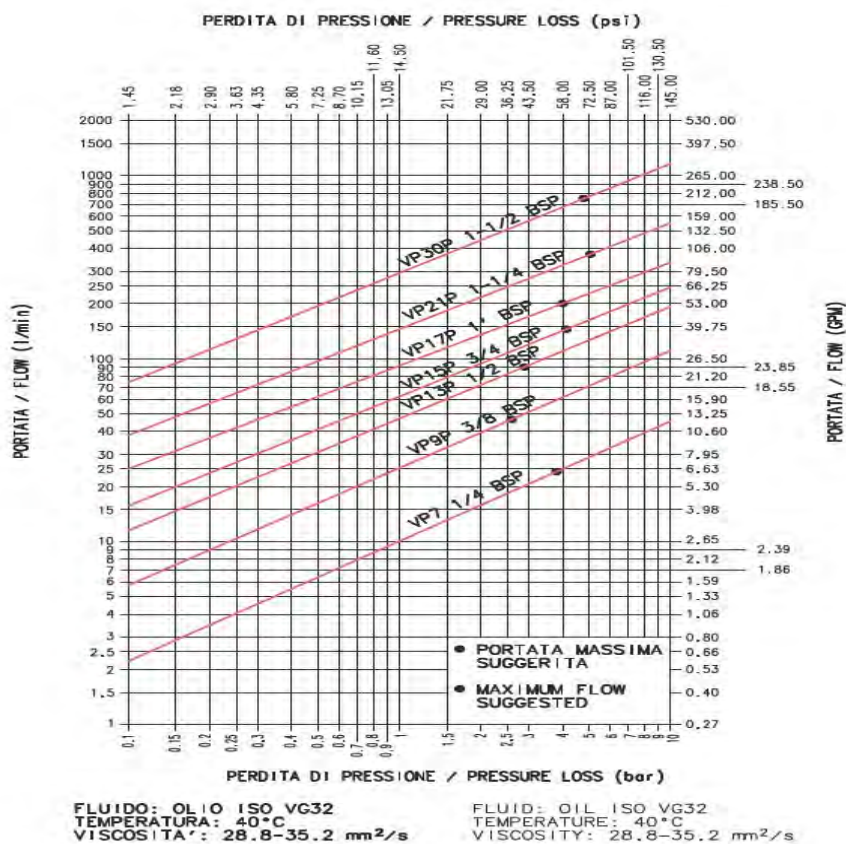


Bestelnummer		max. werkdruk (bar)	A inch	B sw mm	C sw mm	D mm	E Ø mm	F mm	G mm	H Ø mm	I Ø mm	J Ø mm
Female	Male											
	APM 9 3/8-M	350	3/8	27	0	80,0	0,0	0,0	0,0	29,0	0,0	19,7
	APM 9 1/2-M	350	1/2	27	0	82,5	0,0	0,0	0,0	29,0	0,0	19,7
	APM13 1/2-M	330	1/2	36	0	91,0	0,0	0,0	0,0	38,5	0,0	24,5
	APM13 3/4-M	330	3/4	36	0	93,5	0,0	0,0	0,0	38,5	0,0	24,5
	APM15 3/4-M	330	3/4	36	0	95,0	0,0	0,0	0,0	38,5	0,0	27,0
	APM17 1-M	330	1	46	0	108,5	0,0	0,0	0,0	49,8	0,0	30,0
	APM21 1 1/4-M	300	1 1/4	55	0	123,5	0,0	0,0	0,0	59,8	0,0	36,0
	APM30 1 1/2-M	270	1 1/2	70	0	146,9	0,0	0,0	0,0	75,8	0,0	57,0

VP-P

Schroef snelkoppeling VP-P serie – vlakafdichtend volgens Stucchi specificaties – BSP draad

De “VP-P” schroef/vlakafdichtende koppeling serie is de technische oplossing voor zware hydraulische toepassingen. De schroefverbinding voorkomt het vroegtijdig invreten van de kogels in de mannelijke koppeling (brinnelling) in tegenstelling tot de conventionele kogelsluiting. Dit maakt de “VP-P” serie geschikt voor hoge werkdrukken en impulsdrukken. Het drievoudige klepsysteem garandeert een veilige koppeling, zelfs indien er in het systeem een hoge restdruk heerst. Ook voorkomt het vloeistof verlies bij het aan en afkoppelen. De veiligheidssluiting, een ring die automatisch sluit bij het koppelen, voorkomt dat deze per ongeluk zou kunnen ontkoppelen. Dit maakt de “VP-P” serie uitermate geschikt voor toepassing waar sterke trillingen en torsie voorkomen. **Uitwisselbaar: Interne specificaties Stucchi.**



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it



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VP-P

Schroef snelkoppeling VP-P serie – vlakafdichtend volgens Stucchi specificaties – BSP draad.

Technische info

Uitwisselbaar: specificatie Stucchi

Mechanisch vergrendeld door schroefstelsel

Onder restdruk koppelbaar

Mogelijke draadsoorten zijn BSP, NPT, METRISCH, SAE en ORFS

Afdichting

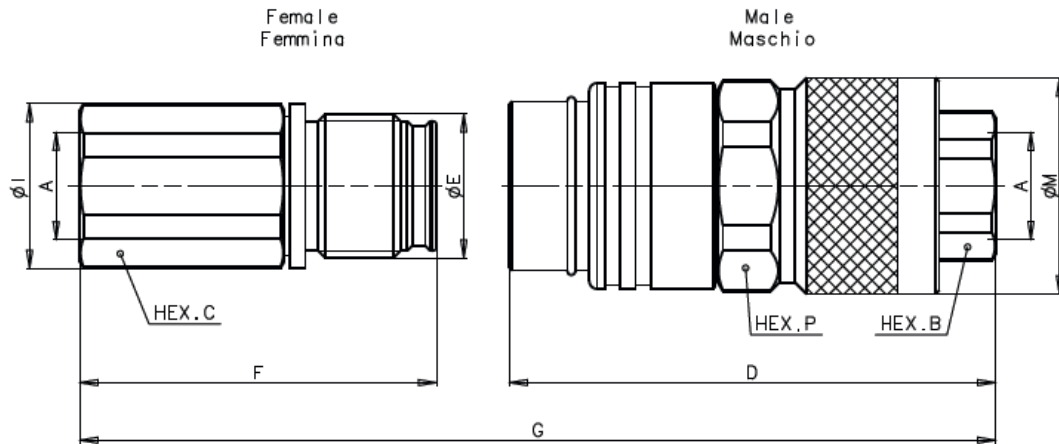
Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Hoge graad Carbon staal, oppervlakte behandeling Nitriding en Oxidating (QPQ)

De rest verzonken. Veer C72 staal.

Kogels hard staal 100C6.



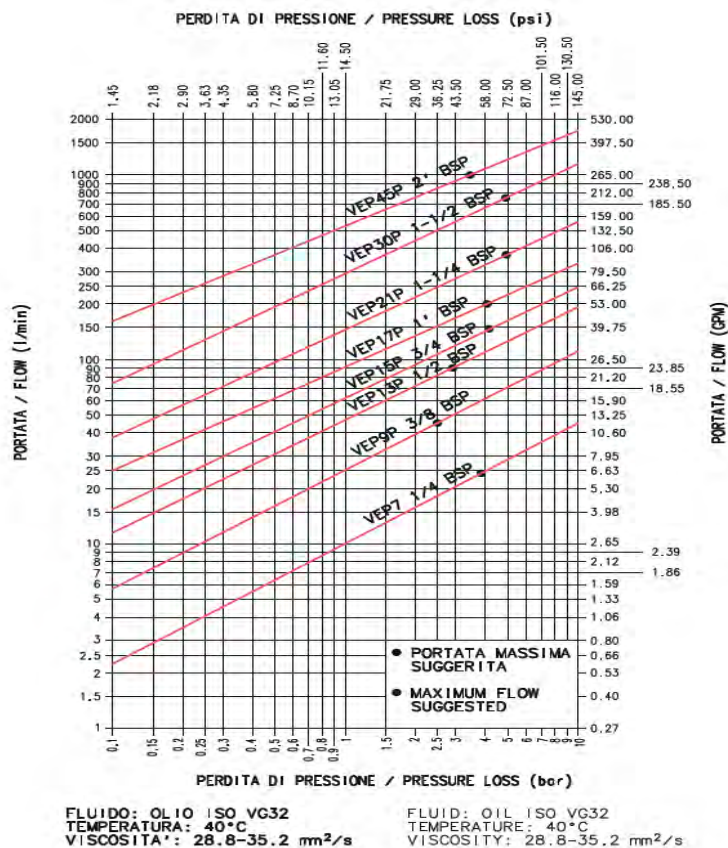
Bestelnummer		max. werkdruk (bar)	A inch	B sw mm	C sw mm	D mm	E Ø mm	F mm	G mm	I Ø mm	mm Ø	P Ø mm
Female	Male											
VP 7 1/4-F	VP 7 1/4-M	600	1/4	22	27	83,9	M24X2	52,8	125,2	29,0	35,0	32,0
VP 9 3/8-F	VP 9 3/8-M	550	3/8	27	30	94,5	M28X2	64,3	142,3	32,0	42,0	38,0
VP 9 1/2-F	VP 9 1/2-M	550	1/2	27	30	94,5	M28X2	69,3	147,3	32,0	42,0	38,0
VP13 1/2-F	VP13 1/2-M	550	1/2	36	36	110,0	M36X3	76,2	167,9	40,0	49,0	45,0
VP13 3/4-F	VP13 3/4-M	550	3/4	36	36	110,0	M36X3	83,2	174,9	40,0	49,0	45,0
VP15 3/4-F	VP15 3/4-M	550	3/4	36	41	110,0	M39X3	83,4	174,9	44,8	52,0	48,0
VP17 3/4-F	VP17 3/4-M	500	3/4	46	46	127,1	M45X3	96,0	200,5	49,8	60,0	55,0
VP17 1-F	VP17 1-M	500	1	46	46	127,1	M45X3	98,0	202,5	49,8	60,0	55,0
VP21 1-F	VP21 1-M	470	1	55	55	137,0	M55X3	104,0	213,8	59,8	76,0	70,0
VP21 1 1/4-F	VP21 1 1/4-M	470	1 1/4	55	55	137,0	M55X3	105,0	214,8	59,8	76,0	70,0
VP30 1 1/4-F	VP30 1 1/4-M	400	1 1/4	65	65	174,7	M74X4	132,2	271,3	85,0	94,0	85,0
VP30 1 1/2-F	VP30 1 1/2-M	400	1 1/2	65	65	174,7	M74X4	132,2	271,3	85,0	94,0	85,0

VEP-P

Schroef snelkoppeling VEP-P serie – vlakafdichtend volgens Stucchi specificaties – BSP draad

De “VEP-P” schroef/vlakafdichtende koppeling serie is de Stucchi oplossing voor toepassing in systemen met een hoge druk en tevens geschikt waar restdruk in het systeem aanwezig is. De schroefsluiting voorkomt het vroegtijdig invreten van de kogels in de mannelijke koppeling (brinnelling) in tegenstelling tot de verbinding van de conventionele kogelsluiting bij systemen met hoge impuls drukken. Het drie dubbele klepsysteem garandeerde een veilige koppeling, zelfs als er in het systeem een hoge restdruk heerst. Tevens voorkomt deze koppeling bij het aankoppelen verlies van vloeistof.

Uitwisselbaar: Stucchi interne specificaties



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it

VEP-P

Schroef snelkoppeling VEP-P serie – vlakafdichtend volgens Stucchi specificaties – BSP draad

Technische info

Uitwisselbaar: specificatie Stucchi

Mechanisch vergrendeld door schroefstelsel

Onder restdruk koppelbaar

Mogelijke draadsoorten zijn BSP, NPT, METRISCH, SAE en ORFS

Afdichting

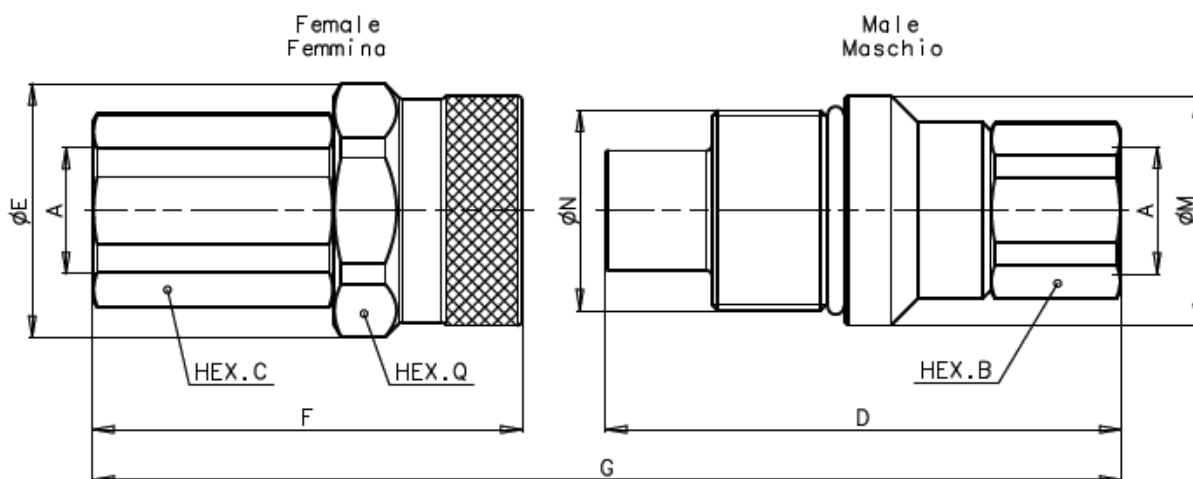
Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Hoge graad Carbon staal, oppervlakte behandeling Nitriding en Oxidating (QPQ)

De rest verzonken. Veer C72 staal.

Kogels hard staal 100C6.

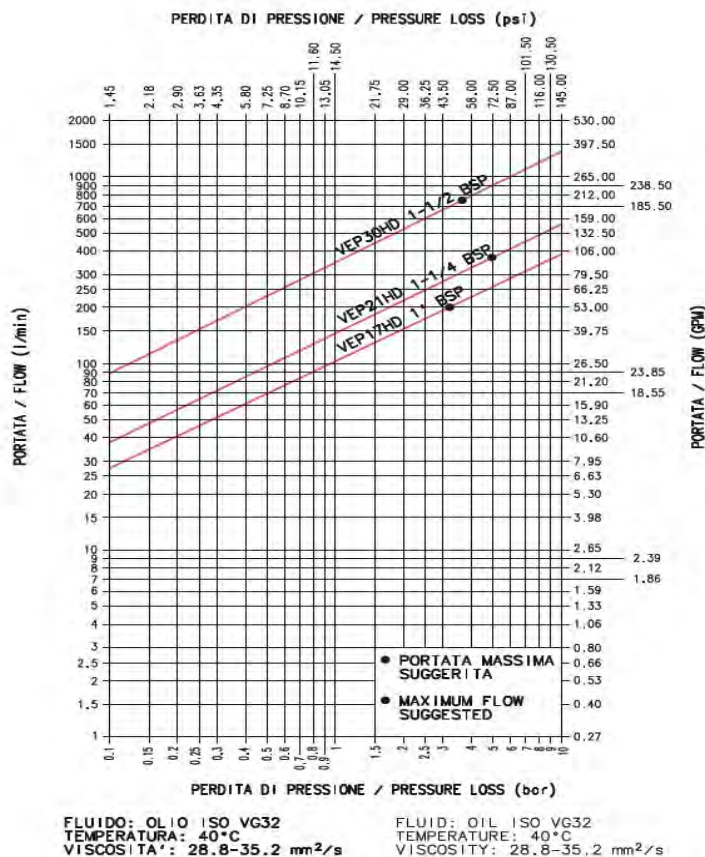


Bestelnummer		max. werkdruk Gekoppeld (bar)	A	B	C	D	E	F	G	M	N	Q
Female	Male		inch	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	mm	Ø mm
VEP 7 1/4-F	VEP 7 1/4-M	600	1/4	22	27	71,0	38,8	54,1	113,3	34,8	M30X2	36,0
VEP 9 3/8-F	VEP 9 3/8-M	550	3/8	27	30	82,5	41,8	65,8	131,3	37,8	M33X2	38,0
VEP 9 1/2-F	VEP 9 1/2-M	550	1/2	27	30	85,0	41,8	70,8	138,8	37,8	M33X2	38,0
VEP13 1/2-F	VEP13 1/2-M	550	1/2	36	36	95,0	49,8	77,8	154,6	45,8	M40X3	46,0
VEP13 3/4-F	VEP13 3/4-M	550	3/4	36	36	97,4	49,8	84,8	164,0	45,8	M40X3	46,0
VEP15 3/4-F	VEP15 3/4-M	550	3/4	36	41	99,0	53,8	84,9	165,4	49,8	M45X3	50,0
VEP17 3/4-F	VEP17 3/4-M	500	3/4	46	46	113,6	58,8	97,7	188,5	54,8	M50X3	55,0
VEP17 1-F	VEP17 1-M	500	1	46	46	113,6	58,8	99,7	190,5	54,8	M50X3	55,0
VEP21 1-F	VEP21 1-M	470	1	55	55	123,4	69,8	105,8	205,2	64,5	M58X3	65,0
VEP21 1 1/4-F	VEP21 1 1/4-M	470	1 1/4	55	55	123,4	69,8	106,8	206,2	64,5	M58X3	65,0
VEP30 1 1/4-F	VEP30 1 1/4-M	400	1 1/4	65	65	150,0	92,0	133,5	253,9	89,8	M80X4	85,0
VEP30 1 1/2-F	VEP30 1 1/2-M	400	1 1/2	65	65	150,0	92,0	133,5	253,9	89,8	M80X4	85,0

VEP-HD

Schroef snelkoppeling VEP-HP serie – vlakafdichtend volgens Stucchi specificaties – BSP draad

De “VEP-HD” schroef/vlakafdichtende koppeling is een ander voorbeeld van de continue verbeteringen van de Stucchi producten. Ontworpen voor zware toepassingen met hoge werkdruk, hoge impuls frequentie en mechanische belasting. De “VEP-HD” koppelingen zijn gefabriceerd uit hoogwaardig carbonstaal met een speciale oppervlakte behandeling om de koppeling te beschermen tegen zout, pekelen enz. . Deze serie is getest tot 10.000 impulsen. Het drievoudige klepsysteem garandeert een veilige koppeling, zelfs als er in het systeem een hoge restdruk heerst. Ook voorkomt het vloeistof verlies bij het aan en afkoppelen. **Uitwisselbaar: Interne specificaties Stucchi**



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it



Stucchi®

HYDRAULIEK SNELKOPPELINGEN FF



VEP-HD

Schroef snelkoppeling VEP-HD serie – vlakafdichtend volgens Stucchi specificaties – BSP draad

Technische info

Uitwisselbaar: specificatie Stucchi

Mechanisch vergrendeld door schroefstelsel

Onder restdruk koppelbaar

Mogelijke draadsoorten zijn BSP, NPT, METRISCH, SAE en ORFS

Getest met 1 miljoen pulsen.

Afdichting

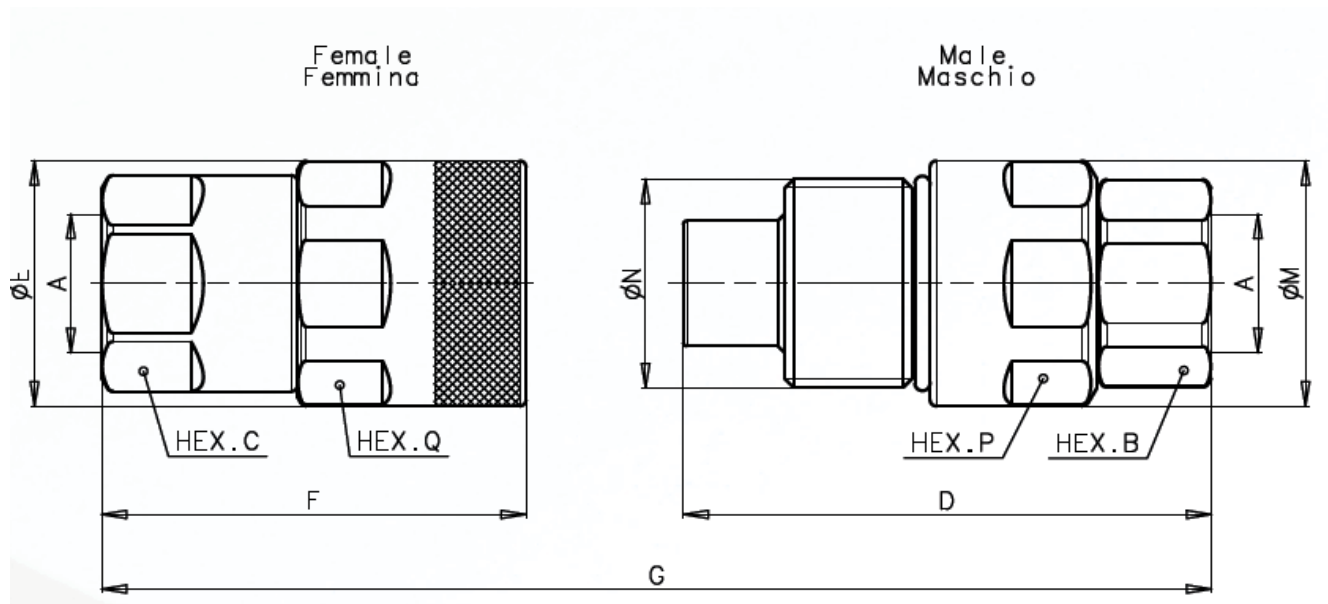
Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Hoge graad Carbon staal, oppervlakte behandeling Nitriding en Oxidating (QPQ)

De rest verzonken. Veer C72 staal.

Kogels hard staal 100C6.



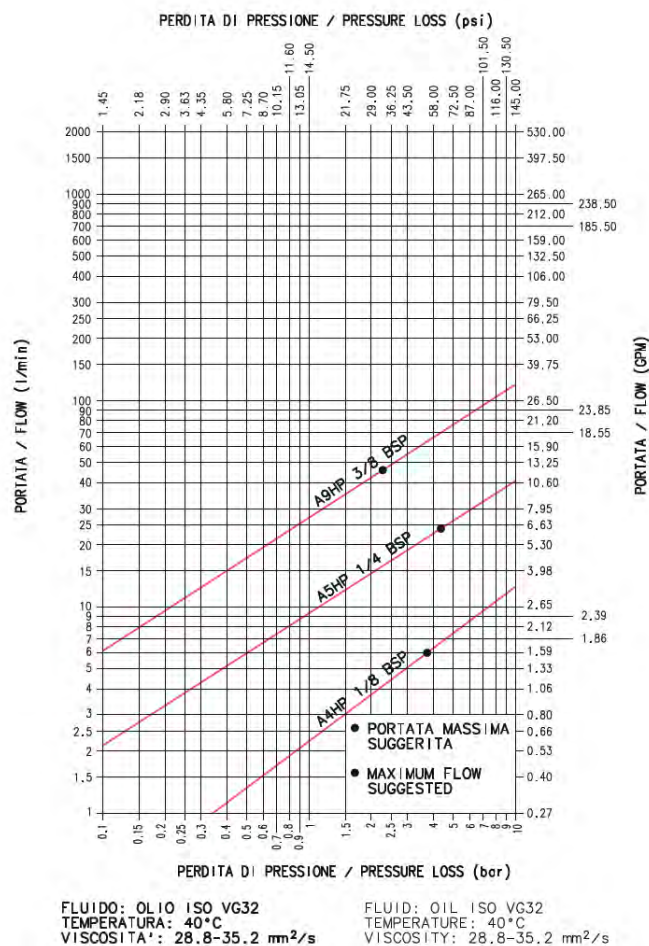
Bestelnummer		max. wd. Gekopp. (bar)	A	B	C	D	E	F	G	M	N	Q
Female	Male		inch	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	mm	Ø mm
VEP17HD 3/4-F	VEP17HD 3/4-M	500	3/4	46	46	124,0	58,8	99,7	200,9	58,8	M50X3	55,0
VEP17HD 1-F	VEP17HD 1-M	500	1	46	46	124,0	58,8	99,7	200,9	58,8	M50X3	55,0
VEP21HD 1-F	VEP21HD 1-M	470	1	55	55	133,4	69,8	106,8	216,2	69,8	M58X3	65,0
VEP21HD 1 1/4-F	VEP21HD 1 1/4-M	470	1 ¼	55	55	133,4	69,8	106,8	216,2	69,5	M58X3	65,0
VEP30HD 1 1/4-F	VEP30HD 1 1/4-M	400	1 ¼	65	65	150,0	95,0	133,5	253,9	94,4	M80X4	85,0
VEP30HD 1 1/2-F	VEP30HD 1 1/2-M	400	1 ½	65	65	150,0	95,0	133,5	253,9	94,4	M80X4	85,0

A-HP

Snelkoppeling A serie – vlakafdichtend volgens Stucchi specificaties

“A-HP” is de vlakafdichtende koppeling voor hoge druk hydrauliek. Gebruik tot 720 bar/10.440 PSI werkdruk. De koppelingen zijn gefabriceerd uit hoogwaardig carbon staal.

De vlakafdichtende uitvoering voorkomt lekkage gedurende aan en afkoppelen. Voor de veiligheid is deze koppeling niet uitwisselbaar met lagere druk koppelingen. De automatische veiligheidssluiting voorkomt ongewenste ont koppeling. “A-HP” koppelingen worden gebruikt voor toepassingen waar hoge werkdruk vereist is en maximale veiligheid. Uitwisselbaar: Interne specificaties Stucchi.



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it



Stucchi®

HYDRAULIEK SNELKOPPELINGEN FF



A-HP

Snelkoppeling A serie – vlakafdichtend volgens Stucchi specificaties

Technische info

Uitwisselbaar: volgens Stucchi specificaties

Mechanisch vergrendeld door kogels

Niet onder druk koppelbaar

Mogelijke draadsoorten zijn BSP, NPT

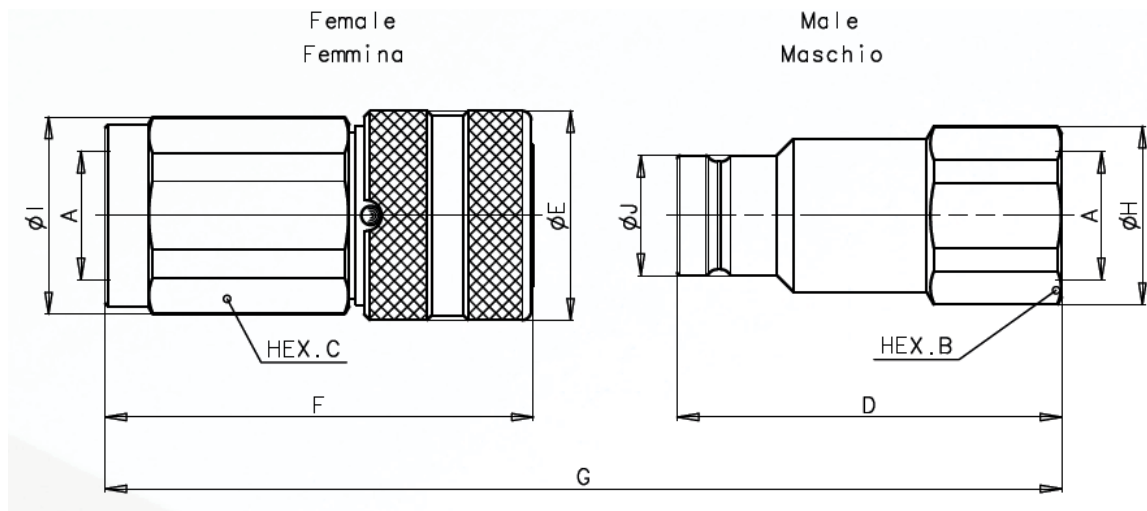
Afdichting

Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Carbon staal, oppervlakte verzonken CR111. Veer C72 staal.

Kogels hard staal 100C6.

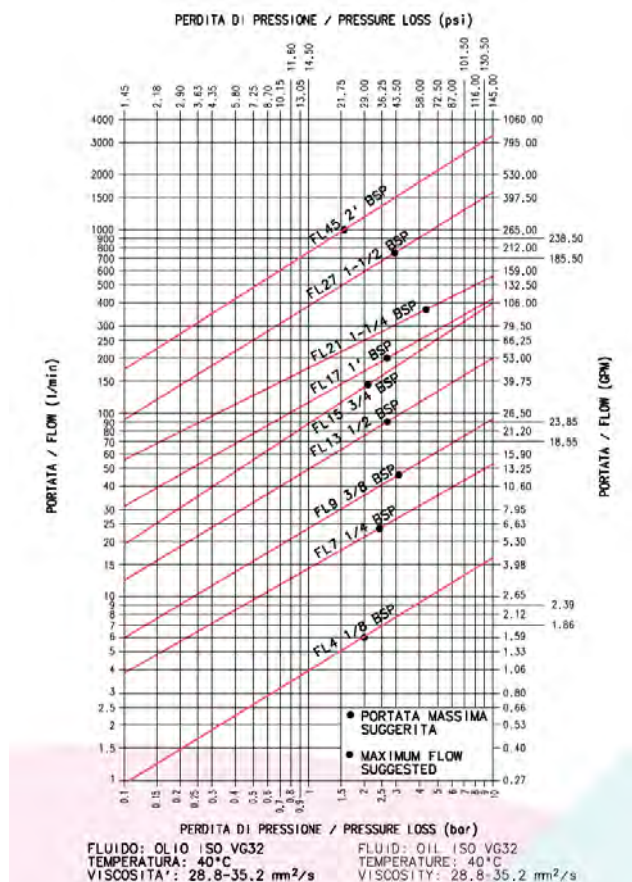


Bestelnummer		max. wd. Gekopp. (bar)	A	B	C	D	E	F	G	H	I	J
Female	Male		inch	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	Ø mm	Ø mm
HPA 4 1/8-F	HPA 4 1/8-M	720	1/8	17	17	36,2	22	44,0	72,3	18,5	21,8	12,0
HPA 5 1/4-F	HPA 5 1/4-M	720	1/4	22	22	47,9	29	58,0	94,9	23,8	29,0	16,5
HPA 5 3/8-F	HPA 5 3/8-M	720	3/8	24	24	54,9	29	60,0	103,9	26,0	29,0	16,5
HPA 9 3/8-F	HPA 9 3/8-M	720	3/8	27	30	60,0	34	64,6	108,8	29,0	32,0	19,5
HPA 9 1/2-F	HPA 9 1/2-M	720	1/2	27	30	62,5	34	69,6	116,3	29,0	32,0	19,5

FL

**Snelkoppeling FL serie – vlakafdichtend volgens ISO 16028 en NFPA T3.20.15(HTMA)
Vervaardigd uit RVS AISI 316**

De “FL” vlakafdichtende koppeling is de oplossing van Stucchi voor toepassing in een gebied waar hoge concentraties corrosie kunnen ontstaan en/of waar vloeistof wordt getransporteerd die veel corrosie veroorzaken. De “FL” koppeling is gefabriceerd uit RVS AISI 316. De standaard afdichtingen zijn gemaakt uit Viton/Fluorcarbon, maar ook andere opties zijn mogelijk afhankelijk van de vloeistof of de temperatuur. De specificatie van de vlakafdichtende koppeling in RVS voorkomt lekkage bij aan en afkoppelen en reduceert vervuiling in het systeem en bieden optimale bescherming tegen corrosie. Dit maakt de “FL” koppeling ideaal voor toepassing in de machinebouw, off shore, marine, chemie, farmacie en voedselindustrie. Uitwisselbaar: ISO 16028 en NFPA T3.20.15(HTMA)



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it



Stucchi®

HYDRAULIEK SNELKOPPELINGEN FF



FL

**Snelkoppeling FL serie – vlakafdichtend volgens ISO 16028 en NFPA T3.20.15(HTMA)
Vervaardigd uit RVS AISI 316**

Technische info

Uitwisselbaar: ISO 16028 (van 1/4 tot 1 1/4) HTMA (3/8)

Mechanisch vergrendeld door kogels

Niet onder druk koppelbaar

Mogelijke draadsoorten zijn BSP, NPT

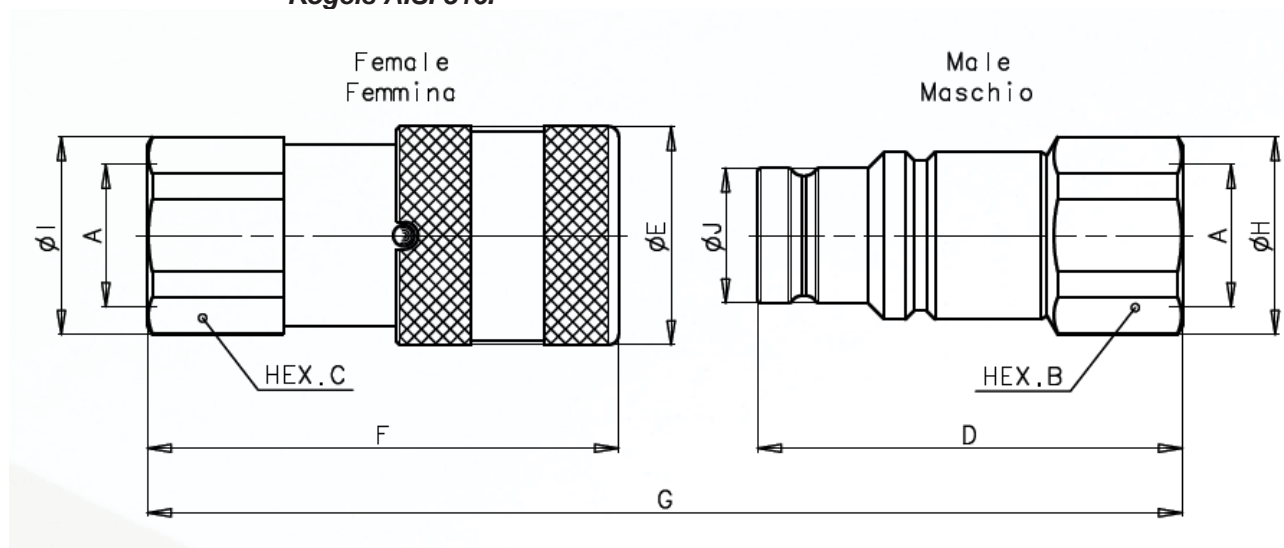
Afdichting

Standaard VITON, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Inox AISI 316. Veer AISI 302

Kogels AISI 316.

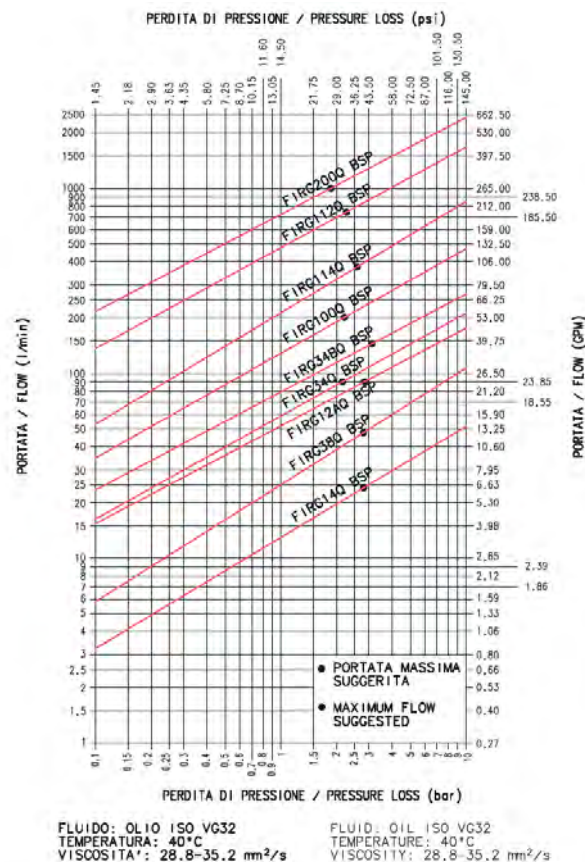


Bestelnummer		max. Werkdr. (bar)	A inch	B sw mm	C sw mm	D mm	E Ø mm	F mm	G mm	H Ø mm	I Ø mm	J Ø mm
Female	Male											
FL 4 1/8-F	FL 4 1/8-M	350	1/8	17	19	36,3	20,0	40,0	68,4	18,5	20,5	11,6
FL 7 1/4-F	FL 7 1/4-M	350	1/4	22	22	47,9	28,0	48,3	86,7	23,8	29,0	16,1
FL 9 3/8-F	FL 9 3/8-M	350	3/8	27	24	59,9	32,0	64,2	108,6	26,0	29,0	19,7
FL 9 1/2-F	FL 9 1/2-M	350	1/2	27	27	62,4	32,0	69,2	116,1	29,0	29,0	19,7
FL13 1/2-F	FL13 1/2-M	350	1/2	32	32	70,5	38,0	73,8	127,0	33,8	33,8	24,5
FL13 3/4-F	FL13 3/4-M	350	3/4	36	36	70,5	38,0	80,8	134,0	38,5	38,5	24,5
FL15 3/4-F	FL15 3/4-M	350	3/4	36	36	70,5	42,0	80,9	133,8	38,5	38,5	27,0
FL17 1-F	FL17 1-M	330	1	46	46	82,2	48,0	92,9	153,3	49,5	49,5	30,0
FL21 1 1/4-F	FL21 1 1/4-M	280	1 1/4	55	55	90,0	55,0	106,2	173,0	59,8	59,8	36,0
FL27 1 1/2-F	FL27 1 1/2-M	230	1 1/2	70	65	111,0	80,0	132,4	214,8	76,0	72,0	57,0
FL45 2-F	FL45 2-M	100	2	75	80	123,8	100,0	156,6	241,5	83,5	88,5	73,0

FIRG-Q

Snelkoppeling FIRG-Q Serie – vlakafdichtend volgens ISO 16028 en NFPA T3.20.15(HTMA)

De “FIRG-Q” vlakafdichtende koppeling is de oplossing voor toepassing in corrosie gevoelige omgevingen en/of transport van bijvoorbeeld zoetwater, water-glycol e.d. die corrosie veroorzaken. De producten zijn gefabriceerd uit carbon staal en hebben een speciale oppervlakte behandeling ondergaan. De interne kleppen zijn gemaakt van RVS AISI303 en kunnen geleverd worden met diverse speciale afdichtingen, aangepast aan de temperatuur en/of de vloeistof die vervoerd moet worden. De vlakafdichtende uitvoering sluit lekkages uit gedurende het aan en afkoppelen en reduceert verontreiniging van het systeem. Deze gecombineerde voordelen van de vlakke afdichting, met de grotere bescherming tegen corrosie, maken de “FIRG-Q” tot de ideale koppeling voor diverse toepassingen in de industrie. Uitwisselbaar: ISO 16028 en NTPA T3.20.15(HTMA)



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it

FIRG-Q

Snelkoppeling FIRG-Q Serie – vlakafdichtend volgens ISO 16028 en NFPA T3.20.15(HTMA)

Technische info

Uitwisselbaar: ISO 16028 (van A7 tot A21) HTMA (A9)

Mechanisch vergrendeld door kogels. Niet onder druk koppelbaar

Mogelijke draadsoorten zijn BSP, NPT, SAE, Metrisch en ORFS

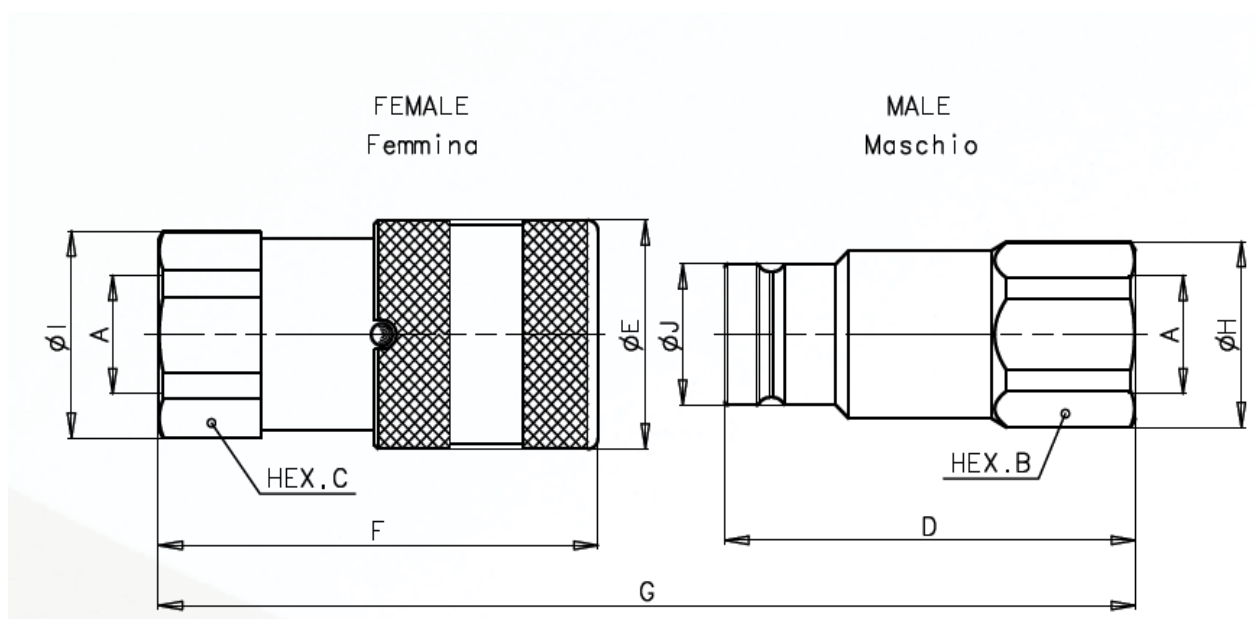
Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Afdichting

Materiaal

Carbon staal, oppervlakte behandeling QPQ. Veer AISI 302.

Kogels AISI 420.



Bestelnummer		max. Werkdr. (bar)	A	B	C	D	E	F	G	H	I	J
Female	Male		inch	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	Ø mm	Ø mm
FIRGQ 1/4-F	FIRGQ 1/4-M	300	1/4	22	22	47,9	28,0	48,1	85,2	23,8	24,0	16,1
FIRGQ 3/8-F	FIRGQ 3/8-M	300	3/8	24	27	60,0	32,0	64,2	108,7	26,0	29,0	19,7
FIRGQ 1/2-F	FIRGQ 1/2-M	300	1/2	27	27	62,5	32,0	69,2	116,2	29,0	29,0	19,7
FIRGQ 1/2A-F	FIRGQ 1/2A-M	250	1/2	32	32	68,0	38,0	73,8	124,5	33,8	33,8	24,5
FIRGQ 3/4-F	FIRGQ 3/4-M	250	3/4	36	36	70,5	38,0	80,8	134,0	38,5	38,5	24,5
FIRGQ 3/4B-F	FIRGQ 3/4B-M	250	3/4	36	36	70,5	42,0	78,5	131,4	38,5	38,5	27,0
FIRGQ 1-F	FIRGQ 1-M	250	1	45	45	82,3	48,0	93,2	153,3	47,8	47,8	30,0
FIRGQ 1 1/4-F	FIRGQ 1 1/4-M	250	1 1/4	55	55	89,8	55,0	106,0	172,8	59,8	59,8	36,0
FIRGQ 1 1/2-F	FIRGQ 1 1/2-M	200	1 1/2	70	65	111,0	80,0	132,4	214,8	76,0	72,0	57,0
FIRGQ 2-F	FIRGQ 2-M	200	2	75	80	123,8	100,0	156,6	241,5	83,5	88,5	73,0

TOEBEHOREN

Beschermkappen worden altijd aanbevolen om de koppeling te beschermen tegen beschadiging en vuil. De levensduur van de koppeling wordt hierdoor verlengd. Dit is vooral belangrijk bij weersinvloeden op een mobiele toepassing en waar agressieve materialen voorkomen. (bijvoorbeeld zand, ammoniak enz.)





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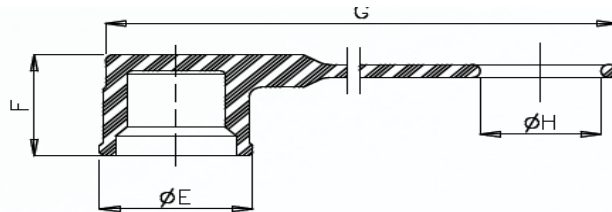
HYDRAULIEK SNELKOPPELINGEN FF



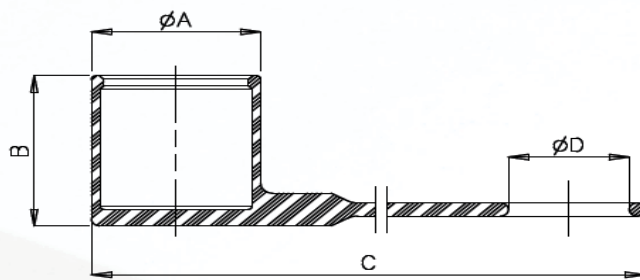
Beschermkap voor FIRG en A serie

Technische info
Materiaal

Verkrijgbaar in de kleuren: rood, geel, blauw, zwart en groen
PVC, te gebruiken van -20 gr C tot +100 gr Celcius



TMD



TFP

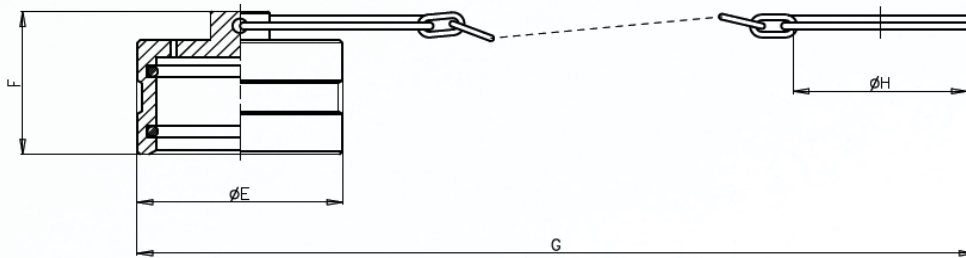
Bestelnummer		A	B	C	D	E	F	G	H	I	J
Female	Male	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm
TMD 7B-ROOD*	TFP 7D-ROOD	1/4	22	22	47,9	28,0	48,1	85,2	23,8	24,0	16,1
TMD 9S-ROOD	TFP 9D-ROOD	3/8	24	27	60,0	32,0	64,2	108,7	26,0	29,0	19,7
TMD 9L-ROOD	TFP 9D-ROOD	1/2	27	27	62,5	32,0	69,2	116,2	29,0	29,0	19,7
TMD13S-ROOD	TFP13D-ROOD	1/2	32	32	68,0	38,0	73,8	124,5	33,8	33,8	24,5
TMD13L-ROOD	TFP13F-ROOD	3/4	36	36	70,5	38,0	80,8	134,0	38,5	38,5	24,5
TMD15F-ROOD	TFP15F-ROOD	3/4	36	36	70,5	42,0	78,5	131,4	38,5	38,5	27,0
TMD17G-ROOD	TFP17G-ROOD	1	45	45	82,3	48,0	93,2	153,3	47,8	47,8	30,0
TMD21H-ROOD	TFP21H-ROOD	1 1/4	55	55	89,8	55,0	106,0	172,8	59,8	59,8	36,0

Voor A 7 1/4-F of Firg 1/4-F is de TMD 7B-ROOD, voor de blauwe is het TMD 7B-BLAUW

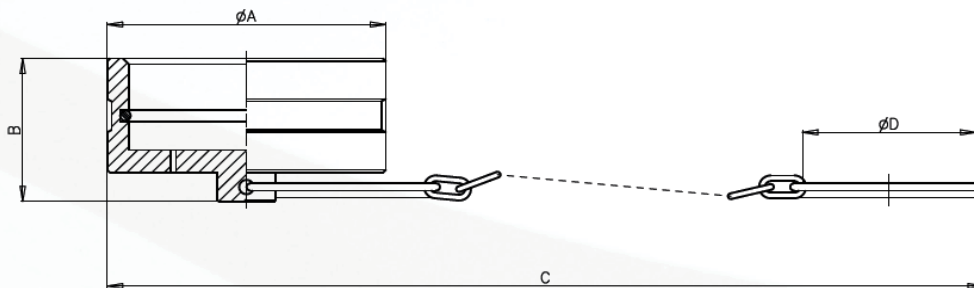
Beschermkap voor FIRG en A serie

Technische info
Materiaal

Leverbaar in de kleuren rood en blank
Aluminium, temperatuur -20 tot +100 gr Celcius



TAPPO PER INNESTO MASCHIO
Cap of male half



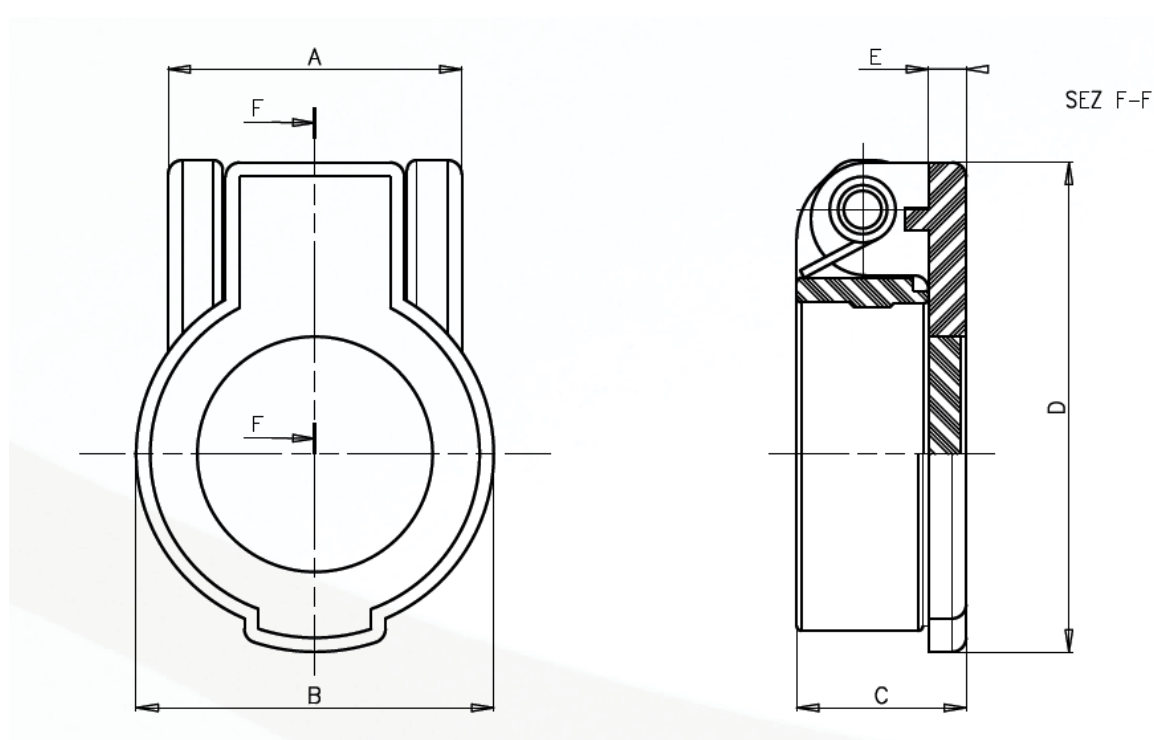
TAPPO PER INNESTO FEMMINA
Cap of female half

Description	Coupling	Unit	A	B	C	D	E	F	G	H	Unit	Weight
-	F-A25	mm Inch	80 3,15	41 1,61	370 14,57	51 2,01	- -	- -	- -	- -	Kg lb	0,220 0,49
-	M-A25	mm Inch	- -	- -	- -	- -	60 2,36	46 1,81	360 14,17	51 2,01	Kg lb	0,180 0,40
-	F-FIRG112 F-A30	mm Inch	95 3,74	50 1,97	380 14,96	58,5 2,30	- -	- -	- -	- -	Kg lb	0,355 0,78
-	M-FIRG112 M-A30	mm Inch	- -	- -	- -	- -	70 2,76	50 1,97	368 14,49	58,5 2,30	Kg lb	0,205 0,45
-	F-FIRG200	mm Inch	115 4,53	50 1,97	435 17,13	75 2,95	- -	- -	- -	- -	Kg lb	0,470 1,04
-	M-FIRG200	mm Inch	- -	- -	- -	- -	85 3,35	62 2,44	420 16,54	75 2,95	Kg lb	0,305 0,67

Beschermkap voor FIRG en A serie

Technische info
Materiaal

Verkrijgbaar in de kleuren: rood, geel, blauw, zwart en groen
PVC, te gebruiken van -20 gr C tot +100 gr Celcius

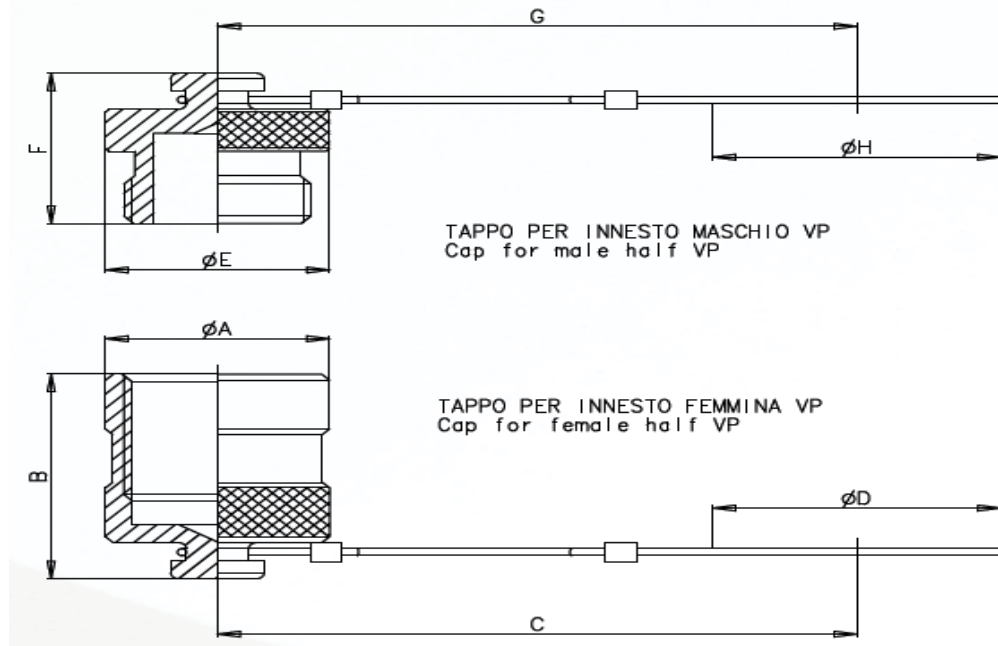


Bestelnummer			A	B	C	D	E
Female	Male	inch	mm	mm	mm	mm	mm
FF 9-3/8 ROOD		3/8+1/2	31,5	38	18	52	4
FF13-1/2 ROOD		1/2+3/4	31,5	46	18	60	4
31,5-3/4 ROOD		3/4	31,5	50	18	64	4
FF17-1 ROOD		3/4+1	31,5	56	18	70	4

Beschermkap voor VP-P serie

Technische info
Materiaal

Verkrijgbaar in de kleuren: rood en blank
Aluminium, te gebruiken van -20 gr C tot +100 gr Celcius



MV

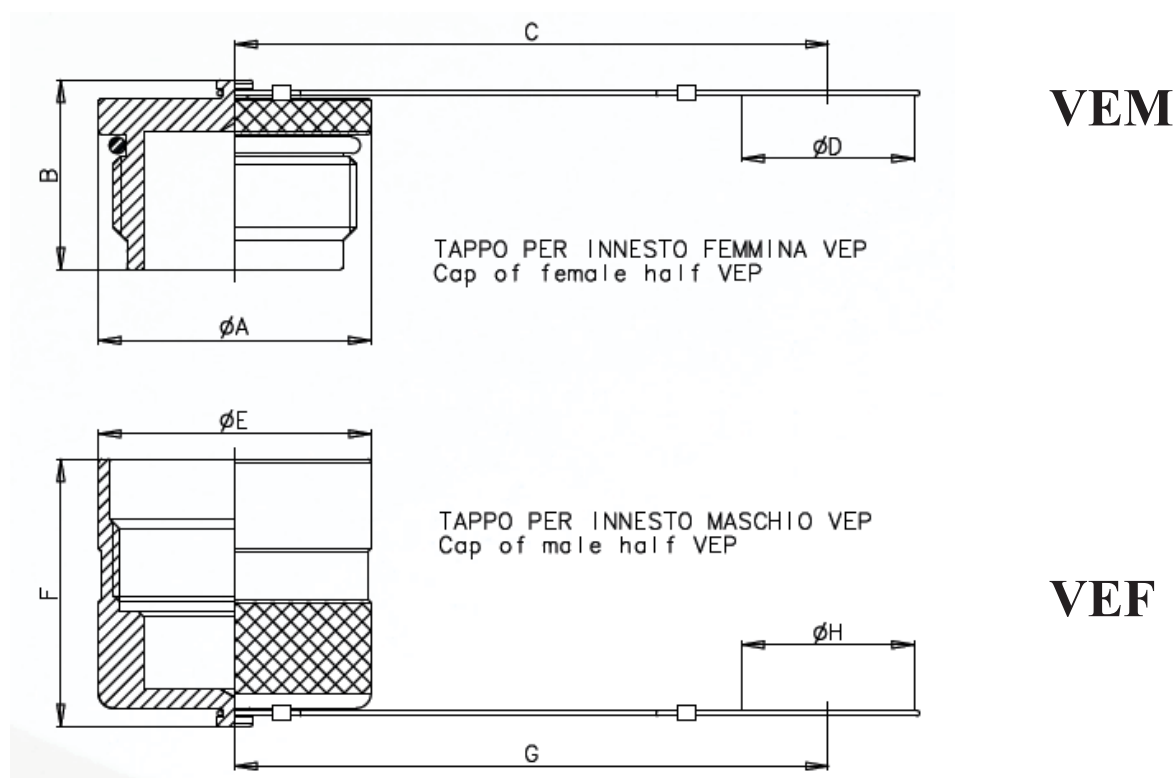
FV

Bestelnummer			A	B	C	D	E	F	G	H
Female	Male	inch	mm	mm	mm	mm	mm	mm	mm	mm
		FV 7G	MV 7G	1/4	28,8	34	150	24	28,8	25
FV 9G	MV 9G	3/8	32,8	37	170	24	32,8	25	170	24
FV13G	MV13G	1/2	41,8	43	210	33	40,8	32	210	33
FV15G	MV15G	3/4	44,8	43	210	36	43,8	32	210	36
FV17G	MV17G	1	51,8	48	240	41	50,7	32	240	41
FV21G	MV21G	1 1/4	61,8	51	270	51	61,2	34	270	51
FV30G	MV30G	1 1/2	78,8	65	340	57	79,3	42	340	57

Beschermkap voor VEP-P serie

Technische info
Materiaal

Verkrijgbaar in de kleuren: rood en blank
Aluminium, te gebruiken van -20 gr C tot +100 gr Celcius



Bestelnummer			A	B	C	D	E	F	G	H
Female	Male	inch	mm	mm	mm	mm	mm	mm	mm	mm
VEM 7	VEF 7	1/4	34,8	35,4	150	24	34,8	45	150	24
VEM 9	VEF 9	3/8	37,8	36,6	170	24	37,8	51,5	170	24
VEM 13	VEF 13	1/2	45,8	40	210	33	45,8	56,5	210	33
VEM 15	VEF 15	3/4	49,8	43,6	210	36	49,8	60	210	36
VEM 17	VEF 17	1	54,8	49,3	240	41	54,8	70	240	41
VEM 21	VEF 21	1 1/4	64,5	53,4	270	51	64,5	75	270	51
VEM 30	VEF 30	1 1/2	89,8	62,6	340	57	89,8	88	340	57
VEM 45	VEF 45	2	145	88			145	140		



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HYDRAULIEK SNELKOPPELINGEN FF



NOTES

A large area for notes, consisting of a pink header bar and a white body with horizontal lines. The bottom of the page features a decorative graphic with overlapping pink and light blue shapes.



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HYDRAULIEK SNELKOPPELINGEN PP

5

NOTES

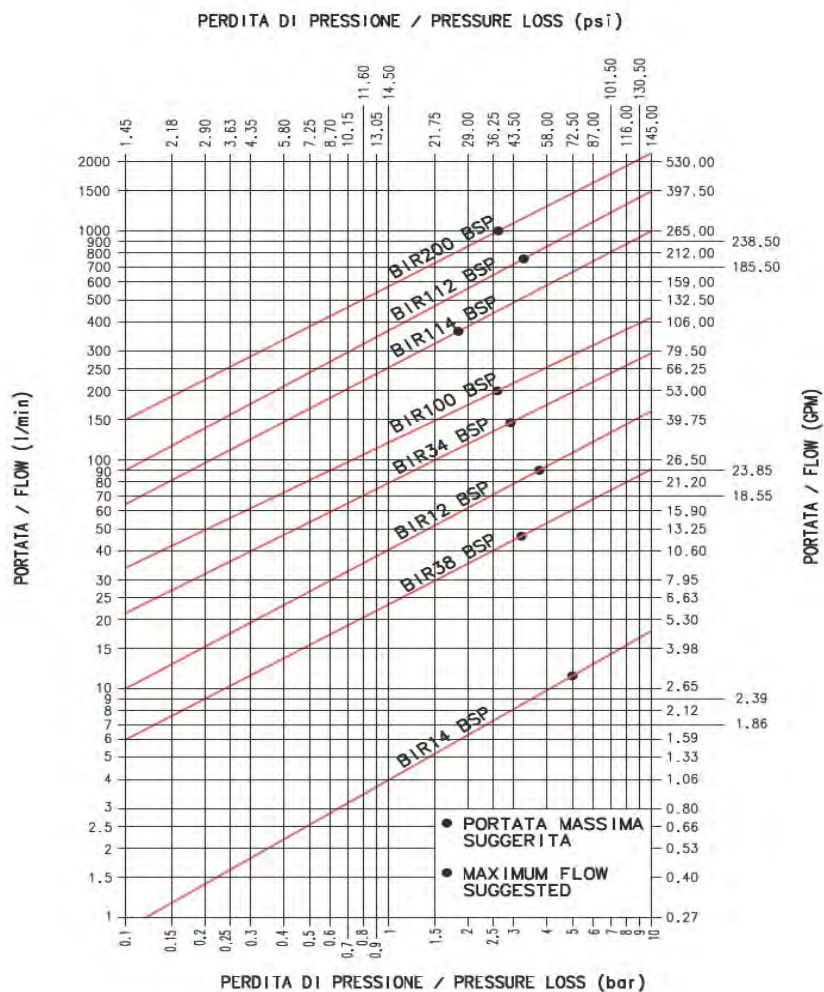
Lined area for notes with a decorative background of colorful geometric shapes (pink, blue, and yellow) at the bottom.

BIR

Snelkoppeling BIR serie – met klep – volgens ISO 7241-1 SERIE A

De “BIR” snelkoppelingen is uitgevoerd met een klep en uitwisselbaar met de internationale standaard ISO 7241-1 A, Deze koppeling is gefabriceerd uit carbon staal en heeft een zink oppervlakte coating. Deze serie is wereldwijd uitwisselbaar en beschikbaar in de maten ¼” tot en met 2”. Dit maakt de “BIR” één van de meest gebruikte koppelingen wereldwijd voor hydraulische toepassingen vooral in de landbouw en industrie.

Uitwisselbaar: ISO 7241-1 A



FLUIDO: OLIO ISO VG32
TEMPERATURA: 40°C
VISCOSITA': 28,8-35,2 mm²/s

FLUID: OIL ISO VG32
TEMPERATURE: 40°C
VISCOSITY: 28.8-35.2 mm²/s

Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it



Stucchi®

HYDRAULIEK SNELKOPPELINGEN PP



BIR

Snelkoppeling BIR serie – met klep - volgens ISO 7241-1 SERIE A

Technische info

Uitwisselbaar: ISO 7241-1 serie A

Mechanisch vergrendeld door kogels.

Niet onder druk koppelbaar

Mogelijke draadsoorten zijn BSP, NPT

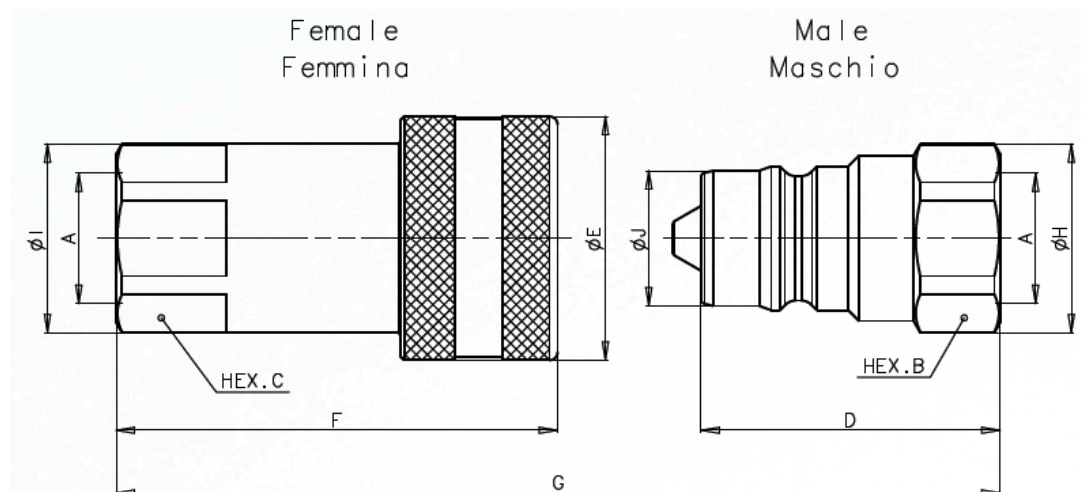
Afdichting

Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Carbon staal, oppervlakte verzonken CRIII. Veer C72 staal.

Kogels hard staal 100C6.

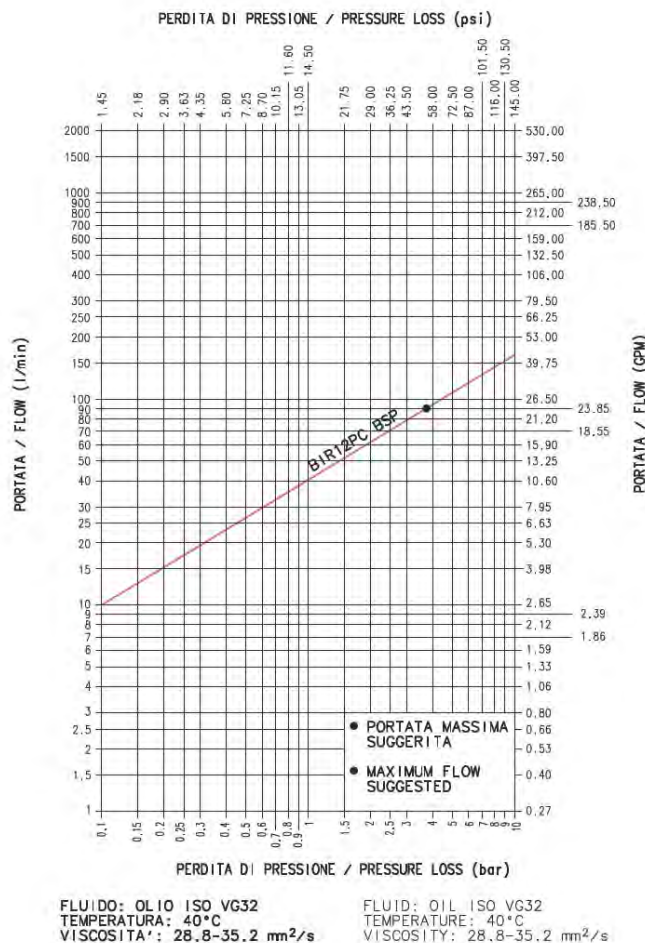


Bestelnummer		max. Werkdr. (bar)	A	B	C	D	E	F	G	H	I	J
Female	Male		inch	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	Ø mm	Ø mm
BIR 1/4-F	BIR 1/4-M	350	1/4	19	19	32,0	26,0	47,1	64,8	20,8	22,0	11,8
BIR 3/8-F	BIR 3/8-M	300	3/8	22	22	38,0	31,0	56,1	76,8	24,0	24,0	17,3
BIR 1/2-F	BIR 1/2-M	250	1/2	27	27	44,5	38,0	63,3	86,3	29,0	30,0	20,5
BIR 3/4-F	BIR 3/4-M	250	3/4	36	38	55,0	48,0	82,2	111,1	38,5	44,0	29,1
BIR 1-F	BIR 1-M	230	1	41	45	63,1	54,0	97,1	127,3	44,8	52,0	34,3
BIR 1 1/4-F	BIR 1 1/4-M	230	1 1/4	55	50	75,0	65,0	117,2	151,2	60,0	55,5	45,0
BIR 1 1/2-F	BIR 1 1/2-M	180	1 1/2	60	60	85,0	80,0	135,3	171,3	65,5	65,5	55,0
BIR 2-F	BIR 2-M	130	2	75	75	100	100	160,2	201,2	82,5	83,7	65,0

PC

Snelkoppeling BIR-PC serie – PUSH PULL – volgens ISO 7241-1 SERIE A
Onder restdruk koppelbaar tot 200 bar

De “BIR-PC” is een snelkoppeling met een klep, waarin een kleine druk-ontlastingsklep die het mogelijk maakt om onder restdruk, dat zich in het systeem bevindt, te koppelen. Deze koppeling wordt veel toegepast op landbouw machines met een gesloten systeem waar de interne restdruk behoorlijk kan oplopen wanneer de machine is losgekoppeld. (bij voorbeeld door warmte invloed van buitenaf) Verkrijgbaar in ½” uitvoering en uitwisselbaar met de series “I”, “IR-V”, “IRS-V”, “IR” en “IRS” in de ½” uitvoering. De modulaire uitvoering is ook verkrijgbaar, zoals de “I12PC”, met metrische draad of andere uitvoeringen. Uitwisselbaar: ISO 7241-1 A



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it

PC

Snelkoppeling BIR-PC serie – PUSH PULL – volgens ISO 7241-1 SERIE A
Onder restdruk koppelbaar tot 200 bar

Technische info

Uitwisselbaar: ISO 7241-1 serie A

Klep systeem

Mechanisch vergrendeld door kogels.

Stekker onder restdruk (200 bar) koppelbaar. Op het vrouwelijk deel mag geen druk staan. Tijdens het koppelen mag er geen flow zijn.

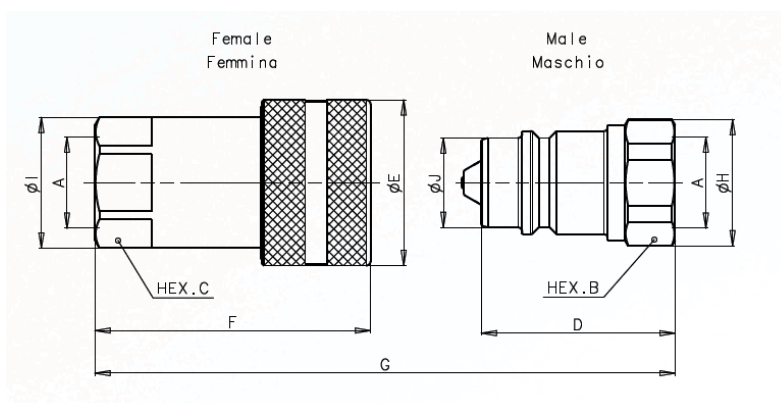
Afdichting Materiaal

Mogelijke draadsoorten zijn BSP, NPT

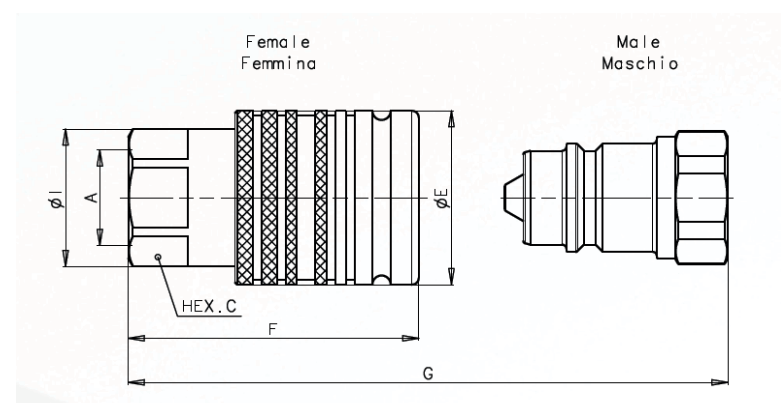
Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Carbon staal, oppervlakte verzonken CR111. Veer C72 staal.

Kogels hard staal 100C6.



Bestelnummer		max. Werkdr. (bar)	A	B	C	D	E	F	G	H	I	J
Female	Male		inch	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	Ø mm	Ø mm
PC 1/2-P-F	PC 1/2-M	250	1/2	27	27	44,5	38,0	63,3	86,3	29	30	20,5

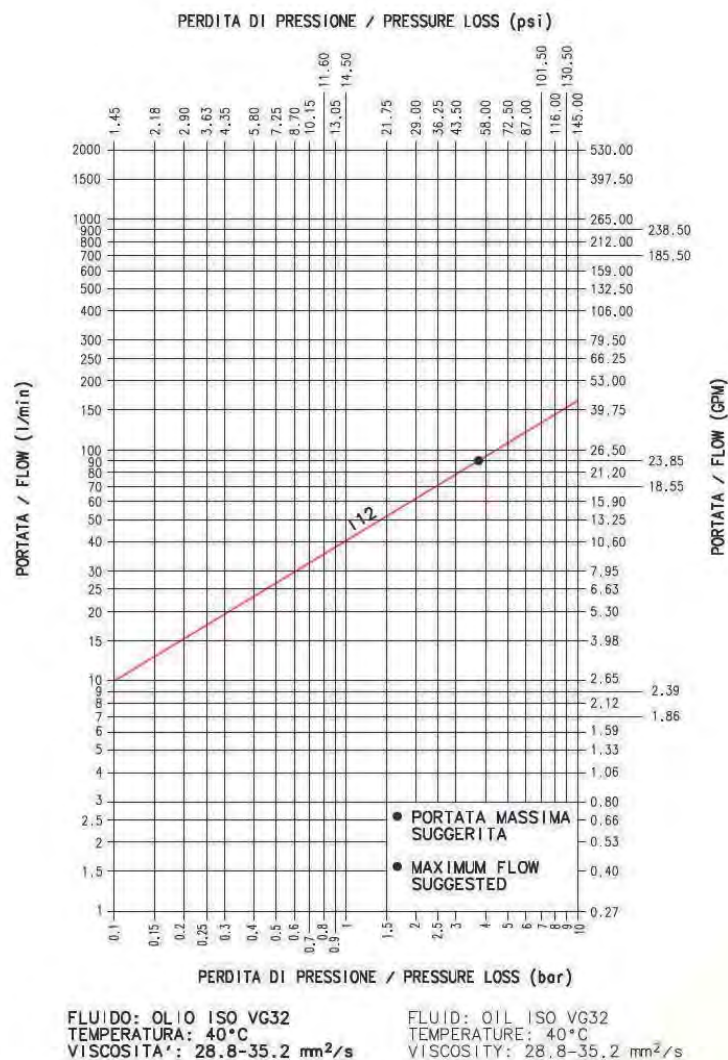


Bestelnummer		max. Werkdr. (bar)	A	B	C	D	E	F	G	H	I	J
Female	Male		inch	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	Ø mm	Ø mm
PC 1/2-PP-F	PC 1/2-M	250	1/2		27		38,0	63,2	86,3		30	

I

Snelkoppeling I serie, volgens ISO 7241-1 SERIE A

De “I” snelkoppeling is uitgevoerd met een klep, modulair opgebouwd en gefabriceerd in carbon staal met een oppervlakte behandeling van zink. De modulaire opbouw stelt u in staat om diverse aansluitingen te realiseren voor de toepassing volgens specifieke wensen. Desondanks behoudt de koppeling een compacte afmeting. De koppeling is verkrijgbaar in bouwmaat ½” en is uitwisselbaar met koppelingen volgens ISO 7241-1 A.



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it



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HYDRAULIEK SNELKOPPELINGEN PP



I

Snelkoppeling I serie, volgens ISO 7241-1 SERIE A

Technische info

Uitwisselbaar: ISO 7241-1 serie A

Klep systeem

Mechanisch vergrendeld door kogels.

Op beide delen mag bij het aan en afkoppelen geen druk staan en mag er geen flow zijn.

Mogelijke draadsoorten zijn Metrisch

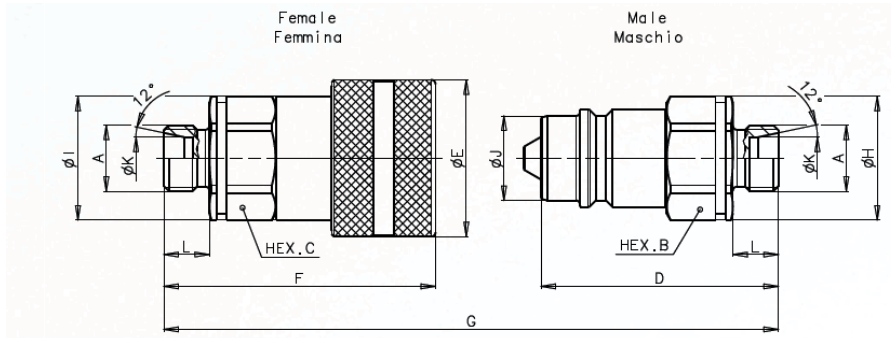
Afdichting

Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

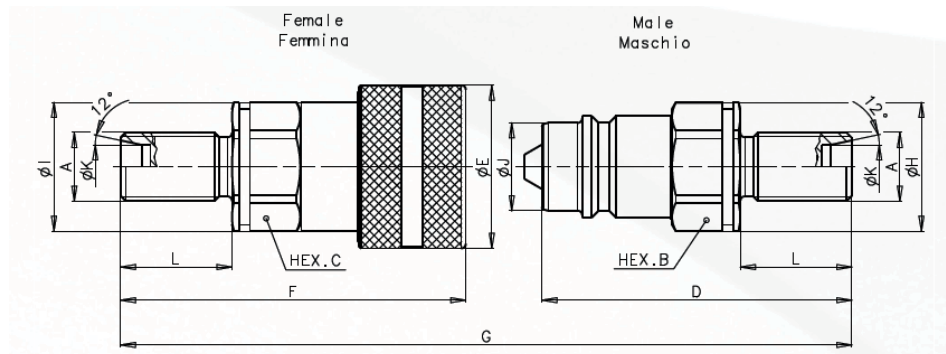
Materiaal

Carbon staal, oppervlakte verzonken CR111. Veer C72 staal.

Kogels hard staal 100C6..



Bestelnummer		max. Werkdr. (bar)	A	B	C	D	E	F	G	H	I	J
Female	Male		Mm	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	Ø mm	Ø mm
I 12L-F	I 12L-M	250	18x1.5	27	27	57,3	38	65,6	101,4	30	30	20,5
I 15L-F	I 15L-M	250	22x1.5	27	27	54,5	38	62,8	95,8	30	30	20,5

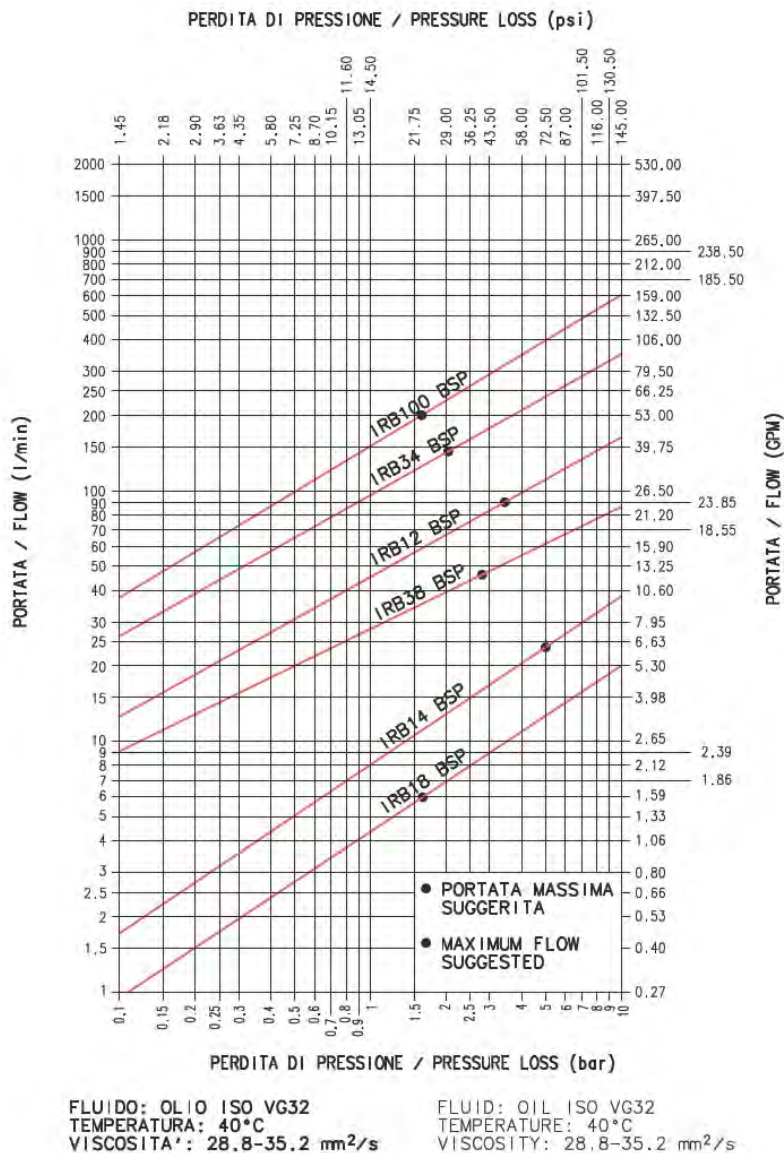


Bestelnummer		max. Werkdr. (bar)	A	B	C	D	E	F	G	H	I	J
Female	Male		Mm	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	Ø mm	Ø mm
I 12LSC-F	I 12LSC-M	250	18x1.5	27	27	72,3	38	80,4	131,2	30	30	20,5
I 15LSC-F	I 15LSC-M	250	22x1.5	27	27	69,5	38	77,8	125,8	30	30	20,5

IRB

Snelkoppeling IRB serie, volgens ISO 7241-1 SERIE B

De “IRB” snelkoppeling is uitgevoerd met een klep en uitwisselbaar met internationale standaard ISO 7241-1 B. De koppelingen worden gefabriceerd in carbon staal, RVS (zie IRBX serie) en brons (zie IRBO serie). Bij de carbon staal uitvoering is de oppervlakte van de koppeling verzinkt. Gebaseerd op de wereldwijde uitwisselbaarheid van de “IRB” koppeling wordt deze in vele industriële toepassingen gemonteerd. Uitwisselbaar: ISO 7241-1 B



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it



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HYDRAULIEK SNELKOPPELINGEN PP



IRB

Snelkoppeling IRB serie, volgens ISO 7241-1 SERIE B

Technische info

Uitwisselbaar: ISO 7241-1 serie B

Mechanisch vergrendeld door kogels.

Op beide delen mag bij het aan en afkoppelen geen druk staan en mag er geen flow zijn.

Mogelijke draadsoorten zijn BSP, NPT

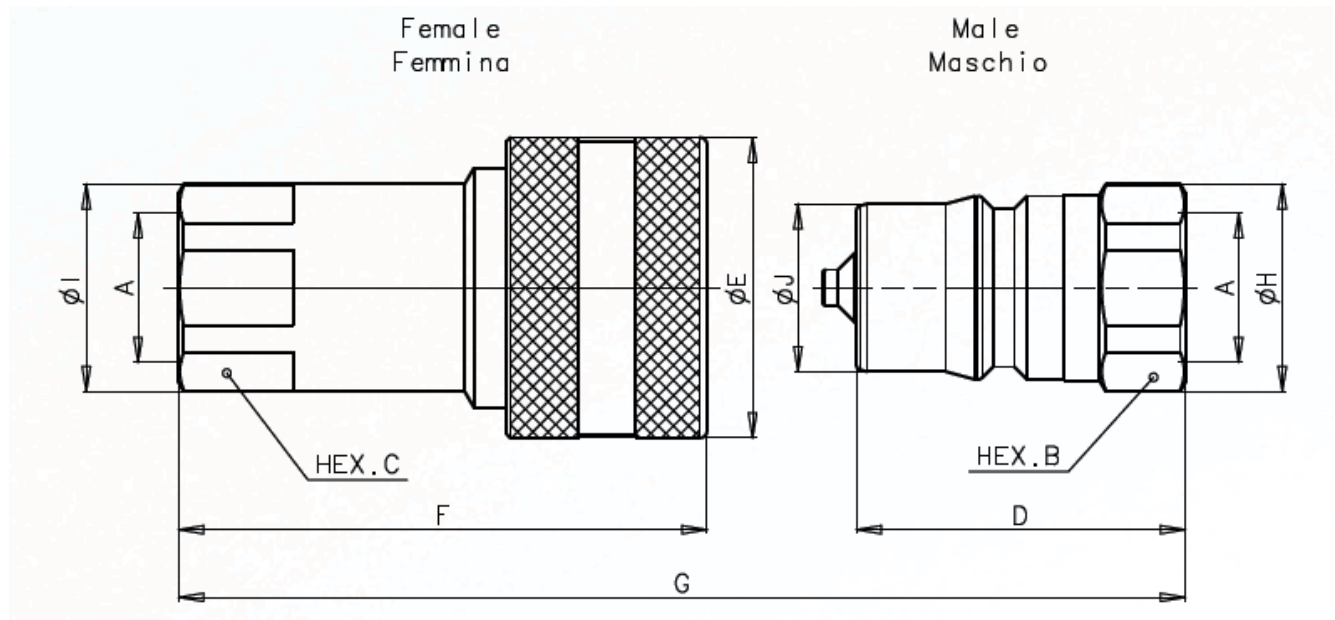
Afdichting

Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Carbon staal, oppervlakte verzonken CR111. Veer C72 staal.

Kogels hard staal 100C6.

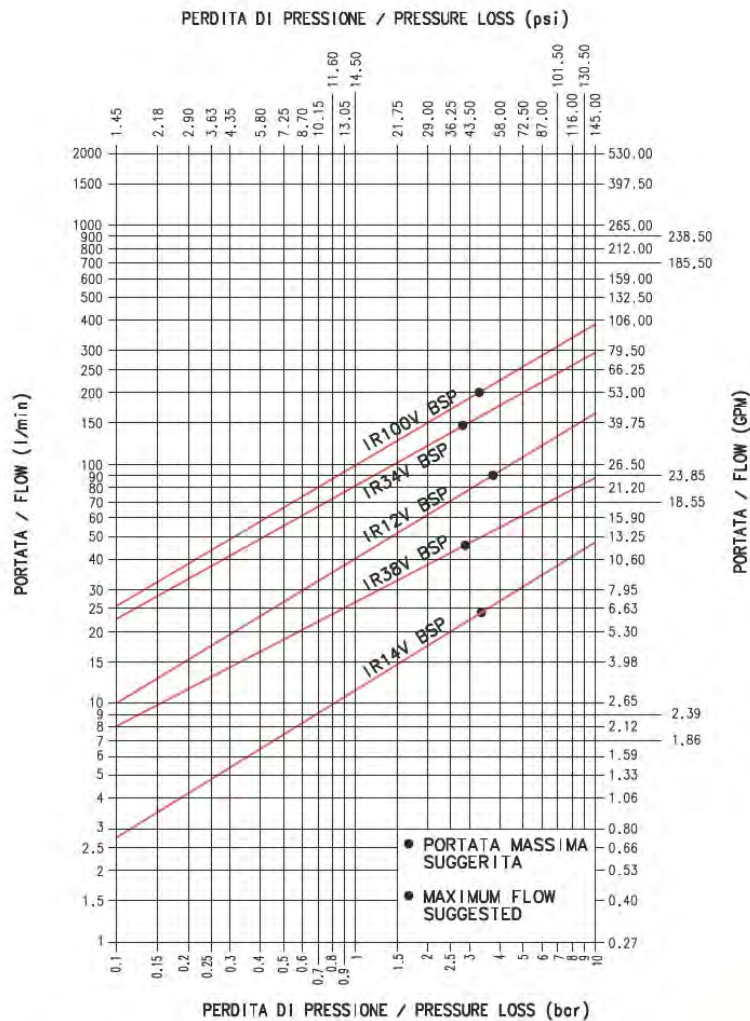


Bestelnummer		max. Werkdr. (bar)	A inch	B sw mm	C sw mm	D mm	E Ø mm	F mm	G mm	H Ø mm	I Ø mm	J Ø Mm
Female	Male											
IRB 1/8-F	IRB 1/8-M	350	1/8	14	14	30	23	48,8	60,5	15,8	15,8	10,8
IRB 1/4-F	IRB 1/4-M	350	1/4	19	19	35	27	57,0	70,7	20,8	21,2	14,2
IRB 3/8-F	IRB 3/8-M	300	3/8	24	24	41	34	66,0	82,7	26,0	27,0	19,1
IRB 1/2-F	IRB 1/2-M	280	1/2	27	27	46	42	73,9	92,6	29,0	29,0	23,5
IRB 3/4-F	IRB 3/4-M	230	3/4	36	36	55	50	90,1	111,1	38,5	38,5	31,4
IRB 1-F	IRB 1-M	180	1	41	41	66	60	106,2	133,2	44,8	44,8	37,7

IRV

Snelkoppeling IRV serie, uitwisselbaar met gelijkwaardige koppeling, 1/2" volgens ISO 7241-1 SERIE A

De IRV snelkoppeling is uitgevoerd met een klep en uitwisselbaar met de "IR" serie met kogel. De koppeling is gefabriceerd uit carbon staal met een oppervlakte behandeling van zink. Het ontwerp is gebaseerd op een betere afdichting dan het type met kogelafsluiting. De maat 1/2" maakt deel uit van de "BIR" serie en is uitwisselbaar volgens de internationale standaard ISO 7241-1 A. **Uitwisselbaar: Met gelijkwaardige koppeling. Alleen de 1/2" ISO 7241-1 A**



FLUIDO: OLIO ISO VG32
TEMPERATURA: 40°C
VISCOSITA': 28.8-35.2 mm²/s

FLUID: OIL ISO VG32
TEMPERATURE: 40°C
VISCOSITY: 28.8-35.2 mm²/s

Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it

IRV

**Snelkoppeling IRV serie, uitwisselbaar met gelijkwaardige koppeling,
1/2" volgens ISO 7241-1 SERIE A**

Technische info

Uitwisselbaar: ISO 7241-1 serie A

Mechanisch vergrendeld door kogels.

Niet onder druk koppelbaar

Mogelijke draadsoorten zijn BSP, NPT

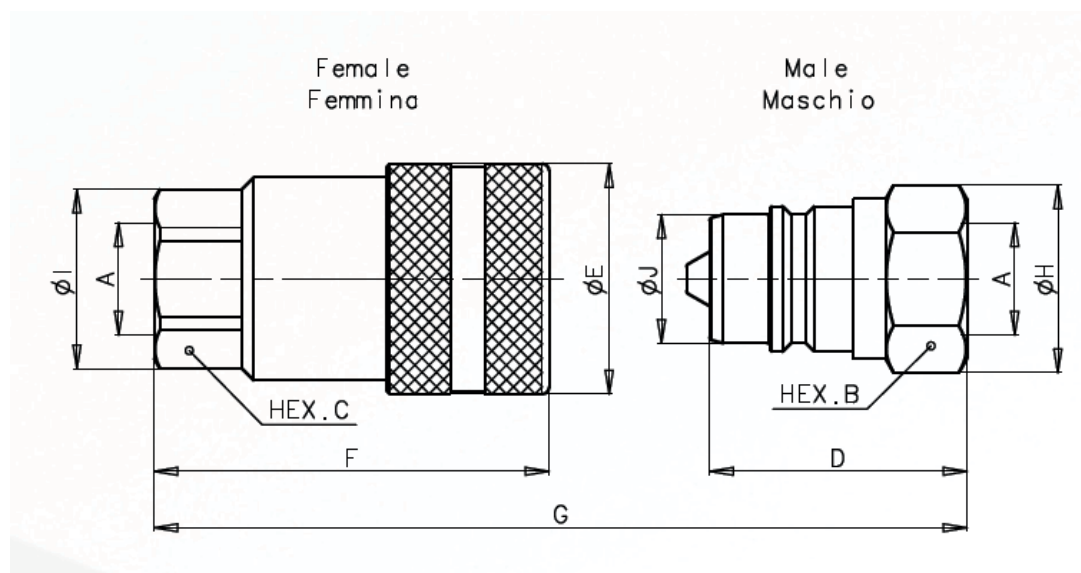
Afdichting

Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Carbon staal, oppervlakte verzonken CRIII. Veer C72 staal.

Kogels hard staal 100C6.

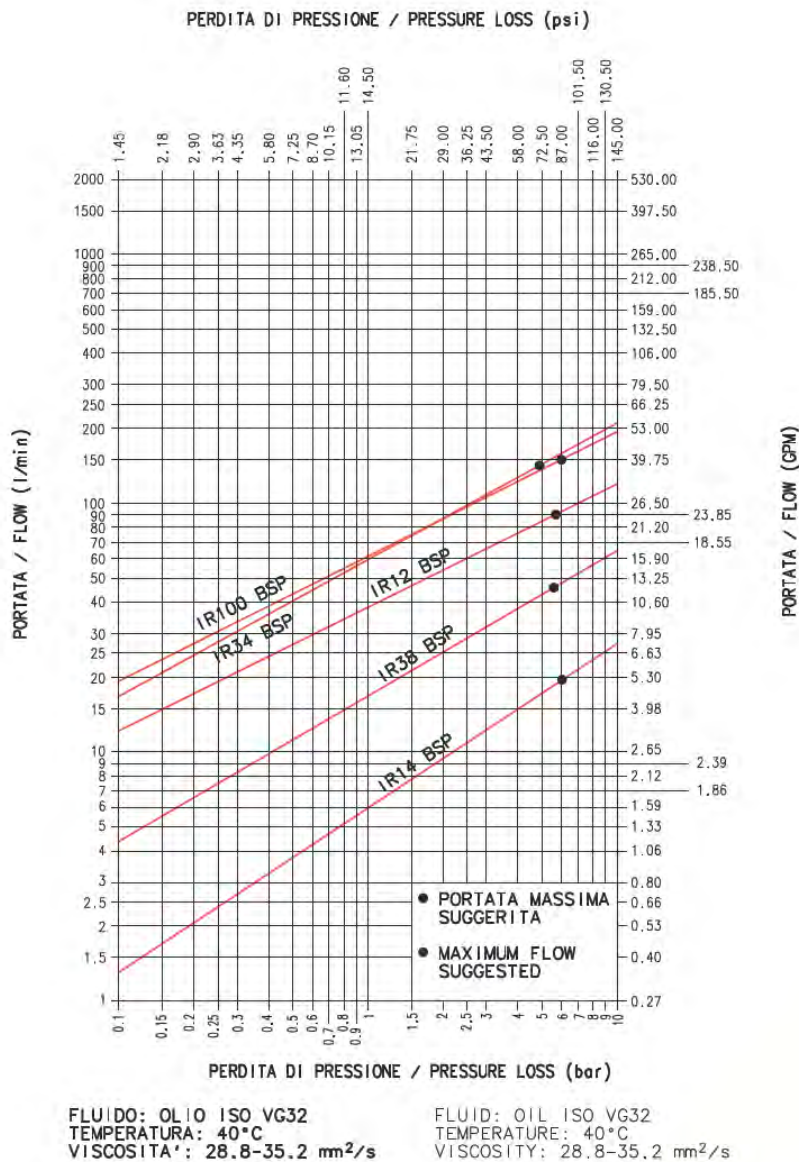


Bestelnummer		max. Werkdr. (bar)	A	B	C	D	E	F	G	H	I	J
Female	Male		inch	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	Ø mm	Ø mm
IRV 1/4-F	IRV 1/4-M	300	1/4	19	19	32,5	27	50,4	65,9	22,0	21,0	14,2
IRV 3/8-F	IRV 3/8-M	300	3/8	24	24	38,0	34	58,3	76,3	27,7	26,5	19,0
BIR 1/2-F	BIR 1/2-M	250	1/2	27	27	44,5	38	63,3	86,3	29,0	30,0	20,5
IRV 3/4-F	IRV 3/4-M	250	3/4	36	38	59,0	48	90,3	118,3	38,5	43,0	26,9
IRV 1-F	IRV 1-M	200	1	41	45	64,1	54	97,6	128,8	44,8	52,0	31,4

IR

Snelkoppeling IR serie, uitwisselbaar met gelijkwaardige koppeling, 1/2" volgens ISO 7241-1 SERIE A

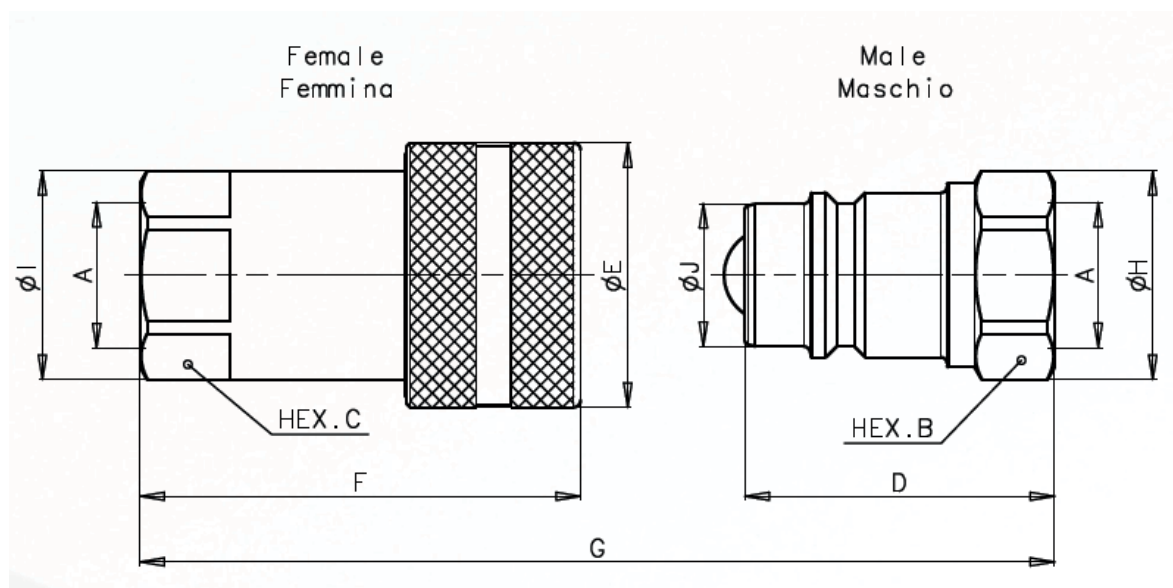
De "IR" snelkoppeling is uitgevoerd met een kogelafdichting en gefabriceerd uit carbon staal met een oppervlakte behandeling uit zink. Gebaseerd op de goede slijtagevastheid van de kogel afdichting wordt deze "IR" koppeling veelal toegepast in de landbouw. De maat 1/2" is uitwisselbaar met de internationale standaard ISO 7241-1 A. **Uitwisselbaar: Met gelijkwaardige koppelingen. Allen de 1/2" ISO 7241-1 A**



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it

IR

*Snelkoppeling IR serie, uitwisselbaar met gelijkwaardige koppeling,
1/2" volgens ISO 7241-1 SERIE A*

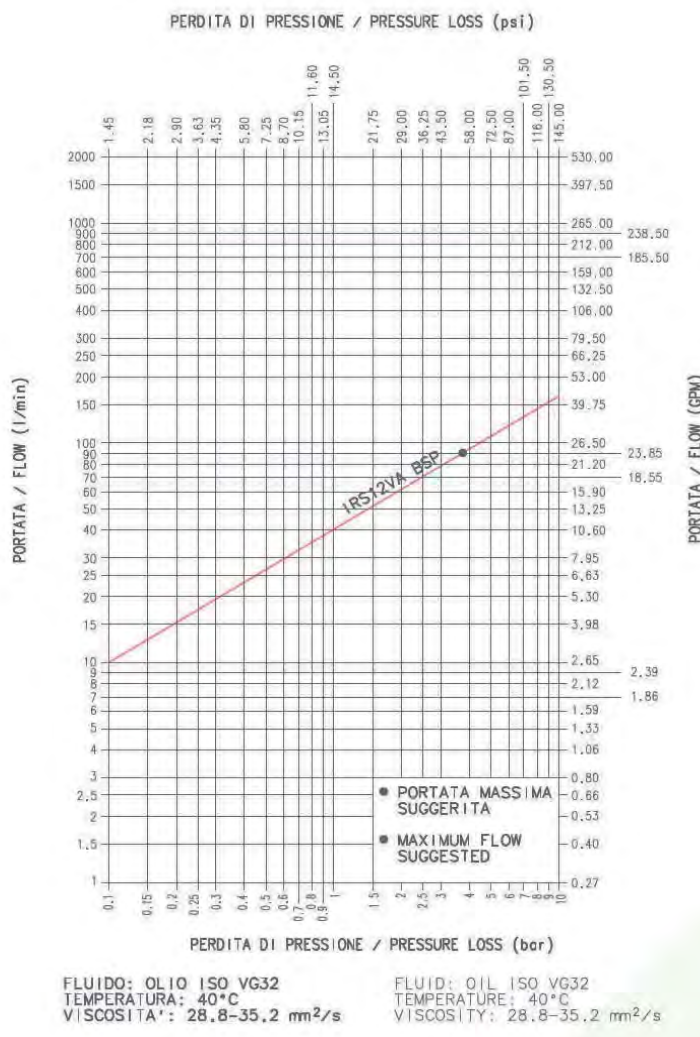


Bestelnummer		max. Werkdr. (bar)	A	B	C	D	E	F	G	H	I	J
Female	Male		inch	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	Ø mm	Ø Mm
IR 1/4-F	IR 1/4-M	300	1/4	19	19	32,5	27	48,9	64,4	22,0	21,0	14,2
IR 3/8-F	IR 3/8-M	300	3/8	24	24	38,0	34	58,3	76,3	27,7	26,5	19,0
BIR 1/2-F	BIR 1/2-M	250	1/2	27	27	44,5	38	63,3	86,3	30,0	30,0	20,5
IR 3/4-F	IR 3/4-M	250	3/4	36	38	59,0	48	90,3	118,3	38,5	43,0	26,9
IR 1-F	IR 1-M	200	1	41	45	66,1	54	99,6	132,8	44,8	52,0	31,4

IRS-V

Snelkoppeling IRSV serie, push pull, volgens ISO 7241-1 SERIE A

De “IRS-V” snelkoppeling is uitgerust met een klep geschikt voor montage in een paneel. Deze koppeling is een zo genaamde dubbelwerkende snelkoppeling. De buitenring kan zowel naar voren als naar achteren bewogen worden om te koppelen en te ontkoppelen. Deze koppeling heeft bij montage in een paneel een automatische losbreek functie. De “IRS-V” serie wordt veel gemonteerd op tractoren en is verkrijgbaar in de ½” uitvoering. Beschikbaar zijn ook de modulaire uitvoeringen zoals (I 12 VA) met metrische draad of andere aansluitingen en koppelbaar onder restdruk (IRS 12 VAPC).
Uitwisselbaar: ISO 7241-1 A



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it



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HYDRAULIEK SNELKOPPELINGEN PP



IRS-V

Snelkoppeling IRSV serie, push pull, volgens ISO 7241-1 SERIE A

Technische info

Uitwisselbaar: ISO 7241-1 serie A

Klep systeem

Mechanisch vergrendeld door kogels.

Stekker zonder restdruk koppelbaar. Op het vrouwelijk deel mag geen druk staan. Tijdens het koppelen mag er geen flow zijn.

Mogelijke draadsoorten zijn BSP, NPT

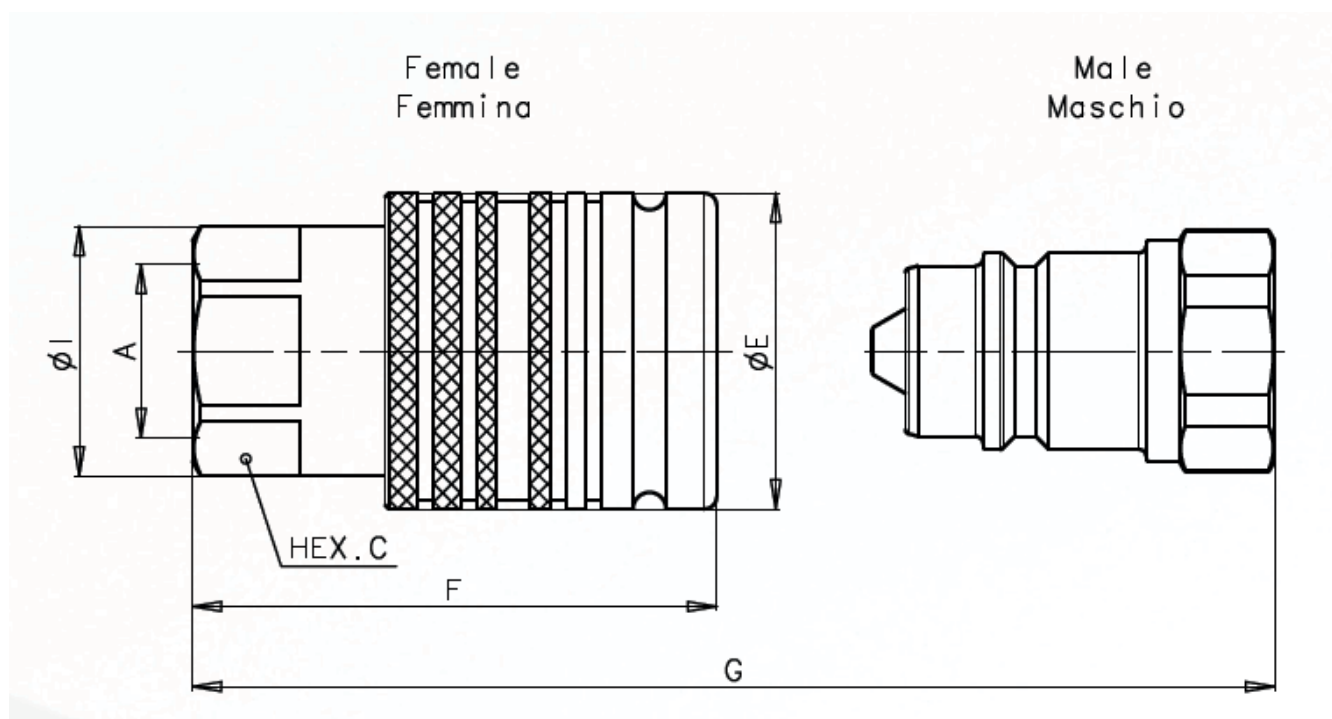
Afdichting

Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Carbon staal, oppervlakte verzonken CR111. Veer C72 staal.

Kogels hard staal 100C6.



Bestelnummer		max. Werkdr. (bar)	A	B	C	D	E	F	G	H	I	J
Female	Male		INCH	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	Ø mm	Ø mm
IRS 1/2V-F		250	1/2		27		38	63,2			30	

IRSV

Snelkoppeling IRSV serie, push pull, volgens ISO 7241-1 SERIE A

Technische info

Uitwisselbaar: ISO 7241-1 serie A

Klep systeem

Mechanisch vergrendeld door kogels.

Stekker zonder restdruk koppelbaar. Op het vrouwelijk deel mag geen druk staan. Tijdens het koppelen mag er geen flow zijn.

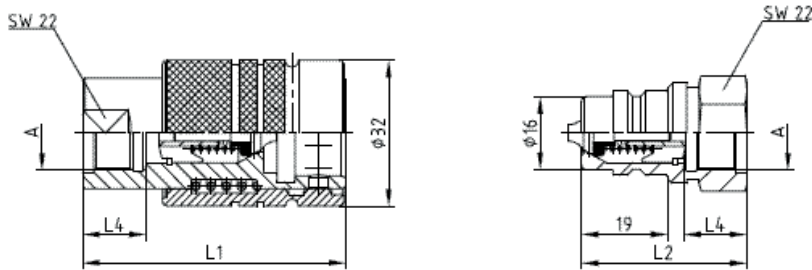
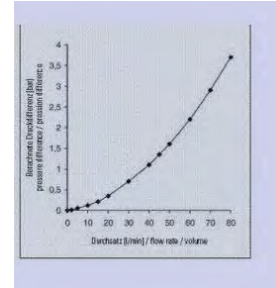
Mogelijke draadsoorten zijn BSP, NPT

Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

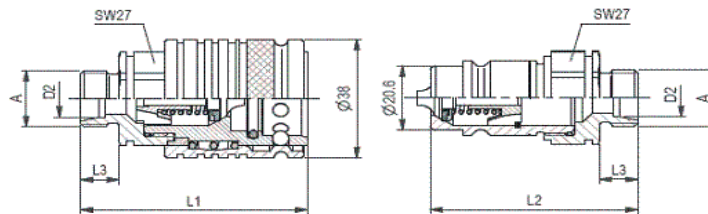
Afdichting

Materiaal

Carbon staal, oppervlakte verzonken CR111. Veer C72 staal. Kogels hard staal 100C6.



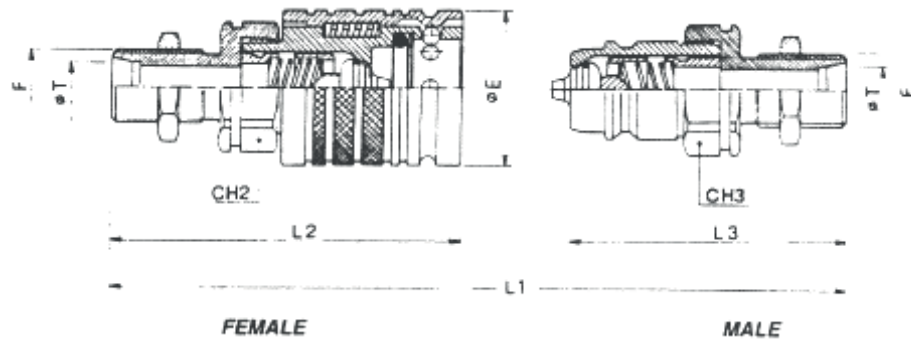
Bestelnummer		max. Werkdr. (bar)	A	D2	L1	L2	L4
Female	Male		INCH	mm	mm	mm	mm
IRSV 3/8-F BG2	IRSV 3/8-M BG2	250	3/8		58	37	13



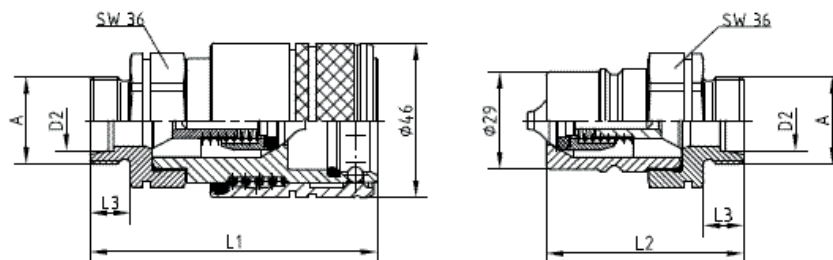
Bestelnummer		max. Werkdr. (bar)	A	D2	L1	L2	L3	L4
Female	Male		mm	mm	mm	mm	mm	mm
IRSV 8L-F	IRSV 8L-M	250	M14x1,5	8L	65	57	10	
IRSV 10L-F	IRSV 10L-M	250	M16x1,5	10L	66	58	11	
IRSV 12L-F	IRSV 12L-M	250	M18x1,5	12L	66	59	11	
IRSV 15L-F	IRSV 15L-M	250	M22x1,5	15L	67	59	12	
IRSV 18L-F	IRSV 18L-M	250	M26x1,5	18L	67	59	12	
IRSV 10S-F	IRSV 10S-M	250	M18x1,5	10S	67	59	12	
IRSV 12S-F	IRSV 12S-M	250	M20x1,5	12S	67	59	12	
IRSV 14S-F	IRSV 14S-M	250	M22x1,5	14S	69	61	14	
IRSV 16S-F	IRSV 16S-M	250	M24x1,5	16S	69	61	14	

IRSV

Snelkoppeling IRSV serie, push pull, volgens ISO 7241-1 SERIE A



Bestelnummer		max. Werkdr. (bar)	F Mm	T mm	L2 mm	L3 mm
Female	Male					
IRSV 8LSC-F	IRSV 8LSC-M	250	M14x1,5	8L	80	72
IRSV 10LSC-F	IRSV 10LSC-M	250	M16x1,5	10L	81	73
IRSV 12LSC-F	IRSV 12LSC-M	250	M18x1,5	12L	81	73
IRSV 15LSC-F	IRSV 15LSC-M	250	M22x1,5	15L	82	74
IRSV 18LSC-F	IRSV 18LSC-M	250	M26x1,5	18L	82	74
IRSV 10SSC-F	IRSV 10SSC-M	250	M18x1,5	10S	82	74
IRSV 12SSC-F	IRSV 12SSC-M	250	M20x1,5	12S	82	74
IRSV 14SSC-F	IRSV 14SSC-M	250	M22x1,5	14S	84	76
IRSV 16SSC-F	IRSV 16SSC-M	250	M24x1,5	16S	84	76



Bestelnummer		max. Werkdr. (bar)	A INCH	D2 mm	L1 mm	L2 mm	L4 mm
Female	Male						
IRSV 3/4-F BG4	IRSV 3/4-M BG4	250	3/4		92	65	19

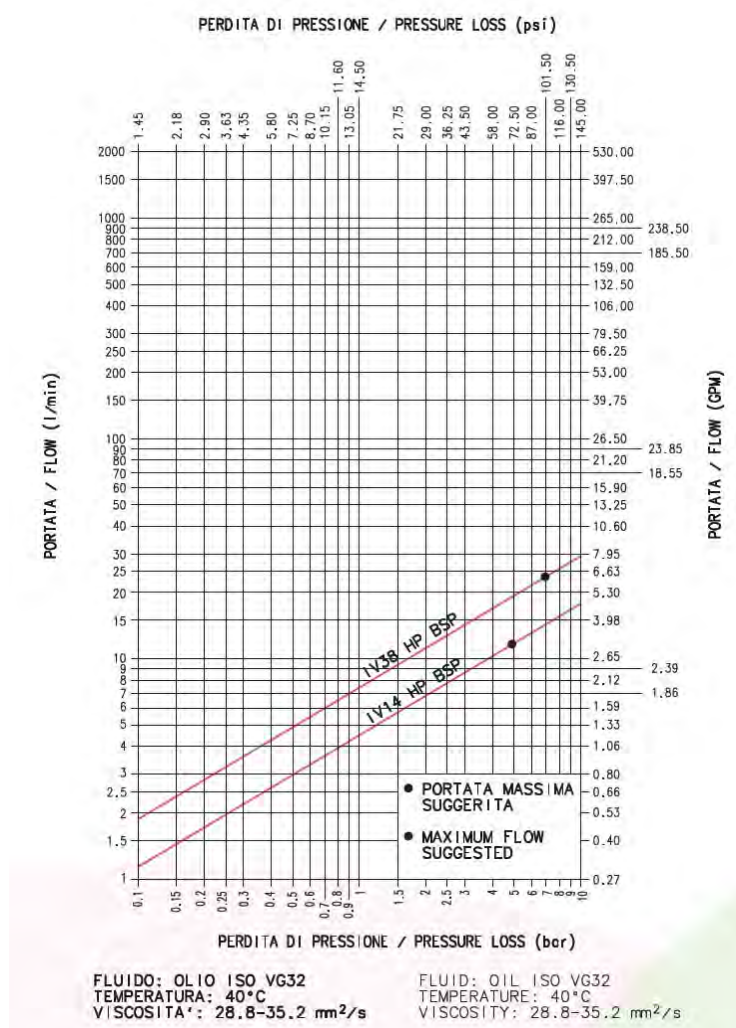
LET OP DEZE KOPPELING IS MET BINNENDRAAD

IV-HP

Snelkoppeling IV-HP serie, uitwisselbaar met soortgelijke koppelingen

De “IV-HP” snelkoppeling is uitgerust met een kogelafdichting. Deze koppeling wordt gebruikt in hydraulische systemen met werkdrukken tot 700 bar/10000 psi. De snelkoppelingen zijn gefabriceerd uit hoogwaardig carbon staal en hebben een oppervlaktebehandeling met zink. De “IV-HP” is uitwisselbaar met gelijkwaardige koppelingen die op de markt zijn. De toepassing vindt voornamelijk plaats bij afstempel apparatuur en cilinders.

Uitwisselbaar: Gelijkwaardige koppelingen.



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it



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HYDRAULIEK SNELKOPPELINGEN PP



IV-HP

Snelkoppeling IV-HP serie, uitwisselbaar met soortgelijke koppelingen

Technische info

Uitwisselbaar: met vergelijkbare koppelingen

Kleppen systeem door middel van kogel.

Mechanisch vergrendeld door schroefstelsel.

Niet onder druk of vloeistofstroom koppelbaar.

Mogelijke draadsoorten zijn BSP, NPT

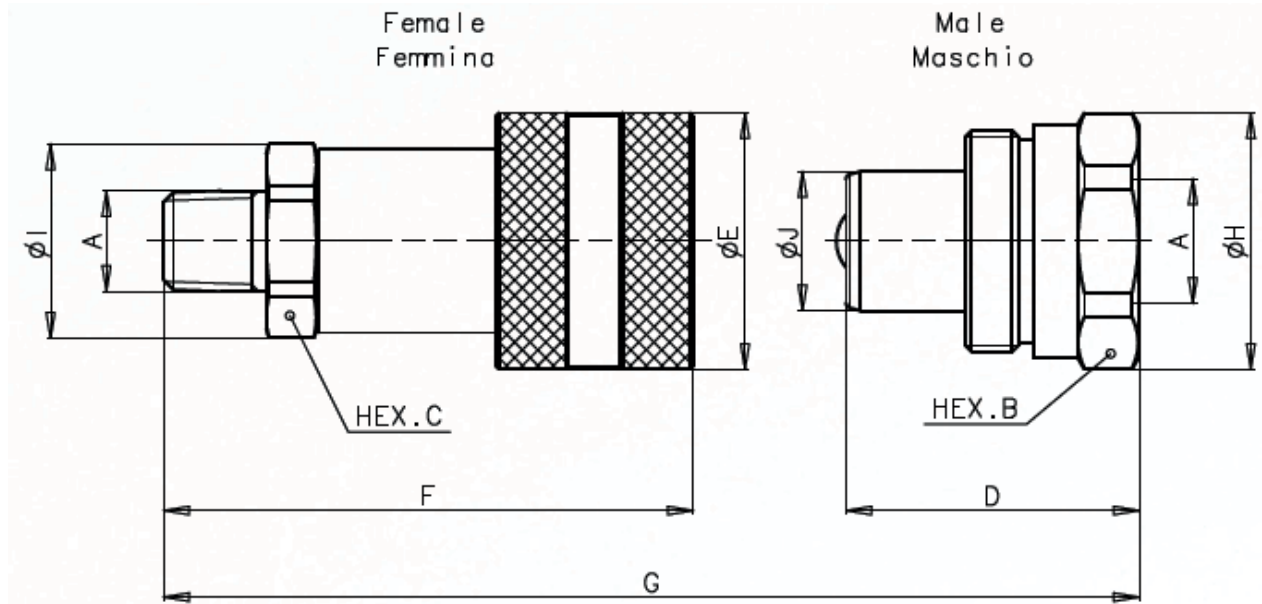
Afdichting

Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Carbon staal, oppervlakte verzonken CRIII. Veer C72 staal.

Kogels hard staal 100C6.

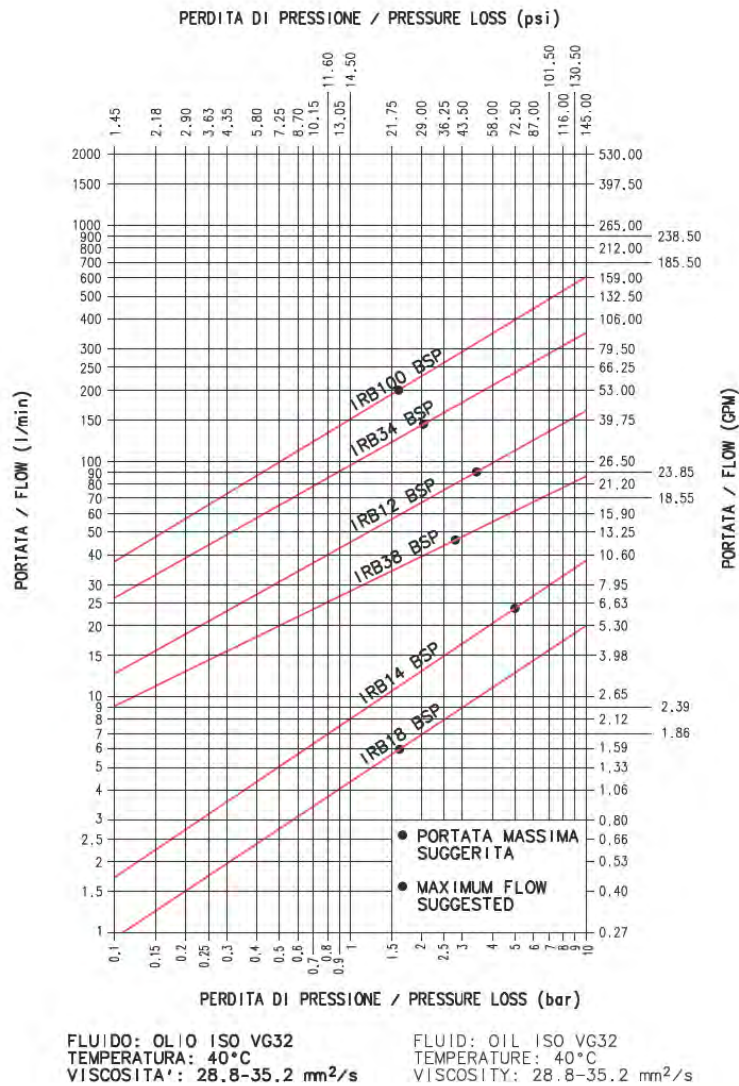


Bestelnummer		max. Werkdr. (bar)	A	B	C	D	E	F	G	H	I	J
Female	Male		inch	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	Ø mm	Ø Mm
HP14-KO-1/4-F	HP14-KO-1/4-F	700	1/4	19	22	32,5	28	60,8	74,5	28,0	24,5	15,8
HP38-KO-3/8-F	HP38-KO-3/8-F	700	3/8	32	24	40,0	35	72,2	86,8	35,0	26,5	19,0

IRBX

Snelkoppeling IRBX serie, uitwisselbaar met ISO 7241-1 serie B

De “IRBX” snelkoppeling is uitgerust met een klep en uitwisselbaar volgens de internationale standaard ISO 7241-1 B gefabriceerd uit RVS INOX 316. De toepassing van deze koppeling is zeer geschikt voor gebieden waar hoge concentraties corrosie kunnen ontstaan en/of waar vloeistof wordt getransporteerd die veel corrosie veroorzaken.
Uitwisselbaar: ISO 7241-1 B



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it



Stucchi®

HYDRAULIEK SNELKOPPELINGEN PP



IRBX

Snelkoppeling IRBX serie, uitwisselbaar met ISO 7241-1 serie B

Technische info

Uitwisselbaar: ISO 7241-1 serie B

Mechanisch vergrendeld door kogels.

Op beide delen mag bij het aan en afkoppelen geen druk staan en mag er geen flow zijn.

Mogelijke draadsoorten zijn BSP, NPT

Afdichting

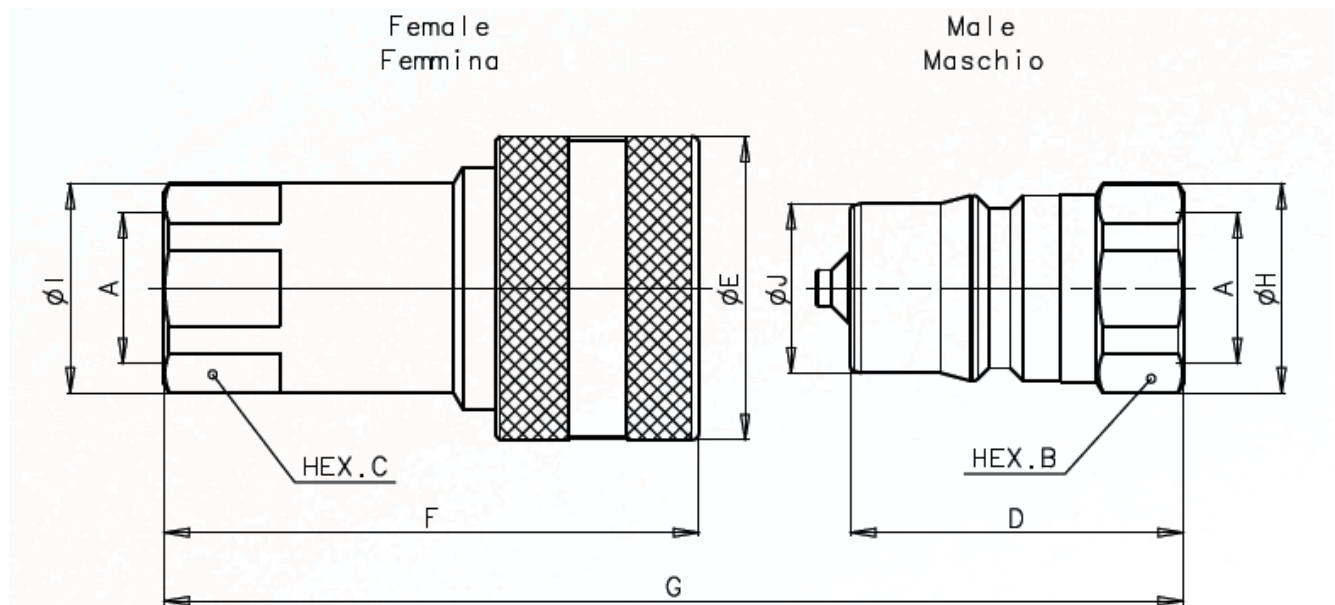
Standaard VITON, anti-extrusion ring PTFE.

Materiaal

RVS AISI 316. Klep van koper. Op aanvraag klep in RVS AISI 316.

Veer RVS AISI 302.

Kogels RVS AISI 316.

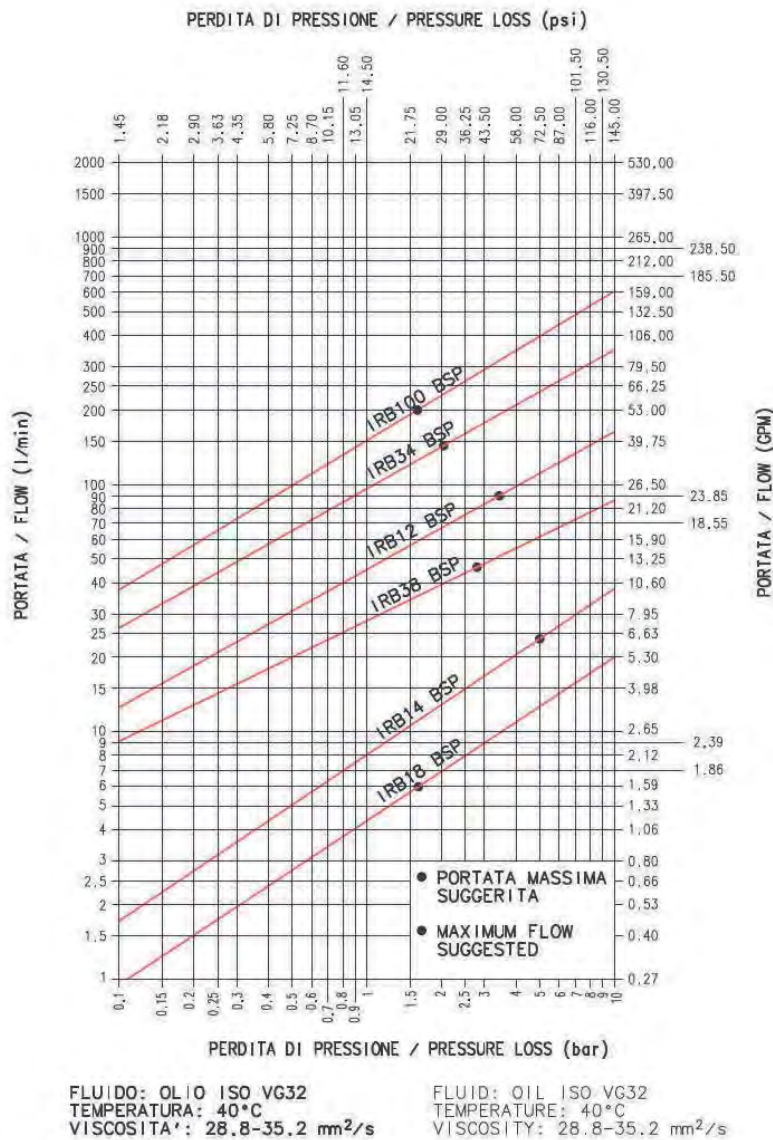


Bestelnummer		max. Werkdr. (bar)	A	B	C	D	E	F	G	H	I	J
Female	Male		inch	sw mm	sw mm	mm	Ø mm	mm	mm	Ø mm	Ø mm	Ø mm
IRBX 1/8-F	IRBX 1/8-M	250	1/8	14	14	30	23	48,8	60,5	15,8	15,8	10,8
IRBX 1/4-F	IRBX 1/4-M	250	1/4	19	19	35	27	57,0	70,7	20,8	21,2	14,2
IRBX 3/8-F	IRBX 3/8-M	200	3/8	24	24	41	34	66,0	82,7	26,0	27,0	19,1
IRBX 1/2-F	IRBX 1/2-M	200	1/2	27	27	46	42	73,9	92,6	29,0	29,0	23,5
IRBX 3/4-F	IRBX 3/4-M	160	3/4	36	36	55	50	90,1	111,1	38,5	38,5	31,4
IRBX 1-F	IRBX 1-M	125	1	41	41	66	60	106,2	133,2	44,8	44,8	37,7

IRBO

Snelkoppeling IRBO serie, uitwisselbaar met ISO 7241-1 serie B

De “IRBO” snelkoppeling is uitgerust met een klep en uitwisselbaar volgens de internationale standaard ISO 7241-1 B gefabriceerd uit brons. De veren en kogels zijn uitgevoerd in RVS. Deze “IRBO” koppelingen bieden een voordeel op plekken waar corrosie optreedt. Voor industriële toepassing waar brons gebruikt wordt, is deze koppeling zeer geschikt.
Uitwisselbaar: ISO 7241-1 B



Voor meer informatie en de veiligheidsvoorschriften kijkt U op www.stucchi.it



Stucchi®

HYDRAULIEK SNELKOPPELINGEN PP



IRBO

Snelkoppeling IRBO serie, uitwisselbaar met ISO 7241-1 serie B

Technische info

Uitwisselbaar: ISO 7241-1 serie B

Mechanisch vergrendeld door kogels.

Op beide delen mag bij het aan en afkoppelen geen druk staan en mag er geen flow zijn.

Mogelijke draadsoorten zijn BSP, NPT

Standaard VITON, anti-extrusion ring PTFE.

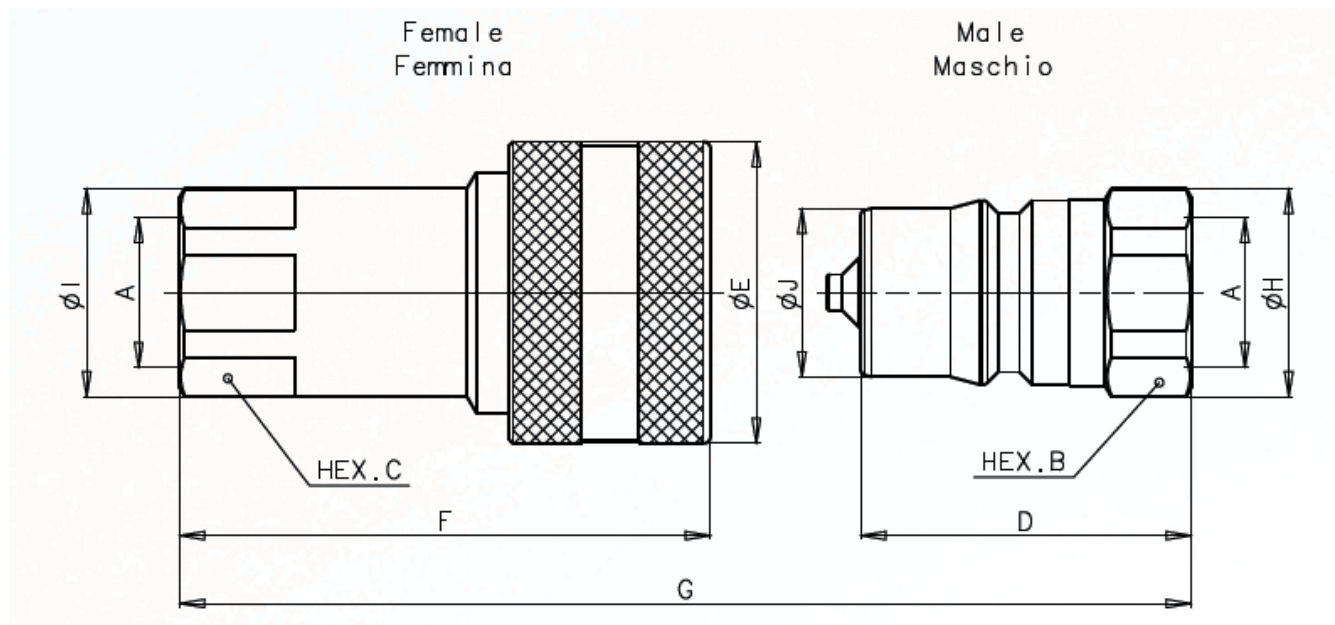
Afdichting

Materiaal

Koper.

Veer RVS AISI 302.

Kogels RVS AISI 316.



Bestelnummer		max. Werkdr. (bar)	A	B	C	D	E	F	G	H	I	J
Female	Male		inch	sw mm	sw mm	mm	\emptyset mm	mm	mm	\emptyset mm	\emptyset mm	\emptyset Mm
IRBO 1/8-F	IRBO 1/8-M	200	1/8	14	14	30	23	48,8	60,5	15,8	15,8	10,8
IRBO 1/4-F	IRBO 1/4-M	200	1/4	19	19	35	27	57,0	70,7	20,8	21,2	14,2
IRBO 3/8-F	IRBO 3/8-M	160	3/8	24	24	41	34	66,0	82,7	26,0	27,0	19,1
IRBO 1/2-F	IRBO 1/2-M	160	1/2	27	27	46	42	73,9	92,6	29,0	29,0	23,5
IRBO 3/4-F	IRBO 3/4-M	125	3/4	36	36	55	50	90,1	111,1	38,5	38,5	31,4
IRBO 1-F	IRBO 1-M	100	1	41	41	66	60	106,2	133,2	44,8	44,8	37,7

TMB TFB

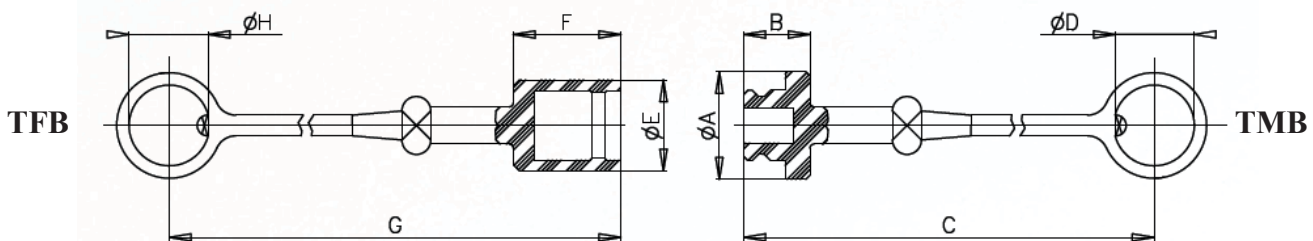
Stofkap voor BIR serie

Beschermkappen worden altijd aanbevolen om de koppeling te beschermen tegen beschadiging en vuil. De levensduur van de koppeling wordt hierdoor verlengd. Dit is vooral belangrijk bij weersinvloeden op een mobiele toepassing en waar agressieve materialen voorkomen. (bijvoorbeeld zand, ammoniak enz.)



CAP FOR MALE COUPLING
Tappo per innesto maschio

CAP FOR FEMALE COUPLING
Tappo per innesto femmina



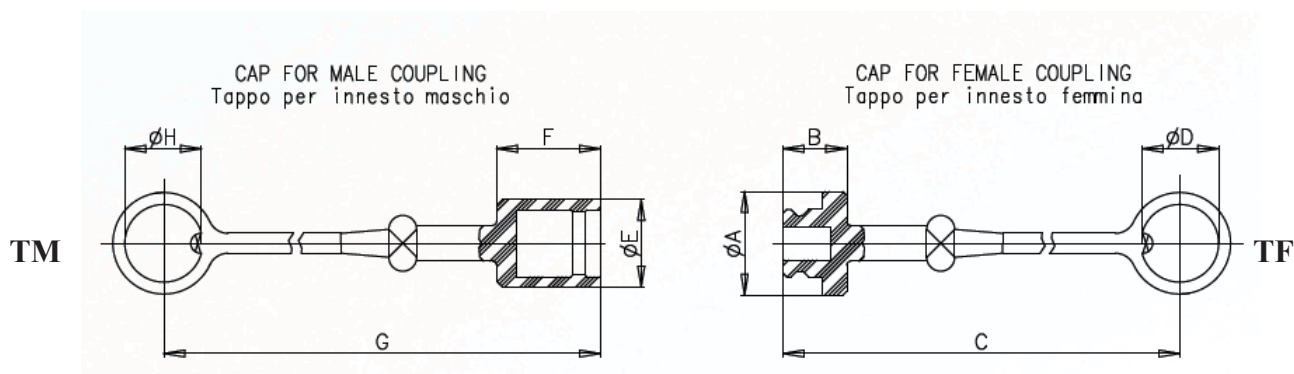
Bestelnummer		A	B	C	D	E	F	G	H
Female Voor BIR M	Male Voor BIR F	mm	mm	mm	mm	mm	mm	mm	mm
TFB 1/4-ROOD	TMB 1/4-ROOD	20	16	223	19,5	18	23	230	19,5
TFB 3/8-ROOD	TMB 3/8-ROOD	26	16	223	22,5	24	27	234	22,5
TF 1/2-ROOD	TM 1/2-ROOD	33	20	273	28,0	29	32	239	28,0
TFB 3/4-ROOD	TMB 3/4-ROOD	40	19	266	32,0	36	41	288	32,0
TFB 1-ROOD	TMB 1-ROOD	45	24	271	38,0	42	48	295	38,0

PVC Caps leverbaar in rood. Geel, zwart, blauw en groen op aanvraag leverbaar.
Geschikt voor temperaturen van -20 tot + 100 graden Celcius.

TM TF

Stofkap voor IRV EN IR serie

Beschermkappen worden altijd aanbevolen om de koppeling te beschermen tegen beschadiging en vuil. De levensduur van de koppeling wordt hierdoor verlengd. Dit is vooral belangrijk bij weersinvloeden op een mobiele toepassing en waar agressieve materialen voorkomen. (bijvoorbeeld zand, ammoniak enz.)



Bestelnummer		A	B	C	D	E	F	G	H
Female Voor BIR M	Male Voor BIR F	mm	mm	mm	mm	mm	mm	mm	mm
TF 1/4-ROOD	TM 1/4-ROOD	26	16	223	19,5	22	26	233	19,5
TF 3/8-ROOD	TM 3/8-ROOD	30	18	225	25,5	27	29	236	25,5
TF 1/2-ROOD	TM 1/2-ROOD	33	20	273	28,0	29	32	239	28,0
TF 3/4-ROOD	TM 3/4-ROOD	40	25	272	32,0	35	42	289	32,0
TF 1-ROOD	TM 1-ROOD	44	24	271	38,0	40	47	294	38,0

PVC Caps leverbaar in rood. Geel, zwart, blauw en groen op aanvraag leverbaar.
Geschikt voor temperaturen van -20 tot + 100 graden Celcius.

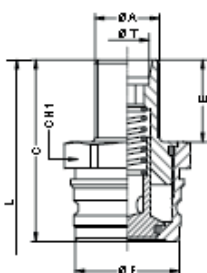
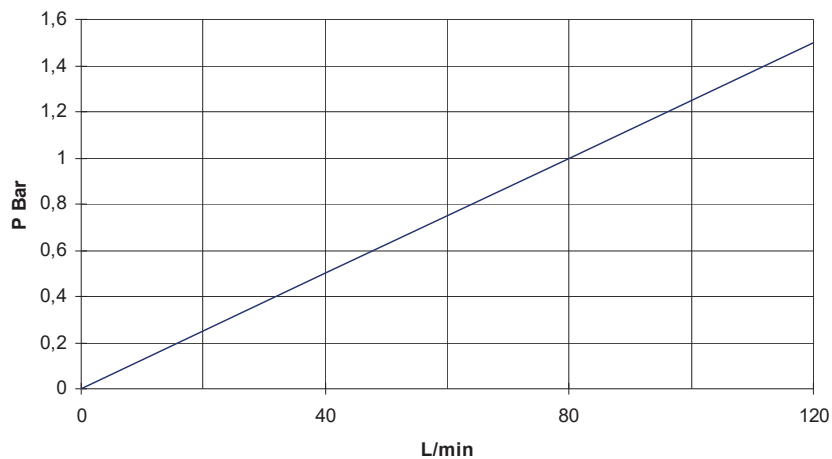
PFT

**Beremmingskoppeling, Volgens ISO5676/ISO/TC23/NFU16006
BSP volgens DIN2353;DIN3852**

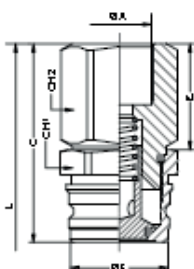
Koppeling voor het doorschakelen van het hydraulisch remsysteem van tractor naar machine.



**Materiaal: Carbon staal EN10277-3
Afdichting NBR
Kogels AISI 1010/1015
Veer Carbon staal DIN 17233/84(B)**



Bestelnummer	A	T	CH1	CH3	C	F	E
Male			mm	mm	mm	mm	mm
PFT 12L-M	M18x1,5	12L	32	24	51	29	23
PFT 13,5L-M	M20x1,5	13.5	32	27	51	29	23
PFT 15L-M	M22x1,5	15L	32	27	51	29	23



Bestelnummer	A	T	CH1	CH2	C	F	E
Male			mm	Mm	mm	mm	mm
PFT 1/2-M	M18x1,5	12L	32	24	51	29	23

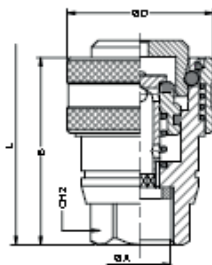
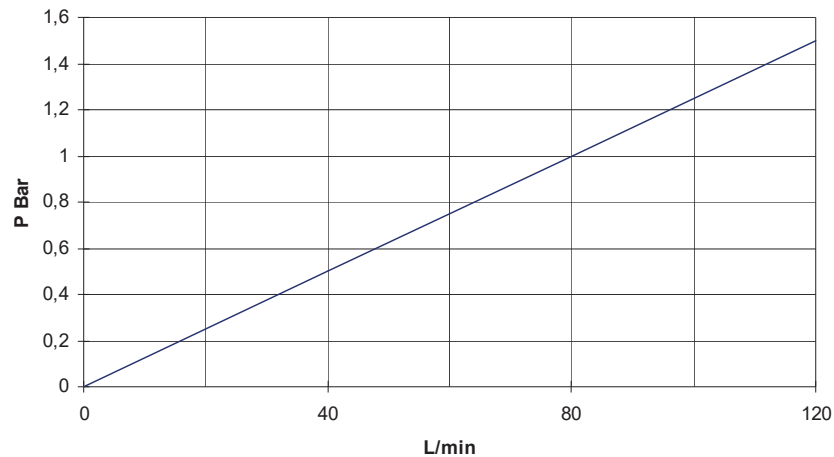
PFT

*Beremmingskoppeling, Volgens ISO5676/ISO/TC23/NFU16006
BSP volgens DIN2353;DIN3852*

Koppeling voor het doorschakelen van het hydraulisch remsysteem van tractor naar machine.



Materiaal: Carbon staal EN10277-3
Afdichting NBR
Kogels AISI 1010/1015
Veer Carbon staal DIN 17233/84(B)



Bestelnummer	A	CH2	B	D
Female		mm	mm	Mm
PFT 3/8-F	3/8 BSP	27	57	45
PFT 1/2-F	1/2 BSP	27	57	45
PFT 1815-F	M18x1,5	27	57	45

VCR

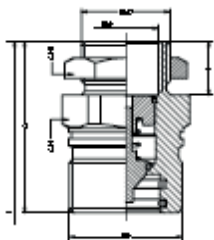
Trailerkoppeling met vleugel volgens 97.23.EC

Materiaal: Carbon staal EN10277-3

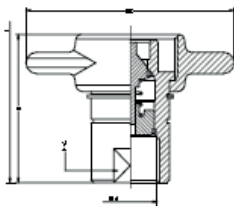
Afdichting NBR

Veer Carbon staal DIN 17233/84(B)

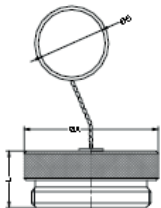
Werkdruk maximaal 3/4" 250 bar, 1" 230 bar



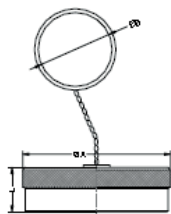
Bestelnummer	A	CH1	CH2	C	F	L
Female		mm	Mm	mm	mm	mm
VCR 3/4-F	3/4" BSP	46	50	78	44	138
VCR 1-F	1" BSP	55	50	83	53	148



Bestelnummer	A	CH1	CH2	C	F	L
Female		mm	Mm	mm	mm	mm
VCR 3/4-M	3/4" BSP	33	50	78	44	138
VCR 1-M	1" BSP	40	50	83	53	148



Bestelnummer	A	L	B			
Plug	mm	mm	mm			
VCR 3/4-FM	50	25	42			
VCR 1-FM	60	25	50			



Bestelnummer	A	L	B			
Cap	mm	mm	mm			
VCR 3/4-MM	48	13	42			
VCR 1-MM	60	18	50			

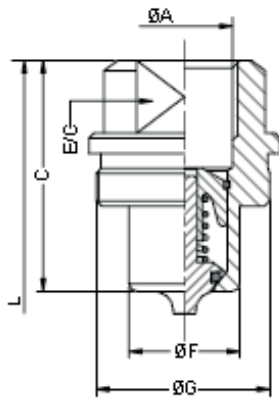


Bestelnummer	A	L				
Parking	mm	mm				
VCR 3/4-P	45	25				
VCR 1-P	55	25				

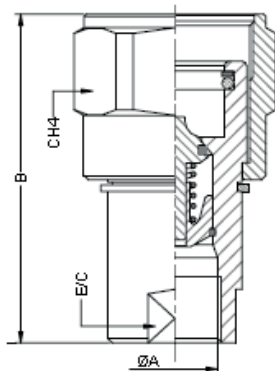
TGW

Trailerkoppeling Hoge Druk.

Materiaal: Carbon staal EN10277-3
Afdichtingen NBR
Back up ring PFTE
Veer carbon staal DIN 17233/84(B)



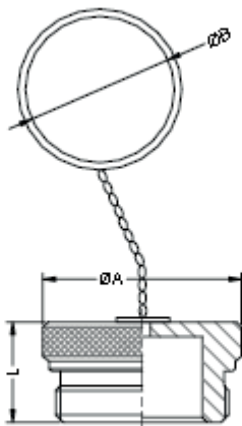
Bestelnummer	A	Werkdr.	E/C	C	F	G	L
Male	BSP	BAR	mm	mm	mm	mm	mm
TGW 1/4-M	1/4	950	19	36	15	M27x1,5	72
TGW 3/8-M	3/8	750	22	40	19	M30x1,5	81
TGW 1/2-M	1/2	750	27	46	22	M35x1,5	92
TGW 3/4-M	3/4	650	35	56	29	M45x1,5	112
TGW 1-M	1	450	41	63	36	M54x1,5	126
TGW 1 1/4-M	1 1/4	450	58	75	50	M70x2	150
TGW 1 1/2-M	1 1/2	300	61	83	55	M78x2	167
TGW 2-M	2	300	71	118	70	M92x3	237



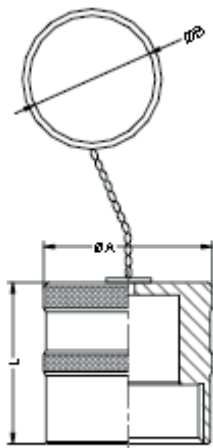
Bestelnummer	A	Werkdr.	E/C	B	CH4	L
Male	BSP	BAR	mm	mm	mm	mm
TGW 1/4-F	1/4	950	19	59	32	72
TGW 3/8-F	3/8	750	22	67	36	81
TGW 1/2-F	1/2	750	27	73	41	92
TGW 3/4-F	3/4	650	35	89	50	112
TGW 1-F	1	450	41	102	65	126
TGW 1 1/4-F	1 1/4	450	58	130	80	150
TGW 1 1/2-F	1 1/2	300	61	143	85	167
TGW 2-F	2	300	71	203	105	237

TGW

Trailerkoppeling Hoge Druk.



Bestelnummer	A	L	B		
Female	mm	mm	mm		
TGW 1/4-PLUG	32	18,5	25		
TGW 3/8-PLUG	35	20,5	30		
TGW 1/2-PLUG	40	20,5	30		
TGW 3/4-PLUG	50	25,5	42		
TGW 1-PLUG	60	27,0	50		
TGW 1 1/4-PLUG	75	39,0	50		
TGW 1 1/2-PLUG	85	41,0	50		
TGW 2-PLUG	99	43,0	50		



Bestelnummer	A	L	B		
Female	mm	mm	mm		
TGW 1/4-CAP	32	30	25		
TGW 3/8-CAP	35	37	30		
TGW 1/2-CAP	40	38	30		
TGW 3/4-CAP	50	46	42		
TGW 1-CAP	60	55	50		
TGW 1 1/4-CAP	75	74	50		
TGW 1 1/2-CAP	85	72	50		
TGW 2-CAP	99	121	50		

IRSA

Snelkoppeling Push Pull volgens ISO 7241-1 grote 25

Technische info

Uitwisselbaar: ISO 7241-1 serie 25

Klep systeem

Mechanisch vergrendeld door kogels.

Stekker zonder restdruk koppelbaar. Op het vrouwelijk deel mag geen druk staan.

Tijdens het koppelen mag er geen flow zijn.

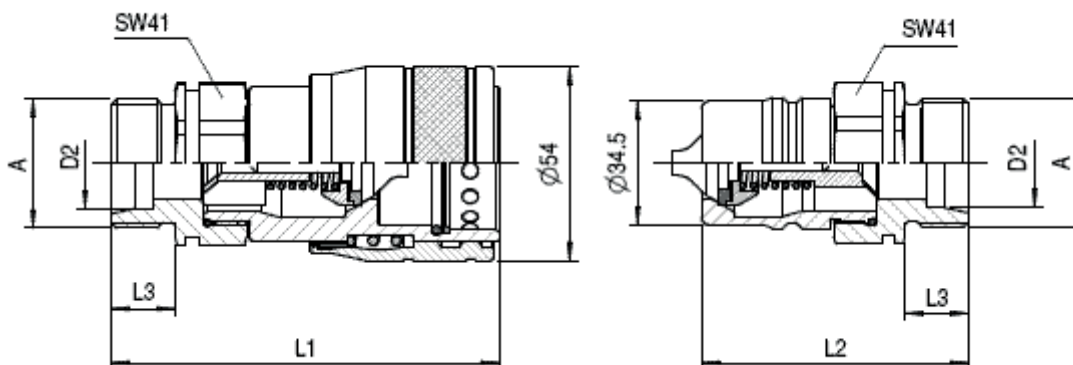
Mogelijke draadsoorten zijn BSP, NPT en Metrisch

Afdichting

Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Carbon staal, oppervlakte verzinken CRIII. Veer C72 staal. Kogels hard staal 100C6.



Bestelnummer		A	D2	L1	L2	L4
Female	Male	mm	mm	mm	mm	mm
IRSA 3/4-F	IRSA 3/4-M	3/4"		104	72	19
IRSA 1-F	IRSA 1-M	1"		104	72	19

Let op deze koppelingen zijn met binnendraad.

P Schroefsnelkoppeling

Technische info

Schroefkoppeling met een hoog drukbereik als de koppeling volledig geschroefd is. Een voordeel is dat er niet per ongeluk ontkoppeld kan worden.

Tijdens het koppelen mag er geen flow zijn.

Mogelijke draadsoorten zijn BSP, Metrisch en SAE flens.

BSP heeft standaard binnendraad

Metrisch heeft standaard buitendraad

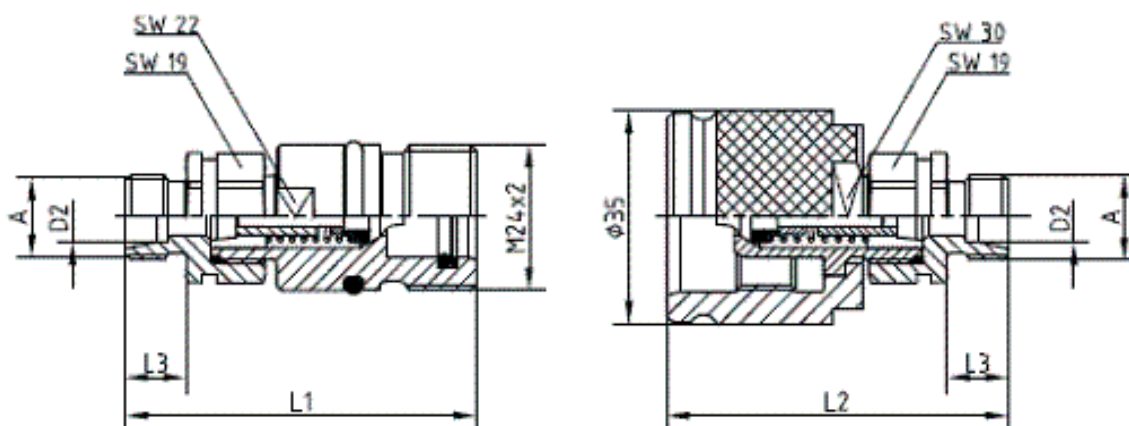
Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Staal, oppervlakte verzinken.



Afdichting Materiaal

Werkdruk 450 BAR



Bestelnummer		A	D2	L1	L2	L3	L4
Female	Male	mm	mm	mm	mm	mm	mm
1P 1/4-F	1P 1/4-M	1/4"		60	58		13

P

Schroefsnelkoppeling

Technische info

Schroefkoppeling met een hoog drukbereik als de koppeling volledig geschroefd is. Een voordeel is dat er niet per ongeluk ontkoppeld kan worden.

Tijdens het koppelen mag er geen flow zijn.

Mogelijke draadsoorten zijn BSP, Metrisch en SAE flens.

BSP heeft standaard binnendraad

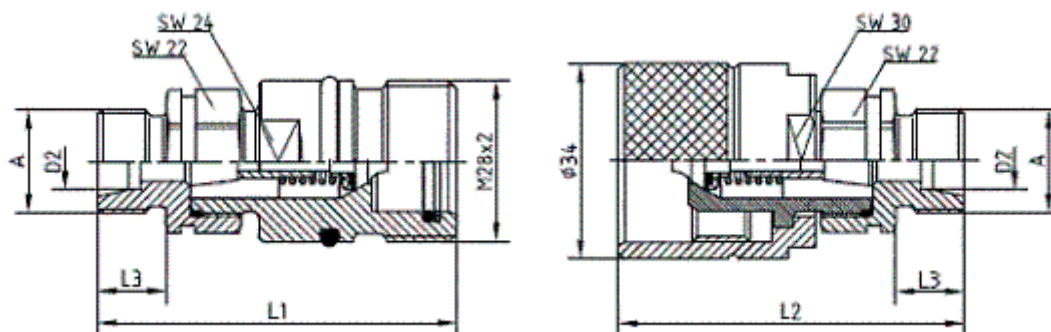
Metrisch heeft standaard buitendraad

Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Staal, oppervlakte verzonken.



Afdichting Materiaal

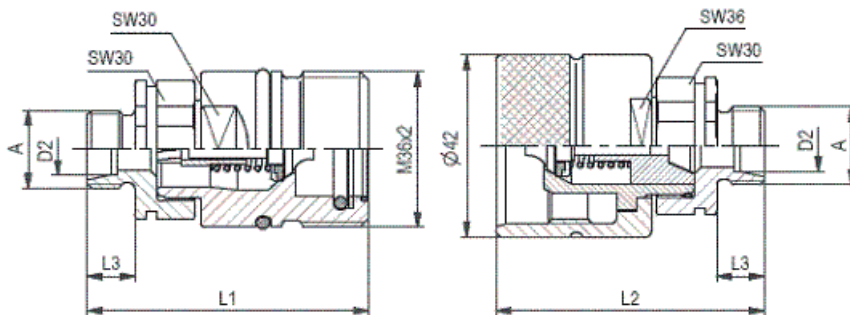


Werkdruk gekoppeld 450 BAR

Bestelnummer		A	D2	L1	L2	L3	L4
Female	Male	mm	mm	mm	mm	mm	mm
2P 1/4-F	2P 1/4-M	1/4		64	61		13
2P 3/8-F	2P 3/8-M	3/8		64	61		13
2P 1615-F	2P 1615-M	M16x1,5		64	61		13
2P 8L-F	2P 8L-M	M14x1,5	8L	61	46	10	
2P 10L-F	2P 10L-M	M16x1,5	10L	62	47	11	
2P 12L-F	2P 12L-M	M18x1,5	12L	62	47	11	
2P 8S-F	2P 8S-M	M16x1,5	8S	63	48	12	
2P 10S-F	2P 10S-M	M18x1,5	10S	63	48	12	
2P 12S-F	2P 12S-M	M20x1,5	12S	63	48	12	
2P 8LSC-F	2P 8LSC-M	M14x1,5	8L	76	61	25	
2P 10LSC-F	2P 10LSC-M	M16x1,5	10L	77	62	26	

- SC is een schotuitvoering met schotmoer

P Schroefsnelkoppeling



Werkdruk gekoppeld 400 BAR

Bestelnummer		A	D2	L1	L2	L3	L4
Female	Male	mm	mm	mm	mm	mm	mm
3P 3/8-F	3P 3/8-M	3/8		68	66		15
3P 1/2-F	3P 1/2-M	1/2		68	66		15
3P 1815-F	3P 1815-M	M18x1,5		68	66		15
3P 2215-F	3P 2215-M	M22x1,5		68	66		15
3P 8L-F	3P 8L-M	M14x1,5	8L	64	50	10	
3P 10L-F	3P 10L-M	M16x1,5	10L	65	51	11	
3P 12L-F	3P 12L-M	M18x1,5	12L	65	51	11	
3P 15L-F	3P 15L-M	M22x1,5	15L	66	52	12	
3P 18L-F	3P 18L-M	M26x1,5	18L	66	52	12	
3P 10S-F	3P 10S-M	M18x1,5	10S	66	52	12	
3P 12S-F	3P 12S-M	M20x1,5	12S	66	52	12	
3P 14S-F	3P 14S-M	M22x1,5	14S	68	54	14	
3P 16S-F	3P 16S-M	M24x1,5	16S	68	54	14	
3P 20S-F	3P 20S-M	M30x2	20S	70	56	16	
3P 8LSC-F	3P 8LSC-M	M14x1,5	8L	80	66	26	
3P 10LSC-F	3P 10LSC-M	M16x1,5	10L	80	66	26	
3P 12LSC-F	3P 12LSC-M	M18x1,5	12L	84	70	30	
3P 15LSC-F	3P 15LSC-M	M22x1,5	15L	81	67	27	
3P 18LSC-F	3P 18LSC-M	M26x1,5	18L	81	67	27	
3P 10SSC-F	3P 10SSC-M	M18x1,5	10S	80	66	27	
3P 12SSC-F	3P 12SSC-M	M20x1,5	12S	81	67	27	
3P 14SSC-F	3P 14SSC-M	M22x1,5	14S	83	69	29	
3P 16SSC-F	3P 16SSC-M	M24x1,5	16S	83	69	29	

- SC is een schotuitvoering met schotmoer

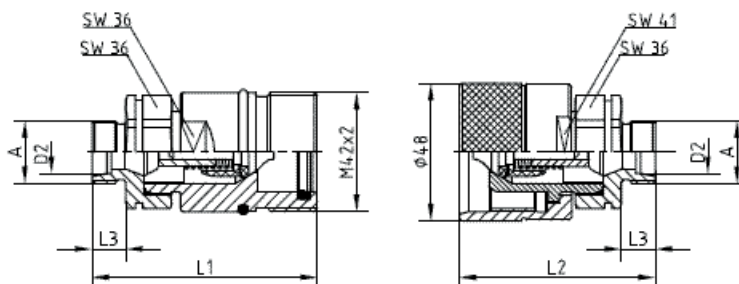
P

Schroefsnelkoppeling

Technische info *Schroefkoppeling met een hoog drukbereik als de koppeling volledig geschroefd is. Een voordeel is dat er niet per ongeluk ontkoppeld kan worden. Tijdens het koppelen mag er geen flow zijn. Mogelijke draadsoorten zijn BSP, Metrisch en SAE flens. BSP heeft standaard binnendraad Metrisch heeft standaard buitendraad*

Afdichting *Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk*

Materiaal *Staal, oppervlakte verzinken.*



Werkdruk gekoppeld is 400 BAR

Bestelnummer		A	D2	L1	L2	L3	L4
Female	Male	mm	mm	mm	mm	mm	mm
4P 1/2-F	4P 1/2-M	1/2		85	76		19
4P 3/4-F	4P 3/4-M	3/4		85	76		19
4P 2215-F	4P 2215-M	M22x1,5		85	76		19
4P 12L-F	4P 12L-M	M18x1,5	12L	79	58	11	
4P 15L-F	4P 15L-M	M22x1,5	15L	80	59	12	
4P 18L-F	4P 18L-M	M26x1,5	18L	80	59	12	
4P 22L-F	4P 22L-M	M30x2	22L	82	61	14	
4P 16S-F	4P 16S-M	M24x1,5	16S	82	61	14	
4P 20S-F	4P 20S-M	M30x2	20S	84	63	16	
4P 12LSC-F	4P 12LSC-M	M18x1,5	12L	94	73	26	
4P 15LSC-F	4P 15LSC-M	M22x1,5	15L	95	74	27	
4P 18LSC-F	4P 18LSC-M	M26x1,5	18L	95	74	27	
4P 22LSC-F	4P 22LSC-M	M30x2	22L	104	83	36	
4P 16SSC-F	4P 16SSC-M	M24x1,5	16S	97	76	29	
4P 20SSC-F	4P 20SSC-M	M30x2	20S	104	83	36	

- SC is een schotuitvoering met schotmoer

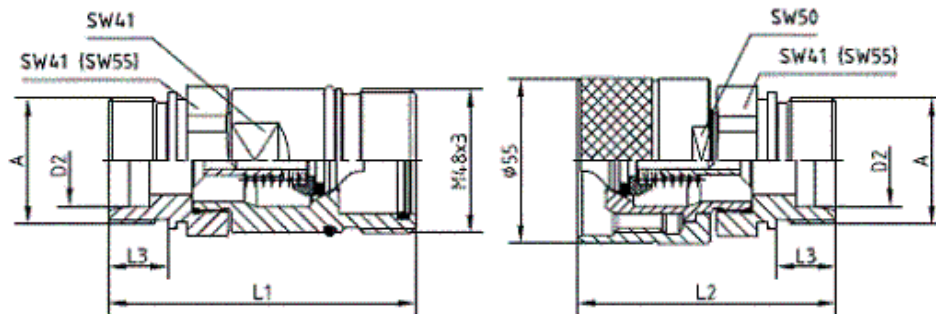
P

Schroefsnelkoppeling

Technische info *Schroefkoppeling met een hoog drukbereik als de koppeling volledig geschroefd is. Een voordeel is dat er niet per ongeluk ontkoppeld kan worden. Tijdens het koppelen mag er geen flow zijn. Mogelijke draadsoorten zijn BSP, Metrisch en SAE flens. BSP heeft standaard binnendraad Metrisch heeft standaard buitendraad*

Afdichting *Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk*

Materiaal *Staal, oppervlakte verzinken.*



Werkdruk gekoppeld is 300 BAR

Bestelnummer		A	D2	L1	L2	L3	L4
Female	Male	mm	mm	mm	mm	mm	mm
6P 3/4-F	6P 3/4-M	3/4		99	82		19
6P 1-F	6P 1-M	1		99	82		19
6P 18L-F	6P 18L-M	M26x1,5	18L	95	69	12	
6P 22L-F	6P 22L-M	M30x2	22L	97	71	14	
6P 28L-F	6P 28L-M	M36x2	28L	97	71	14	
6P 35L-F	6P 35L-M	M45x2	35L	99	73	16	
6P 20S-F	6P 20S-M	M30x2	20S	99	73	16	
6P 25S-F	6P 25S-M	M36x2	25S	101	75	18	
6P 30S-F	6P 30S-M	M42x2	30S	103	77	20	
6P 38S-F	6P 38S-M	M52x2	38S	105	79	22	
6P 18LSC-F	6P 18LSC-M	M26x1,5	18L	115	89	32	
6P 22LSC-F	6P 22LSC-M	M30x2	22L	117	91	34	
6P 28LSC-F	6P 28LSC-M	M36x2	28L	117	91	34	
6P 20SSC-F	6P 20SSC-M	M30x2	20S	121	95	38	
6P 25SSC-F	6P 25SSC-M	M36x2	25S	121	95	38	
6P 30SSC-F	6P 30SSC-M	M42x2	30S	123	97	40	
6P 38SSC-F	6P 38SSC-M	M52x2	38S	123	97	40	

- SC is een schotuitvoering met schotmoer

P

Schroefsnelkoppeling

Technische info

Schroefkoppeling met een hoog drukbereik als de koppeling volledig geschroefd is. Een voordeel is dat er niet per ongeluk ontkoppeld kan worden.

Tijdens het koppelen mag er geen flow zijn.

Mogelijke draadsoorten zijn BSP, Metrisch en SAE flens. BSP heeft standaard binnendraad

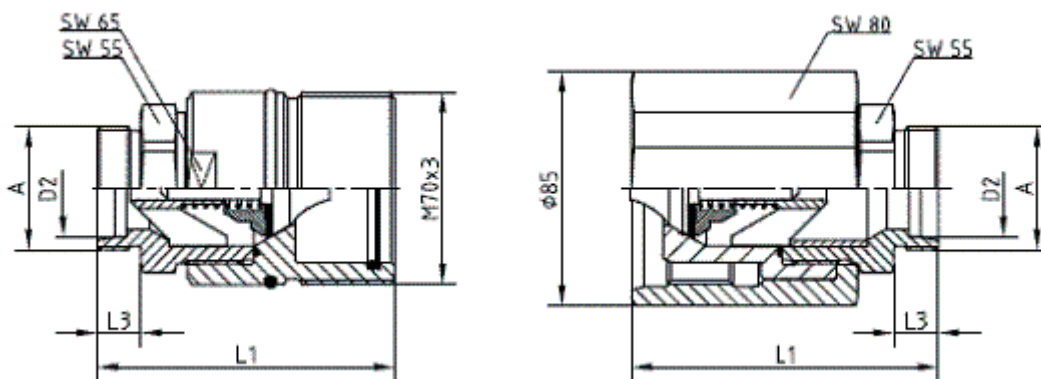
Metrisch heeft standaard buitendraad

Afdichting

Standaard NBR, anti-extrusion ring PTFE, andere op aanvraag mogelijk

Materiaal

Staal, oppervlakte verzinken.



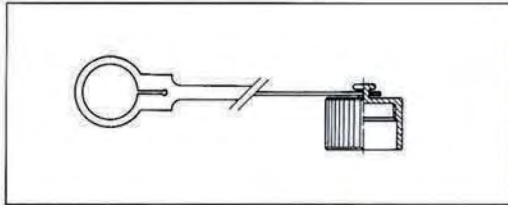
Werkdruk gekoppeld is 300 BAR

Bestelnummer		A	D2	L1	L2	L3	L4
Female	Male	mm	mm	mm	mm	mm	mm
8P 1 1/4-F	8P 1 1/4-M	1 1/2		126	131		29
8P 1 1/2-F	8P 1 1/2-M	1 1/4		128	133		31
8P 35L-F	8P 35L-M	M45x2	35L	105	112	16	
8P 42L-F	8P 42L-M	M52x2	42L	105	112	16	
8P 30S-F	8P 30S-M	M42x2	30S	113	109	20	
8P 38S-F	8P 38S-M	M52x2	38S	111	118	22	
8P 35LSC-F	8P 35LSC-M	M45x2	35L	125	132	36	
8P 42LSC-F	8P 42LSC-M	M52x2	42L	129	132	36	
8P 30SSC-F	8P 30SSC-M	M42x2	30S	129	136	40	
8P 38SSC-F	8P 38SSC-M	M52x2	38S	129	136	40	

- SC is een schotuitvoering met schotmoer

TCH F

stofkap



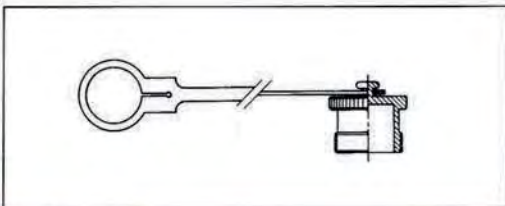
Kenmerken

van toepassing op de female snelkoppeling
serie **P female**

Artikelnummer	Materiaal
TCH 2 F	PVC
TCH 3 F	PVC
TCH 4 F	PVC
TCH 6 F	PVC

TCH M

stofkap



Kenmerken

van toepassing op de male snelkoppeling
serie **P male**

Artikelnummer	Materiaal
TCH 2 M	PVC
TCH 3 M	PVC
TCH 4 M	PVC
TCH 6 M	PVC



HYDRAULIEK MULTIKOPPELINGEN



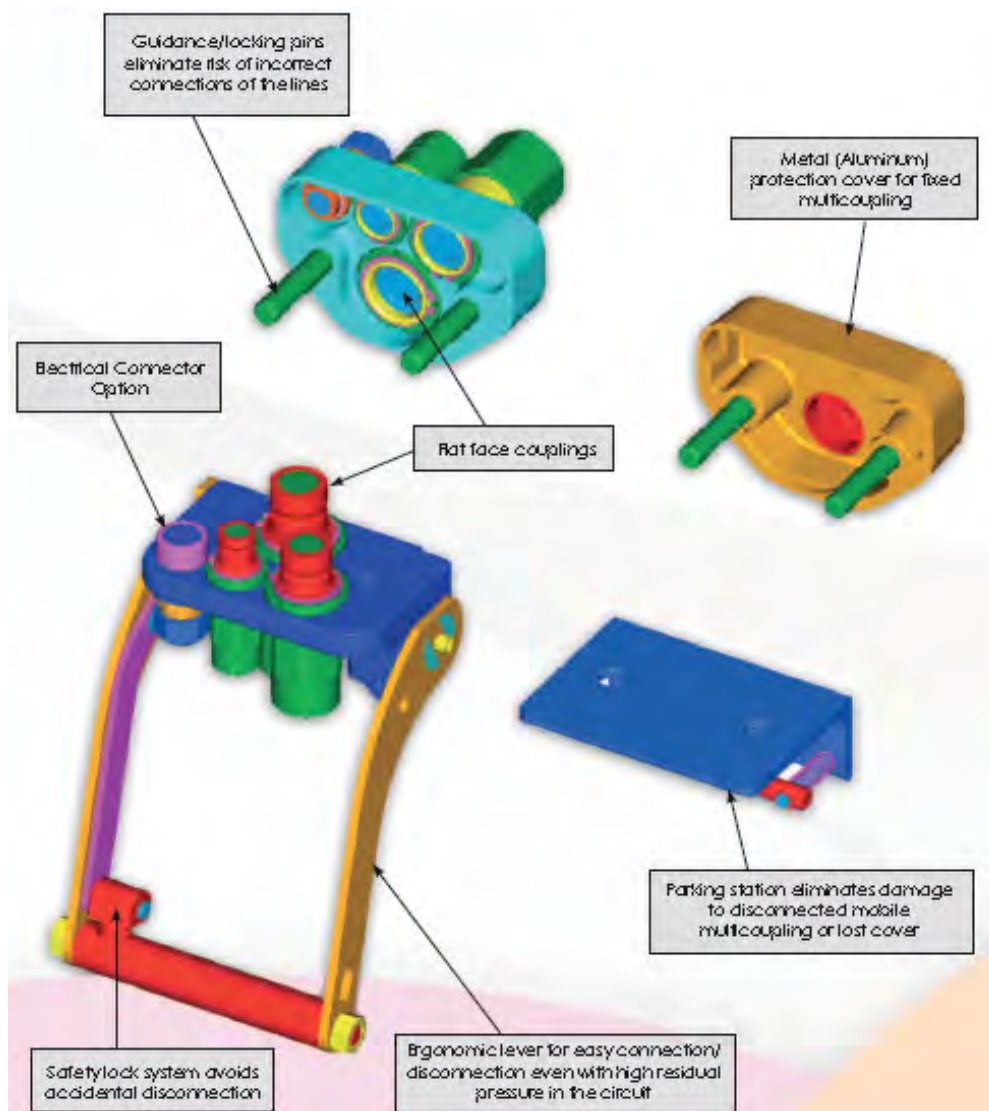
NOTES

A large area for taking notes, consisting of a pink header bar followed by numerous horizontal lines. The bottom portion of the page is partially obscured by a decorative graphic with overlapping pink, blue, and white shapes.

GR

Multisysteem

“GR” is de multi-koppeling die vele mogelijkheden biedt voor aan en afkoppelen van meerdere hydraulische, elektrische en luchtleidingen. Tot en met tien verbindingen kunnen gelijktijdig met één simpele, snelle en veilige handbeweging aan en afgekoppeld worden, zonder daarvoor veel kracht uit te oefenen. De koppelingen kunnen allemaal van hetzelfde type zijn, maar er is ook de mogelijkheid om in één plaat verschillende typen koppelingen te plaatsen. Dit is afhankelijk van de toepassing. Uitwisselbaar: Interne specificaties Stucchi.

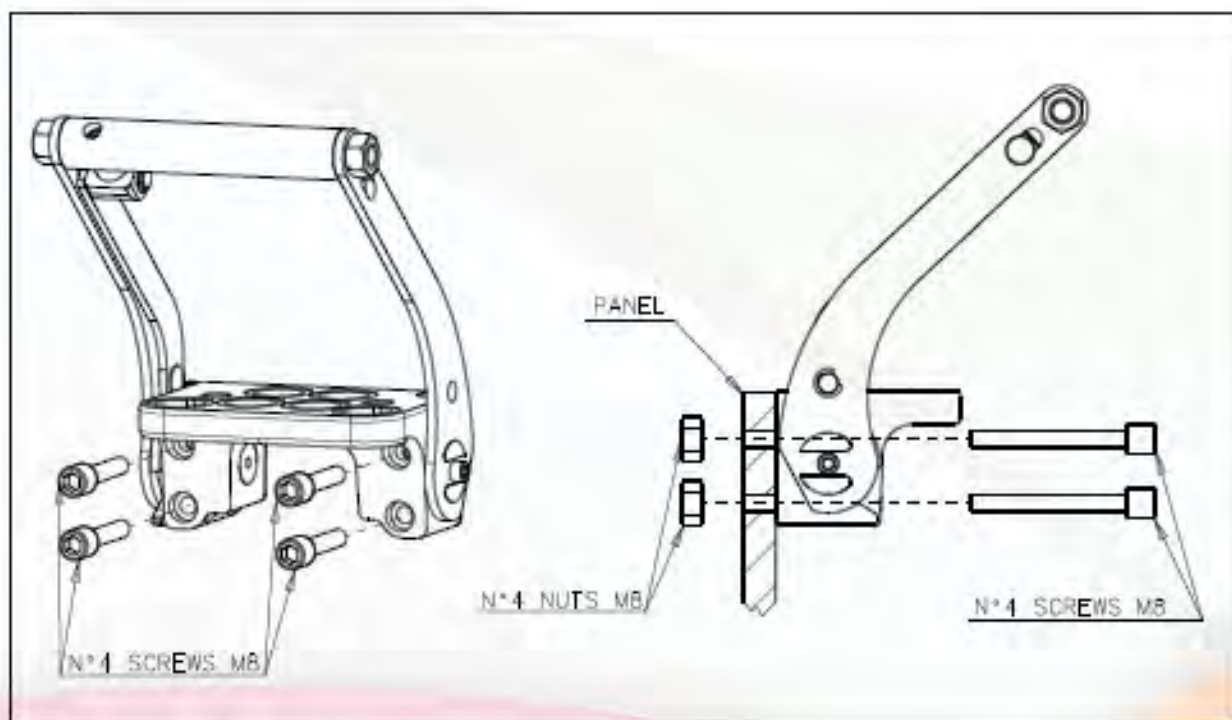


GR

Multisysteem

Voordelen:

- Snel aan en afkoppelen tot 10 lijnen, zonder de mogelijkheid van verkeerd aan te sluiten.
- Flat face koppelingen zijn makkelijk af te vegen en schoon te houden.
- De "FAP" koppelingen maken het mogelijk onder restdruk koppelen.
- De "FAP" koppelingen worden in de plaat vergrendeld door een seegering of door een schotmoer met een seegering.
- De safety lock op de hendel maakt 1-hands bediening mogelijk
- Compact design
- Makkelijk toe te passen in een bestaand systeem



GR Multisysteem



PERFORMANCE

All the Stucchi multicouplings have been tested at their maximum resistance by impulse pressure test. The maximum resistance (N) for each multicoupling model, is indicated in the data sheets below.

The force applied to multicoupling coupled, depends on the number of couplings under pressure at the same time, on their operating pressure and on their size.

For a correct use of the multicoupling is necessary to verify that the force is not greater to the maximum resistance of the multicoupling.

$$F = [(P1/4 \times S1/4) + (P3/8 \times S3/8) + (P1/2 \times S1/2) + (P5/8 \times S5/8) + (P3/4 \times S3/4) + (P1 \times S1)] \times 9.8$$

F Force applied to multicoupling (N)

P Total amount of operating pressure coupled in the couplings with same size (bar)

S Hydrostatic pushing area coupled (cm²)

The operating pressure for a single coupling must not be greater to the maximum operating pressure coupled indicated in table.

Coupling size	Hydrostatic pushing area coupled	Maximum operating pressure coupled for FAP couplings
1/4	S1/4= 0,723 cm ²	42 Mpa (420 bar)
3/8	S3/8= 1,228 cm ²	35 Mpa (350 bar)
1/2	S1/2= 1,893 cm ²	33 Mpa (330 bar)
5/8	S5/8= 2,404 cm ²	33 Mpa (330 bar)
3/4	S3/4= 3,278 cm ²	33 Mpa (330 bar)
1	S1= 4,335 cm ²	30 Mpa (300 bar)

EXAMPLE:

Max. resistance of GRM5 multicoupling is 23000 N.

To verify if GRM5 multicoupling resists to operating condition of following application:

One line size 3/8 with max. operating pressure coupled of 30 Mpa (300 bar)

One line size 3/8 with max. operating pressure coupled of 15 Mpa (150 bar)

One line size 5/8 with max. operating pressure coupled of 25 Mpa (250 bar)

One line size 5/8 with max. operating pressure coupled of 10 Mpa (100 bar)

One line size 3/4 with max. operating pressure coupled of 20 Mpa (200 bar)

One line size 3/4 with max. operating pressure coupled of 5 Mpa (50 bar)

It is necessary verify that F (force applied to multicoupling) is not greater than max. multicoupling resistance:

$$P3/8 \quad 300 \text{ bar} + 150 \text{ bar} \quad 450 \text{ bar}$$

$$P5/8 \quad 250 \text{ bar} + 100 \text{ bar} \quad 350 \text{ bar}$$

$$P3/4 \quad 200 \text{ bar} + 50 \text{ bar} \quad 250 \text{ bar}$$

$$F = [(P3/8 \times S3/8) + (P5/8 \times S5/8) + (P3/4 \times S3/4)] \times 9.8$$

$$F = [(450 \times 1,224) + (350 \times 2,404) + (250 \times 3,278)] \times 9.8$$

$$F = [551.7 + 841.4 + 824.5] \times 9.8 \quad 21732 \text{ N}$$

Being F (21732 N) lower than max. multicoupling resistance (23000 N), the GRM5 multicoupling is suitable for this application.



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HYDRAULIEK MULTIKOPPELINGEN

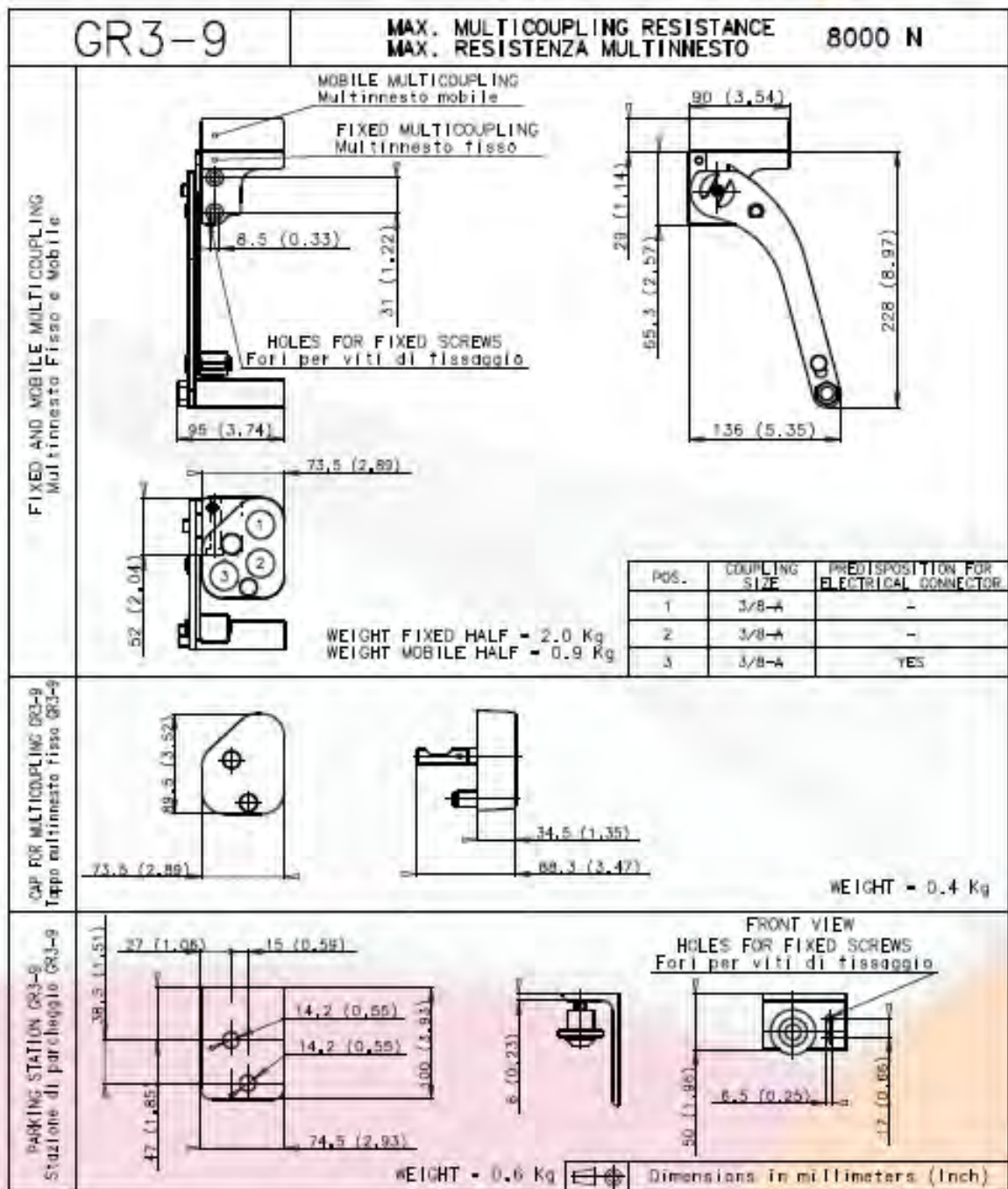
5

GR

Multisysteem

GR3-9 MULTICOUPLING

- Threelines size 3/8
- One line predisposed for electrical connector
Female EC.. Male EC..
- On request other line predisposed for electrical connector





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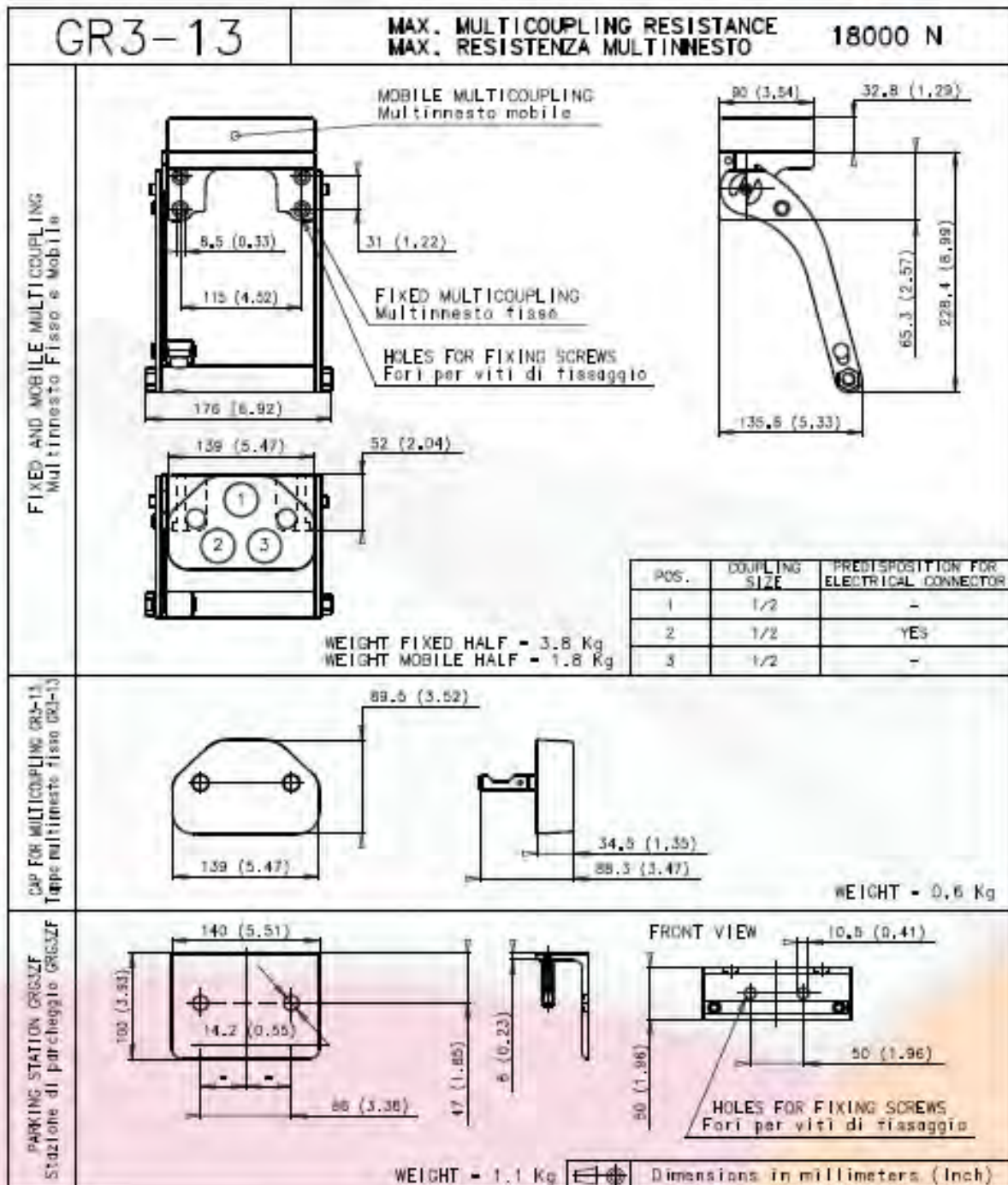
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GR3-13 MULTICOUPLING

- Three lines size 1/2
- One line predisposed for electrical connector
Female EC...-13, Male EC...-13
- On request other line predisposed for electrical connector





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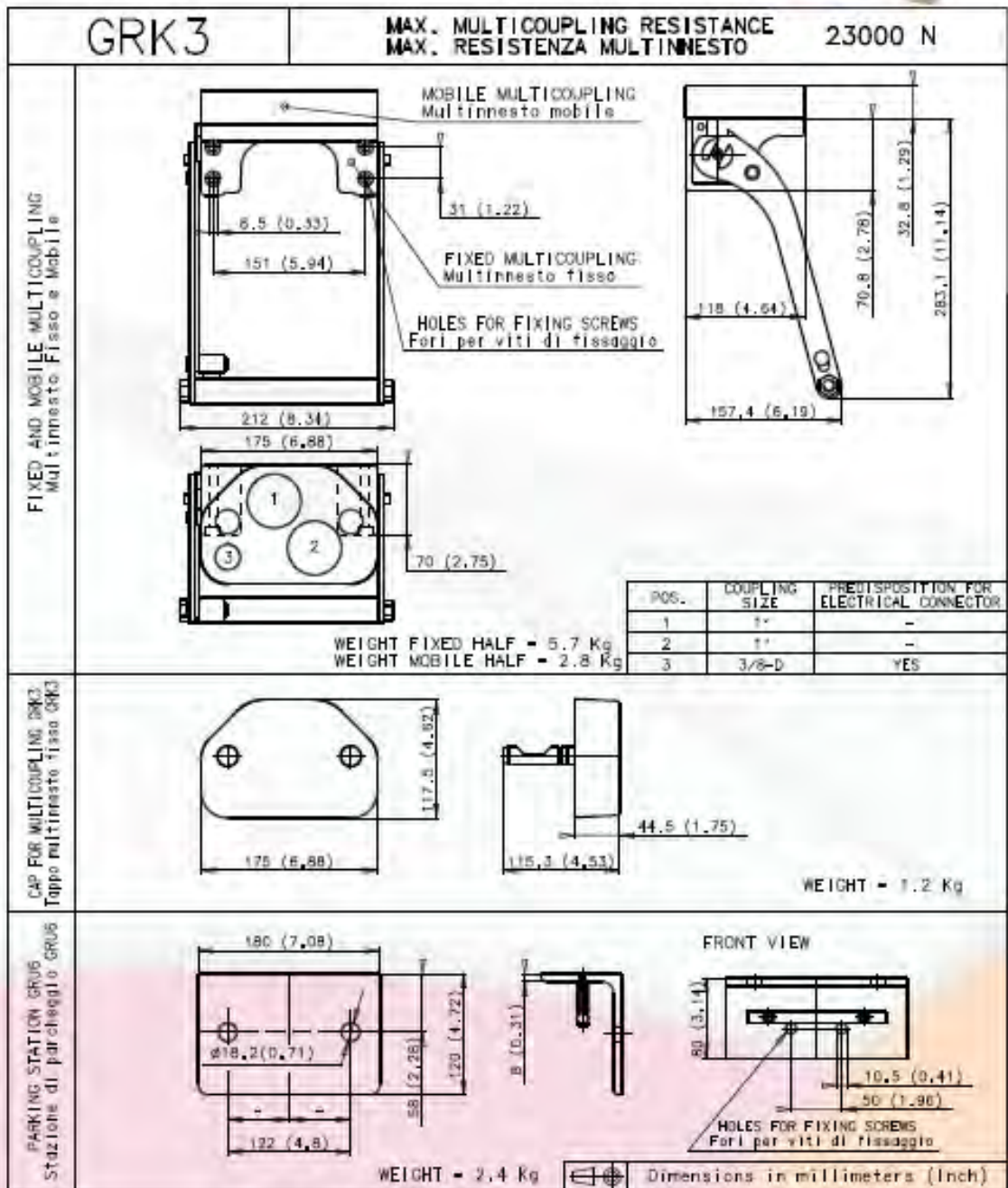
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GRK3 MULTICOUPLING

- Two lines size 1
- One line size 3/8
- One line predisposed for electrical connector
Female EC., Male EC., D





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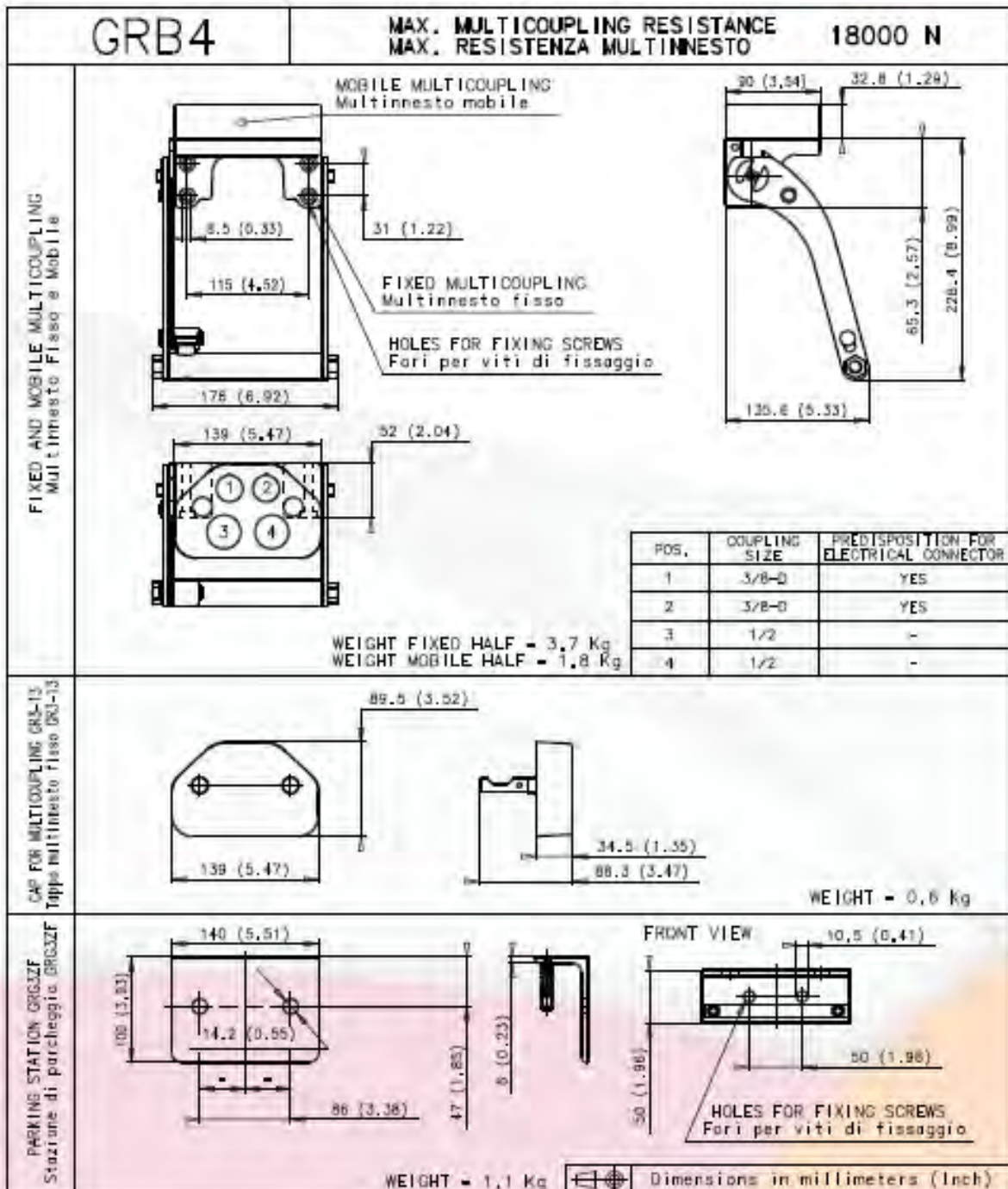
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GRB4 MULTICOUPLING

- Two lines size 1/2
- Two lines size 3/8
- Two lines predisposed for electrical connector
Female EC... Male EC...D





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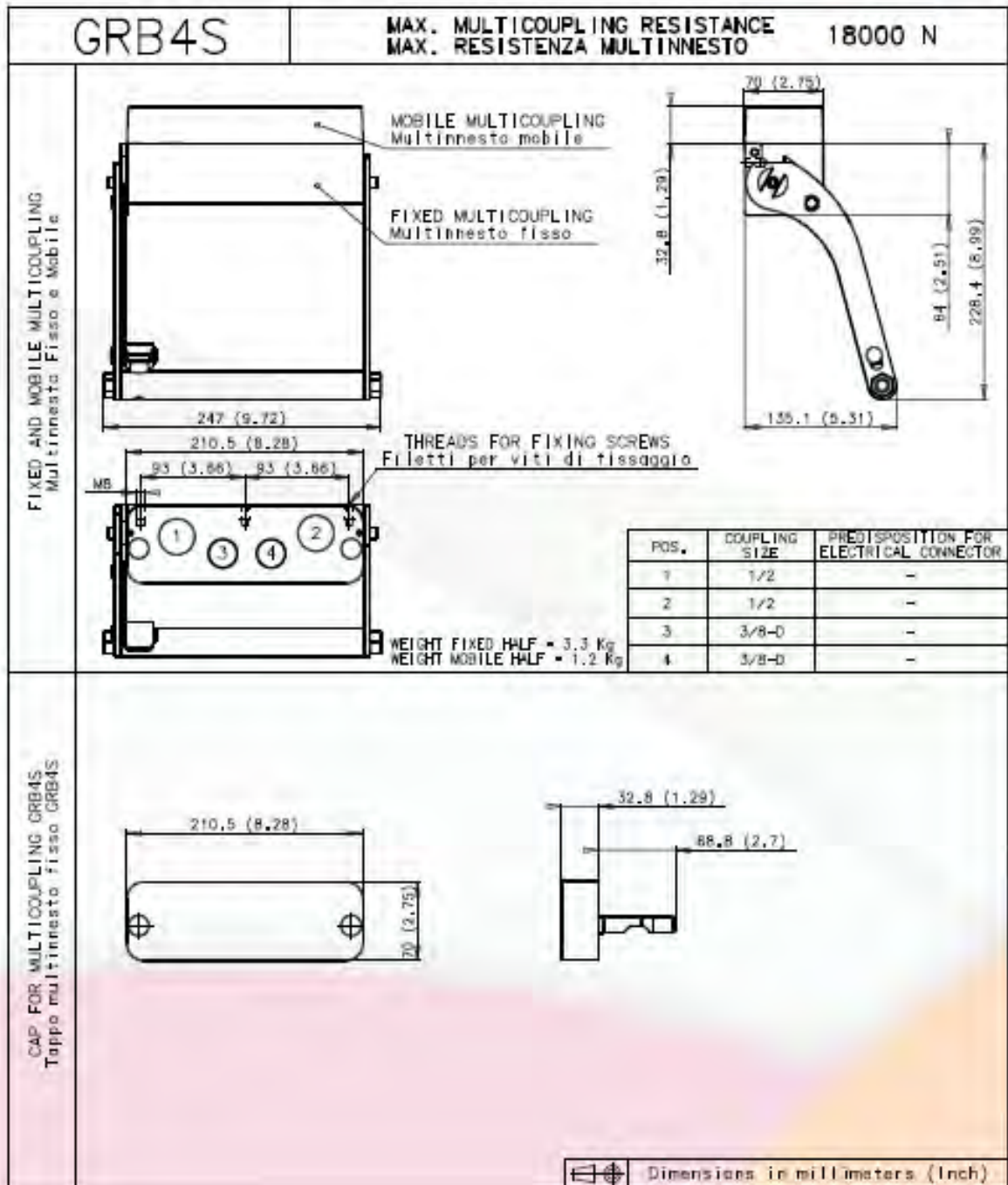
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GRB4S MULTICOUPLING

- Two lines size 1/2
- Two lines size 3/8
- On request lines predisposed for electrical connector





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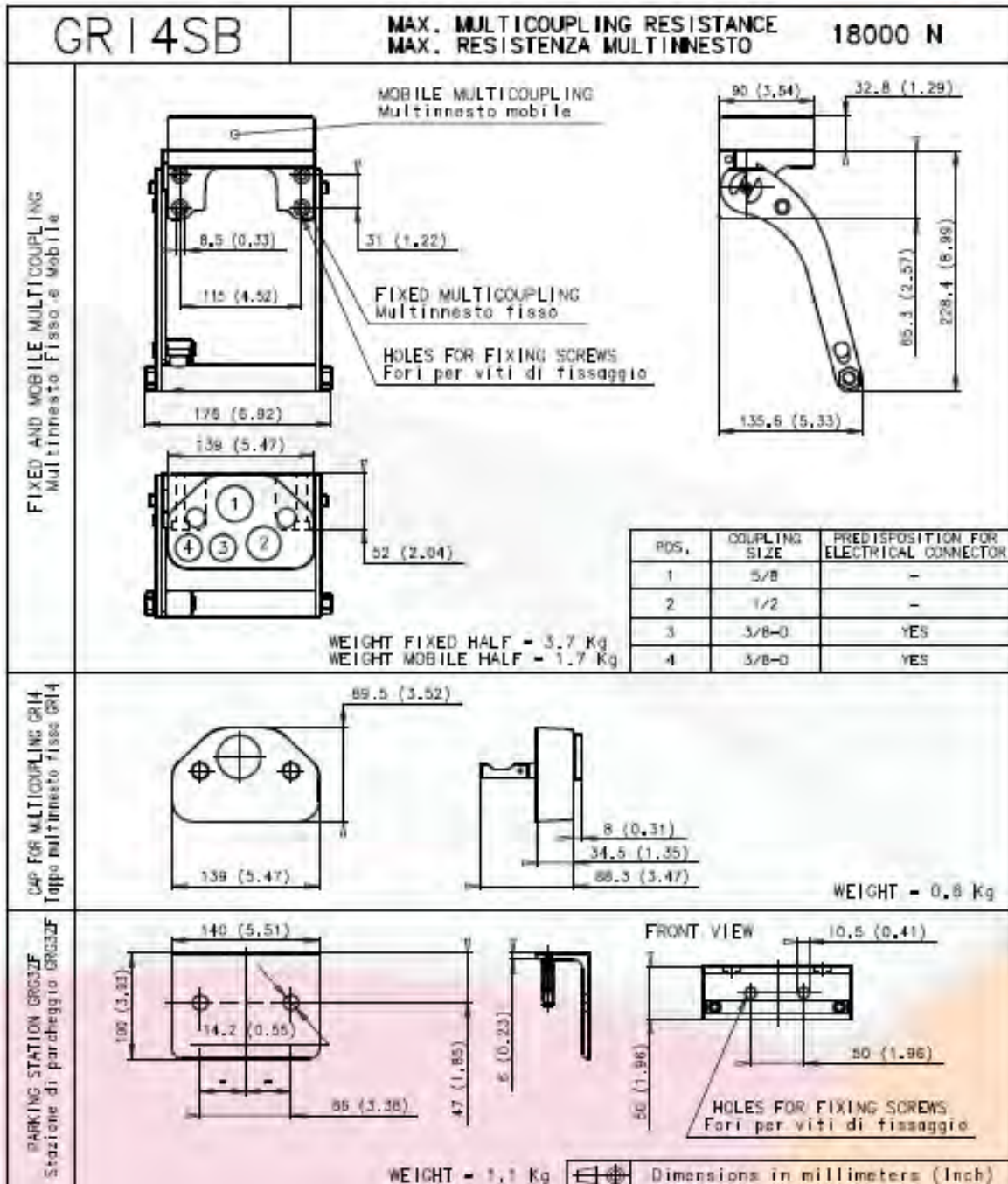
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GRI4SB MULTICOUPLING

- One line size 5/8
- One line size 1/2
- Two lines size 3/8
- Two lines predisposed for electrical connector
Female EC... Male EC...D





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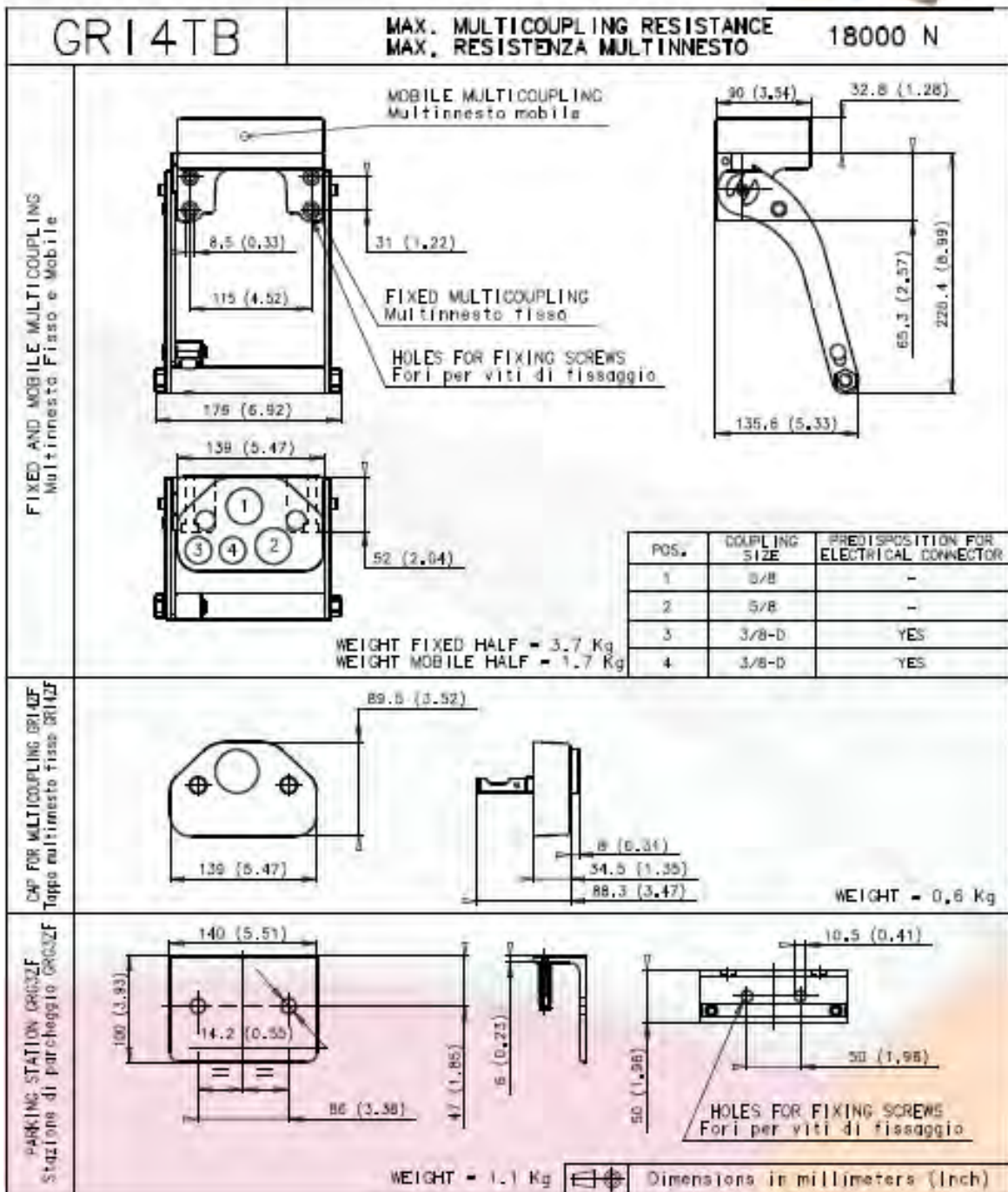
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GRI4TB MULTICOUPLING

- Two lines size 5/8
- Two lines size 3/8
- Two lines predisposed for electrical connector
Female EC..., Male EC...D





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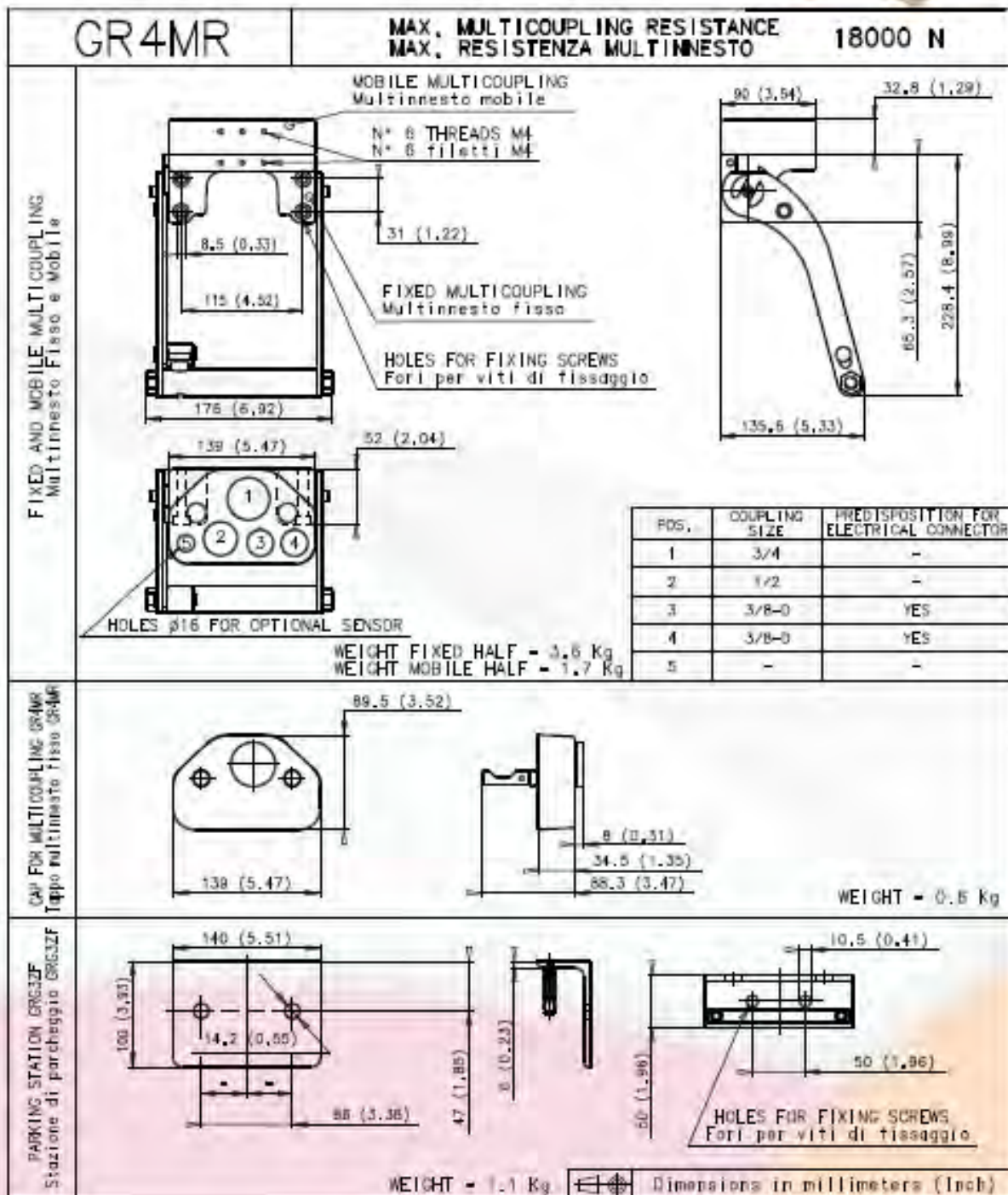
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GR4MR MULTICOUPLING

- One line size 3/4
- One line size 1/2
- Two lines size 3/8
- Two lines predisposed for electrical connector
Female EC... Male EC...D
- One hole for optional sensor





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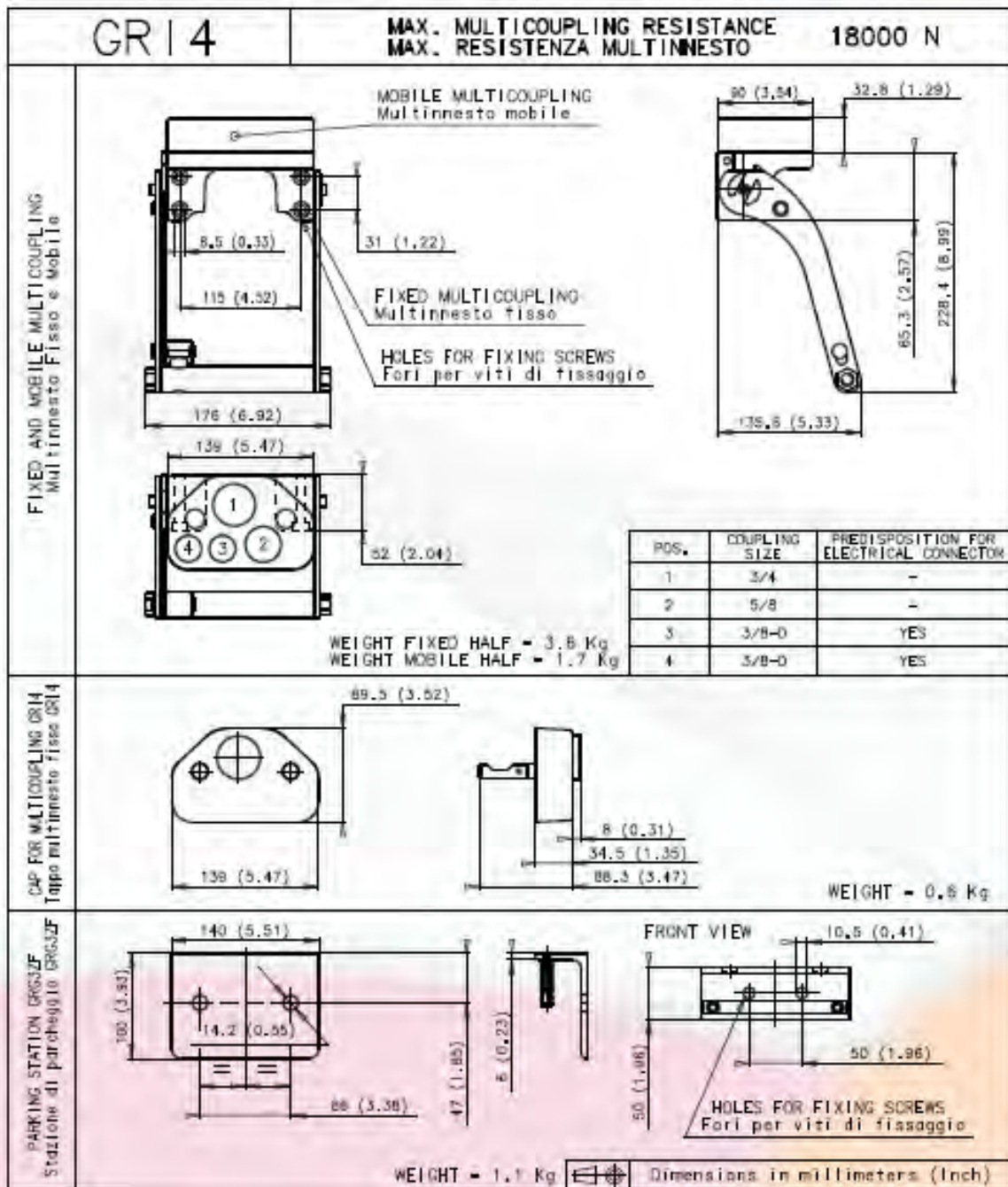
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GR14 MULTICOUPLING

- One line size 3/4
- One line size 5/8
- Two lines size 3/8
- Two lines predisposed for electrical connector
Female EC... Male EC...D





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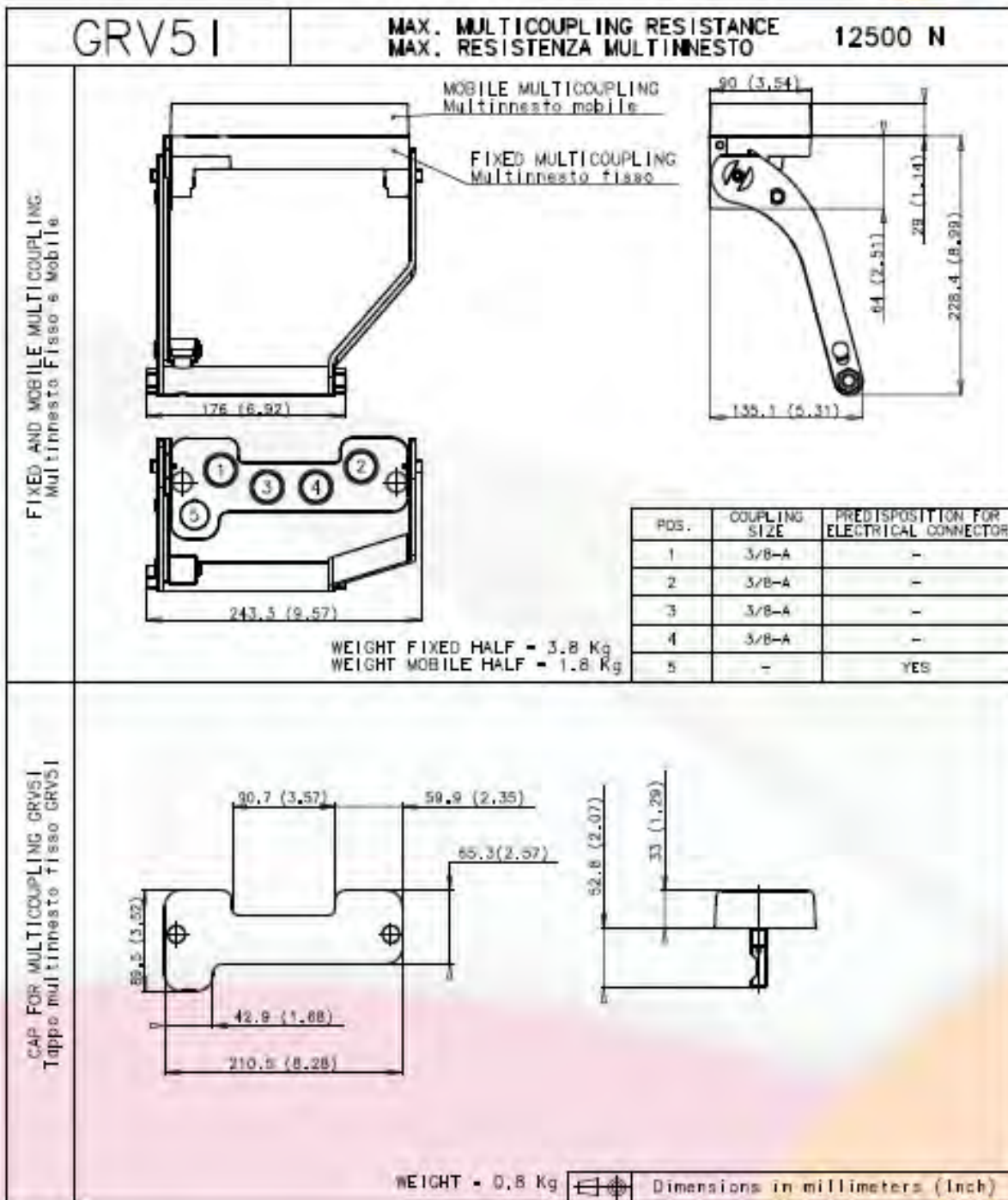
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GRV51 MULTICOUPLING

- To assemble directly on distributor valve
Walvoil SDM143/DUM142, Nimco CV452
- Five lines size 3/8
- One line predisposed for electrical connector
Female EC..., Male EC...





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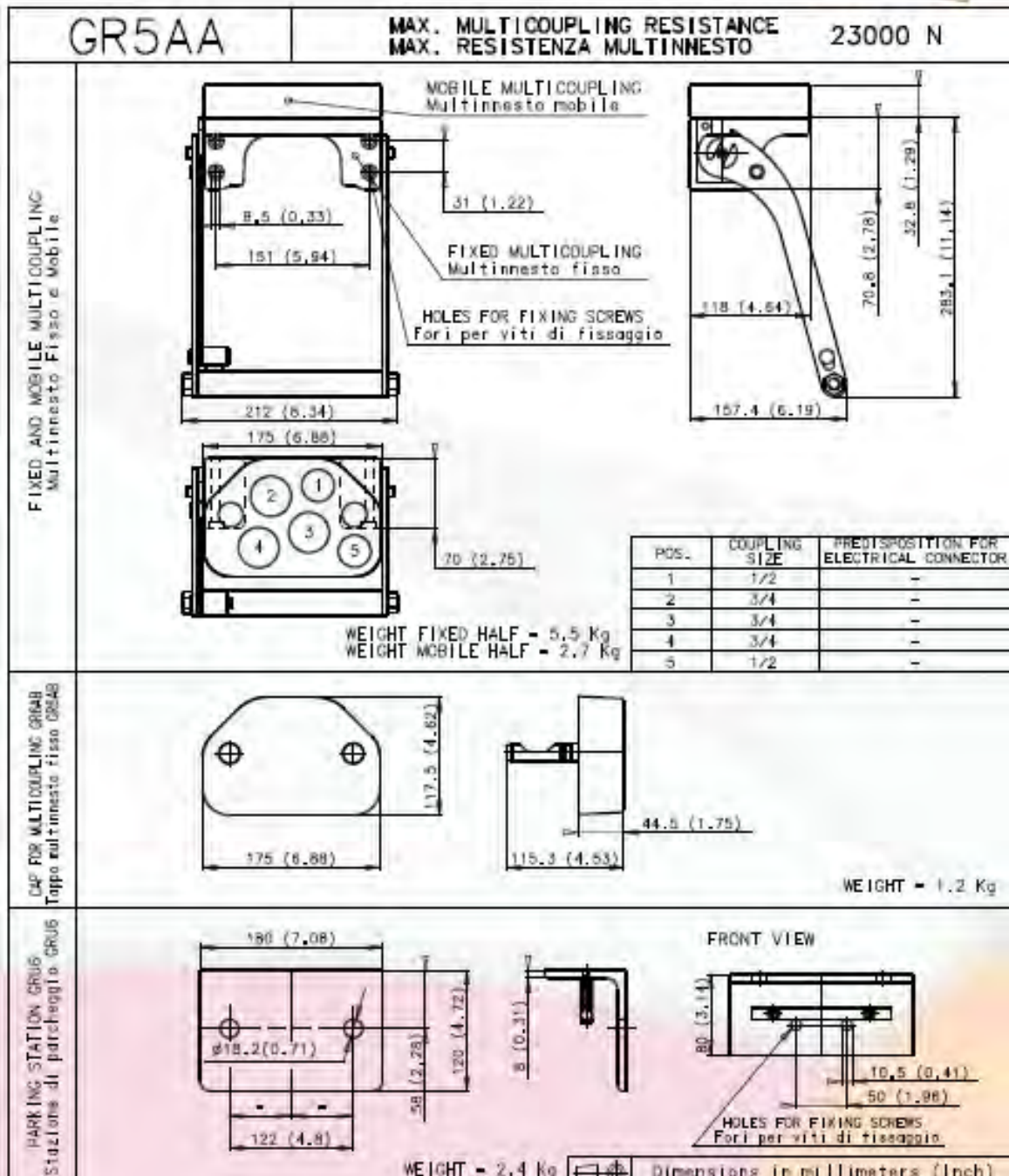
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GR5AA MULTICOUPLING

- Threelines size 3/4
- Two lines size 1/2
- On request lines predisposed for electrical connector





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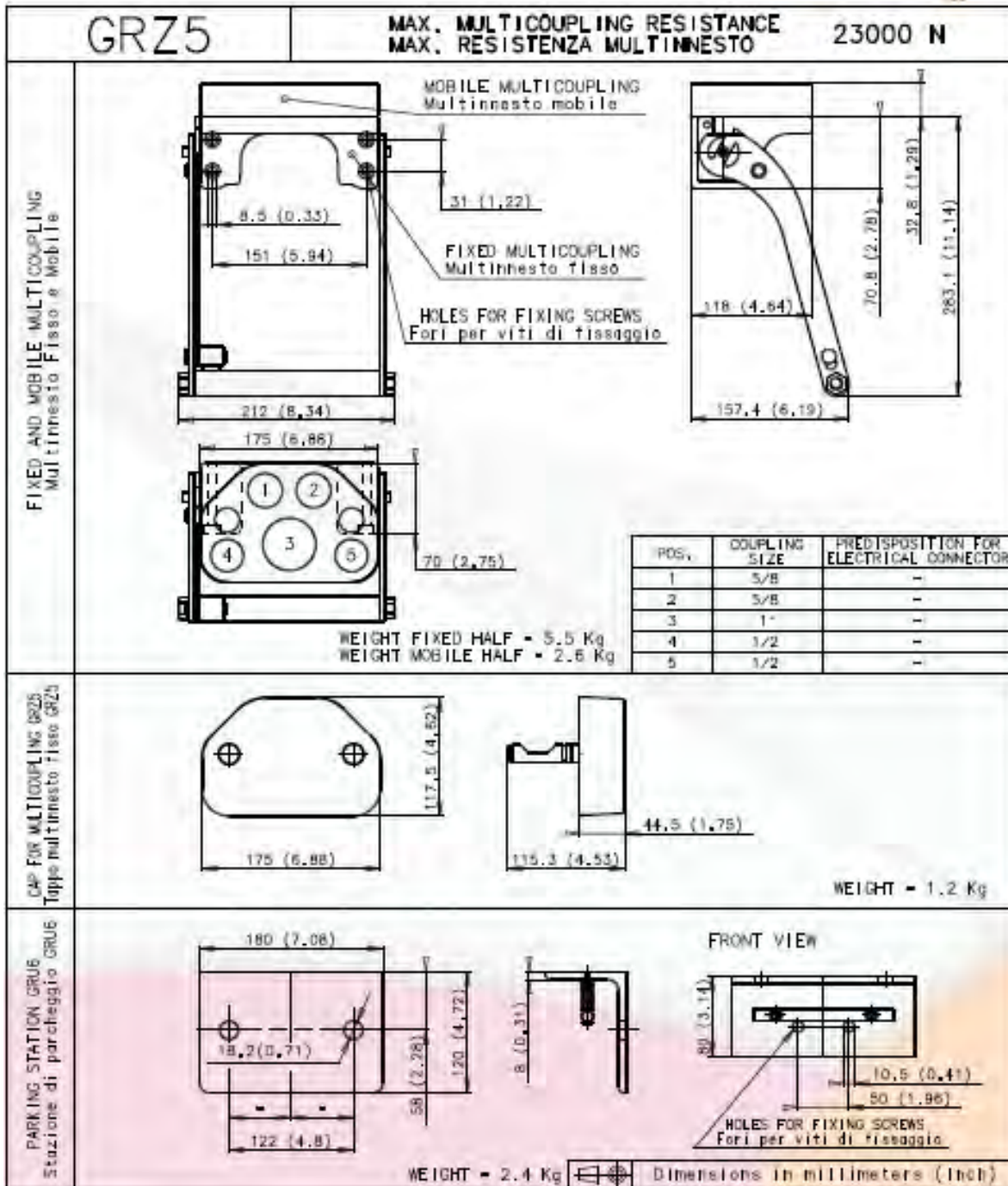
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GRZ5 MULTICOUPLING

- One line size 1
- Two lines size 5/8
- Two lines size 1/2
- On request lines predisposed for electrical connector





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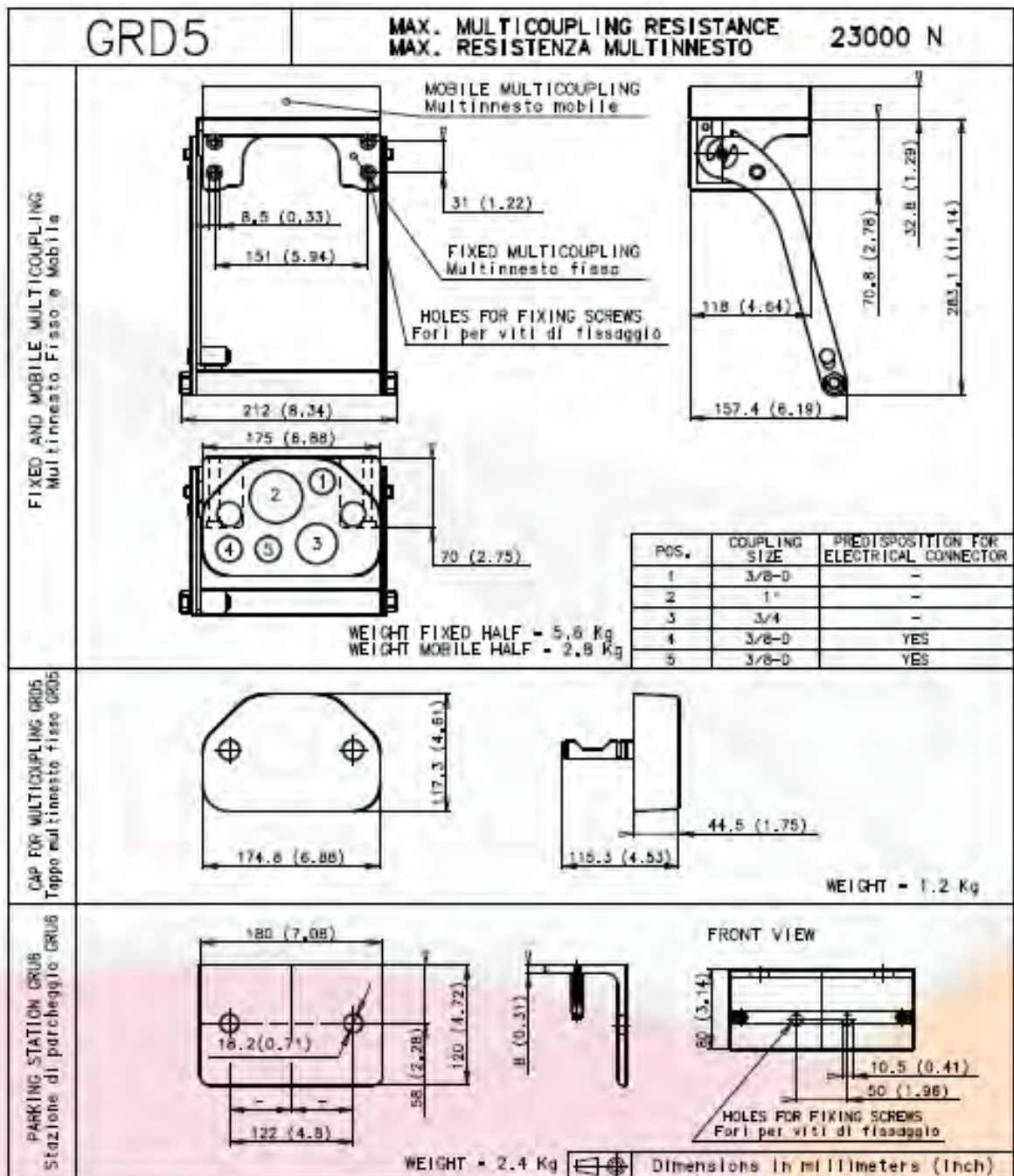
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GRD5 MULTICOUPLING

- One line size 1
- One line size 3/4
- Three lines size 3/8
- Two lines predisposed for electrical connector
Female EC., Male EC..D





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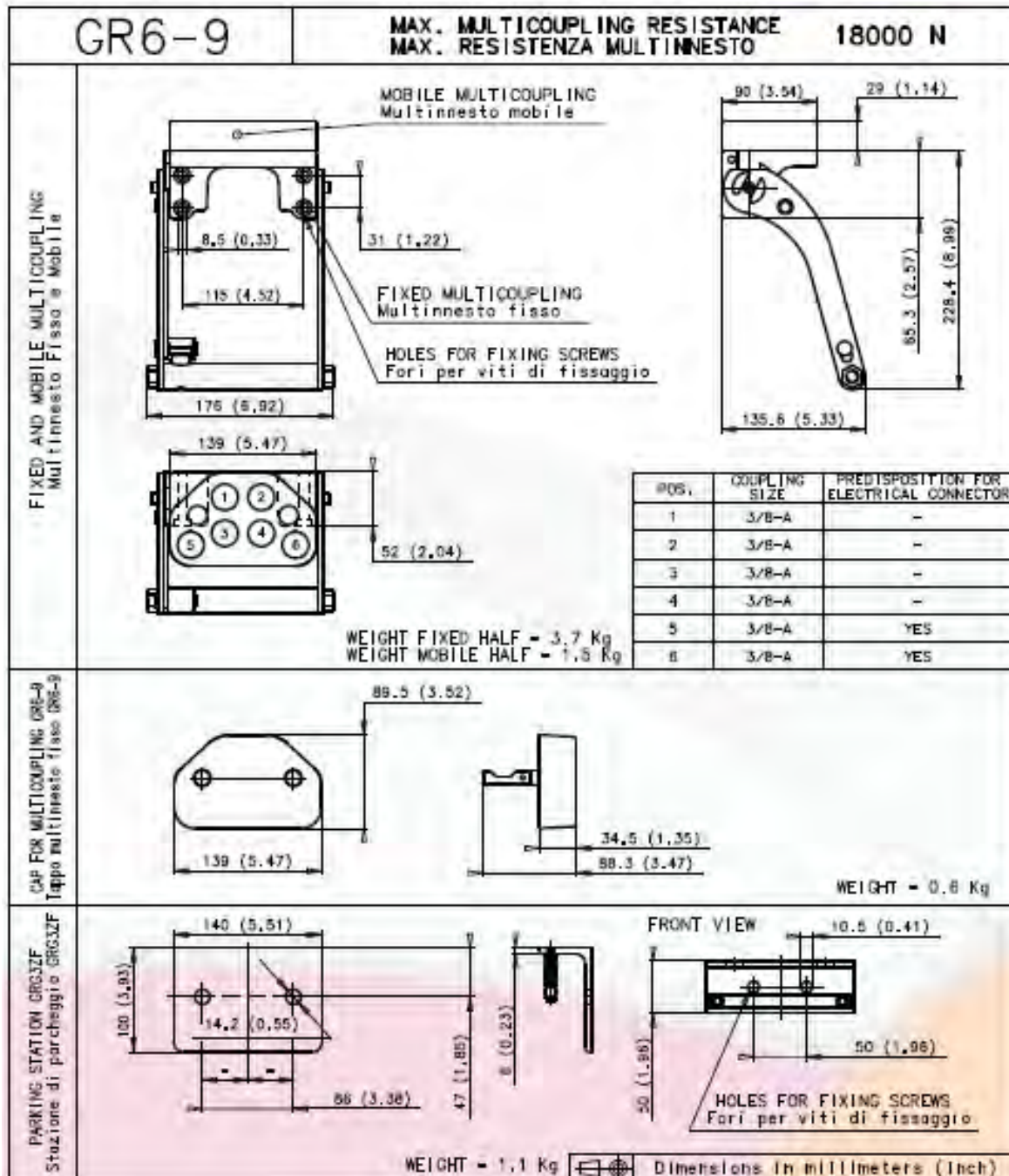
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GR6-9 MULTICOUPLING

- Six lines size 3/8
- Two lines predisposed for electrical connector
Female EC., Male EC..
- On request others lines predisposed for electrical connector





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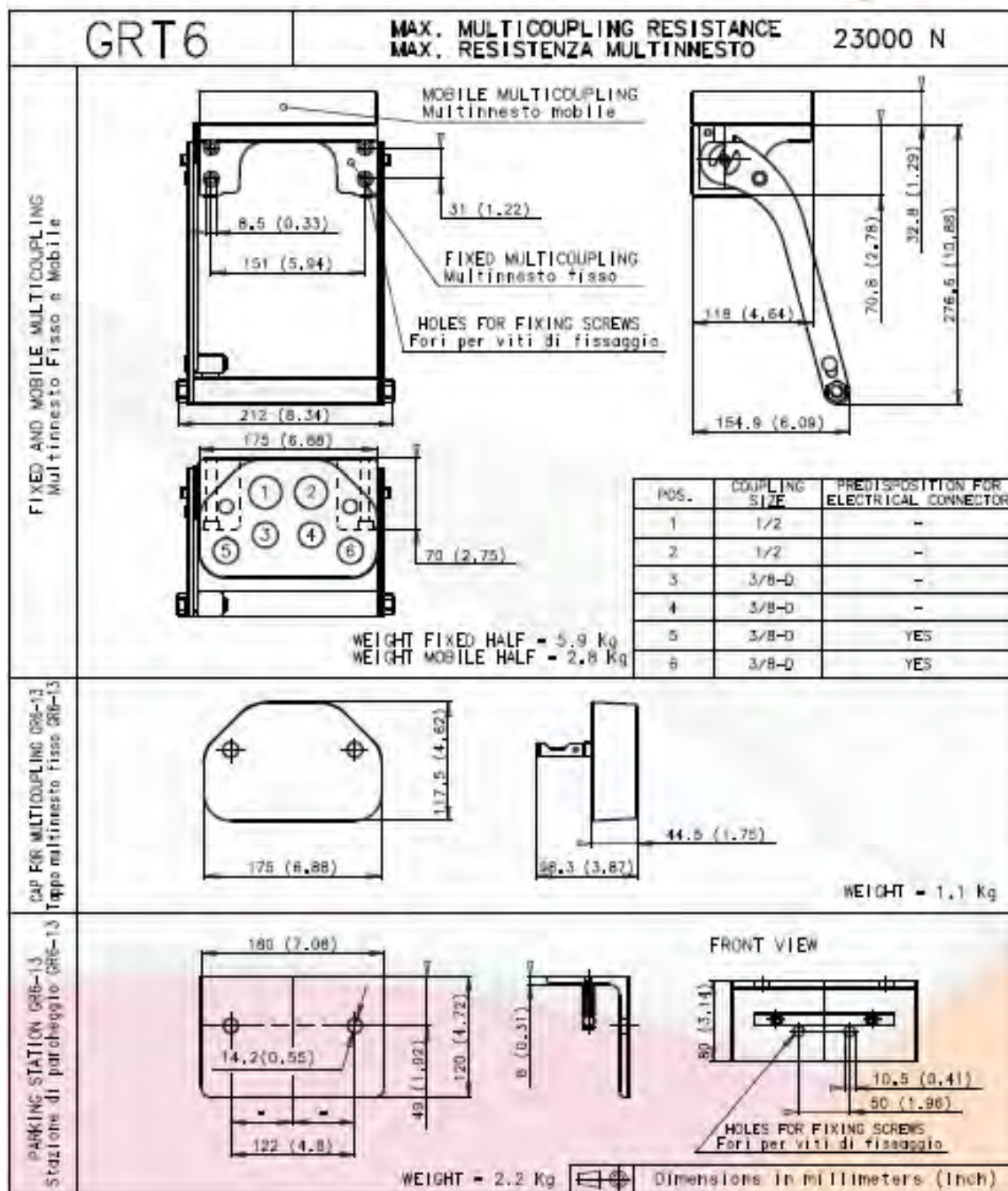
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GRT6 MULTICOUPLING

- Two lines size 1/2
- Four lines size 3/8
- Two lines predisposed for electrical connector
Female EC., Male EC., D
- On request others lines predisposed for electrical connector





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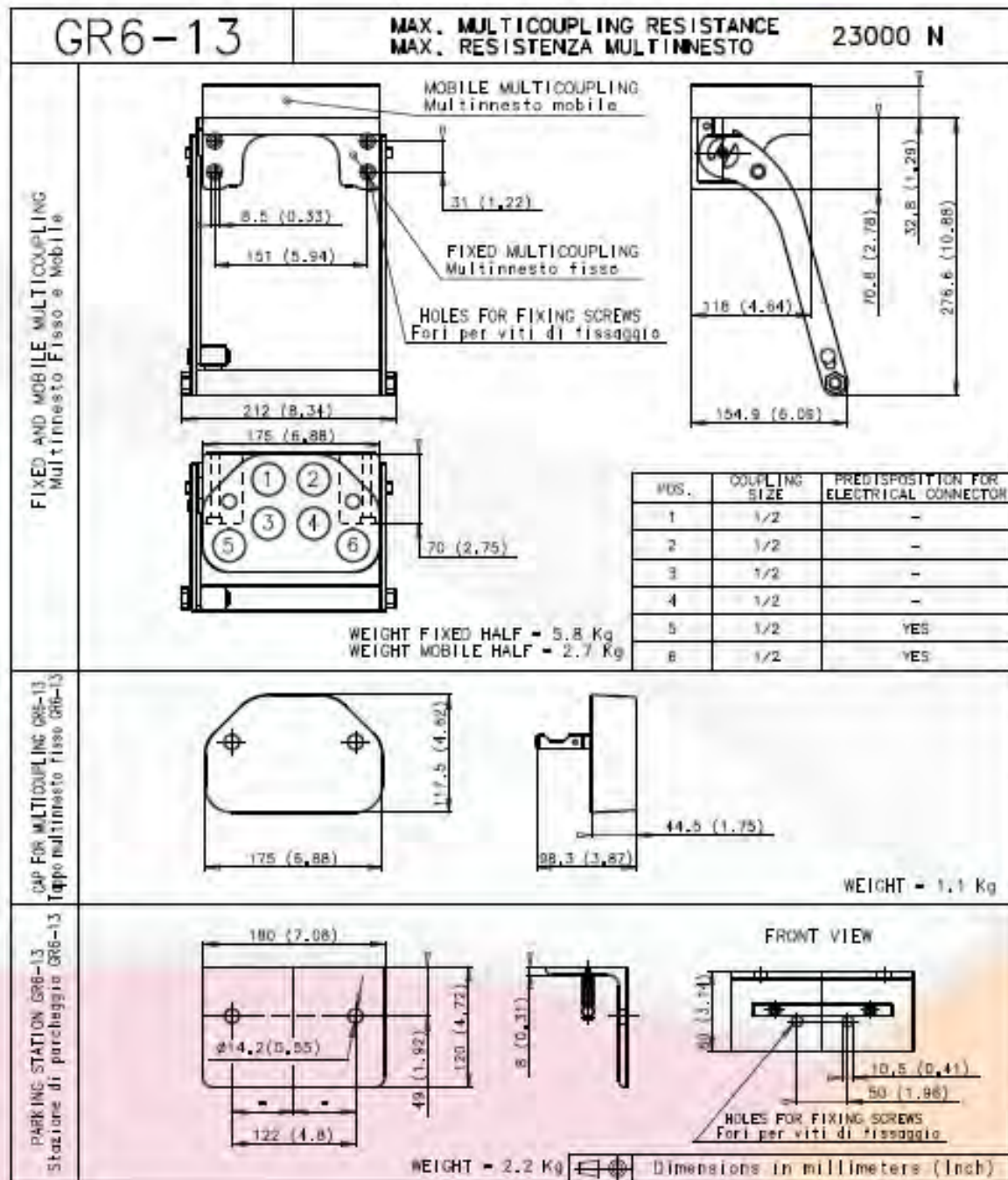
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GR6-13 MULTICOUPLING

- Six lines size 1/2
- Two lines predisposed for electrical connector
Female EC...-13, Male EC...-13
- On request others lines predisposed for electrical connector





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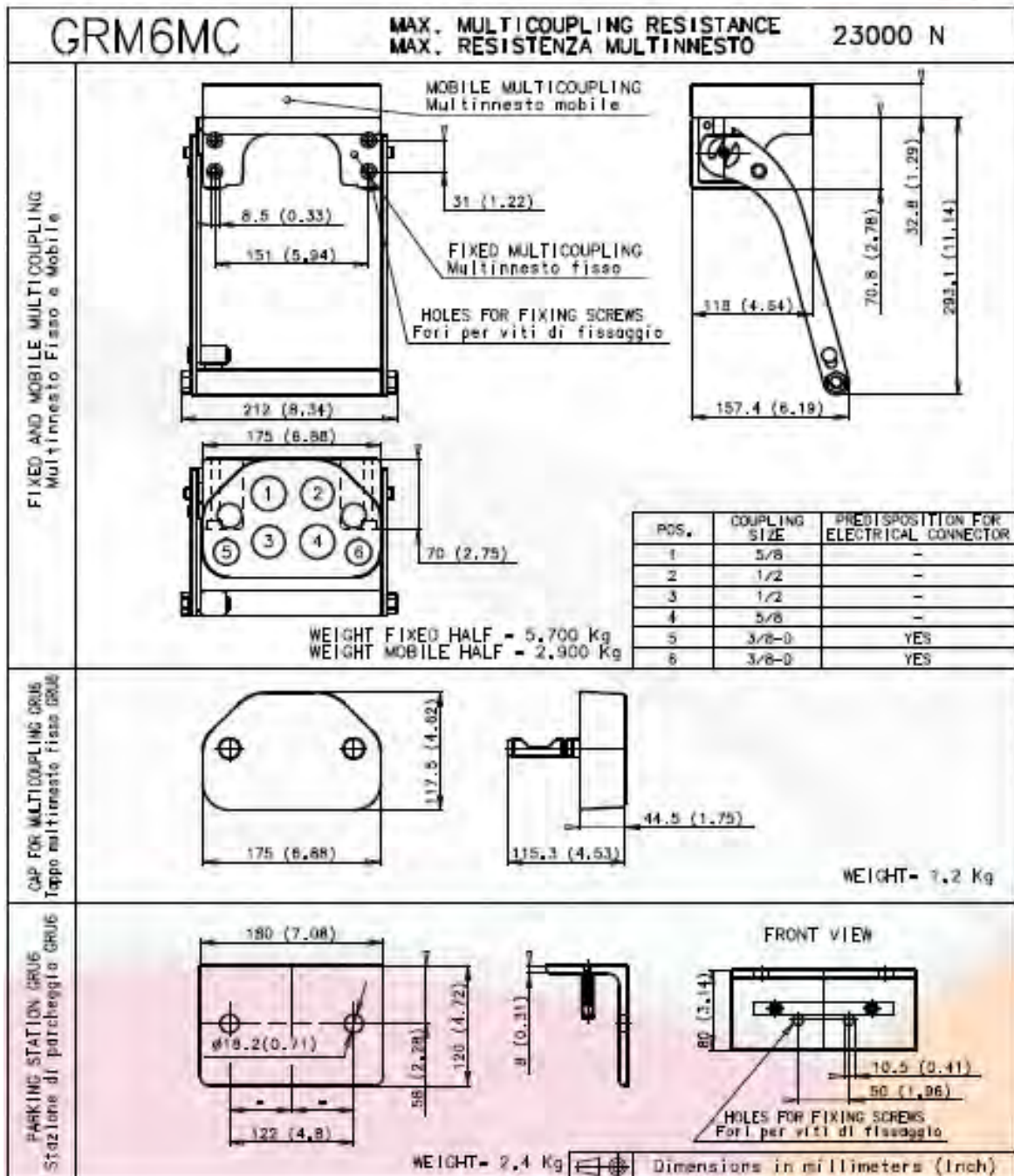
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GRM6MC MULTICOUPLING

- Two lines size 5/8
- Two lines size 1/2
- Two lines size 3/8
- Two lines predisposed for electrical connector
Female EC... Male EC...D
- On request others lines predisposed for electrical connector





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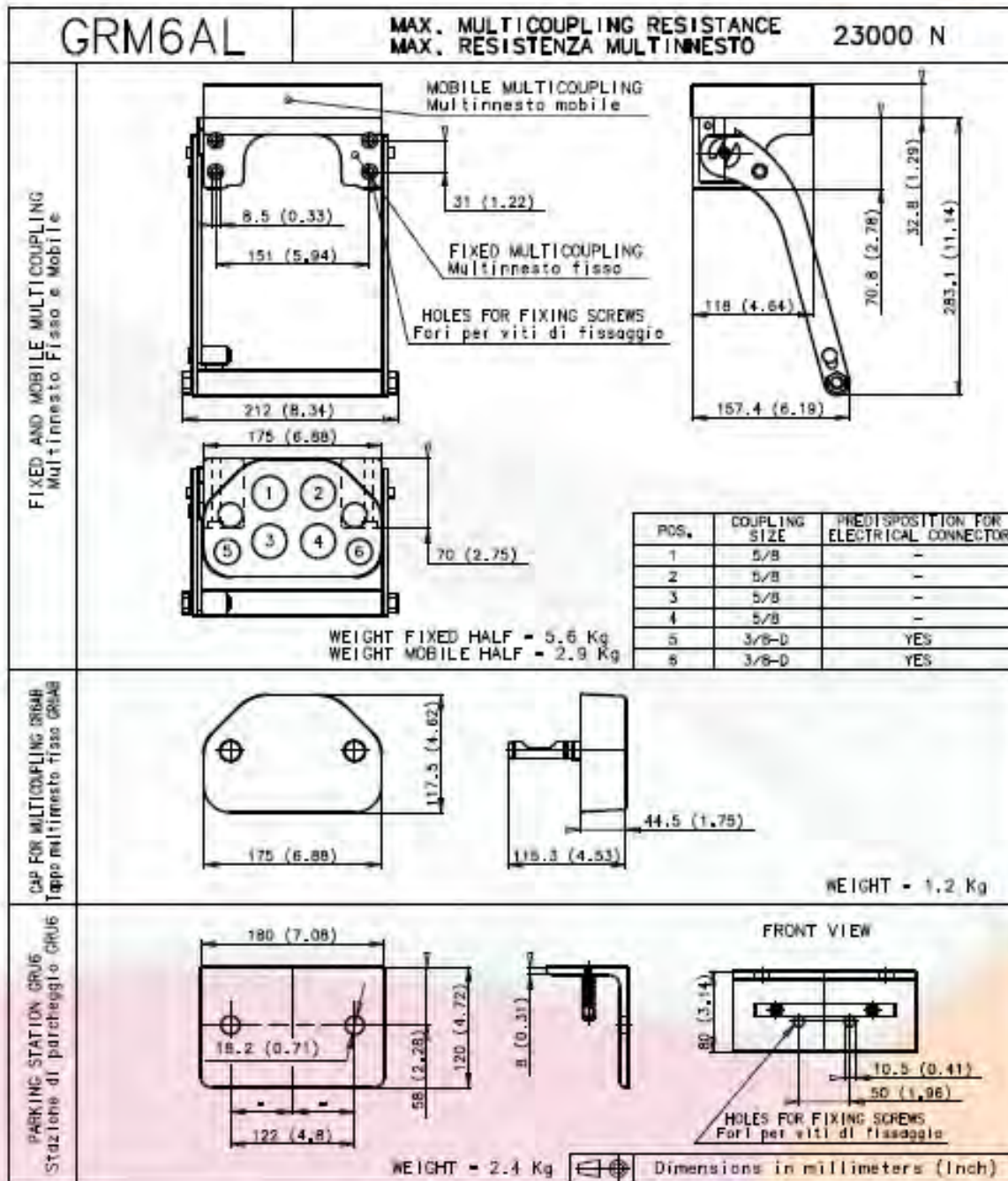
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GRM6AL MULTICOUPLING

- Fourlines size 5/8
- Two lines size 3/8
- Two lines predisposed for electrical connector
Female EC., Male EC..D





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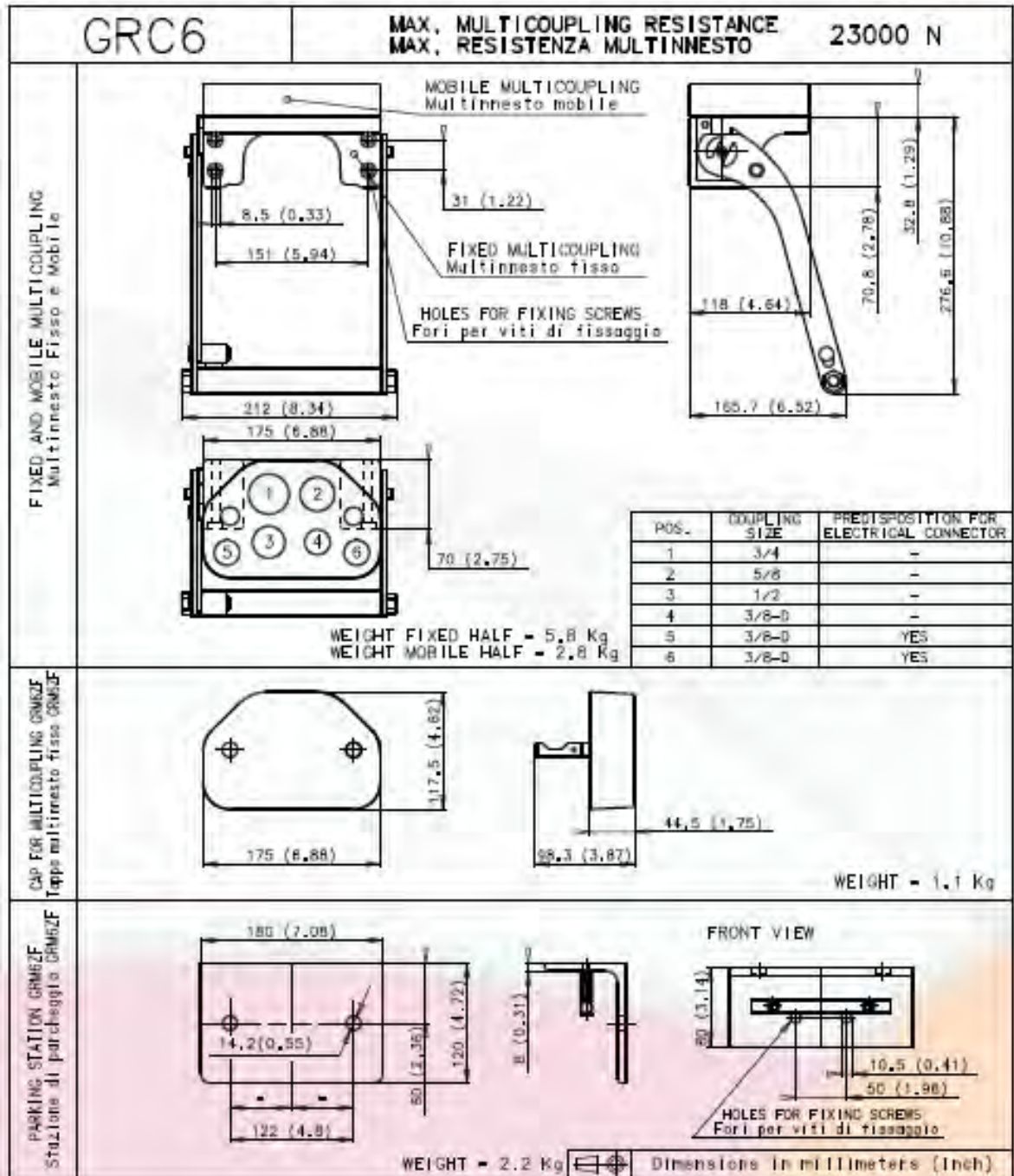
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GRC6 MULTICOUPLING

- One line size 3/4
- One line size 5/8
- One line size 1/2
- Three lines size 3/8
- Two lines predisposed for electrical connector
Female EC... Male EC...D
- On request others lines predisposed for electrical connector





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HYDRAULIEK MULTIKOPPELINGEN

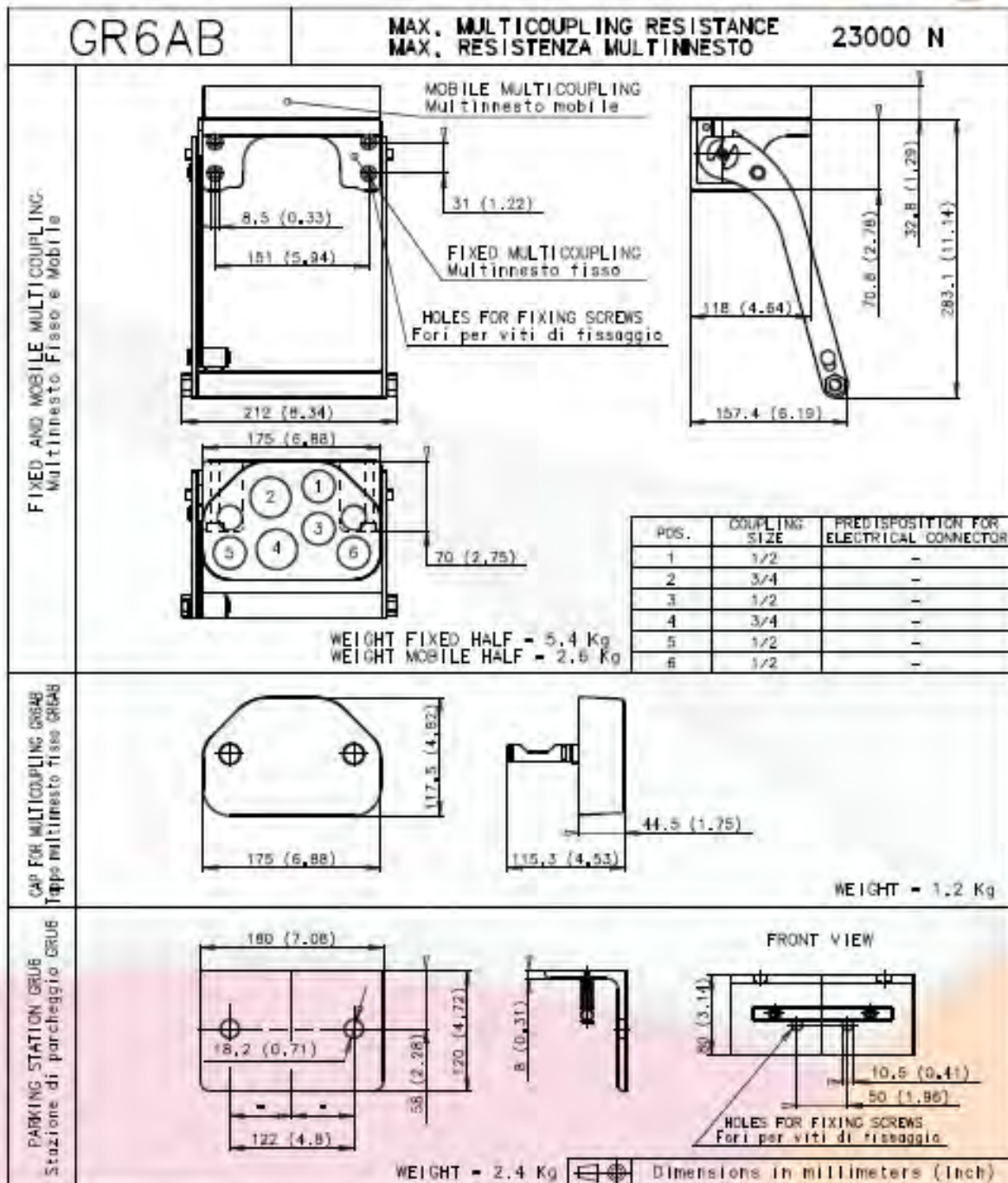
5

GR

GR6AB MULTICOUPLING

Two lines size 3/4

- Four lines size 1/2
- On request lines predisposed for electrical connector

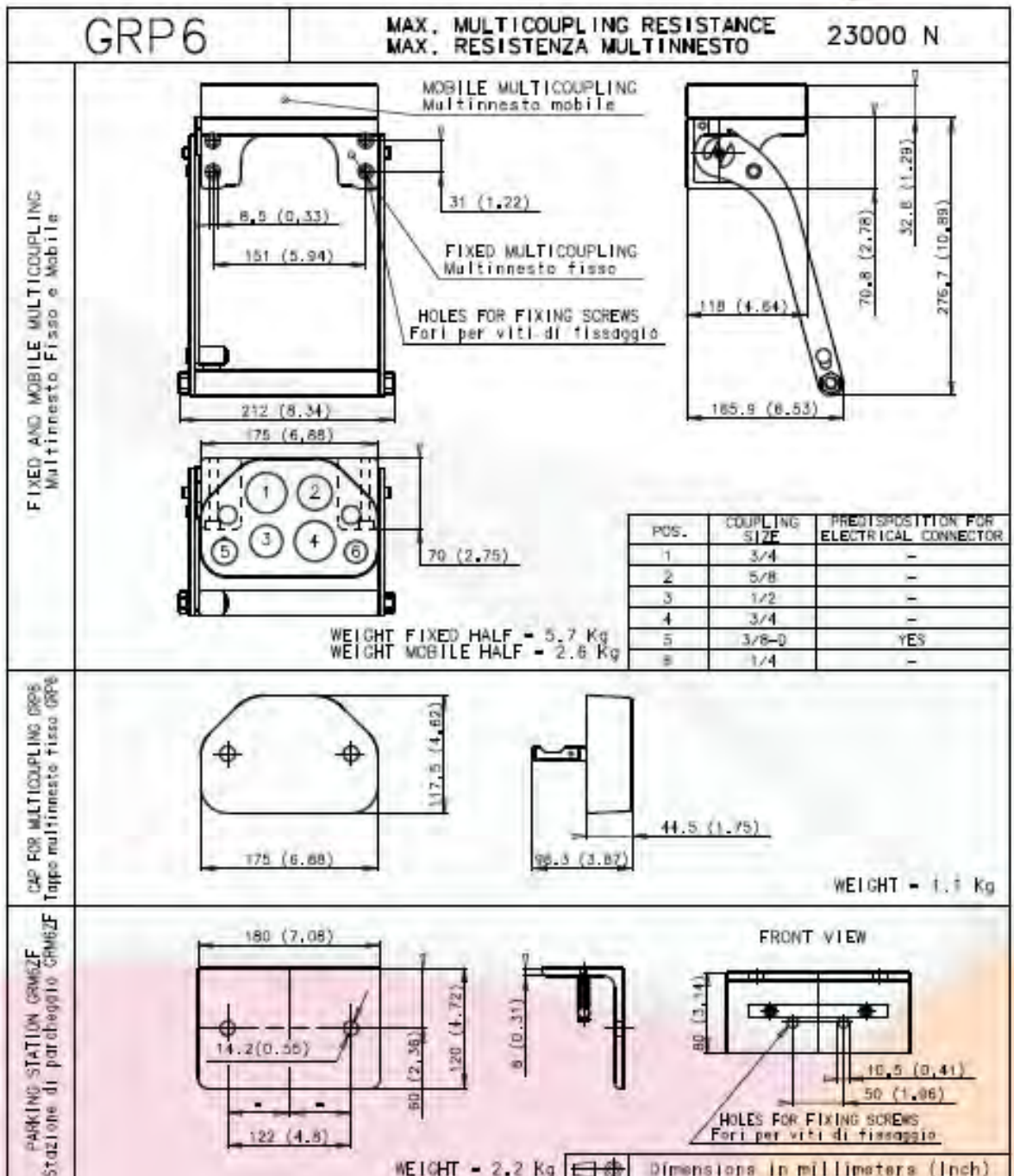




GR

GRP6 MULTICOUPLING

- Two lines size 3/4
- One line size 5/8
- One line size 1/2
- One line size 3/8
- One line size 1/4
- One line predisposed for electrical connector
Female EC... Male EC...D





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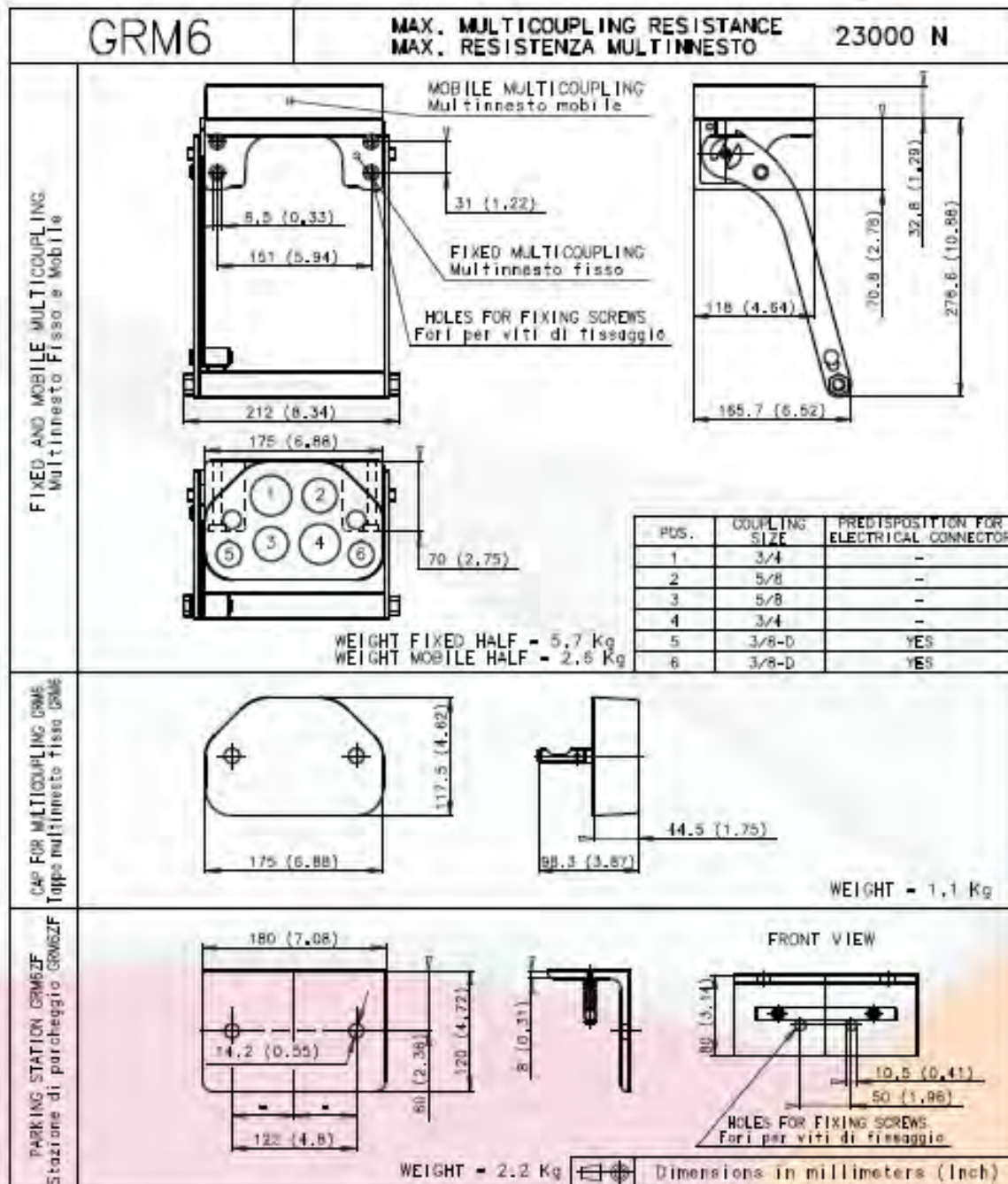
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GRM6 MULTICOUPLING

- Two lines size 3/4
- Two lines size 5/8
- Two lines size 3/8
- Two lines predisposed for electrical connector
Female EC..., Male EC...D





Stucchi®

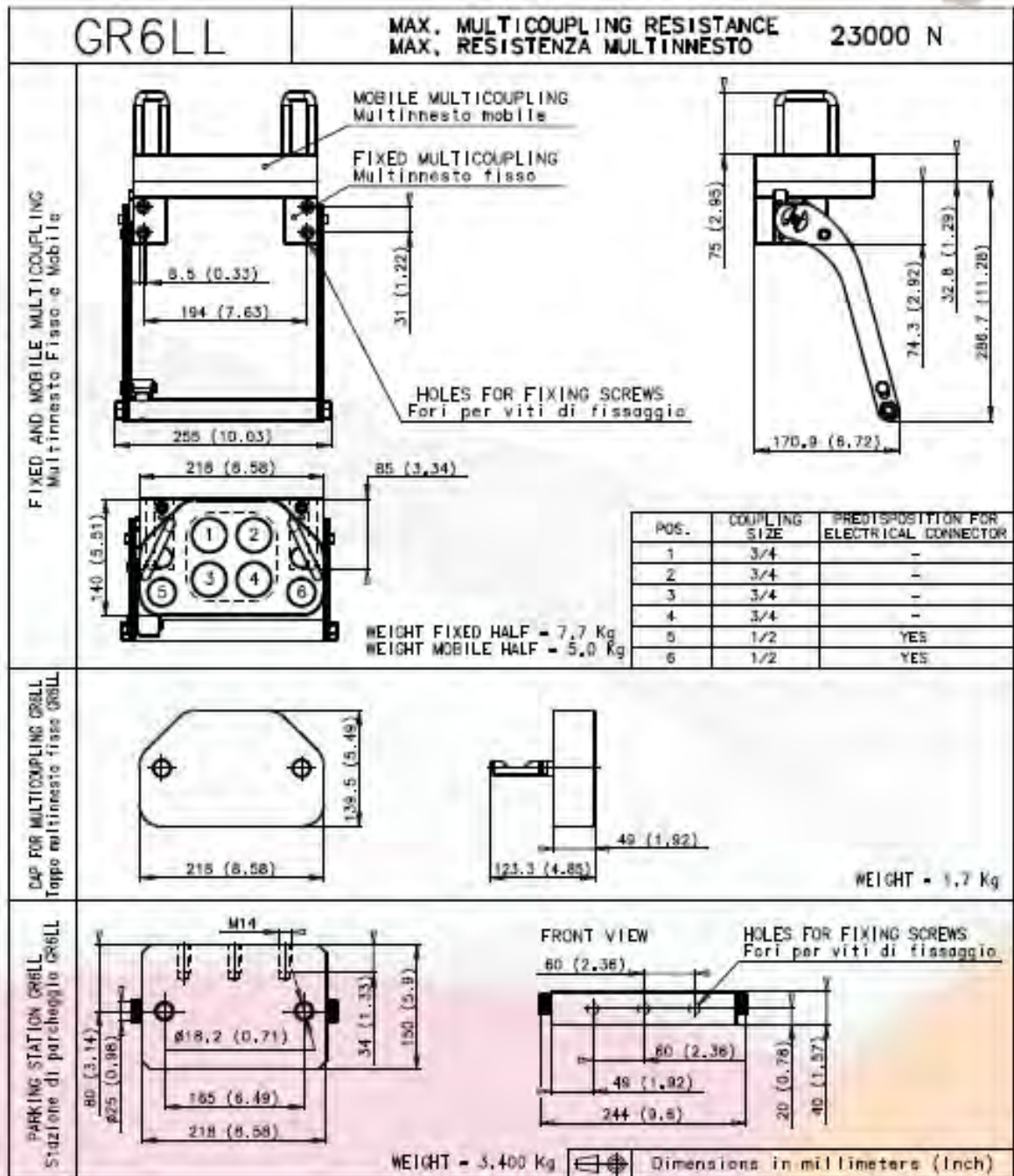
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GR6LL MULTICOUPLING

- Fourlines size 3/4
- Two lines size 1/2
- Two lines predisposed for electrical connector
Female EC...-13, Male EC...-13

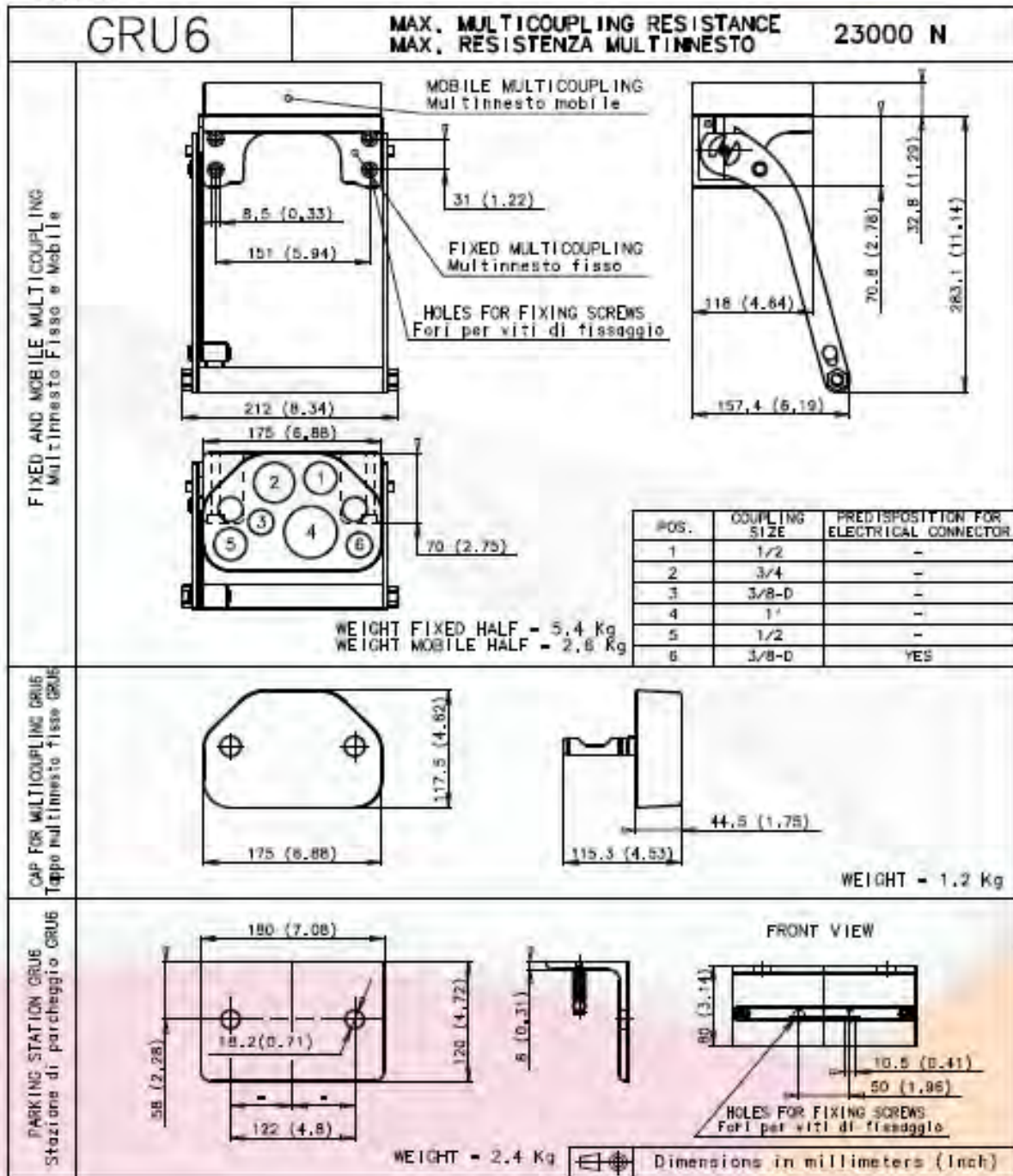




GR

GRU 6 MULTICOUPLING

- One line size 1
- One line size 3/4
- Two lines size 1/2
- Two lines size 3/8
- One line predisposed for electrical connector
Female EC... Male EC...D
- On request others lines predisposed for electrical connector





Stucchi®

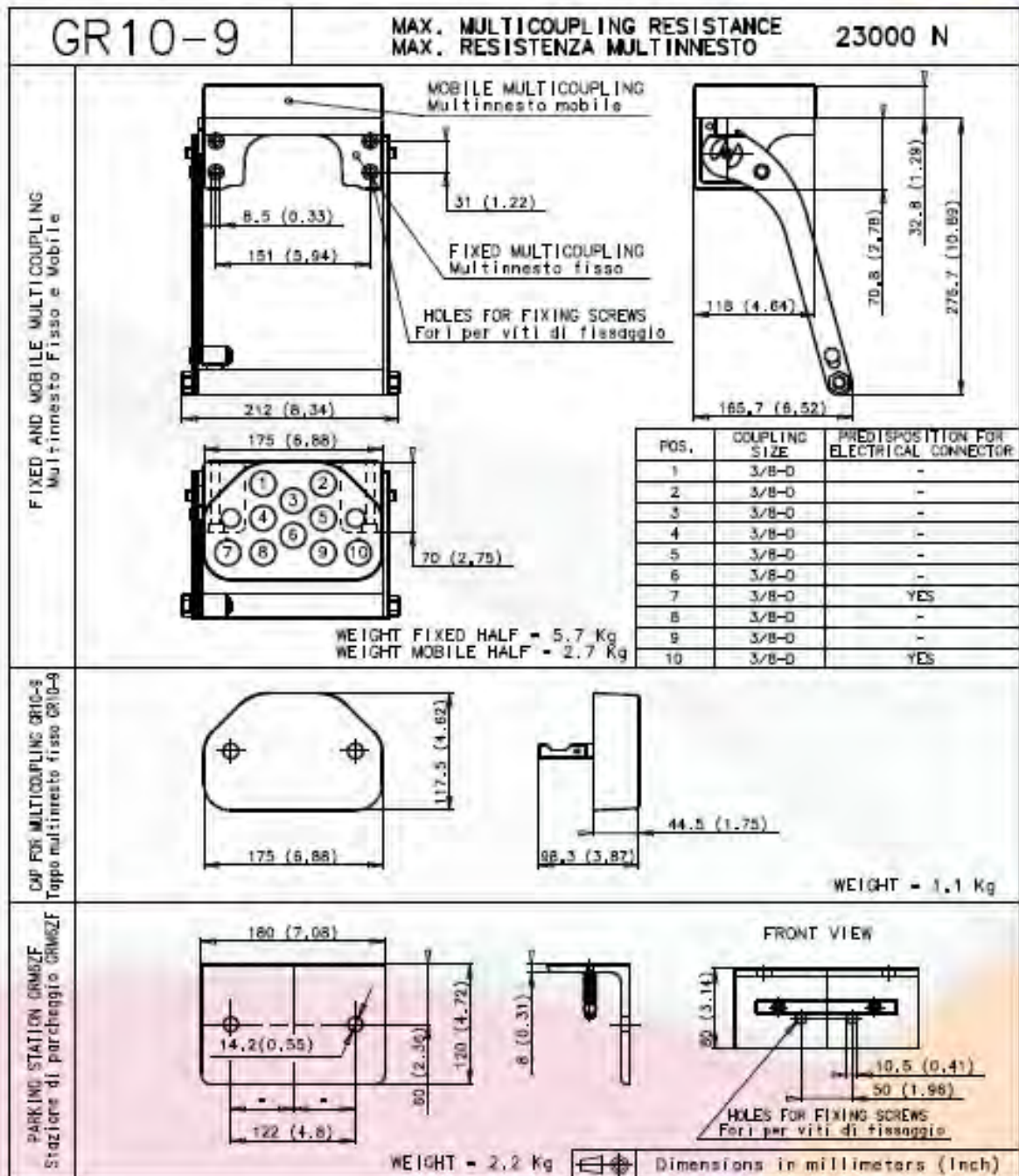
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GR10-9 MULTICOUPLING

- Ten lines size 3/8
- Two lines predisposed for electrical connector Female EC., Male EC..D
- On request others lines predisposed for electrical connector





Stucchi®

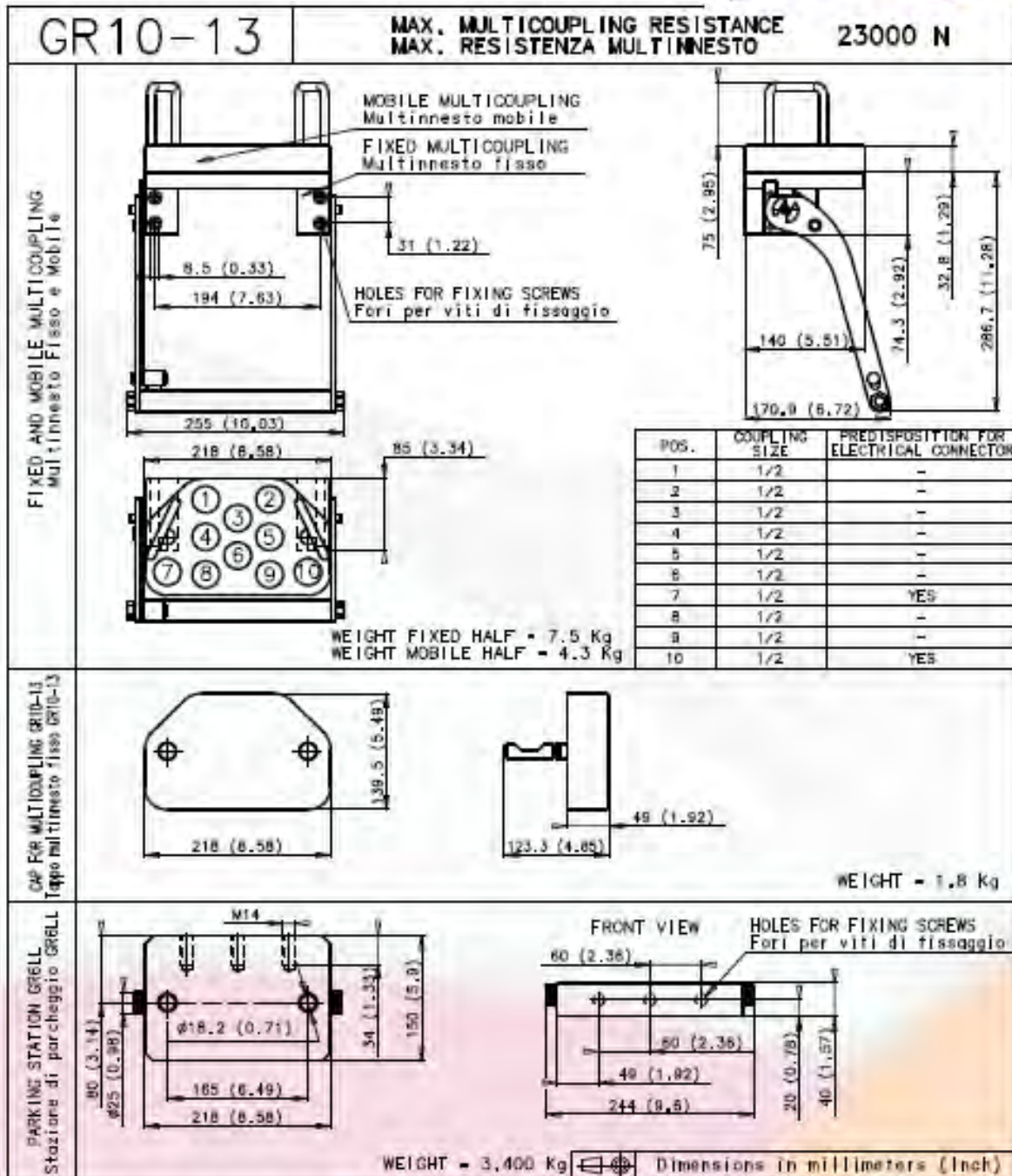
HYDRAULIEK MULTIKOPPELINGEN

5

GR

GR10-13 MULTICOUPLING

- Ten lines size 1/2
- Two lines predisposed for electrical connector
Female EC...-13, Male EC...-13
- On request others lines predisposed for electrical connector

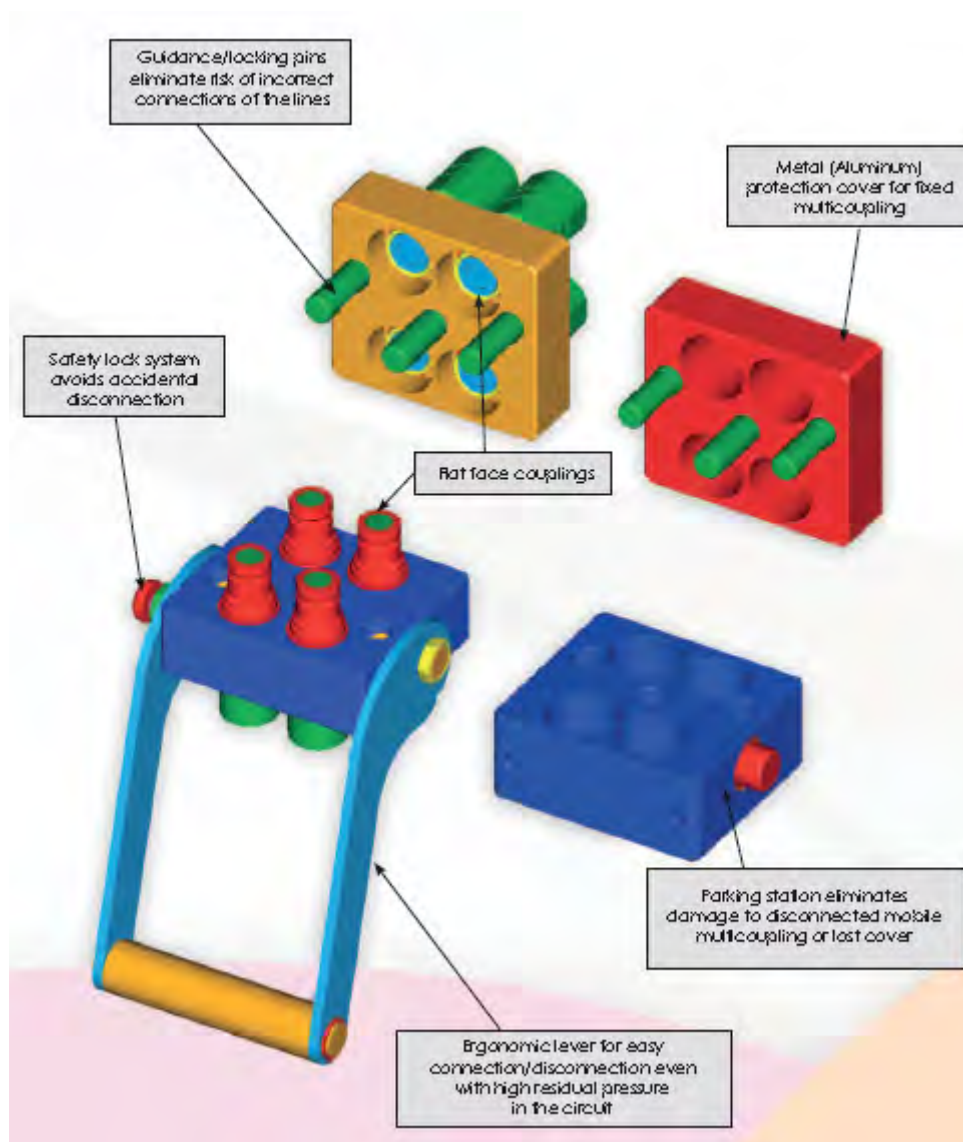


DP

“DP” is de compacte multi-koppeling die de oplossing biedt voor toepassing in kleine ruimtes, waar hydraulische, elektrische en lucht aansluitingen gerealiseerd moeten worden.

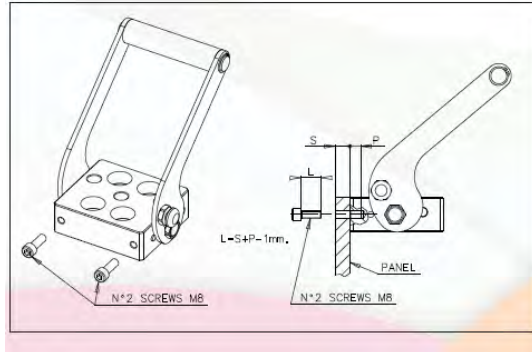
Tot en met vier lijnen (maat ½” BSP) kunnen gelijktijdig en veilig gekoppeld worden. Simpel en met weinig kracht. De koppelingen kunnen allemaal van hetzelfde type zijn, maar ook verschillend afhankelijk van de toepassing.

Uitwisselbaar: Interne specificaties Stucchi.





DP



PERFORMANCE

All the Stucchi multicoplings have been tested at their maximum resistance by impulse pressure test. The maximum resistance (N) for each multicoupling model, is indicated in the data sheets below.

The force applied to multicoupling coupled, depends on the number of couplings under pressure at the same time, on their operating pressure and on their size.

For a correct use of the multicoupling is necessary to verify that the force is not greater to the maximum resistance of the multicoupling.

$$F = [(P3/8 \times S3/8) + (P1/2 \times S1/2)] \times 9.8$$

F Force applied to multicoupling (N)

P Total amount of operating pressure coupled in the couplings with same size (bar)

S Hydrostatic pushing area coupled (cm²)

The operating pressure for a single coupling must not be greater to the maximum operating pressure coupled indicated in table.

Coupling size	Hydrostatic pushing area coupled	Maximum operating pressure coupled for FA P couplings
3/8	S3/8 = 1,226 cm ²	35 MPa (350 bar)
1/2	S1/2 = 1,893 cm ²	33 MPa (330 bar)

EXAMPLE:

Max. resistance of DPT2 multicoupling is 10000 N.

To verify if DPT2 multicoupling resists to operating condition of following application:

Oneline size 3/8 with max. operating pressure coupled of 30 MPa (300 bar)

Oneline size 1/2 with max. operating pressure coupled of 20 MPa (200 bar)

It is necessary verify that F (force applied to multicoupling) is not greater than max. multicoupling resistance:

P3/8 = 300 bar

P1/2 = 200 bar

$$F = [(P3/8 \times S3/8) + (P1/2 \times S1/2)] \times 9.8$$

$$F = [(300 \times 1,226) + (200 \times 1,893)] \times 9.8$$

$$F = [367,8 + 378,4] \times 9.8 = 7314 \text{ N}$$

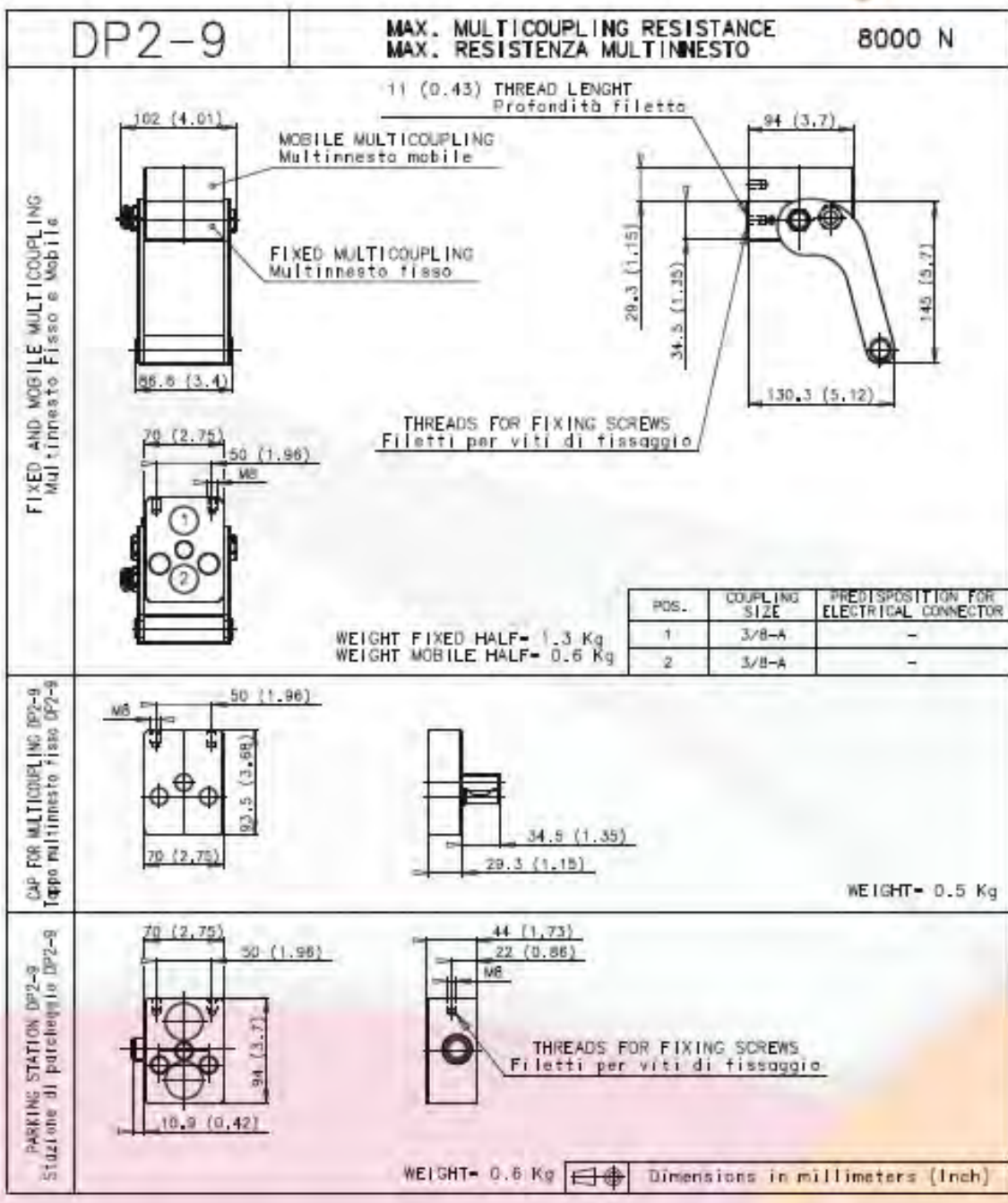
Being F (7314 N) lower than max. multicoupling resistance (10000 N), the DPT2 multicoupling is suitable for this application.



DP

DP2-9 MULTICOUPLING

- Two lines size 3/8
- On request one line predisposed for electrical connector





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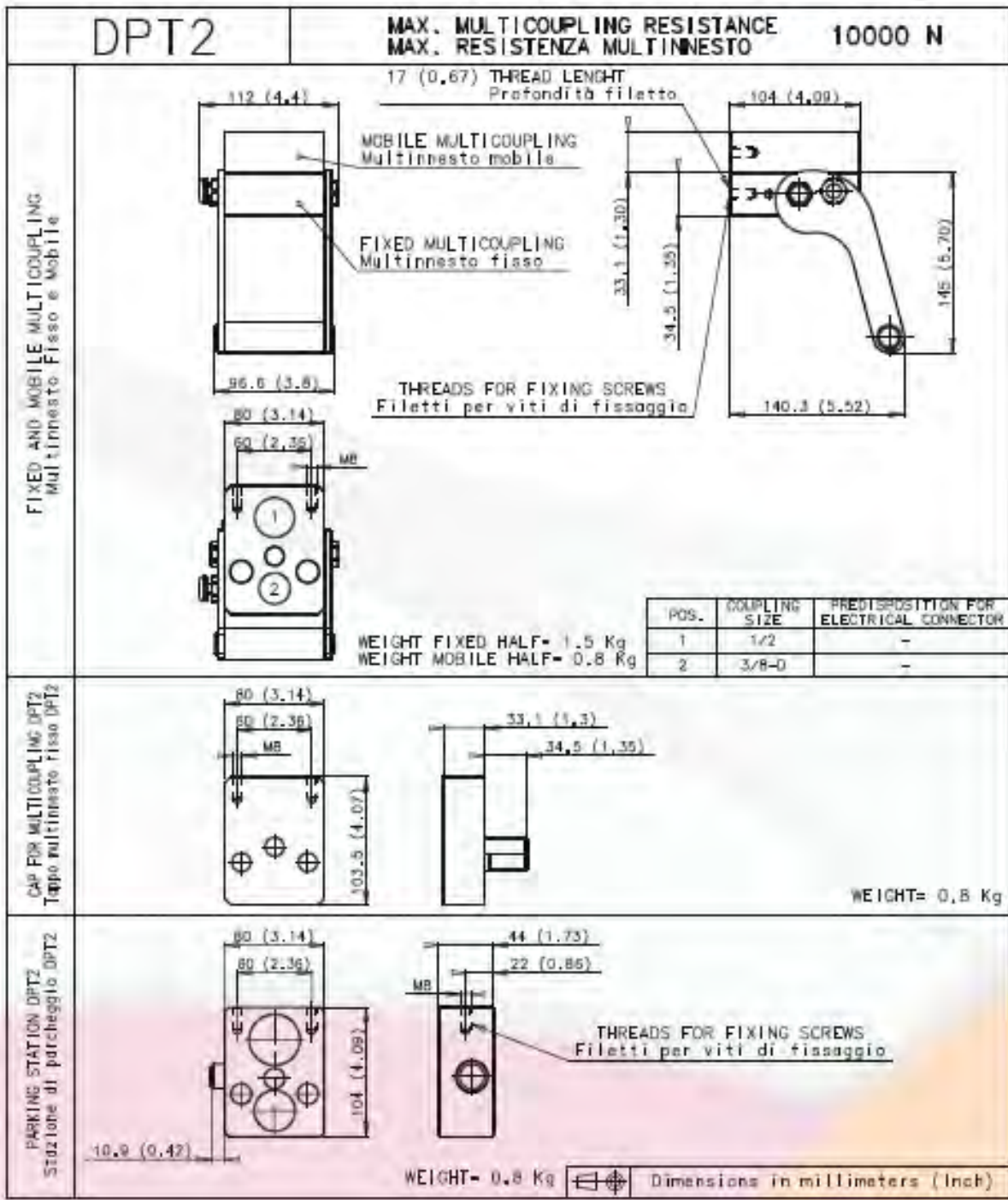
HYDRAULIEK MULTIKOPPELINGEN

5

DP

DPT2 MULTICOUPLING

- One line size 1/2
- One line size 3/8
- On request one line predisposed for electrical connector

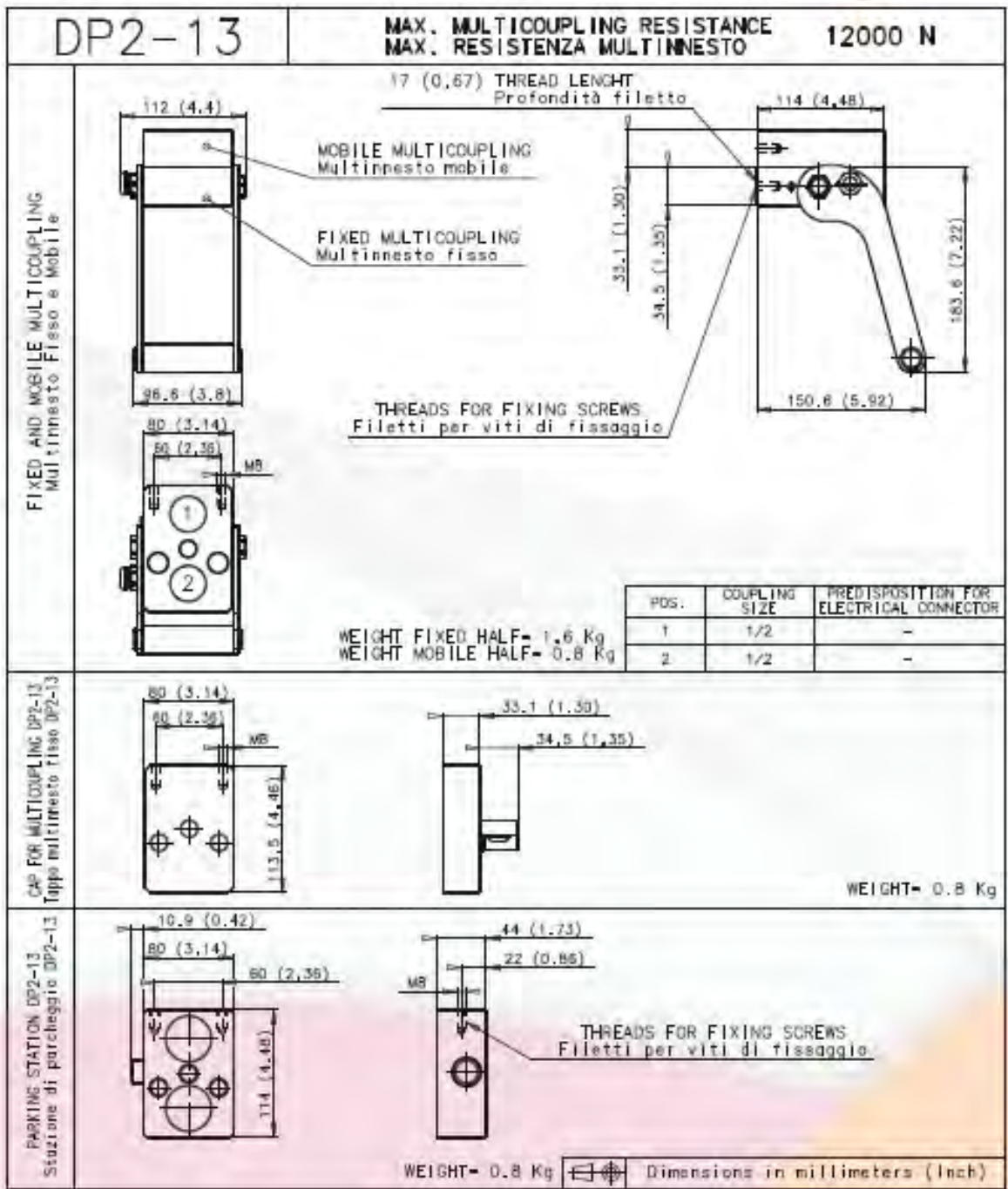




DP

DP2-13 MULTICOUPLING

- Two lines size 1/2
- On request one line predisposed for electrical connector





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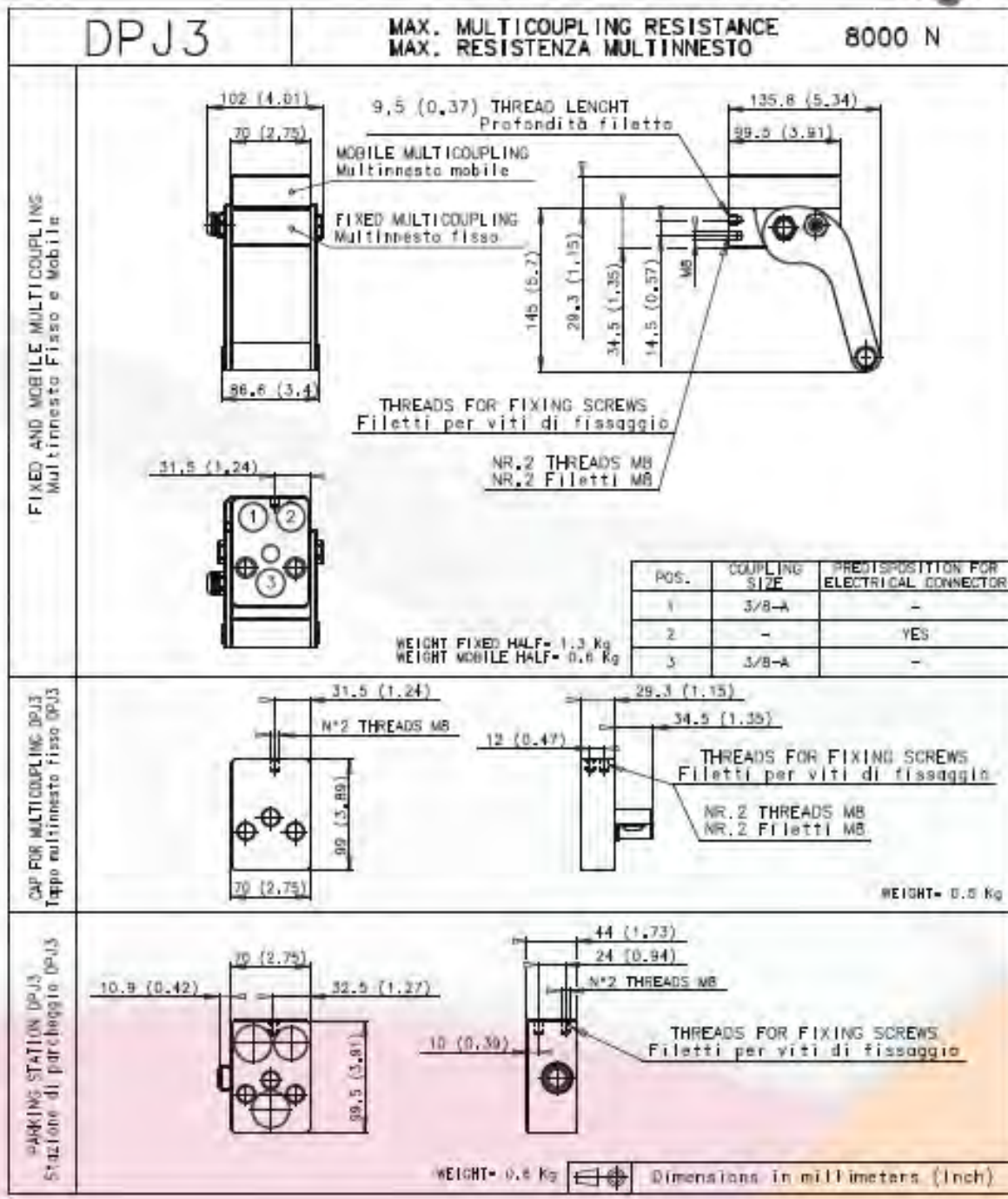
HYDRAULIEK MULTIKOPPELINGEN

5

DP

DPJ3 MULTICOUPLING

- Two lines size 3/8
- One line for electrical connector
Female EC... Male EC..J

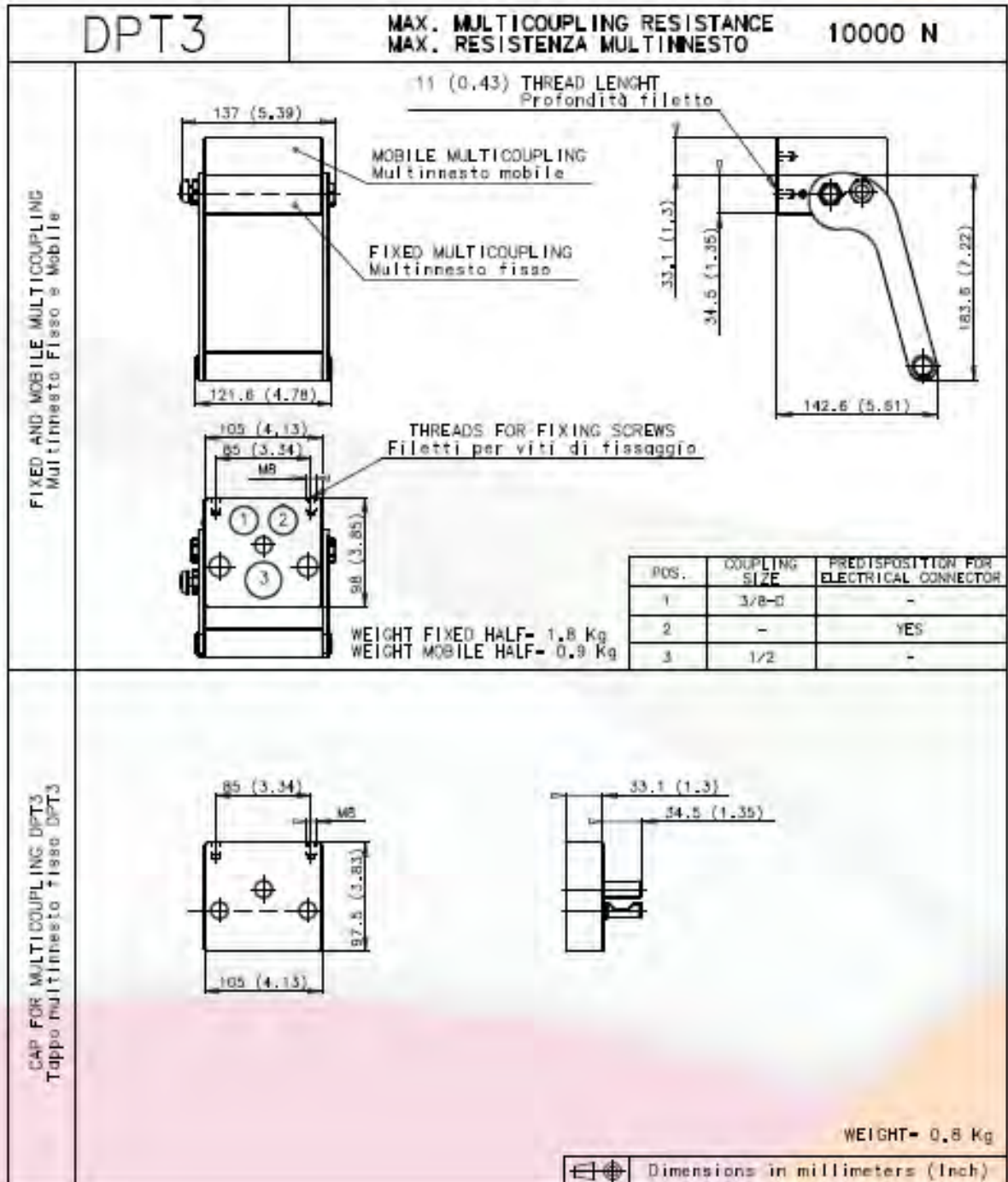




DP

DPT3 MULTICOUPLING

- One line size 1/2
- One line size 3/8
- One line for electrical connector
Female EC., Male EC..DT

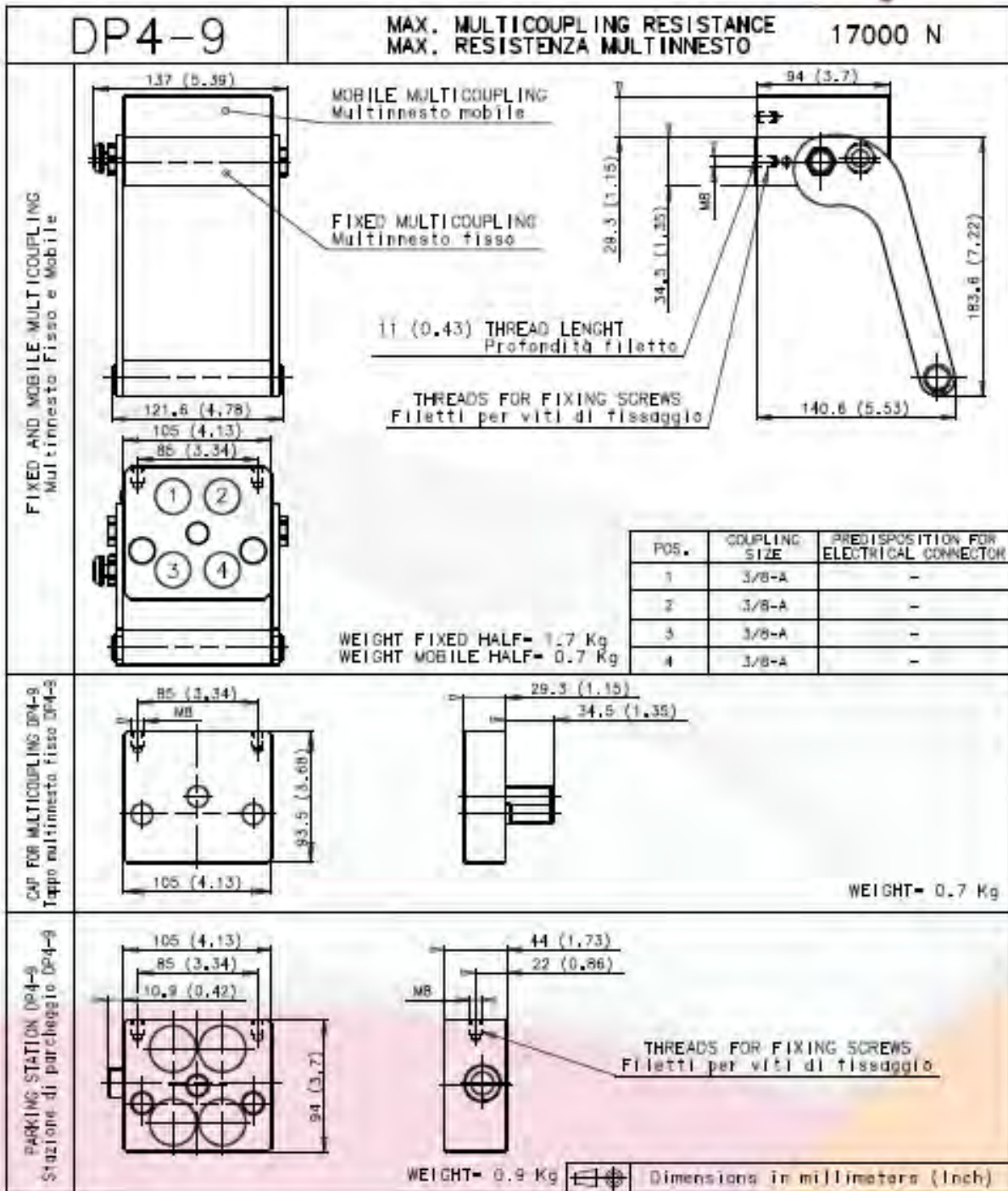




DP

DP4-9 MULTICOUPLING

- Four lines size 3/8
- On request lines predisposed for electrical connector





Stucchi®

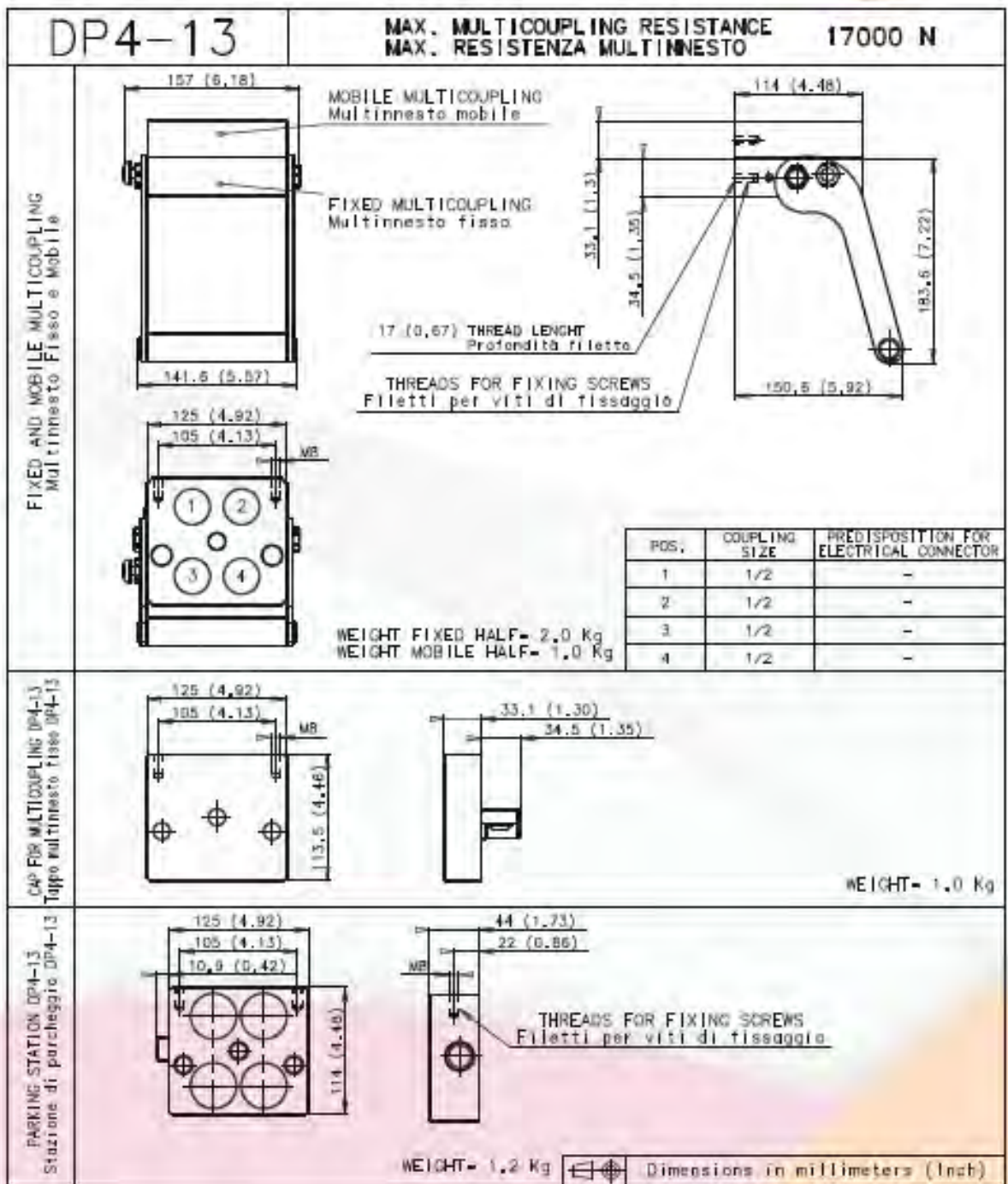
HYDRAULIEK MULTIKOPPELINGEN

5

DP

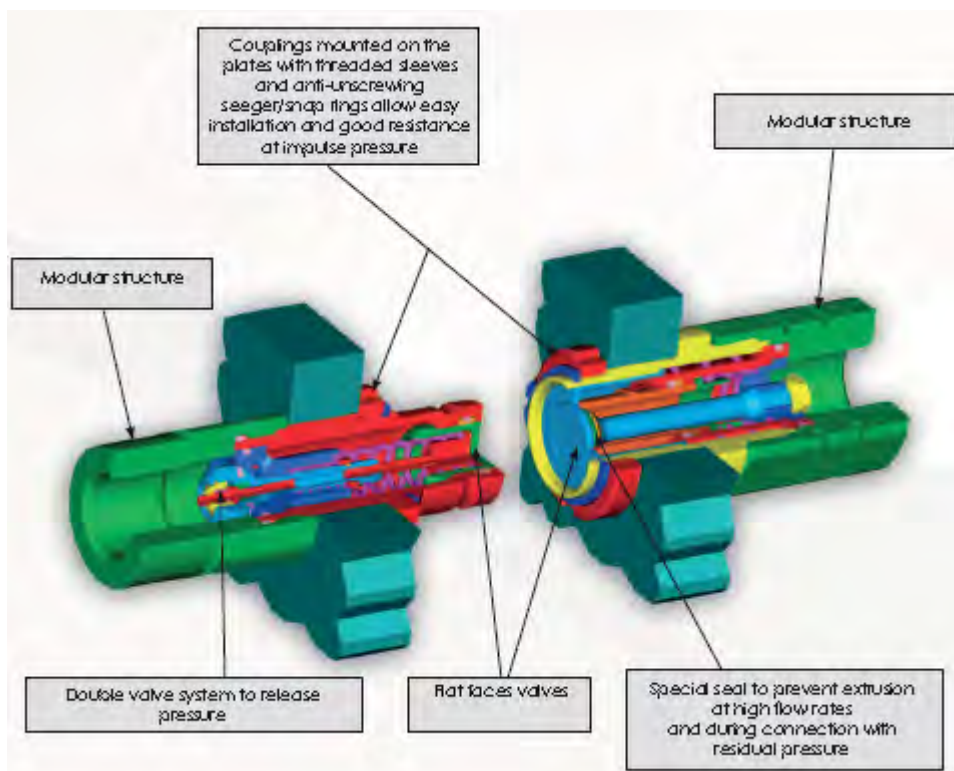
DP4-13 MULTICOUPLING

- Four lines size 1/2
- On request lines predisposed for electrical connector



FAP-Z De Fap-z

Fap-Z is de flatface koppeling serie zonder koppel mechanisme, die gemonteerd worden in multisysteem platen. Ze zijn vervaardigd uit hoogwaardig carbon staal met een zink-ijzer oppervlakte behandeling. Het interne kleppen systeem en de flat face klep maken het mogelijk om veilig te koppelen zelfs met hoge restdruk, en voorkomen het verlies van vloeistof. (er mag geen flow zijn) De koppelingen zijn geborgd met een borgmoer en seegerring. Dit maakt de koppeling geschikt voor toepassingen met sterk wisselende drücken.





FAP-Z

HOW TO USE

- Before connecting clean the flat mating surface of coupling to avoid inclusion of contamination in the circuit.
- Connect and disconnect in according to the instruction of use for multicoupling.

WARNING !

- Do not use the female coupling disconnected as a cap with high impulse pressure.
- Do not couple-uncouple with flow in the circuit. Connection only allowed with residual pressure.
- Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (174 °F).
- When the couplings are disconnected, it is suggested to use the protection cap and parking station.
- It is important to limit contamination in the circuit to avoid compromising the function of the internal valves.

PERFORMANCE

Description	Size	ISO Size	Rated flow		Max. flow suggested		Connect* force		Hydraulic pushing area coupled	Spillage *
			l/min	GPM	l/min	GPM	Nm	lbf		
FAP92	3/8		23	4,10	44	12,19	300	47,50	1,224	0,012
FAP132	1/2		45	11,93	90	23,85	320	72,00	1,893	0,020
FAP152	5/8		74	19,41	148	39,22	320	72,00	2,404	0,110
FAP172	3/4		100	26,50	200	53,00	500	112,50	3,298	0,032
FAP212	1		189	50,09	378	100,17	520	117,00	4,335	0,035

Description	Max. operating pressure						Burst pressure					
	Coupled		Male		Female		Coupled		Male		Female	
	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
FAP92	35	5075	35	5075	35	5075	120	17400	120	17400	100	14300
FAP132	35	4785	35	4785	35	4785	120	17400	120	17400	100	14300
FAP152	35	4785	35	4785	35	4785	120	17400	120	17400	100	14300
FAP172	35	4785	35	4785	35	4785	120	17400	120	17400	100	14300
FAP212	50	4330	50	4330	50	4330	100	14300	100	14300	90	11900

Description	Max. residual pressure during connection						Max. residual pressure during disconnection	
	Male Female to drain		Female Male to drain		Male and Female		MPa	psi
	MPa	psi	MPa	psi	MPa	psi		
FAP92	25	3425	25	3425	25	3425	25	3425
FAP132	25	3425	25	3425	20	2900	20	2900
FAP152	25	3425	25	3425	20	2900	20	2900
FAP172	25	3425	25	3425	15	2175	15	2175
FAP212	25	3425	25	3425	15	2175	15	2175

* Connect force without residual pressure. The force increase to increasing of internal residual pressure.

* Spillage is an indicative value of the fluid loss per couple-uncouple cycle without residual pressure.

• Temperature range: Standard seats NBR, PUR, POM from -20 °C to +100 °C (from -4 °F to +212 °F).

• Tests:

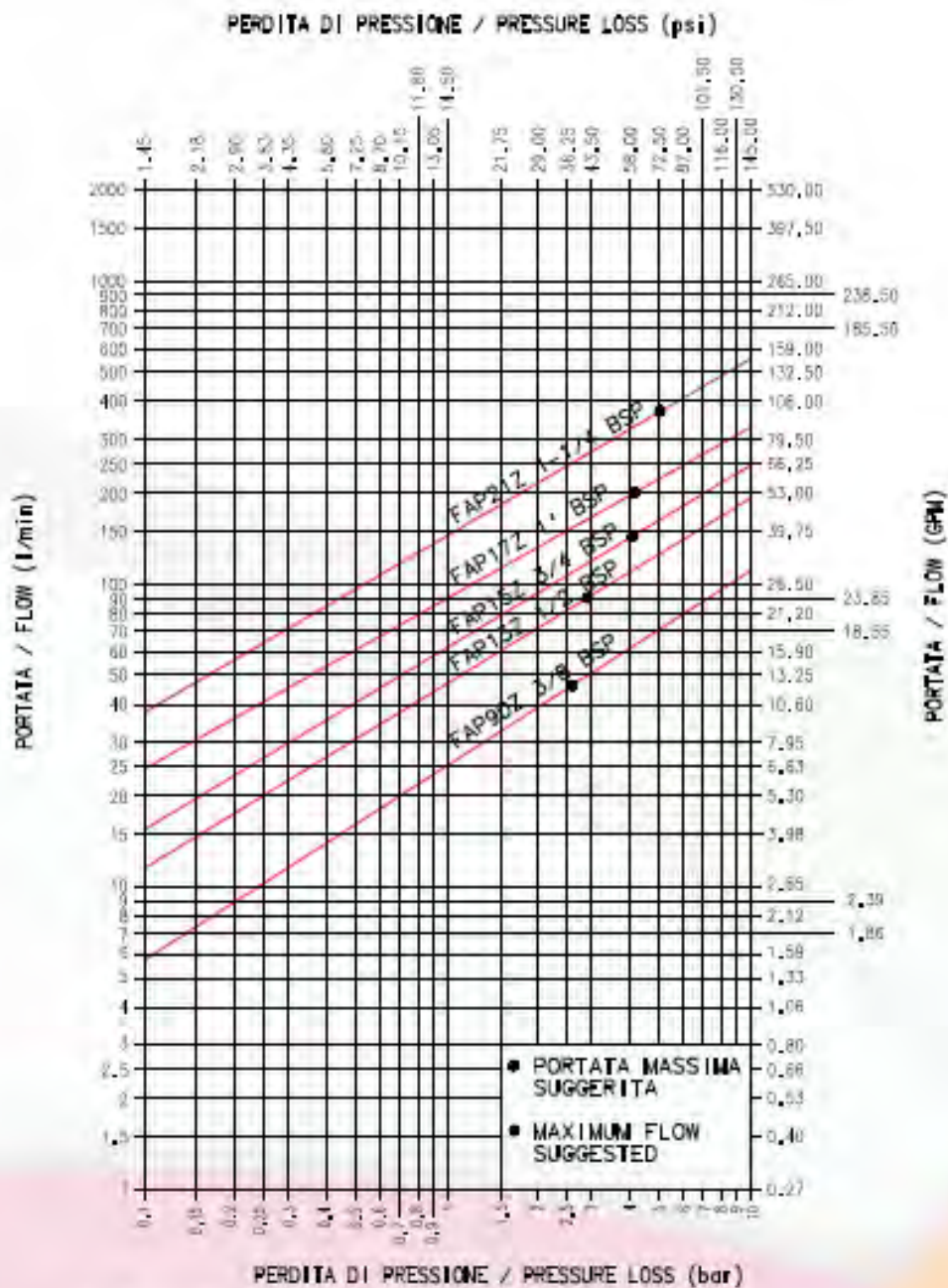
The couplings coupled and the male uncoupled, have been tested at max. operating pressure for 200'000 impulses in according with ISO 7241-2.

The female uncoupled have been tested for 100'000 impulses.

FAP-Z

PRESSURE DROP

TESTS ESEGUITI IN CONFORMITA' A ISO 7241-2
TESTS IN ACCORDANCE WITH ISO 7241-2

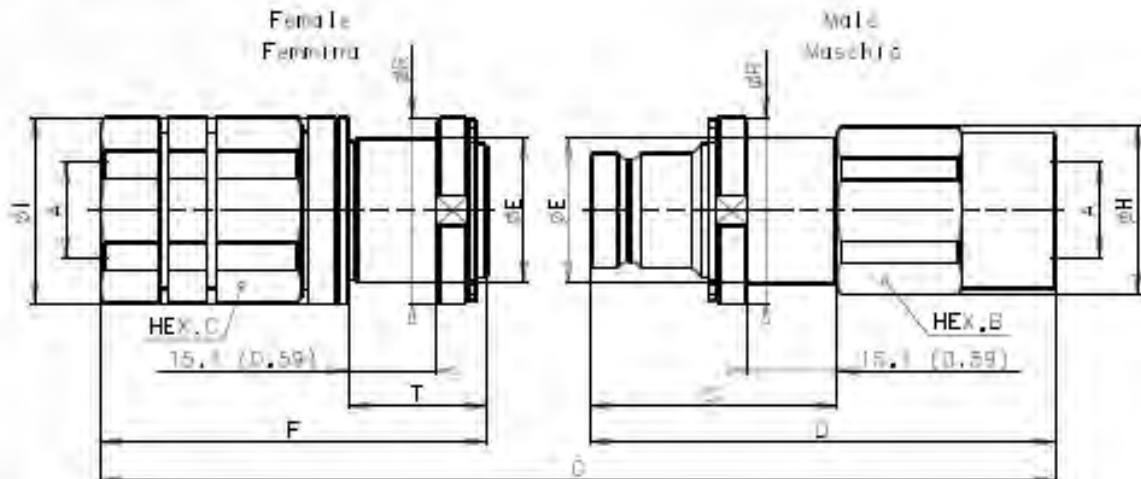


FLUIDO: OLIO ISO VG32
TEMPERATURA: 40°C
VISCOSITA': 28,8-35,2 mm²/s

FLUID: OIL ISO VG32
TEMPERATURE: 40°C
VISCOSITY: 28,8-35,2 mm²/s

FAP-Z

OVERALL DIMENSIONS

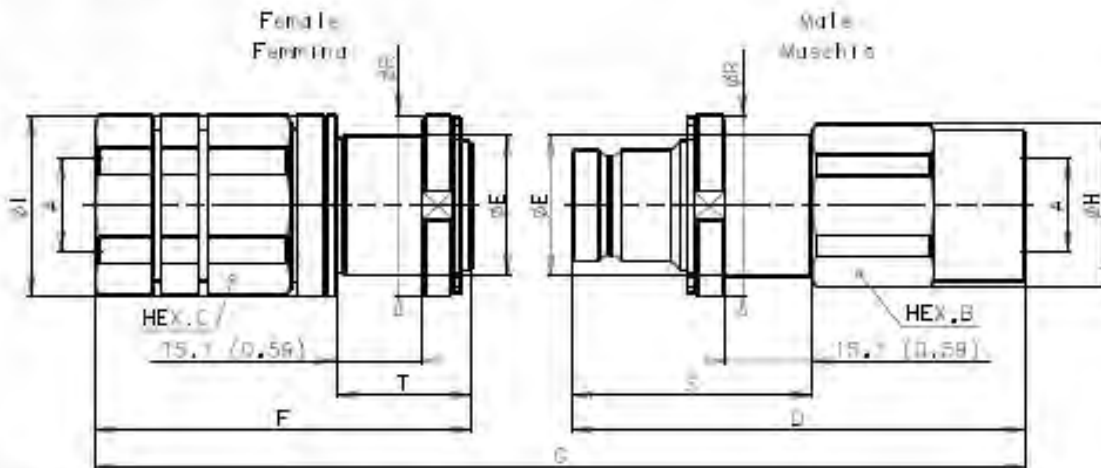


FEMALE BSPP THREAD (DIN 3852)

Description	A	Unit	B	C	D	E	F	G	H	I	J	K	L	M	N	WEIGHT	
																Male	Female
FAP9A2 3/8 BSP	3/8	mm Inch	27 1.06	30 1.18	30 3.15	25 0.98	66.7 2.63	128.8 5.07	29 1.14	32 1.26	32 1.26	40.3 1.59	22.1 0.87	Kg lb	0.220 0.49	0.255 0.56	
FAP9A2 1/2 BSP	1/2	mm Inch	27 1.06	30 1.18	32.5 3.25	25 0.98	71.7 2.82	136.3 5.37	29 1.14	32 1.26	32 1.26	40.3 1.59	22.1 0.87	Kg lb	0.210 0.46	0.260 0.57	
FAP9D2 3/8 BSP	3/8	mm Inch	27 1.06	30 1.18	30 3.15	25 0.98	66.6 2.62	128.8 5.07	29 1.14	32 1.26	32 1.26	42.4 1.67	24 0.94	Kg lb	0.220 0.49	0.250 0.55	
FAP9D2 1/2 BSP	1/2	mm Inch	27 1.06	30 1.18	32.5 3.25	25 0.98	71.6 2.82	136.3 5.37	29 1.14	32 1.26	32 1.26	42.4 1.67	24 0.94	Kg lb	0.210 0.46	0.255 0.56	
FAP132 1/2 BSP	1/2	mm Inch	32 1.42	32 1.42	31 3.58	32 1.26	80 3.15	136.2 5.35	38.3 1.52	40 1.57	39.8 1.57	45.4 1.79	23.2 0.93	Kg lb	0.440 0.97	0.445 0.98	
FAP132 3/4 BSP	3/4	mm Inch	32 1.42	32 1.42	38.4 3.68	32 1.26	87 3.43	136 5.36	38.3 1.52	40 1.57	39.8 1.57	45.4 1.79	23.2 0.93	Kg lb	0.420 0.93	0.450 0.99	
FAP132 3/4 BSP	3/4	mm Inch	32 1.42	41 1.61	31 3.74	34 1.34	88.8 3.42	141.4 5.55	38.3 1.52	44.8 1.76	48.3 1.91	45.3 1.78	28.2 0.93	Kg lb	0.435 0.96	0.575 1.27	
FAP172 3/4 BSP	3/4	mm Inch	46 1.81	46 1.81	106.3 4.22	40 1.57	102.6 4.04	184.4 7.26	49.8 1.96	49.8 1.96	49 1.93	51.9 2.04	23.6 0.93	Kg lb	0.820 1.81	0.935 2.17	
FAP172 1 BSP	1	mm Inch	46 1.81	46 1.81	106.5 4.22	40 1.57	104.6 4.12	184.4 7.24	49.8 1.96	49.8 1.96	49 1.93	51.9 2.04	23.6 0.93	Kg lb	0.770 1.70	0.935 2.06	
FAP212 1 BSP	1	mm Inch	55 2.17	55 2.17	125.5 4.94	32 2.05	111.4 4.39	207.6 8.17	59.8 2.35	59.8 2.35	59 2.32	54.6 2.15	23.6 0.93	Kg lb	1.320 2.91	1.440 3.22	
FAP212 1 1/4 BSP	1 1/4	mm Inch	55 2.17	55 2.17	125.5 4.94	32 2.05	112.4 4.43	206.6 8.15	59.8 2.35	59.8 2.35	59 2.32	54.6 2.15	23.6 0.93	Kg lb	1.220 2.69	1.545 3.41	

FAP-Z

OVERALL DIMENSIONS



FEMALE NPT THREAD (ANSI B.1.20.3)

Description	A	Unit	B	C	D	E	F	G	H	I	K	L	S	T	Unit	Weight	
																Annis	Remise
FAP9A2 3/8NPT	3,8	mm Inch	27 1,06	30 1,18	80 3,15	25 0,98	66,7 2,63	128,8 5,07	29 1,14	32 1,26	32 1,26	40,3 1,58	22,1 0,87	Kg lb	0,220 0,49	0,255 0,56	
FAP9A2 1/2NPT	1,2	mm Inch	27 1,06	30 1,18	80 3,15	25 0,98	66,7 2,63	128,8 5,07	29 1,14	32 1,26	32 1,26	40,3 1,58	22,1 0,87	Kg lb	0,220 0,49	0,255 0,56	
FAP9C2 3/8NPT	3,8	mm Inch	27 1,06	30 1,18	80 3,15	25 0,98	66,7 2,63	128,8 5,07	29 1,14	32 1,26	32 1,26	42,4 1,67	24 0,94	Kg lb	0,220 0,49	0,250 0,55	
FAP9C2 1/2NPT	1,2	mm Inch	27 1,06	30 1,18	80 3,15	25 0,98	66,7 2,63	128,8 5,07	29 1,14	32 1,26	32 1,26	42,4 1,67	24 0,94	Kg lb	0,210 0,46	0,255 0,56	
FAP122 1/2NPT	1,2	mm Inch	35 1,42	35 1,42	91 3,58	32 1,26	80 3,15	150,8 5,93	38,3 1,52	40 1,57	38,3 1,52	45,4 1,79	23,3 0,93	Kg lb	0,440 0,97	0,445 0,98	
FAP122 3/4NPT	3,4	mm Inch	35 1,42	35 1,42	93,4 3,68	32 1,26	81 3,20	150,8 6,00	38,3 1,52	40 1,57	38,3 1,52	45,4 1,79	23,3 0,93	Kg lb	0,420 0,93	0,450 0,99	
FAP122 3/4NPT	3,4	mm Inch	35 1,42	41 1,61	93 3,74	34 1,34	83,8 3,32	161,4 6,35	38,3 1,52	44,8 1,76	40,3 1,71	45,3 1,78	23,3 0,93	Kg lb	0,435 0,96	0,575 1,27	
FAP172 3/4NPT	3,4	mm Inch	45 1,81	45 1,81	108,5 4,27	40 1,57	101,2 4,00	185,4 7,32	49,2 1,96	49,2 1,96	49 1,93	51,9 2,04	23,3 0,93	Kg lb	0,820 1,81	0,925 2,17	
FAP172 1NPT	1	mm Inch	45 1,81	45 1,81	108,5 4,27	40 1,57	104,5 4,12	185,4 7,34	49,2 1,96	49,2 1,96	49 1,93	51,9 2,04	23,3 0,93	Kg lb	0,770 1,70	0,925 2,06	
FAP212 1NPT	1	mm Inch	55 2,17	55 2,17	123,5 4,94	52 2,05	111,4 4,39	201,2 8,17	59,2 2,35	59,2 2,35	59 2,32	54,5 2,15	23,3 0,93	Kg lb	1,320 2,91	1,440 3,22	
FAP212 1 1/4NPT	1 1/4	mm Inch	55 2,17	55 2,17	123,5 4,86	52 2,05	112,4 4,43	205,8 8,13	59,2 2,35	59,2 2,35	59 2,32	54,5 2,15	23,3 0,93	Kg lb	1,220 2,69	1,345 3,41	

FAP elektrisch

ELECTRICAL CONNECTORS

In addition to the couplings for fluid energy transmission, it is possible to fit in the multicoplings the electrical connectors for the electric energy transmission. They are suitable for all low tension electronic devices such as instrumentation, signals, solenoid valves etc...

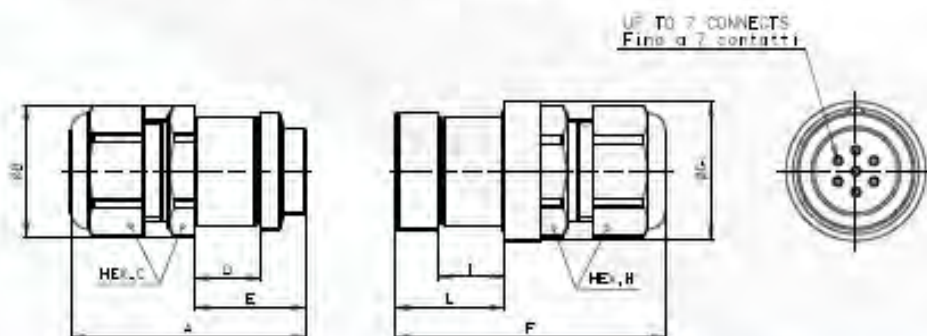


TECHNICAL FEATURES

- Max. number of contacts: 7
- Contact diameter: 2 mm
- Ampere per each contact: 12 service to 15 max.
- Connection between contact and electrical wire: To crimp
- Contacts guaranteed for 100000 connection/disconnection
- Construction material: External bodies in brass/nickel plated for a good corrosion resistance. Internal parts and contacts manufactured by the best specialists.
- Seals: NBR (Nitrile)

FEMALE EC FOR MOBILE MULTICOUPLING
Femmina EC per multinnesto mobile

MALE EC FOR FIXED MULTICOUPLING
Maschio EC per multinnesto fisso



Description	Unit	A	B	C	D	E	F	G	H	I	L	Unit	Weight	
													Male	Female
F EC...	mm	23,6	30	27	15	25,3	51,4	31,8	27	15	24,6	Kg	0,950	0,055
M EC...	Inch	2,11	1,18	1,06	0,59	1,00	2,42	1,25	1,06	0,59	0,97	lb	2,09	0,12
F EC...	mm	23,6	30	27	15	25,3	51,4	31,8	27	15	28,4	Kg	0,900	0,055
M EC-D	Inch	2,11	1,18	1,06	0,59	1,00	2,42	1,25	1,06	0,59	1,12	lb	1,98	0,12
F EC...13	mm	23,6	34,8	27	15	25,1	51,4	34,8	27	15	28,4	Kg	0,173	0,028
M EC...13	Inch	2,11	1,37	1,06	0,59	0,99	2,42	1,37	1,06	0,59	1,12	lb	0,38	0,24
F EC...	mm	23,6	30	27	15	25,3	12,4	30	27	34,5	44,1	Kg	0,950	0,055
M EC-J	Inch	2,11	1,18	1,06	0,59	1,00	2,85	1,18	1,06	1,25	1,74	lb	2,09	0,12
F EC...	mm	23,6	30	27	15	25,3	15,2	30	27	34,5	47,9	Kg	0,990	0,055
M EC-DT	Inch	2,11	1,18	1,06	0,59	1,00	3,00	1,18	1,06	1,25	1,89	lb	2,18	0,12

FAP

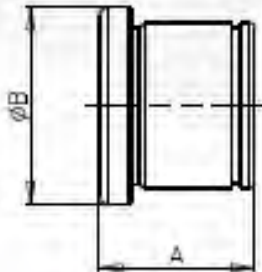
PLUGS FOR MULTICOUPLINGS HOLES

When the multicoupling chosen has one or more holes where are not fitted the couplings or the electrical connectors, it is important to cover the holes with the proper plugs in order to avoid that the dirt enters inside of the multicoupling.

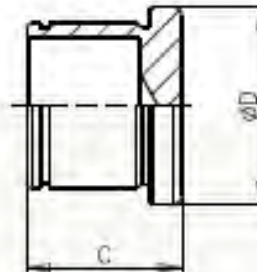
The plugs for multicouplings holes are constructed in black anodizing aluminum.



PLUG FOR FIXED MULTICOUPLING
Tappo per multinnesto fisso



PLUG FOR MOBILE MULTICOUPLING
Tappo per multinnesto mobile



Description	Unit	A	B	C	D	Unit	Weight	
							Fixed half	Mobile half
PLUG FOR FIXED AND MOBILE MULTICOUPLINGS HOLE SIZE 1/4	mm Inch	23,5 0,93	26,0 1,02	23,5 0,93	26,0 1,02	Kg lb	0,025 0,05	0,017 0,04
PLUG FOR FIXED AND MOBILE MULTICOUPLINGS HOLE SIZE 3/8	mm Inch	23,5 0,93	30,0 1,18	23,5 0,93	30,0 1,18	Kg lb	0,035 0,08	0,019 0,04
PLUG FOR FIXED AND MOBILE MULTICOUPLINGS HOLE SIZE 1/2	mm Inch	23,8 0,94	36,0 1,42	23,8 0,94	36,0 1,42	Kg lb	0,055 0,12	0,028 0,06
PLUG FOR FIXED AND MOBILE MULTICOUPLINGS HOLE SIZE 5/8	mm Inch	23,8 0,94	38,0 1,50	23,8 0,94	38,0 1,50	Kg lb	0,063 0,14	0,030 0,07
PLUG FOR FIXED AND MOBILE MULTICOUPLINGS HOLE SIZE 3/4	mm Inch	24,5 0,96	45,0 1,77	24,5 0,96	45,0 1,77	Kg lb	0,090 0,19	0,065 0,14
PLUG FOR FIXED AND MOBILE MULTICOUPLINGS HOLE SIZE 1	mm Inch	24,8 0,98	57,0 2,24	24,8 0,98	57,0 2,24	Kg lb	0,14 0,38	0,085 0,19

FAP

SEALS AND RELATIVE TEMPERATURE RANGE

Seal compound	Temperature range Celsius degrees °C	Temperature range Fahrenheit degrees °F
NBR (Nitrile)	-20 +100	-4 +212
VITON	-15 +180	+5 +356
EPDM (Ethylene Propylene)	-40 +150	-40 +302
KALREZ	-25 +300	-13 +572
HNBR	-30 +130	-22 +266
FLUOROSILICONE	-50 +150	-58 +302
SILICONE	-50 +150	-58 +302
NEOPRENE	-40 +100	-40 +212
PTFE (Teflon)	-50 +180	-58 +356

The above temperatures are indicative and can change due to the fluid used.
For the correct choice of the seal, we suggest you to consult the Stucchi customer service.

CONVERSION FACTORS FROM INTERNATIONAL SYSTEM (SI) TO ANGLO SAXON SYSTEM (USA)

Characteristics	International system SI	Anglo Saxon system USA	Transformation from SI to USA	Transformation from USA to SI
PRESSURE	Mega Pascal (MPa) 1 MPa = 10 bar	Pound/Square Inch (psi)	1 Mpa = 145psi	1 psi = 0,0069 Mpa
FLOW IN HYDRAULIC	Liter per minute (l/min)	Gallon per minute (GPM)	1 l/min = 0,265 GPM	1 GPM = 3,78 l/min
FORCE	Newton (N)	Pound force (lbf)	1 N = 0,225 lbf	1 lbf = 4,444 N
TORQUE	Newton meter (Nm)	Pound force x foot (lbf ft)	1 Nm = 0,737 lbf ft	1 lbf ft = 1,357 Nm
TEMPERATURE	Celsius degree (°C)	Fahrenheit degree (°F)	°C = (°F-32)/1,8	°F = (°C x 1,8) + 32
LENGTH	Millimeter (mm) Meter (m)	Inch (Inch) Foot (ft)	1 mm = 0,03937 inch 1 m = 3,28084 ft	1 inch = 25,4 mm 1 ft = 0,3048 m
WEIGHT	Kilogram (kg)	Pound (lb)	1 kg = 2,2046 lb	1 lb = 0,4536 kg



Stucchi®

HYDRAULIEK SNELKOPPELINGEN VOF



VOF

Snelkoppeling VOF serie uitwisselbaar met Snap-tite, Parker 75 serie



TECHNICAL FEATURES AND OPTIONS



Interchange
Similar Couplings (Oil & Gas)



Sealing description
Nitrile NBR



Connection system
Screw



Available sizes
From 3/4" to 2"



Material
High strength carbon steel



Available threads
BSP - NPT



Operating pressure
Up to 345 bar



Locking mechanism
Screw to connect



Flow rate
Up to 1100 L/Min



Temperature (°C)
-20° / +100°



Valving style
Poppet



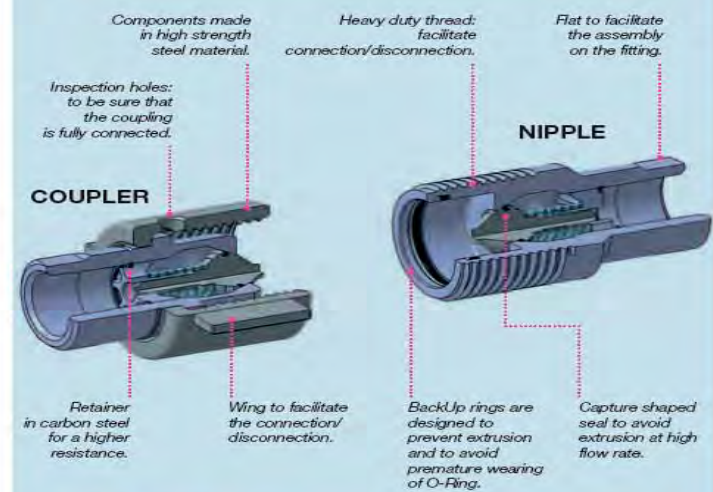
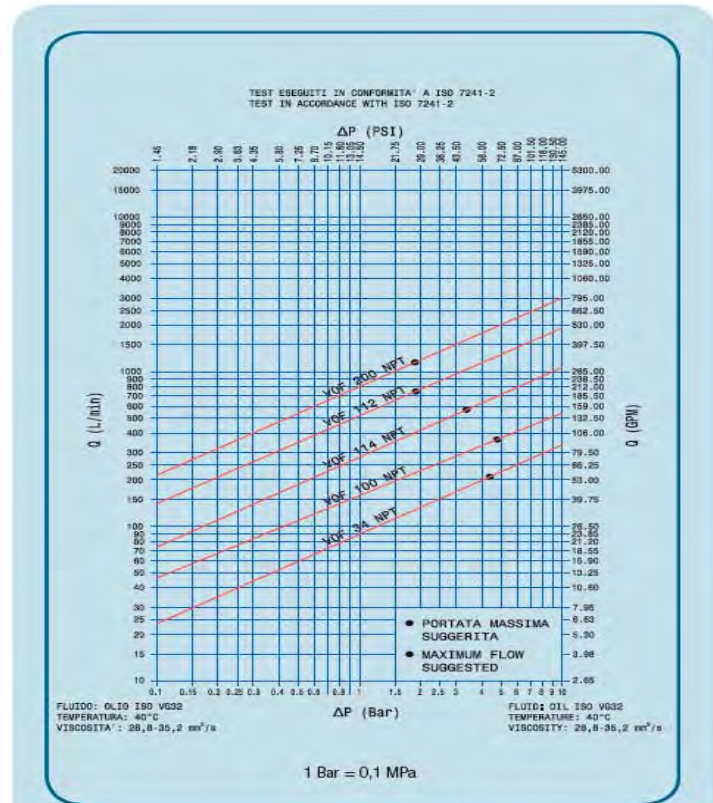
Connection under pressure
Connection: one side*
Disconnection: not allowed

Voordelen :

- Inspectie gat om te controleren of de koppeling goed gemonteerd is
- De elastomeer seal op de kop geeft een maximale dichting na ontkoppeling
- De vorm van de interne onderdelen is ontworpen om turbulentie te reduceren en drukval te voorkomen.
- Compact design
- Eenvoudig in gebruik

Hoe te gebruiken

- Maak voor het aankoppelen de delen schoon
- Controleer het inspectiegat na montage (geen ruimte toegestaan)
- Bij het ontkoppelen draai de huls compleet Van de koppeling.



MAIN APPLICATIONS





Stucchi®

HYDRAULIEK SNELKOPPELINGEN VOF

VOF

Snelkoppeling VOF serie uitwisselbaar met Snap-tite, Parker 75 serie

PERFORMANCE

Description	Size		Rated Flow		Max. flow suggested		Connect torque*		Disconnect torque		Spillage**
	Inch	mm	l/min	GPM	l/min	GPM	Nm	lbf ft	Nm	lbf ft	
VOF34	3/4	20	106	28.09	212	56.18	1.2	0.89	0.6	0.44	11.5
VOF100	1	25	189	50.09	378	100.17	1.6	1.18	1.1	0.81	21.16
VOF114	1 1/4	31.5	288	76.32	576	152.64	2.8	2.07	1.9	1.40	42.3
VOF112	1 1/2	40	379	100.44	758	200.87	4	2.95	3.6	2.66	86.5
VOF200	2	50	757	200.61	1100	291.5	7.5	5.53	5.1	3.76	166

Description	Max. operating pressure						Burst pressure					
	Coupled		Nipple		Coupler		Coupled		Nipple		Coupler	
	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
VOF34	34,5	5000	34,5	5000	34,5	5000	137,9	20000	137,9	20000	100,0	14500
VOF100	34,5	5000	34,5	5000	34,5	5000	137,9	20000	137,9	20000	100,0	14500
VOF114	34,5	5000	34,5	5000	34,5	5000	137,9	20000	137,9	20000	100,0	14500
VOF112	34,5	5000	34,5	5000	34,5	5000	137,9	20000	137,9	20000	82,8	12000
VOF200	34,5	5000	34,5	5000	34,5	5000	100,0	14500	90,0	13050	75,9	11000

* Connect torque and disconnect torque without residual pressure. The torque increase with increasing of internal residual pressure.

** Spillage is an indicative value of the fluid loss per couple-uncouple cycle without residual pressure.

Temperature range:

- Standard seals NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).

Tests performed:

The connected couplings have been tested at maximum operating pressure for 500.000 impulses according to ISO 7241-2 test method.

The couplings disconnected have been tested for 100.000 impulses

WARNING

- Please read carefully General instructions for selection and use of the products in our master catalogues.
- Do not couple-uncouple with flow and/or dynamic pressure in the circuit.
- Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).
- Do not connect with residual pressure in both half for safety reasons.
- When the couplings are disconnected, it is suggested to use the protection caps (aluminum caps are available for VOF).
- Check the maximum allowable working pressure of the port in use.



Stucchi®

HYDRAULIEK SNELKOPPELINGEN VOF

VOF

Snelkoppeling VOF serie uitwisselbaar met Snap-tite, Parker 75 serie



a constant flow of solutions

Lloyd's certification Stucchi VOF BOP approval



Our "STUCCHI VOF" series is approved by Lloyd's Register in accordance with API 16D and the EUB Directive #36.

Also known as "Fire Safe" rating, this certification means that our VOF series are suitable for Drilling Blow-Out-Prevention (BOP) Circuits.

MAIN APPLICATIONS



VOF BENEFIT

- Connection is allowed with residual pressure in one side of the coupling
- Inspection hole to control if the coupling is completely connected
- Wrench flat on the bodies to facilitate the fitting assembly
- The poppet valve with elastomer seal provides maximum sealing of the couplings when disconnected
- Retainer in higher resistance carbon steel
- Shape of internal parts is designed to reduce turbulence and pressure drop
- High resistance with impulse pressures (500.000 cycles connected)
- Compact design
- Simple to use



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HYDRAULIEK SNELKOPPELINGEN VOFX

VOFX

Snelkoppeling VOF serie in RVS Inox uitwisselbaar met Snap-tite Parker S75 serie



“VOFX” is a series of screw to connect couplings with poppet style valving. Made in stainless steel (AISI 316L), with NBR sealing, these couplings are interchangeable with similar ones existing on the market.

The design combines heavy duty construction with robust screw connection to make the “VOFX” series suitable for application with pressure impulses in the hydraulic circuit.

They are available in sizes from 3/4” to 2”.

MAIN APPLICATIONS



VOFX BENEFITS

- Inspection hole to control if the coupling is completely connected
- New treatment on the threads to avoid premature wearing
- Wrench flat on the bodies to facilitate the fitting assembly
- The poppet valve with elastomer seal provides maximum sealing of the couplings when disconnected
- Retainer in stainless steel material
- Shape of internal parts is designed to reduce turbulence and pressure drop
- High resistance to pressure impulses
- Compact design
- Simple to use



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HYDRAULIEK SNELKOPPELINGEN VOFX

VOFX

Snelkoppeling VOF serie in RVS Inox uitwisselbaar met Snap-tite Parker S75 serie



TECHNICAL FEATURES AND OPTIONS



Interchange
Similar Couplings (Oil & Gas)



Sealing description
Nitrile NBR



Connection system
Screw



Available sizes
From 3/4" to 2"



Material
Stainless steel (AISI 316L)



Available threads
NPT-BSP



Operating pressure
Up to 207 bar



Locking mechanism
Screw to connect



Flow rate
Up to 1100 L/Min



Temperature (°C)
-20° / +100°



Valving style
Poppet



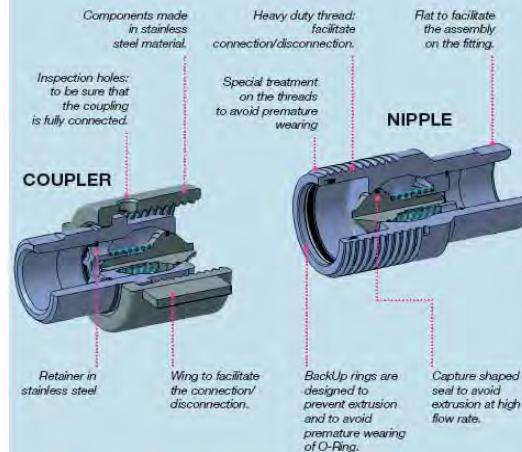
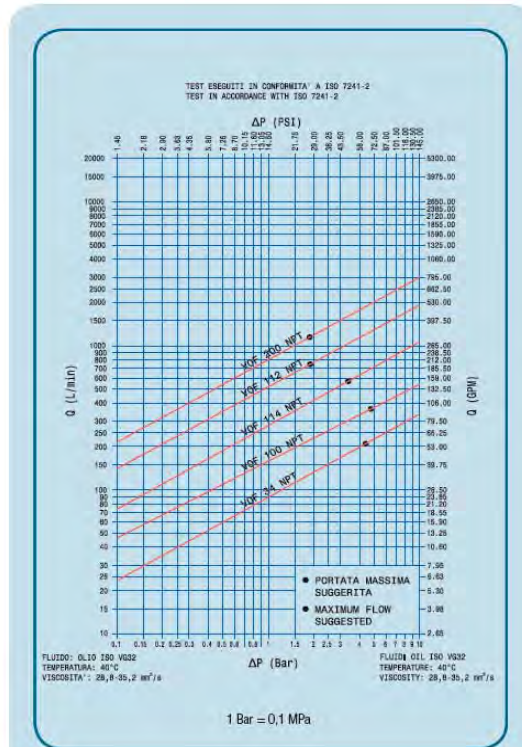
Connection under pressure
Connection: one side*
Disconnection: not allowed

BENEFITS

- *Connection under residual pressure is allowed in one side.
- Inspection hole to control if the coupling is completely connected.
- New treatment on the threads to avoid premature wearing.
- Wrench flat on the bodies to facilitate the fitting assembly.
- The poppet valve with elastomer seal provides maximum sealing of the couplings when disconnected.
- Retainer in stainless steel material.
- Shape of internal parts is designed to reduce turbulence and pressure drop.
- High resistance to pressure impulses (500.000 connected).
- Compact design.
- Simple to use.

HOW TO USE

- Before to connect, clean the mating surface of the couplings and spread anti galling paste on the thread.
- To connect insert the nipples in the coupler, screw the sleeve until positive stop (surface contact of two moving parts), do not push together the couplings, thread only the use of tools for the second part of the connection can be necessary if there is high residual pressure in the circuit.
- Check inspection holes to ensure that the coupling is fully connected (no free space allowed).
- To disconnect unscrew totally the sleeve from the nipple.



MAIN APPLICATIONS





Stucchi®

HYDRAULIEK SNELKOPPELINGEN VOFX

VOFX

Snelkoppeling VOF serie in RVS Inox uitwisselbaar met Snap-tite Parker S75 serie

PERFORMANCES

Size		Description	Max. flow suggested		Connect torque*		Disconnect torque*		Spillage**
Inch	mm		l/min	GPM	Nm	lbf ft	Nm	lbf ft	ml
3/4	20	VOFX34	212	56,18	2,3	1,70	2,3	1,70	11,5
1	25	VOFX100	378	100,17	2,5	1,84	2,5	1,84	21,2
1-1/4	31,5	VOFX114	576	152,64	3	2,21	3	2,21	42,3
1-1/2	40	VOFX112	758	200,87	15,1	11,14	15,2	11,21	82,6
2	50	VOFX200	1100	291,50	10	7,38	10	7,38	192,0

Size	Description	Max. operating pressure						Burst pressure					
		Coupled		Nipple		Coupler		Coupled		Nipple		Coupler	
Inch		MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
3/4	VOFX34	20,7	3000	20,7	3000	20,7	3000	82,8	12000	62,1	9000	62,1	9000
1	VOFX100	20,7	3000	20,7	3000	20,7	3000	82,8	12000	62,1	9000	62,1	9000
1-1/4	VOFX114	20,7	3000	20,7	3000	20,7	3000	82,8	12000	62,1	9000	62,1	9000
1-1/2	VOFX112	20,7	3000	20,7	3000	20,7	3000	82,8	12000	62,1	9000	62,1	9000
2	VOFX200	20,7	3000	20,7	3000	20,7	3000	82,8	12000	62,1	9000	41,4	6000

* Connect torque and disconnect torque without residual pressure. The torque to connect increase with increasing of internal residual pressure.

** Spillage is an indicative value of the fluid loss per couple-uncouple cycle without residual pressure.

Material:

-Construction: Stainless steel AISI 316L
-Springs: AISI 302

Temperature range:

Temperature range: Standard seals NBR from -20 °C to +100 °C (from -4 °F to +212 °F).

Please read carefully "instruction and warning" for proper selection of the products.

Tests performed:

The couplings coupled have been tested at max. operating pressure for 500'000 impulses in according with ISO 7241-2.

The couplings uncoupled have been tested for 100'000 impulses.

⚠ WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects. Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not couple-uncouple with flow in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

Do not use the coupling disconnected with high impulse pressure.

Connect under pressure products are suitable to be connected under residual (static) pressure.

Connection with residual pressure (pressure trapped in the circuit) allowed with other side coupling to drain.

Check the maximum allowable working pressure of the port in use.

Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Customer Service.

The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

It is **MANDATORY** to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written instructions on Stucchi website (www.stucchi.it) before selecting or using Stucchi products.



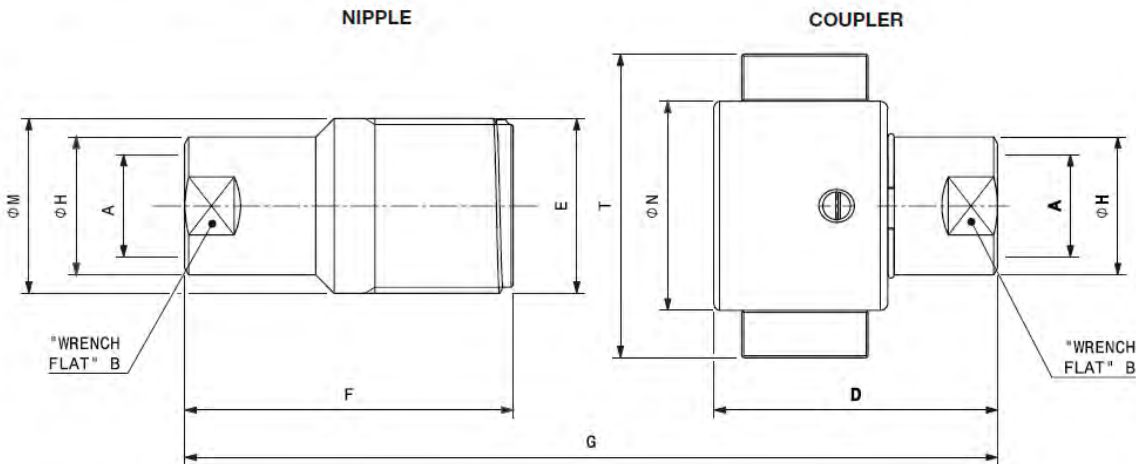
Stucchi®

HYDRAULIEK SNELKOPPELINGEN VOFX

VOFX

Snelkoppeling VOF serie in RVS Inox uitwisselbaar met Snap-tite Parker S75 serie

OVERALL DIMENSIONS



Port description: FEMALE THREAD NPT (ANSI B.1.20.1)

BODY SIZE	Description	Part Number	PORT (A)	Thread	Overall Length	Length		Hex		Diameter						
						mm	inch	mm	inch	mm	inch					
3/4"	VOFX34 NPT Nipple	811201050	3/4"	E	G	123,6	4,87	F	83,2	3,28	B	31,8	1,25	H	35,0	1,38
	VOFX34 NPT Coupler	811201051						D	71,8	2,83						
1"	VOFX100 NPT Nipple	811201052	1"	E	G	152,9	6,02	F	105,8	4,17	B	41,3	1,63	H	45,0	1,77
	VOFX100 NPT Coupler	811201053						D	87,3	3,44						
1-1/4"	VOFX114 NPT Nipple	811201054	1-1/4"	E	G	197,9	7,79	F	136,7	5,38	B	50,8	2,00	H	54,5	2,15
	VOFX114 NPT Coupler	811201055						D	112,4	4,43						
1-1/2"	VOFX112 NPT Nipple	811201056	1-1/2"	E	G	220,3	8,67	F	151,2	5,95	B	57,2	2,25	H	63,5	2,50
	VOFX112 NPT Coupler	811201057						D	126,9	5,00						
2"	VOFX200 NPT Nipple	811201058	2"	E	G	255,2	10,05	F	179,0	7,05	B	76,2	3,00	H	82,6	3,25
	VOFX200 NPT Coupler	811201059						D	154,2	6,07						

BODY SIZE	Description	Part Number	Diameter	Overall dimension		Weight				
				mm	inch	Kg	Lbs			
3/4"	VOFX34 NPT Nipple	811201050	M	44,3	1,74		0,48	1,05		
	VOFX34 NPT Coupler	811201051	N	53,0	2,09	T	77,0	3,03	0,61	1,34
1"	VOFX100 NPT Nipple	811201052	M	57,2	2,25				1,19	2,62
	VOFX100 NPT Coupler	811201053	N	69,0	2,72	T	105,0	4,13	1,38	3,03
1-1/4"	VOFX114 NPT Nipple	811201054	M	66,7	2,62				1,95	4,30
	VOFX114 NPT Coupler	811201055	N	80,0	3,15	T	116,0	4,57	2,27	5,01
1-1/2"	VOFX112 NPT Nipple	811201056	M	82,6	3,25				3,22	7,11
	VOFX112 NPT Coupler	811201057	N	95,0	3,74	T	145,0	5,71	3,84	8,47
2"	VOFX200 NPT Nipple	811201058	M	101,6	4,00				6,04	13,32
	VOFX200 NPT Coupler	811201059	N	122,5	4,82	T	182,5	7,19	8,10	17,86

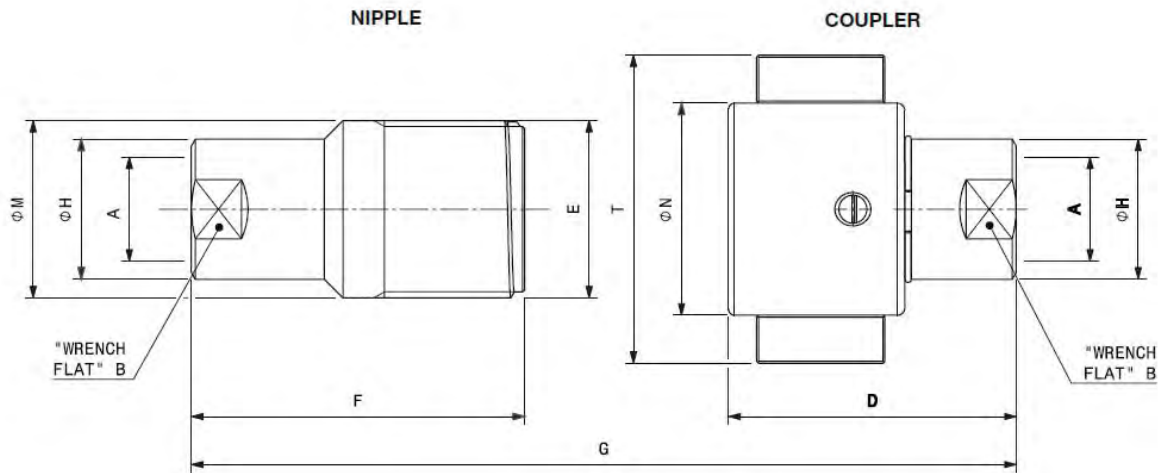


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HYDRAULIEK SNELKOPPELINGEN VOFX

VOFX

Snelkoppeling VOF serie in RVS Inox uitwisselbaar met Snap-tite Parker S75 serie



Port description: FEMALE THREAD BSPP (ISO 1179-1)

BODY SIZE	Description	Part Number	PORT (A)	Thread	Overall Length	Length		Hex		Diameter						
						mm	inch	mm	inch	mm	inch	mm	inch			
3/4"	VOFX34 BSP Nipple	811200050	3/4"	E	G	123,6	4,87	F	83,2	3,28	B	31,8	1,25	H	35,0	1,38
	VOFX34 BSP Coupler	811200051						D	71,8	2,83						
1"	VOFX100 BSP Nipple	811200052	1"	E	G	152,9	6,02	F	105,8	4,17	B	41,3	1,63	H	45,0	1,77
	VOFX100 BSP Coupler	811200053						D	87,3	3,44						
1-1/4"	VOFX114 BSP Nipple	811200054	1-1/4"	E	G	197,9	7,79	F	136,7	5,38	B	50,8	2,00	H	54,5	2,15
	VOFX114 BSP Coupler	811200055						D	112,4	4,43						
1-1/2"	VOFX112 BSP Nipple	811200056	1-1/2"	E	G	220,3	8,67	F	151,2	5,95	B	57,2	2,25	H	63,5	2,50
	VOFX112 BSP Coupler	811200057						D	126,9	5,00						
2"	VOFX200 BSP Nipple	811200058	2"	E	G	255,2	10,05	F	179,0	7,05	B	76,2	3,00	H	82,6	3,25
	VOFX200 BSP Coupler	811200059						D	154,2	6,07						

BODY SIZE	Description	Part Number		Diameter		Overall dimension		Weight	
				mm	inch	mm	inch	Kg	Lbs
3/4"	VOFX34 BSP Nipple	811200050	M	44,3	1,74			0,48	1,05
	VOFX34 BSP Coupler	811200051	N	53,0	2,09	T	77,0	3,03	0,61
1"	VOFX100 BSP Nipple	811200052	M	57,2	2,25			1,19	2,62
	VOFX100 BSP Coupler	811200053	N	69,0	2,72	T	105,0	4,13	1,38
1-1/4"	VOFX114 BSP Nipple	811200054	M	66,7	2,62			1,95	4,30
	VOFX114 BSP Coupler	811200055	N	80,0	3,15	T	116,0	4,57	2,27
1-1/2"	VOFX112 BSP Nipple	811200056	M	82,6	3,25			3,22	7,11
	VOFX112 BSP Coupler	811200057	N	95,0	3,74	T	145,0	5,71	3,84
2"	VOFX200 BSP Nipple	811200058	M	101,6	4,00			6,04	13,32
	VOFX200 BSP Coupler	811200059	N	122,5	4,82	T	182,5	7,19	8,10



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HYDRAULIEK SNELKOPPELINGEN VOFX

VOFX

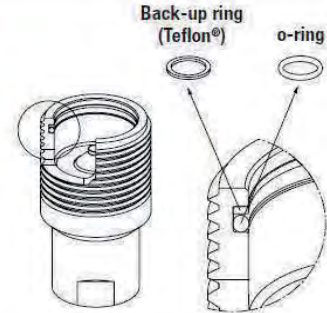
Snelkoppeling VOF serie in RVS Inox uitwisselbaar met Snap-tite Parker S75 serie



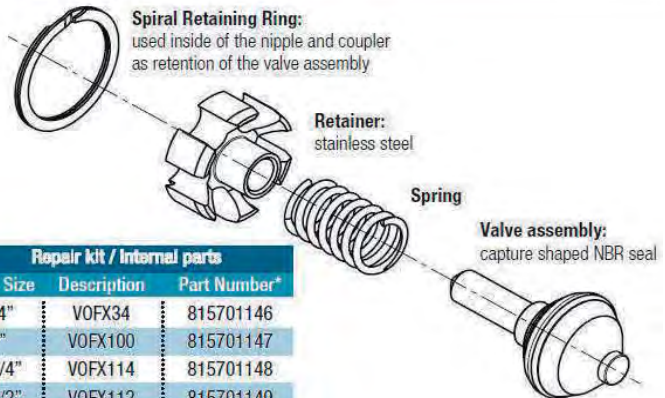
SPARE KIT SEAL FOR NIPPLE

Repair kit / OR+BK		
Body Size	Description	Part Number
3/4"	VOFX34	815700956
1"	VOFX100	815700958
1-1/4"	VOFX114	815700960
1-1/2"	VOFX112	815701122
2"	VOFX200	815700964

O-Ring in Nitrile
BackUp in Teflon®



SPARE KIT INTERNAL PARTS



Repair kit / Internal parts		
Body Size	Description	Part Number*
3/4"	VOFX34	815701146
1"	VOFX100	815701147
1-1/4"	VOFX114	815701148
1-1/2"	VOFX112	815701149
2"	VOFX200	815701150

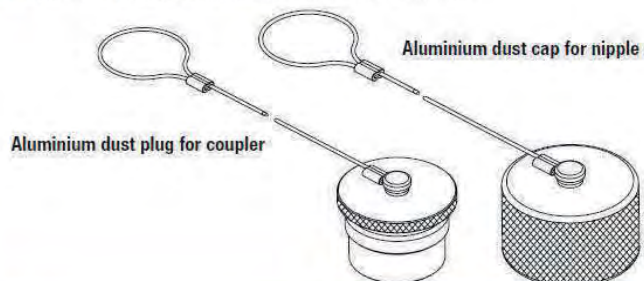
*same codes for coupler or nipple

PROTECTIVE CAPS FOR VOFX SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life.

This is particularly important in Oil&Gas and mobile applications where exposure to weather and aggregate materials are common.

The protective caps for VOFX couplings are manufactured in aluminum (natural color). Upon request also caps manufactured in stainless steel version.



Body Size/Description	Protective Cap		Material/Color
	Plug for Coupler	Cap for Nipple	
3/4"	815405013	815405012	Aluminum/Natural
1"	815405011	815405010	Aluminum/Natural
1-1/4"	815405015	815405014	Aluminum/Natural
1-1/2"	815405017	815405016	Aluminum/Natural
2"	815405019	815405018	Aluminum/Natural



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HYDRAULIEK SNELKOPPELINGEN IRC

IRC

Snelkoppeling IRC serie is uitwisselbaar met Tema, Parker 5000, 7500, 10000 serie



TECHNICAL FEATURES AND OPTIONS

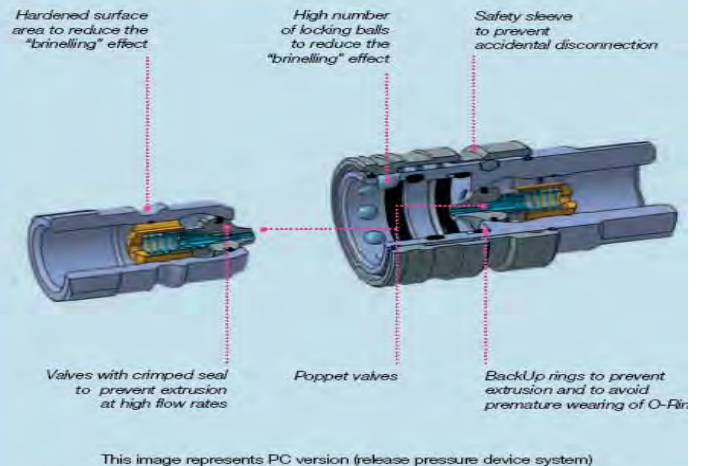
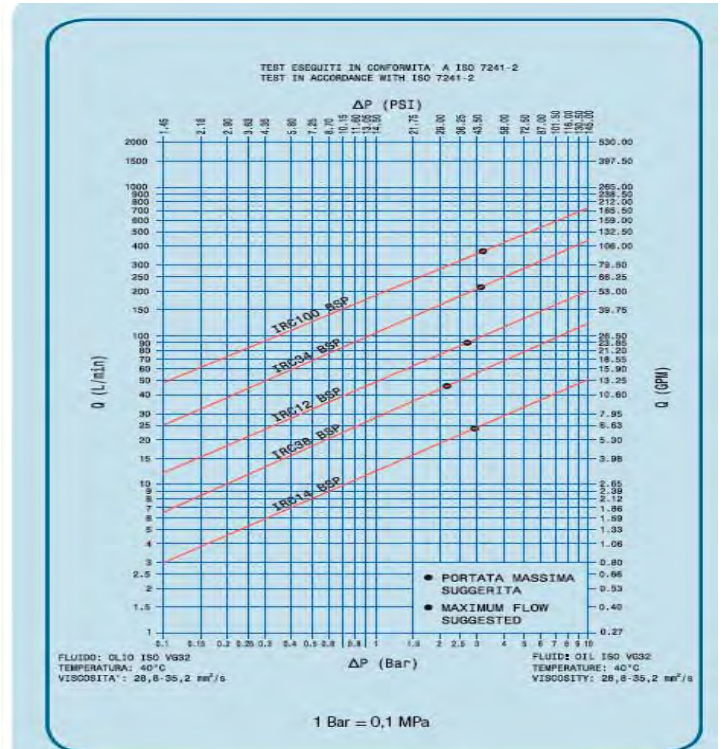
Interchange With similar product (Nordic interface)	Sealing description Nitrile NBR	Connection system Single acting sleeve
Available sizes From 1/4" to 1"	Material High strength carbon steel	Available threads BSP - NPT
Operating pressure Up to 600 bar	Locking mechanism Ball locking + safety sleeve	Flow rate Up to 378 L/Min
Temperature (°C) -20° / +100°	Valving style Poppet	Connection under pressure Only PC version Connection: one side* Disconnection: not allowed

Voordelen

- onder restdruk is het toegestaan de Male of de Female PC versie aan te koppelen
- Oring en backup ring voor optimale Protectie dichting
- Lange levensduur
- Veiligheids huls om accidenteel Ontkoppelen te voorkomen
- Hoge weerstand te druk impulsen
- Compact design
- Makkelijk in gebruik

Hoe te gebruiken

- reinig de oppervlakken
- om te koppelen trek de huls terug en duw De beide helften tot ze volledig verbonden Zijn
- Om het per ongeluk los maken van de koppeling te voorkomen draai de huls van de koppeling.



MAIN APPLICATIONS





Stucchi®

HYDRAULIEK SNELKOPPELINGEN IRC

IRC

Snelkoppeling IRC serie is uitwisselbaar met Tema, Parker 5000, 7500, 10000 serie

PERFORMANCES

Size		Description	Max. flow suggested		Connect force		Disconnect force		Spillage*
Inch	mm		l/min	GPM	N	lbf	N	lbf	ml
1/4	6,3	IRC14	24	6,36	60	13,48	30	6,74	1,1
3/8	10	IRC38	46	12,19	90	20,23	35	7,86	2,5
1/2	12,5	IRC12	90	23,85	120	26,97	35	7,86	3,5
3/4	20	IRC34	212	56,18	170	38,21	45	10,11	15
1	25	IRC100	378	100,17	210	47,20	45	10,11	18

Size	Description	Max. operating pressure						Burst pressure					
		Coupled		Male		Female		Coupled		Male		Female	
Inch	Steel	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
1/4	IRC14	60	8700	40	5800	40	5800	180	26100	120	17400	120	17400
3/8	IRC38	46	6742,5	37	5365	37	5365	130	18850	110	15950	110	15950
1/2	IRC12	40	5800	33	4785	33	4785	110	15950	100	14500	100	14500
3/4	IRC34	33	5365	27	3915	27	3915	100	14500	80	11600	80	11600
1	IRC100	33	4785	33	4785	33	4785	100	14500	100	14500	100	14500

*Spillage is an indicative value of the fluid loss during disconnection (according to ISO 7241-2 test method)

Different possible configurations:

PC version, connectable under residual pressure.

X version, made in AISI 316L (with Viton® seal).

PL version, free flow.

Temperature range:

Seals in NBR (Nitrile) : from -20 °C to +100 °C (from -4 °F to +212 °F).

Seals in VITON® (for IRC -X) : from -15°C to +180°C (from +5 °F to +356 °F).

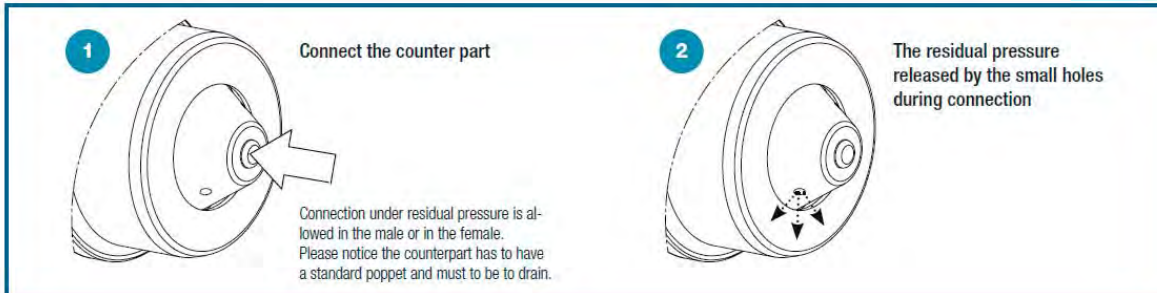
Please read carefully "instruction and warning" for proper selection of the products.

Tests performed:

The couplings have been tested at max. operating pressure for 200.000 impulses according to ISO 7241-2 test method.

For complete technical information contact info@stucchi.it

PC version



! WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects. Connect under pressure products (PC version) are suitable to be connected under residual (static) pressure. Never connect or disconnect with dynamic pressure (e.g. pump on). Do not couple-uncouple with flow and pressure in the circuit (except PC version). Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F). Do not use the coupling disconnected with high impulse pressure. Check the maximum allowable working pressure of the port in use. Make sure that the medium used is compatible with seal and material as indicated for each series. In case of doubt please contact Stucchi Customer Service. The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension. It is **MANDATORY** to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website (www.stucchi.it) before selecting or using Stucchi products.



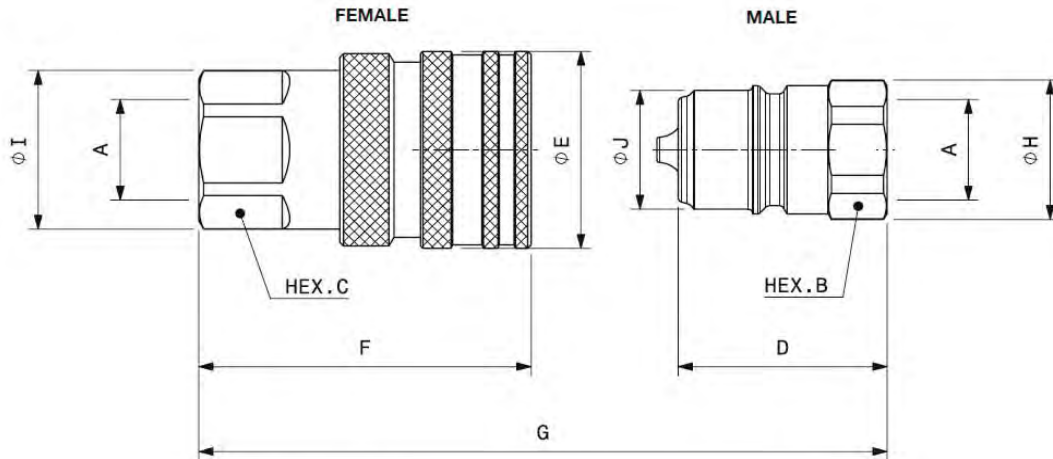
Stucchi®

HYDRAULIEK SNELKOPPELINGEN IRC

IRC

Snelkoppeling IRC serie is uitwisselbaar met Tema, Parker 5000, 7500, 10000 serie

OVERALL DIMENSIONS



Port description: FEMALE THREAD BSPP (ISO 1179-1)

BODY SIZE	Description	Part Number	PORT (A)	Overall Length	Length		Hex		Diameter		Diameter		Weight							
					mm	inch	mm	inch	mm	inch	mm	inch	Kg	Lbs						
1/4"	F IRC14 BSP	Female 811500000	1/4"	G	81,7	3,22	F	60,0	2,36	C	21,0	0,83	I	21,0	0,83	E	26,0	1,02	0,15	0,32
	M IRC14 BSP	Male 811500001					D	48,2	1,90	B	19,0	0,75	H	21,0	0,83	J	12,0	0,47	0,05	0,11
3/8"	F IRC38 BSP	Female 811500002	3/8"	G	76,4	3,01	F	61,6	2,43	C	24,0	0,94	I	26,0	1,02	E	35,0	1,38	0,22	0,48
	M IRC38 BSP	Male 811500003					D	38,0	1,50	B	22,0	0,87	H	24,0	0,94	J	19,9	0,78	0,06	0,12
1/2"	F IRC12 BSP	Female 811500004	1/2"	G	85,2	3,35	F	67,6	2,66	C	30,0	1,18	I	33,0	1,30	E	41,0	1,61	0,33	0,72
	M IRC12 BSP	Male 811500005					D	42,5	1,67	B	27,0	1,06	H	29,0	1,14	J	24,7	0,97	0,10	0,21
3/4"	F IRC34 BSP	Female 811500006	3/4"	G	94,6	3,72	F	76,2	3,00	C	38,0	1,50	I	41,6	1,64	E	52,0	2,05	0,58	1,27
	M IRC34 BSP	Male 811500007					D	47,0	1,85	B	36,0	1,42	H	39,0	1,54	J	32,7	1,29	0,19	0,41
1"	F IRC100 BSP	Female 811500008	1"	G	113,4	4,46	F	92,0	3,62	C	45,0	1,77	I	48,0	1,89	E	62,0	2,44	0,97	2,14
	M IRC100 BSP	Male 811500009					D	56,5	2,22	B	45,0	1,77	H	48,0	1,89	J	40,9	1,61	0,35	0,77

Port description: FEMALE THREAD BSPP (ISO 1179-1)

PC version poppet sealing system connectable under pressure

BODY SIZE	Description	Part Number	PORT (A)	Overall Length	Length		Hex		Diameter		Diameter		Weight							
					mm	inch	mm	inch	mm	inch	mm	inch	Kg	Lbs						
3/8"	F IRC38PC BSP	Female 811500010	3/8"	G	76,4	3,01	F	61,6	2,43	C	24,0	0,94	I	26,0	1,02	E	35,0	1,38	0,22	0,48
	M IRC38PC BSP	Male 811500011					D	38,0	1,50	B	22,0	0,87	H	24,0	0,94	J	19,9	0,78	0,06	0,12
1/2"	F IRC12PC BSP	Female 811500012	1/2"	G	85,2	3,35	F	67,6	2,66	C	30,0	1,18	I	33,0	1,30	E	41,0	1,61	0,33	0,72
	M IRC12PC BSP	Male 811500013					D	42,5	1,67	B	27,0	1,06	H	29,0	1,14	J	24,7	0,97	0,10	0,21
3/4"	F IRC34PC BSP	Female 811500014	3/4"	G	94,6	3,72	F	76,2	3,00	C	38,0	1,50	I	41,6	1,64	E	52,0	2,05	0,58	1,27
	M IRC34PC BSP	Male 811500015					D	47,0	1,85	B	36,0	1,42	H	39,0	1,54	J	32,7	1,29	0,19	0,41
1"	F IRC100PC BSP	Female 811500016	1"	G	113,4	4,46	F	92,0	3,62	C	45,0	1,77	I	48,0	1,89	E	62,0	2,44	0,97	2,14
	M IRC100PC BSP	Male 811500017					D	56,5	2,22	B	45,0	1,77	H	48,0	1,89	J	40,9	1,61	0,35	0,77



Stucchi®

HYDRAULIEK SNELKOPPELINGEN IRC

IRC

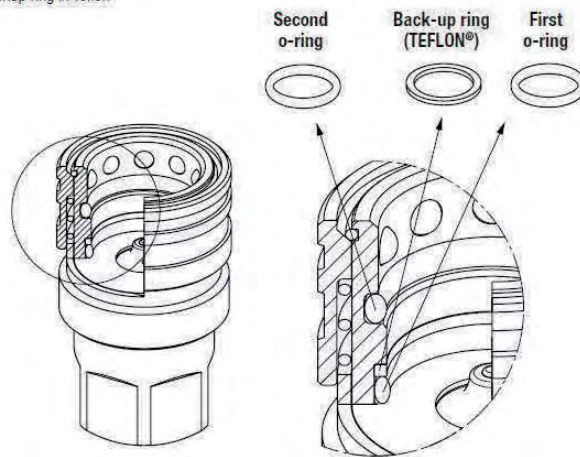
Snelkoppeling IRC serie is uitwisselbaar met Tema, Parker 5000, 7500, 10000 serie



SPARE PARTS: SEAL KIT FOR FEMALE

Repair kit / OR+BK		
Body Size	NBR Version Description	Part Number
1/4"	F IRC14 (2 OR in NBR +BK)	815700700
3/8"	F IRC38 (2 OR in NBR +BK)	815700702
1/2"	F IRC12 (2 OR in NBR +BK)	815700704
3/4"	F IRC34 (2 OR in NBR +BK)	815700706
1"	F IRC100 (2 OR in NBR +BK)	815700708

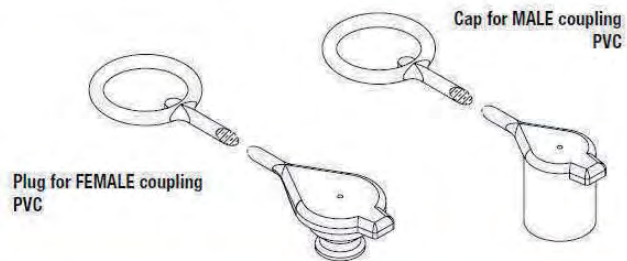
BackUp ring in Teflon®



PROTECTIVE CAPS FOR IRC SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in mobile applications where exposure to weather and aggregate materials are common.

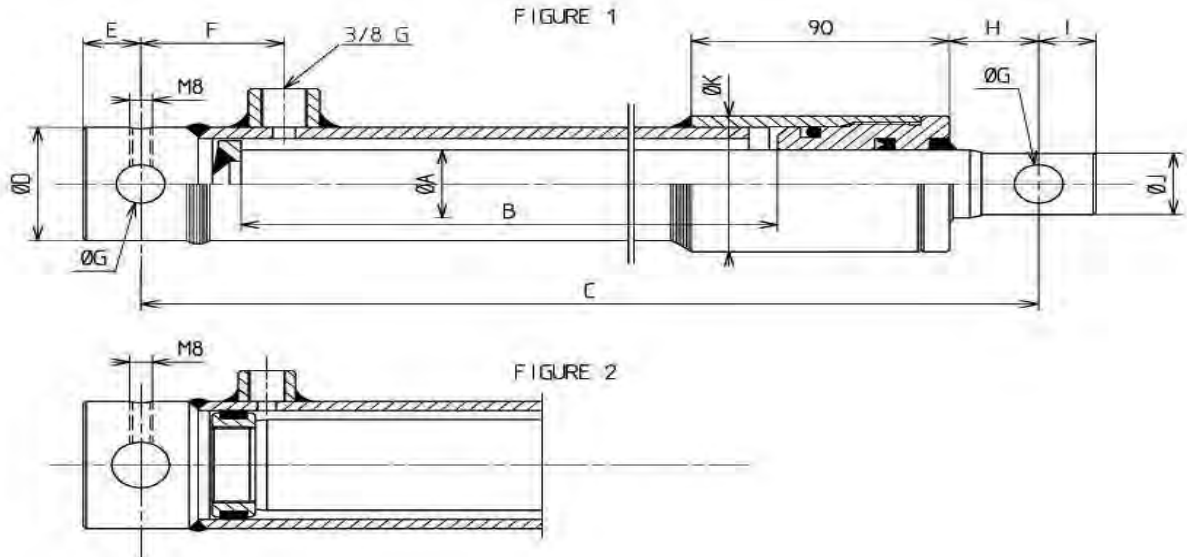
The protective caps for IRC couplings are manufactured in PVC with connection lanyard.



Body Size/Description	Protective Cap		Material/Color
	Part Number	Part Number	
	Plug for Female	Cap for Male	
1/4" IRC14	Ask to sales department		PVC
3/8" IRC38			PVC
1/2" IRC12			PVC
3/4" IRC34			PVC
1" IRC100			PVC

EW

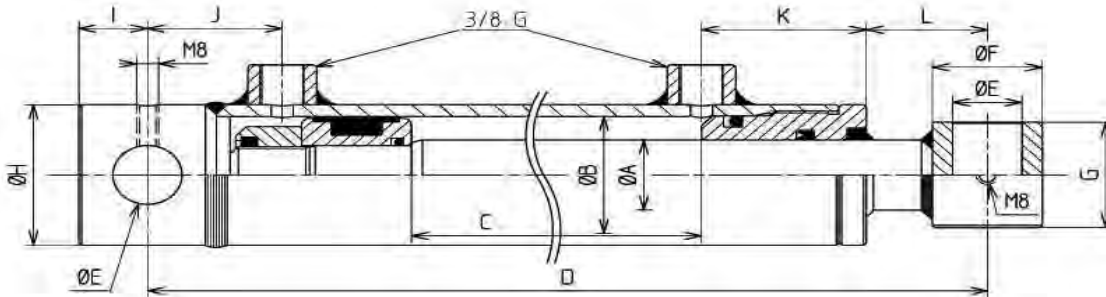
*Enkelwerkende cilinder in standaard uitvoering.
Andere maten op aanvraag verkrijgbaar*



REFERENCE	TYPE	FORCE DE POUSSEE DRUCK KRAFT PUSHING PRESSURE	COURSE B	FIGURE	ENCOMBREMENT								
					MASS								
REFERENZ	TYP		HUB B	ZEICHNUNG	DIMENSION								
REFERENCE	Ø A	180 BARS	STROKE B	SCHEME	C	D	E	F	G	H	I	J	K
3020	30	1T 272	200	1	320	50	20	50	17,00	25	20	27	60
3030			300	1	420								
3040			400	1	520								
3055			550	1	670								
3070			700	1	820								
4020	40	2T 262	200	1	340	60	25	55	23,00	40	25	37	70
4030			300	1	440								
4040			400	1	540								
4055			550	1	690								
4070			700	1	840								
5020	50	3T 534	200	1	360	70	25	55	25,25	60	25	47	80
5030			300	1	460								
5040			400	1	560								
5055			550	2	710								
5070			700	2	860								
6020	60	5T 089	200	1	360	80	30	55	25,25	60	30	57	90
6030			300	1	460								
6040			400	1	560								
6055			550	2	710								
6070			700	2	860								
7030	70	6T 926	300	1	490	90	30	55	30,25	90	30	67	100
7055			550	2	740								
7070			700	2	890								

DW

Dubbelwerkende cilinder in standaard uitvoering.

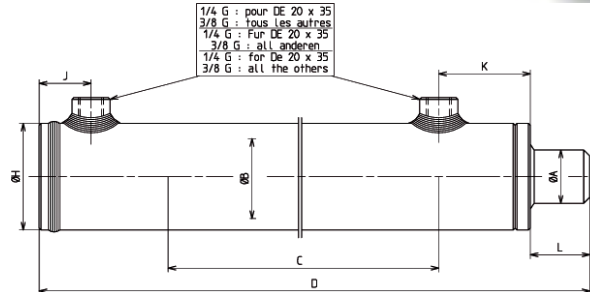


REFERENCE REFERENZ REFERENCE	TYPE TYP TYPE		FORCE DE POUSSEE DRUCK KRAFT PUSHING PRESSURE	FORCE DE TRACTION ZUG KRAFT PULLING PRESSURE	COURSE C HUB C STROKE C	ENCOMBREMENT MASS DIMENSION								
	Ø A Tige Stange Rod	Ø B Alesage Bohrung Cylinder bore	180 BARS			D	E	F	G	H	I	J	K	L
			180 BARS											
			180 BARS											
2541	25	40	2T 262	1T 378	100	290	17,00	40	40	50	20	44	60	44
2542					200	390								
2543					300	490								
2544					400	590								
2545					500	690								
3052	30	50	3T 534	2T 262	200	400	25,25	40	45	60	25	49	60	49
3053					300	500								
3054					400	600								
3055					500	700								
3056					600	800								
3057					700	900								
3562	35	60	5T 089	3T 357	200	400	25,25	40	45	70	25	49	60	49
3563					300	500								
3564					400	600								
3565					500	700								
3566					600	800								
35067	700	900												
4072	40	70	6T 926	4T 665	200	410	30,25	50	55	80	30	49	60	53
4073					300	510								
4074					400	610								
4075					500	710								
4076					600	810								
4077	700	910												
4583	45	80	9T 047	6T 184	300	510	30,25	50	55	90	30	49	60	44
4584					400	610								
4585					500	710								
4586					600	810								
4587					700	910								
50103	50	100	14T 135	10T 601	300	540	30,25	60	70	115	30	49	83	51
50104					400	640								
50105					500	740								
50107					700	940								
50109					900	1140								

DW

Dubbelwerkende cilinder zonder bevestiging.

Andere maten op aanvraag verkrijgbaar

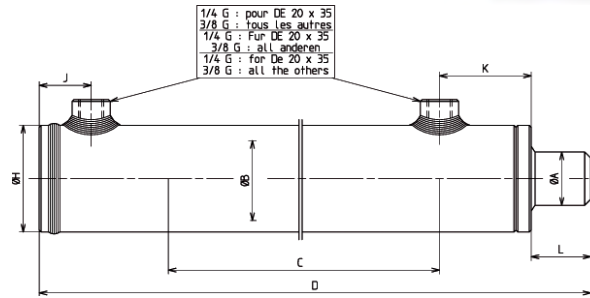


REFERENCE	TYPE		FORCE DE POUSSEE DRUCK KRAFT PUSHING PRESSURE	FORCE DE TRACTION ZUG KRAFT PULLING PRESSURE	COURSE C	ENCOMBREMENT				
	TYP	TYPE				MASS				
REFERENZ	Ø Tige A	Ø Alésage B	180 Bars	180 Bars	HUB C	DIMENSION				
REFERENCE	Ø Stange A	Ø Bohrung B				180 Bars	180 Bars	STROKE C	D	H
	Ø Rod A	Ø Cylinder bore B	180 Bars	180 Bars						
2035-0100NE	20	35	1T 732	1T 166	100	230	45	30	49	21
2035-0150NE					150	280				
2035-0200NE					200	330				
2035-0250NE					250	380				
2035-0300NE					300	430				
2035-0350NE					350	480				
2035-0400NE					400	530				
2035-0450NE					450	580				
2035-0500NE					500	630				
2540-0100NE					25	40				
2540-0150NE	150	280								
2540-0200NE	200	330								
2540-0250NE	250	380								
2540-0300NE	300	430								
2540-0350NE	350	480								
2540-0400NE	400	530								
2540-0450NE	450	580								
2540-0500NE	500	630								
2540-0550NE	550	680								
2540-0600NE	600	730								

DW

Dubbelwerkende cilinder zonder bevestiging.

Andere maten op aanvraag verkrijgbaar

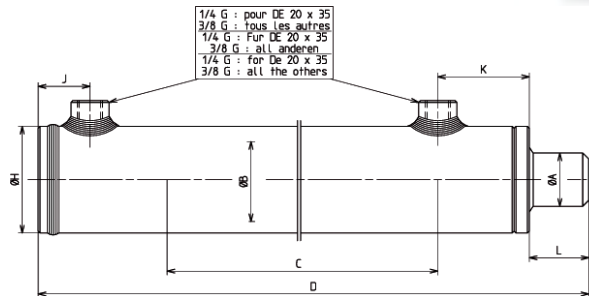


REFERENCE	TYPE		FORCE DE POUSSEE	FORCE DE TRACTION	COURSE C	ENCOMBREMENT				
	TYP	TYPE	DRUCK KRAFT	ZUG KRAFT		MASS				
REFERENZ	Ø Tige A	Ø Alésage B	180 Bars		HUB C	DIMENSION				
REFERENCE	Ø Stange A	Ø Bohrung B	180 Bars		STROKE C	D	H	J	K	L
	Ø Rod A	Ø Cylinder bore B	180 Bars							
3050-0100NE	30	50	3T 534	2T 262	100	240	60	34	50	19
3050-0150NE					150	290				
3050-0200NE					200	340				
3050-0250NE					250	390				
3050-0300NE					300	440				
3050-0350NE					350	490				
3050-0400NE					400	540				
3050-0450NE					450	590				
3050-0500NE					500	640				
3050-0550NE					550	690				
3050-0600NE					600	740				
3050-0650NE					650	790				
3050-0700NE					700	840				
3050-0750NE					750	890				
3050-0800NE					800	940				
3050-0850NE					850	990				
3050-0900NE					900	1040				
3050-0950NE					950	1090				
3050-1000NE					1000	1140				
3060-0100NE					30	60				
3060-0150NE	150	310								
3060-0200NE	200	360								
3060-0250NE	250	410								
3060-0300NE	300	460								
3060-0350NE	350	510								
3060-0400NE	400	560								
3060-0450NE	450	610								
3060-0500NE	500	660								
3060-0550NE	550	710								
3060-0600NE	600	760								
3060-0650NE	650	810								
3060-0700NE	700	860								
3060-0750NE	750	910								
3060-0800NE	800	960								
3060-0850NE	850	1010								
3060-0900NE	900	1060								
3060-0950NE	950	1110								
3060-1000NE	1000	1160								

DW

Dubbelwerkende cilinder zonder bevestiging.

Andere maten op aanvraag verkrijgbaar

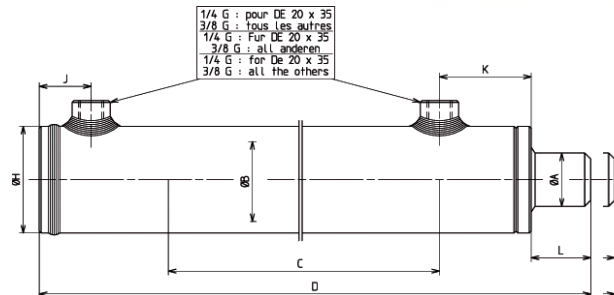


REFERENCE	TYPE		FORCE DE POUSSEE	FORCE DE TRACTION	COURSE C	ENCOMBREMENT				
	TYP	TYPE	DRUCK KRAFT	ZUG KRAFT		MASS				
REFERENZ	Ø Tige A	Ø Alésage B	180 Bars	180 Bars	HUB C	DIMENSION				
REFERENCE	Ø Stange A	Ø Bohrung B			180 Bars	STROKE C	D	H	J	K
	Ø Rod A	Ø Cylinder bore B	180 Bars							
3560-0100NE	35	60	5T 089	3T 357	100	260	70	34	60	19
3560-0150NE					150	310				
3560-0200NE					200	360				
3560-0250NE					250	410				
3560-0300NE					300	460				
3560-0350NE					350	510				
3560-0400NE					400	560				
3560-0450NE					450	610				
3560-0500NE					500	660				
3560-0550NE					550	710				
3560-0600NE					600	760				
3560-0650NE					650	810				
3560-0700NE					700	860				
3560-0750NE					750	910				
3560-0800NE					800	960				
3560-0850NE					850	1010				
3560-0900NE					900	1060				
3560-0950NE					950	1110				
3560-1000NE					1000	1160				
4060-0100NE					40	60				
4060-0150NE	150	310								
4060-0200NE	200	360								
4060-0250NE	250	410								
4060-0300NE	300	460								
4060-0350NE	350	510								
4060-0400NE	400	560								
4060-0450NE	450	610								
4060-0500NE	500	660								
4060-0550NE	550	710								
4060-0600NE	600	760								
4060-0650NE	650	810								
4060-0700NE	700	860								
4060-0750NE	750	910								
4060-0800NE	800	960								
4060-0850NE	850	1010								
4060-0900NE	900	1060								
4060-0950NE	950	1110								
4060-1000NE	1000	1160								

DW

Dubbelwerkende cilinder zonder bevestiging.

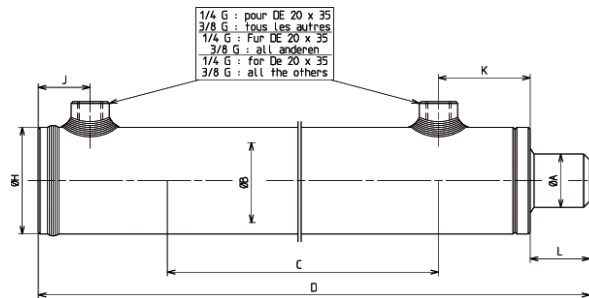
Andere maten op aanvraag verkrijgbaar



REFERENCE	TYPE		FORCE DE POUSSEE	FORCE DE TRACTION	COURSE C	ENCOMBREMENT				
	TYP	TYPE	DRUCK	ZUG		HUB C	MASS			
REFERENZ	Ø Tige A	Ø Alésage B	PUSHING PRESSURE	PULLING PRESSURE	STROKE C		DIMENSION			
REFERENCE	Ø Stange A	Ø Bohrung B	180 Bars	180 Bars		D	H	J	K	L
	Ø Rod A	Cylinder bore B	180 Bars	180 Bars						
3070-0150NE	30	70	6T 926	5T 654	150	310	80	34	60	19
3070-0200NE					200	360				
3070-0250NE					250	410				
3070-0300NE					300	460				
3070-0350NE					350	510				
3070-0400NE					400	560				
3570-0100NE	35	70	6T 926	5T 195	100	260	80	34	60	19
3570-0150NE					150	310				
3570-0200NE					200	360				
3570-0250NE					250	410				
3570-0300NE					300	460				
3570-0350NE					350	510				
3570-0400NE					400	560				
3570-0450NE					450	610				
3570-0500NE					500	660				
3570-0550NE					550	710				
3570-0600NE					600	760				
3570-0650NE					650	810				
3570-0700NE					700	860				
3570-0750NE					750	910				
3570-0800NE					800	960				
3570-0850NE					850	1010				
3570-0900NE	900	1060								
3570-0950NE	950	1110								
3570-1000NE	1000	1160								

DW

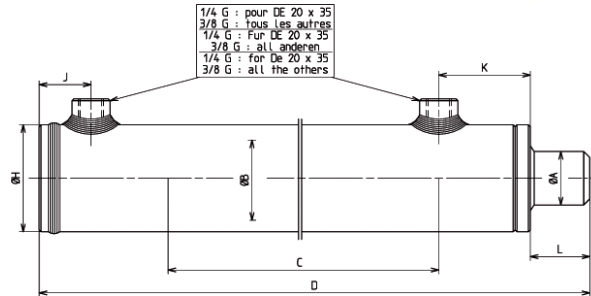
*Dubbelwerkende cilinder zonder bevestiging.
Andere maten op aanvraag verkrijgbaar*



REFERENCE REFERENZ REFERENCE	TYPE TYP TYPE		FORCE DE POUSSEE DRUCK KRAFT	FORCE DE TRACTION ZUG KRAFT	COURSE C	ENCOMBREMENT				
	Ø Tige A	Ø Alésage B	180 Bars	180 Bars	HUB C	MASS				
					Ø Stange A	Ø Bohrung B	180 Bars	180 Bars	DIMENSION	
Ø Rod A	Ø Cylinder bore B	180 Bars	180 Bars	STROKE C					D	H
4070-0100NE	40	70	6T 926	4T 665	100	260	80	34	60	19
4070-0150NE					150	310				
4070-0200NE					200	360				
4070-0250NE					250	410				
4070-0300NE					300	460				
4070-0350NE					350	510				
4070-0400NE					400	560				
4070-0450NE					450	610				
4070-0500NE					500	660				
4070-0550NE					550	710				
4070-0600NE					600	760				
4070-0650NE					650	810				
4070-0700NE					700	860				
4070-0750NE					750	910				
4070-0800NE					800	960				
4070-0850NE					850	1010				
4070-0900NE					900	1060				
4070-0950NE	950	1110								
4070-1000NE	1000	1160								
3080-0150NE	30	80	9T 047	7T 774	150	330	90	34	60	34
3080-0200NE					200	380				
3080-0250NE					250	430				
3080-0300NE					300	480				
3580-0150NE	35	80	9T 047	7T 315	150	330	90	34	60	34
3580-0200NE					200	380				
3580-0250NE					250	430				
3580-0300NE					300	480				

DW

Dubbelwerkende cilinder zonder bevestiging.
Andere maten op aanvraag verkrijgbaar

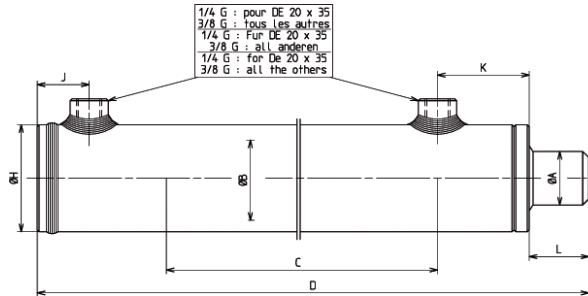


REFERENCE	TYPE		FORCE DE POUSSEE	FORCE DE TRACTION	COURSE C	ENCOMBREMENT				
	TYP	TYPE	DRUCK KRAFT	ZUG KRAFT		MASS				
REFERENZ	Ø Tige A	Ø Alésage B	PUSHING PRESSURE	PULLING PRESSURE	HUB C	DIMENSION				
REFERENCE	Ø Stange A	Ø Bohrung B	180 Bars	180 Bars	STROKE C	D	H	J	K	L
	Ø Rod A	Ø Cylinder bore B	180 Bars	180 Bars						
4080-0100NE	40	80	9T 047	6T 785	100	280	90	34	60	34
4080-0150NE					150	330				
4080-0200NE					200	380				
4080-0250NE					250	430				
4080-0300NE					300	480				
4080-0350NE					350	530				
4080-0400NE					400	580				
4080-0450NE					450	630				
4080-0500NE					500	680				
4080-0550NE					550	730				
4080-0600NE					600	780				
4080-0650NE					650	830				
4080-0700NE					700	880				
4080-0750NE					750	930				
4080-0800NE					800	980				
4080-0850NE					850	1030				
4080-0900NE					900	1080				
4080-0950NE	950	1130								
4080-1000NE	1000	1180								
5080-0200NE	50	80	9T 047	5T 513	200	380	90	34	60	29
5080-0250NE					250	430				
5080-0300NE					300	480				
5080-0350NE					350	530				
5080-0400NE					400	580				
5080-0450NE					450	630				
5080-0500NE					500	680				
5080-0550NE					550	730				
5080-0600NE					600	780				
5080-0650NE					650	830				
5080-0700NE					700	880				
5080-0750NE					750	930				
5080-0800NE					800	980				
5080-0850NE					850	1030				
5080-0900NE					900	1080				
5080-0950NE					950	1130				
5080-1000NE					1000	1180				

DW

Dubbelwerkende cilinder zonder bevestiging.

Andere maten op aanvraag verkrijgbaar



REFERENCE	TYPE		FORCE DE POUSSEE	FORCE DE TRACTION	COURSE C	ENCOMBREMENT				
	TYP	TYPE	DRUCK KRAFT	ZUG KRAFT		MASS				
REFERENZ	Ø	Ø	PUSHING PRESSURE	PULLING PRESSURE	HUB C	DIMENSION				
REFERENCE	Tige A	Alésage B	180 Bars	180 Bars	STROKE C	D	H	J	K	L
	Ø	Ø								
	Ø	Ø								
	Rod A	Cylinder bore B								
5090-0200NE	50	90	11T 450	7T 916	200	380	100	34	60	29
5090-0250NE					250	430				
5090-0300NE					300	480				
5090-0350NE					350	530				
5090-0400NE					400	580				
5090-0450NE					450	630				
5090-0500NE					500	680				
5090-0550NE					550	730				
5090-0600NE					600	780				
5090-0650NE					650	830				
5090-0700NE					700	880				
5090-0750NE					750	930				
5090-0800NE					800	980				
5090-0850NE					850	1030				
5090-0900NE					900	1080				
5090-0950NE					950	1130				
5090-1000NE					1000	1180				
50100-0200NE	50	100	14T 135	10T 601	200	410	115	34	83	36
50100-0250NE					250	460				
50100-0300NE					300	510				
50100-0350NE					350	560				
50100-0400NE					400	610				
50100-0450NE					450	660				
50100-0500NE					500	710				
50100-0550NE					550	760				
50100-0600NE					600	810				
50100-0650NE					650	860				
50100-0700NE					700	910				
50100-0750NE					750	960				
50100-0800NE					800	1010				
50100-0850NE					850	1060				
50100-0900NE					900	1110				
50100-0950NE					950	1160				
50100-1000NE					1000	1210				

Topstangcilinder.

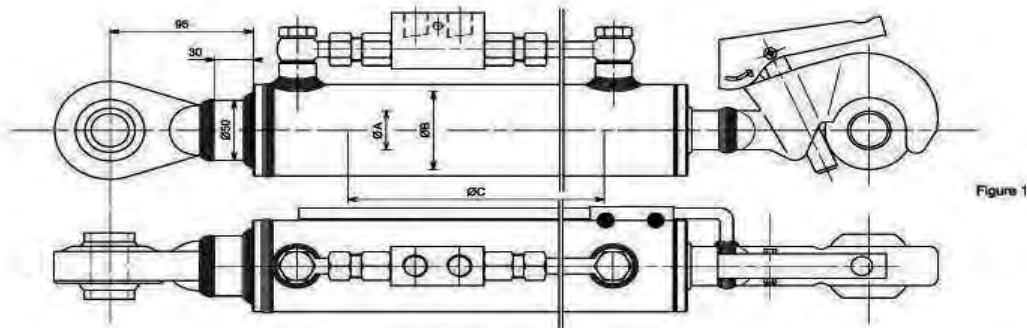


Figure 1

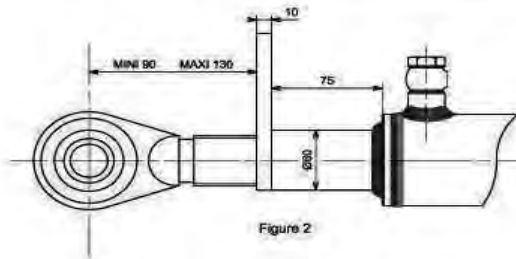


Figure 2

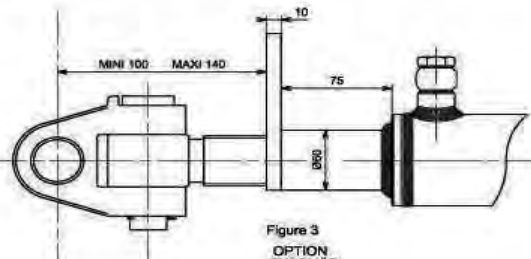
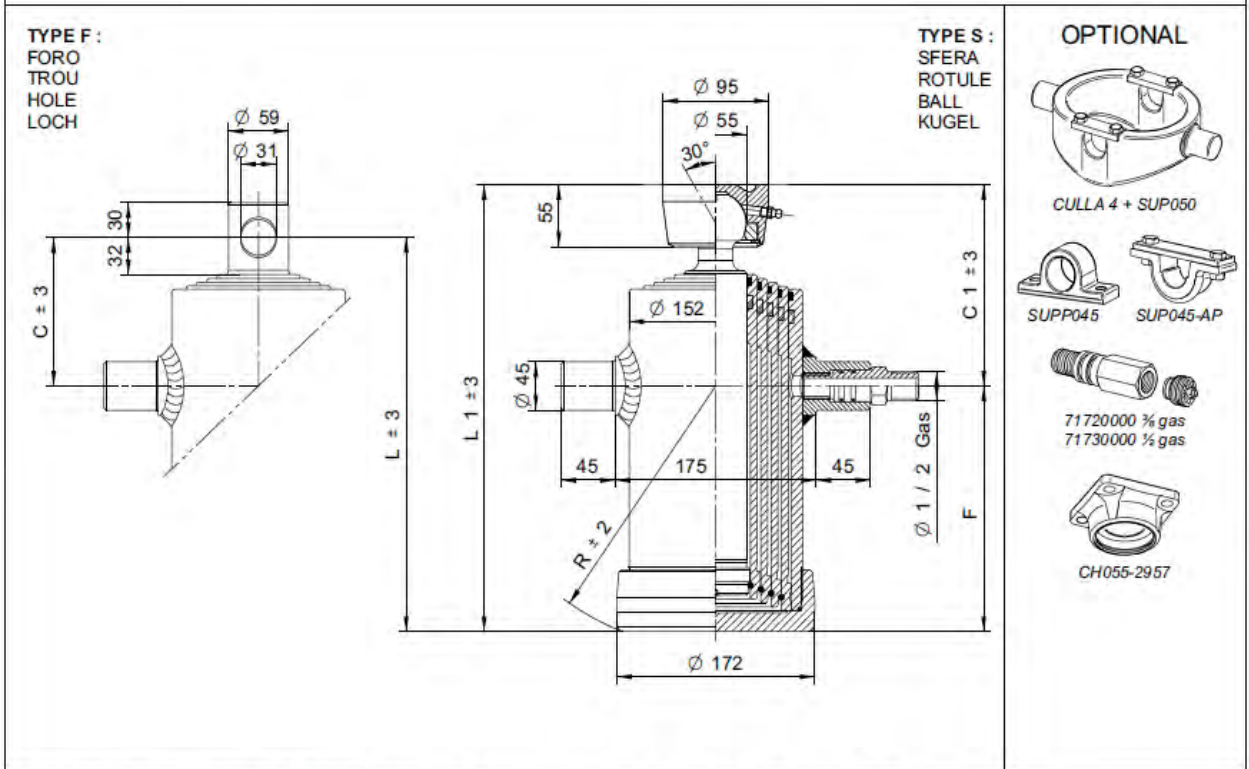


Figure 3
OPTION
ZUBEHÖR
OPTION

REFERENCE	TYPE		FORCE DE POUSSEE	FORCE DE TRACTION	COURSE C	ENTRAXE FERME D	CATEGORIE FIXATION	FIGURE N°
	TYP	TYPE	DRUCK KRAFT	ZUG KRAFT		HUB C	EINBAULANGE DES ZYLINDERS EINGEFAHREN D	TYP VON BEFESTIGUNG
REFERENZ	Ø A	Ø B	PUSHING PRESSURE	PULLING PRESSURE	STROKE C	CLOSED CENTRAL DIMENSION D	TYPE OF FITTING	SCHEME N°
REFERENCE	Tige Stange Rod	Alésage Bohrung Cylinder bore	180 BARS	180 BARS				
A11238	30	60	5T 089	3T 817	210	565	2	1
A11239	30	60	5T 089	3T 817	280	635	2	1
A10572	35	70	6T 926	5T 195	210	570	2	1
A10573	35	70	6T 926	5T 195	280	640	2	1
A10571	40	80	9T 047	6T 785	210	590	2	1
A11220	40	80	9T 047	6T 785	280	660	2	1
A10649	40	80	9T 047	6T 785	210	665/705	2 ou 3	2
	OPTION ZUBEHÖR		OPTION			675/715	3	3
A11240	55	100	14T 135	9T 859	210	690/730	2 ou 3	2
	OPTION ZUBEHÖR		OPTION			700/740	3	3

30

5-traps telescoopcilinder
2 en 3 traps op aanvraag verkrijgbaar



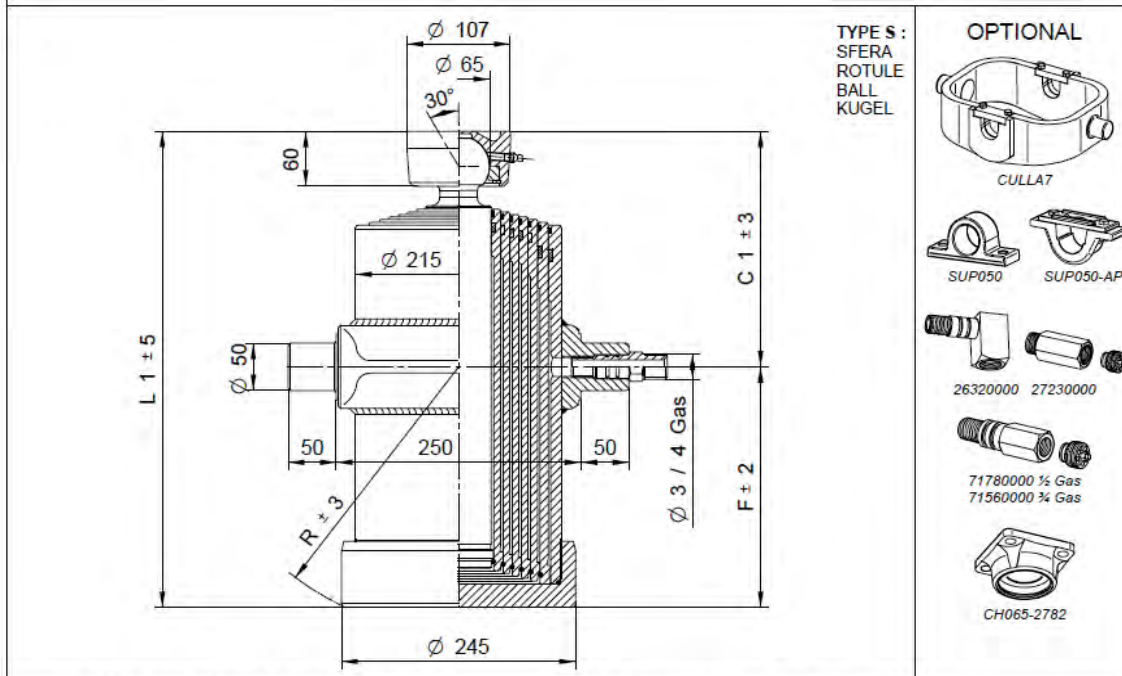
PESO TOT. RIBALTABILE 11 Ton. a 180 Bar
POIDS TOT. REBATABLE 11 Ton. au 180 Bar

TOTAL WEIGHT TIP-UP 11 Ton. 180 Bar
GESAMTGEWICHT KIPPANHÄNGER 11 Ton. 180 Bar

TIPO TYPE TYPE TYP	DISEGNO - DRAWING DESSIN - ZEICHNUNG	CORSIA - STROKE COURSE - HUB	Ø SFILATE mm Ø EXPANSIONS mm Ø EXTENSIONS mm Ø STUFEN mm								DIMENSIONI CILINDRO DIMENSIONS VÉRIN CYLINDER DIMENSIONS ZYLINDER ABMESSUNGEN						L. sfilata - L. extension L. expansion - L. stufen	Peso - Kg - Weight Poids - Kg - Gewicht	Volume olio Lt. Amount of oil Lt. Volume huile Lt. Ölinhalt Lt.	
			46 TON. 2,9	61 TON. 5,2	76 TON. 8,1	91 TON. 11,7	107 TON. 16,1	126 TON. 22,4	145 TON. 29,7	165 TON. 38,4	187 TON. 49,4	C	C'	F	L	L'				R
			F	S																
3051	3362	980	●	●	●	●	●											39	40,5	7,5
3052	3363	1230	●	●	●	●	●											44,5	46	9
3053	3364	1480	●	●	●	●	●											51,5	53	11
3054	3365	1880	●	●	●	●	●											60	61,5	13,5
3055	3366	2130	●	●	●	●	●											65,5	67	15,5
3056	9165	2480	●	●	●	●	●											73,5	75	18
3057	8640	830	●	●	●	●	●											35,5	37	6,5

70

7-traps telescoopcilinder
2 en 3-traps op aanvraag verkrijgbaar



PESO TOT. RIBALTABILE 22 Ton. a 180 Bar
POIDS TOT. REBATABLE 22 Ton. au 180 Bar

TOTAL WEIGHT TIP-UP 22 Ton. 180 Bar
GESAMTGEWICHT KIPPANHÄNGER 22 Ton. 180 Bar

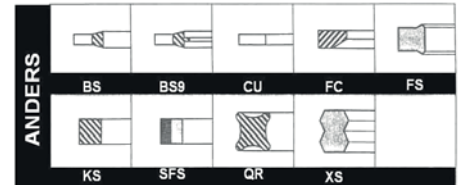
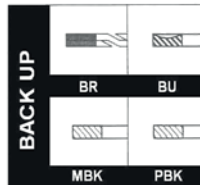
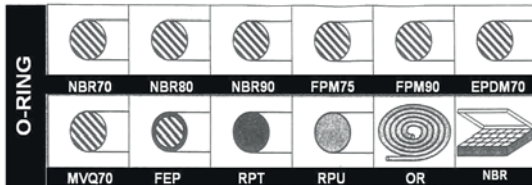
TIPO TYPE TYPE TYP	DISEGNO - DRAWING DESSIN - ZEICHNUNG	CORSIA - STROKE COURSE - HUB	Ø SFILATE mm Ø EXPANSIONS mm Ø EXTENSIONS mm Ø STUFEN mm								DIMENSIONI CILINDRO DIMENSIONS VÉRIN CYLINDER DIMENSIONS ZYLINDER ABMESSUNGEN							L L L L	R	L L L L	F	S	Volume olio Lt. Amount of oil Lt. Volume huile Lt. Ölmenge Lt.			
			68 TON. 6,5	88 TON. 10,9	107 TON. 16,1	126 TON. 22,4	145 TON. 29,7	165 TON. 38,4	187 TON. 49,4	210 TON. 62,3	236 TON. 78,5	C	C'	F	L	L'	L							L	Peso - Kg Poids - Kg	Peso - Kg Poids - Kg
7050	14020	1665	•	•	•	•	•	•	•				-	250	195	-	445	230	320	-	102	23				
7051	14021	1770	•	•	•	•	•	•	•				-	250	210	-	460	244	335	-	106	24				
7052	14022	2065	•	•	•	•	•	•	•				-	250	255	-	505	283	380	-	116	29				
7053	14023	2550	•	•	•	•	•	•	•				-	250	325	-	575	348	450	-	132	35				
7054	14024	2905	•	•	•	•	•	•	•				-	250	375	-	625	395	500	-	144	40				
7055	14025	3395	•	•	•	•	•	•	•				-	250	445	-	695	462	570	-	160	47				
7057	14027	2340	•	•	•	•	•	•	•				-	250	295	-	545	318	420	-	121	32				

PRESSIONE MAX. DI ESERCIZIO 180 BAR - PRESSION MAX. DE SERVICE 180 BAR
WORKING MAX. PRESSURE 180 BAR - MAX. BETRIEBSDRUCK 180 BAR

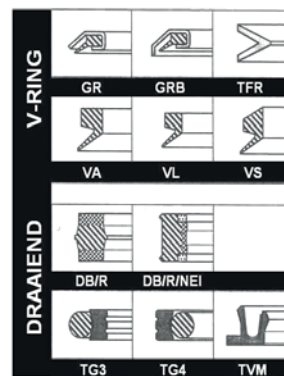
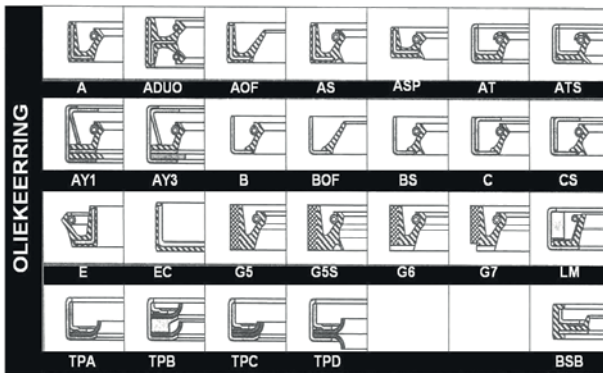
Andere maten op aanvraag leverbaar

**Overzicht Afdichtingen.
Binnen 48 uur te leveren**

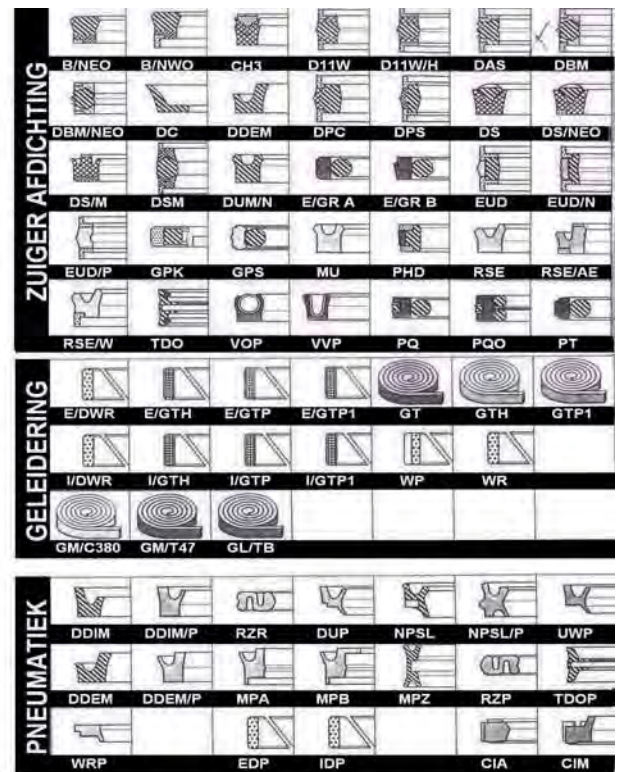
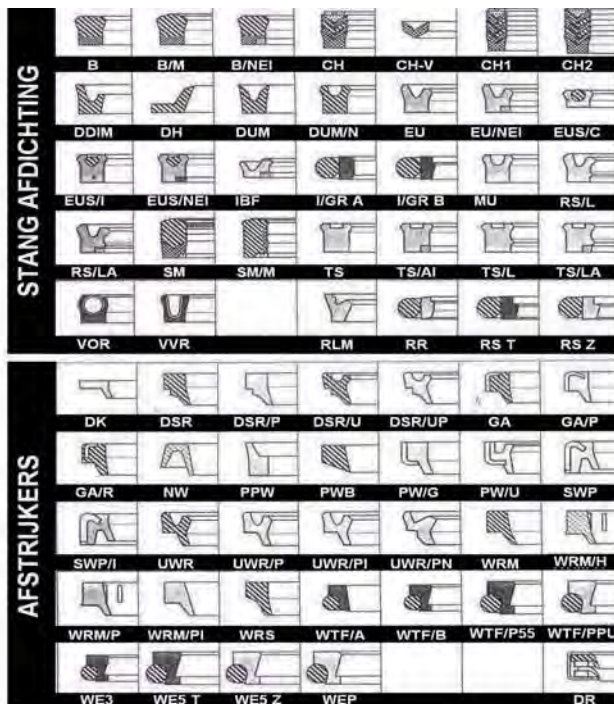
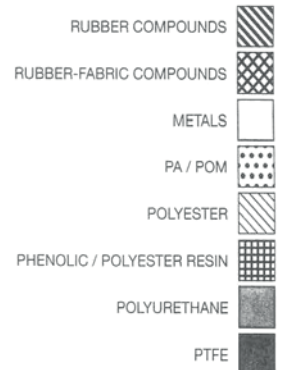
STATISCHE AFDICHTINGEN



ROTERENDE AFDICHTINGEN

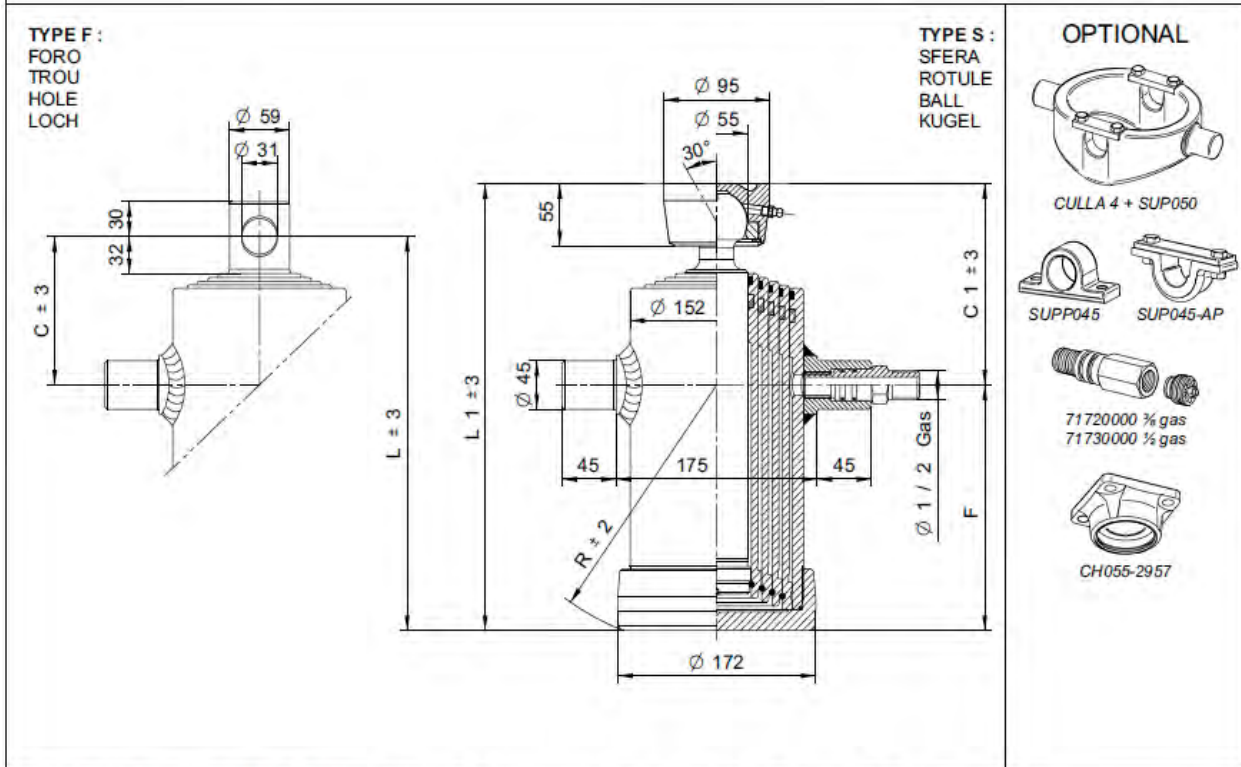


MATERIAAL SOORT



30

5-traps telescoopcilinder
2 en 3 traps op aanvraag verkrijgbaar



PESO TOT. RIBALTABILE 11 Ton. a 180 Bar **TOTAL WEIGHT TIP-UP 11 Ton. 180 Bar**
POIDS TOT. REBATABLE 11 Ton. au 180 Bar **GESAMTGEWICHT KIPPANHÄNGER 11 Ton. 180 Bar**

TIPO TYPE TYPE TYP	DISEGNO - DRAWING DESSIN - ZEICHNUNG	CORSA - STROKE COURSE - HUB	Ø SFILATE mm Ø EXPANSIONS mm Ø EXTENSIONS mm Ø STUFEN mm								DIMENSIONI CILINDRO DIMENSIONS VÉRIN CYLINDER DIMENSIONS ZYLINDER ABMESSUNGEN						L. sfidata - L. extension L. expansion - L. stufen	Peso - Kg - Weight	Poids - Kg - Gewicht	Volume olio Lt. Amount of oil Lt. Volume huile Lt. Ölinhalt Lt.	
			46 TON. 2,9	61 TON. 5,2	76 TON. 8,1	91 TON. 11,7	107 TON. 16,1	126 TON. 22,4	145 TON. 29,7	165 TON. 38,4	187 TON. 49,4	C	C ¹	F	L	L ¹					R
			F	S																	
3051	3362	980	•	•	•	•	•											39	40,5	7,5	
3052	3363	1230	•	•	•	•	•											44,5	46	9	
3053	3364	1480	•	•	•	•	•											51,5	53	11	
3054	3365	1880	•	•	•	•	•											60	61,5	13,5	
3055	3366	2130	•	•	•	•	•											65,5	67	15,5	
3056	9165	2480	•	•	•	•	•											73,5	75	18	
3057	8640	830	•	•	•	•	•											35,5	37	6,5	

70

7-traps telescoopcilinder

2 en 3-traps op aanvraag verkrijgbaar

TYPE S :
SFERA
ROTULE
BALL
KUGEL

OPTIONAL

PESO TOT. RIBALTABILE 22 Ton. a 180 Bar
POIDS TOT. REBATABLE 22 Ton. au 180 Bar

TOTAL WEIGHT TIP-UP 22 Ton. 180 Bar
GESAMTGEWICHT KIPPANHÄNGER 22 Ton. 180 Bar

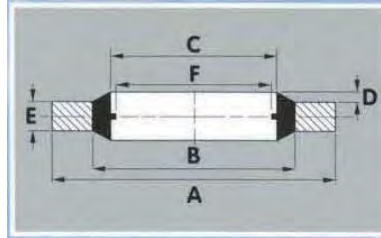
TIPO TYPE TYP	DISEGNO - DRAWING DESSIN - ZEICHNUNG	CORSO - STROKE COURSE - HUB	Ø SFILATE mm Ø EXPANSIONS mm Ø EXTENSIONS mm Ø STUFEN mm								DIMENSIONI CILINDRO DIMENSIONS VÉRIN CYLINDER DIMENSIONS ZYLINDER ABMESSUNGEN						L. sfilata - L. extension L. expansion - L. stufen		Peso - Kg - Weight Poids - Kg - Gewicht		Volume olio Lt. Amount of oil Lt. Volume huile Lt. Ölmhalt Lt.		
			68 TON. 6,5	88 TON. 10,9	107 TON. 16,1	126 TON. 22,4	145 TON. 29,7	165 TON. 38,4	187 TON. 49,4	210 TON. 62,3	236 TON. 78,5	C	C'	F	L	L'	R	F	S				
												C	C'	F	L	L'	R						
7050	14020	1665	•	•	•	•	•	•	•				-	250	195	-	445	230	320	-	102	23	
7051	14021	1770	•	•	•	•	•	•	•				-	250	210	-	460	244	335	-	106	24	
7052	14022	2065	•	•	•	•	•	•	•				-	250	255	-	505	283	380	-	116	29	
7053	14023	2550	•	•	•	•	•	•	•				-	250	325	-	575	348	450	-	132	35	
7054	14024	2905	•	•	•	•	•	•	•				-	250	375	-	625	395	500	-	144	40	
7055	14025	3395	•	•	•	•	•	•	•				-	250	445	-	695	462	570	-	160	47	
7057	14027	2340	•	•	•	•	•	•	•				-	250	295	-	545	318	420	-	121	32	

PRESSIONE MAX. DI ESERCIZIO 180 BAR - PRESSION MAX. DE SERVICE 180 BAR
WORKING MAX. PRESSURE 180 BAR - MAX. BETRIEBSDRUCK 180 BAR

Andere maten op aanvraag leverbaar

BSC..

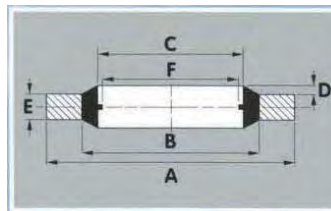
Bonded seal zelf centreren
BSP



Artikel nummer	maat BSP	A	B	C	D	E	F	Barstdruk (BAR)
		+0,13 -0,00	+0,10 -0,10	+0,10 -0,10		+0,15 -0,15	+0,20 -0,20	
BSC02	1/8	15,88	11,84	10,37	0,25/0,51	2,03	8,56	1500,00
BSC04	1/4	20,57	15,21	13,74	0,25/0,51	2,03	11,45	1550,00
BSC06	3/8	23,80	18,75	17,28	0,25/0,51	2,03	14,96	1260,00
BSC08	1/2	28,58	23,01	21,54	0,25/0,51	2,50	18,64	1150,00
BSC10	5/8	31,75	24,97	23,49	0,25/0,51	2,50	20,60	1250,00
BSC12	3/4	34,93	28,53	27,05	0,25/0,51	2,50	24,13	1060,00
BSC16	1	42,80	36,88	33,89	0,25/0,51	2,50	30,30	810,00
BSC20	1 1/4	52,38	45,93	42,93	0,25/0,51	2,50	38,96	690,00
BSC24	1 1/2	58,60	51,39	48,44	0,25/0,51	2,50	44,86	690,00
BSC32	2	73,03	63,63	60,58	0,25/0,51	2,50	56,67	700,00

MSC..

Bonded seal zelf centreren
Metrisch



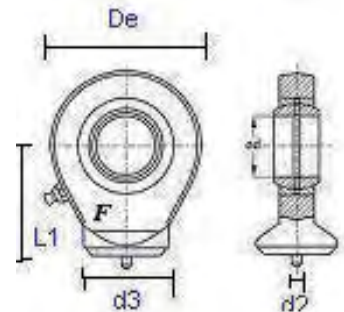
Artikel nummer	A	B	C	D	E	F	Barstdruk (BAR)
	+0,13 -0,00	+0,10 -0,10	+0,10 -0,10	+0,25 -0,00	+0,10 -0,10	+0,20 -0,20	
MSC 6	11,00	8,20	6,70	0,30	1,00	4,70	1510
MSC 8	14,00	10,40	8,70	0,30	1,00	6,40	1550
MSC10	18,00	12,40	10,70	0,40	1,50	8,05	1880
MSC12	18,00	14,30	12,70	0,40	1,50	9,73	1250
MSC14	22,00	16,40	14,70	0,40	1,50	11,38	1510
MSC16	24,00	18,40	16,70	0,40	1,50	13,41	1400
MSC18	26,00	20,40	18,70	0,40	1,50	14,76	1275
MSC20	28,00	22,50	20,70	0,40	1,50	16,76	1150
MSC22	30,00	24,40	22,70	0,40	2,00	18,74	1100
MSC24	32,00	26,40	24,70	0,40	2,00	20,11	1050
MSC26	35,00	28,40	26,70	0,40	2,00	22,30	1050
MSC28	36,00	29,00	27,20	0,40	2,00	23,30	1130
MSC30	39,00	33,00	31,00	0,40	2,00	25,70	860

GK..DO

**Aanlasogen industrie volgens ISO 12240-4 serie S,
DIN 648 serie E, vorm C**

**Materiaal: Kop staal ST52.3
Lager staal**

Bestelnummer	d	H	L1	D3	De	H1	L
	Mm	mm	mm	Mm	mm	mm	Mm
GK10DO	10	9	24	15	29	7	38,5
GK12DO	12	10	27	17,5	34	8	44
GK15DO	15	12	31	21	40	10	51
GK16DO	16	14	35	24	46	11	58
GK17DO	17	14	35	24	46	11	58
GK20DO	20	16	38	27,5	53	13	64,5
GK25DO	25	20	45	33,5	64	17	77
GK30DO	30	22	51	40	73	19	87,5
GK35DO	35	25	61	47	82	21	102
GK40DO	40	28	69	52	92	23	115
GK45DO	45	32	77	58	102	27	128
GK50DO	50	35	88	62	112	30	144
GK60DO	60	44	100	70	135	38	167,5
GK70DO	70	49	115	80	160	42	195
GK80DO	80	55	141	95	180	47	231

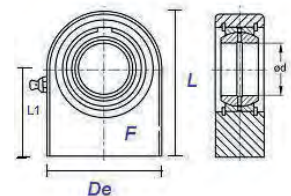


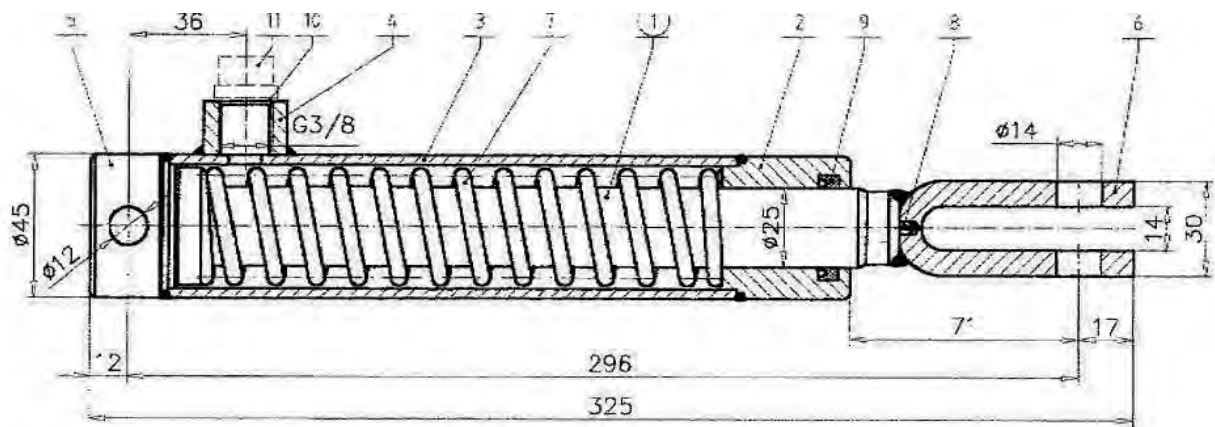
GF..DO

Aanlasogen

**Materiaal: Kop staal ST52.3
Lager staal**

Bestelnummer	d	H	L1	D3	De	H1	L
	Mm	mm	mm	Mm	mm	mm	Mm
GF20DO	10	9	24	15	29	7	38,5
GF25DO	12	10	27	17,5	34	8	44
GF30DO	15	12	31	21	40	10	51
GF35DO	16	14	35	24	46	11	58
GF40DO	17	14	35	24	46	11	58
GF45DO	20	16	38	27,5	53	13	64,5
GF50DO	25	20	45	33,5	64	17	77
GF60DO	30	22	51	40	73	19	87,5
GF70DO	35	25	61	47	82	21	102
GF80DO	40	28	69	52	92	23	115
GF90DO	45	32	77	58	102	27	128
GF100DO	50	35	88	62	112	30	144
GF110DO	60	44	100	70	135	38	167,5
GF120DO	70	49	115	80	160	42	195



RCS 25*Remcilinder**Remcilinder 25/90 in kleur gespoten*

Product Tech Data

Hydraulic motors overview

Motor Type	Displacement cm ³ /rev.[in ³ /rev]	Pressure Drop (continuous/Intermittent/Peak) bar [PSI]	Oil Flow (continuous) l/min [US gal/min]	Max. Output (Intermittent) kW [hp]
MM	8-50	105/140/200	20	3,2
MLHM	[0.5-3.05]	[1500/2030/2900]	[5.5]	[4.3]
MP	25-630	140/175/225	60	12,8
MLHP	[1.52-38.05]	[2030/2540/3260]	[16]	[17.1]
MR, RW	50-400	175/200/225	60	15
MLHR, MLHRW	[3.14-24.4]	[2540/2900/3260]	[16]	[20.1]
HP	25-630	125/175	60	14,7
	[1.52-38.05]	[1815/2540]	[16]	[19.7]
HR	50-400	140/175	60	15
	[3.14-24.4]	[2030/2540]	[16]	[20.1]
MH	200-500	175/200/225	75	18,5
MLHH	[12.3/30.7]	[2540/2900/3260]	[20]	[24.8]
HW	125-550	205/225	75	21,6
	[7.69-33.55]	[2970/3260]	[20]	[29]
MS	80-565	210/275/295	75	23
MLHS	[4.91-34.47]	[3050/3990/4280]	[20]	[30.8]
MSY	200-475	200/225	75	24
MLHSY	[12.2-28.96]	[2900/3270]	[20]	[32.2]
MT	160-725	200/240/280	125	40
MLHT	[9.83-44.2]	[2900/3450/4050]	[33]	[54]
MTM	200-725	250/350/400	125	70
MLHTM	[12.29-44.2]	[3600/5080/5800]	[33]	[94]
MV	315-800	200/240/280	200	56
MLHV	[19.18-48.91]	[2900/3450/4050]	[53]	[76]
MVM	315-800	250/350/400	200	112
MLHVM	[19.18-48.91]	[3600/5080/5800]	[53]	[150]

MM Orbitmotoren



Deze mini-hydrauliekmotoren zetten een onder druk toegevoerde oliestroom om in mechanische energie. Ondanks de kleine afmetingen onderscheidt deze motor zich door een hoog vermogen, hoog draaimoment en een hoog toerental.

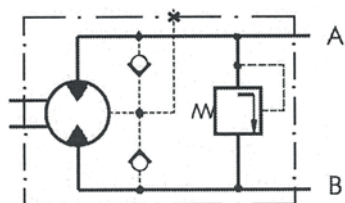


Deze motoren worden toegepast in conveyers, ventilatoren, aandrijving scheepsbesturing en dergelijken.

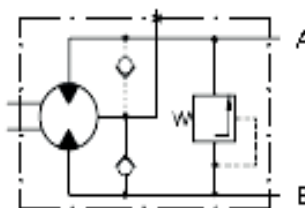
Algemene informatie:

Displacement,	[cm ³ / rev.]	8,2 ÷ 50
Max. Speed,	[RPM]	400 ÷ 1950
Max. Torque,	[daNm]	1, 1 ÷ 4,5
Max. Output,	[KW]	1,8 ÷ 2,4
Max. Pressuredrop	[bar]	70 ÷ 100
Max. Oil Flow,	[L/min]	16 ÷ 20
Min. Speed,	[RPM]	20 ÷ 50
Pressure fluid		Miniral based - HLP(DIN 51524) or HM (ISO 6743/4)
Temperature range,	[° C]	-30 ÷ 90
Optimal Viscosity range,		20 ÷ 75
Filtration		ISO code 20/16 (min recommended fluid filtration of 25 micron)

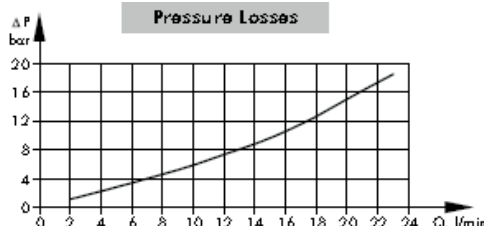
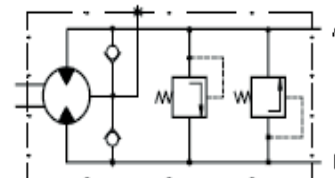
MMP met ingebouwd
Drukbegegningsventiel
A→B, Δ p=100 bar (50bar)



MMP met ingebouwd
drukbegegningsventiel
B→A, Δ p=100 bar (50bar)



MMD met ingebouwd
drukbegegningsventiel
B→A, Δ p=100 bar (50bar)



MM

Orbitmotoren

Technische Informatie

Type	MM 8	MM 12,5	MM 20	MM 32	MM 40	MM 50
Displacement [cm ³ /rev.]	8,2	12,9	20	31,8	40	50
Max. Speed, [RPM]	cont.	1950	1550	1000	630	500
	int.*	2440	1940	1250	790	625
Max. Torque [daNm]	cont.	1,1	1,6	2,5	4	4,1
	int.*	1,5	2,3	3,5	5,7	5,7
	peak**	2,1	3,3	5,1	6,4	6,6
Max. Output [kW]	cont.	1,8	2,4	2,4	2,4	1,8
	int.*	2,6	3,2	3,2	3,2	3,0
Max. Pressure Drop [bar]	cont.	100	100	100	100	80
	int.*	140	140	140	140	110
	peak**	200	200	200	200	140
Max. Oil Flow [l/min]	cont.	16	20	20	20	20
	int.*	20	25	25	25	25
Max. Inlet Pressure, [bar]	cont.	140	140	140	140	140
	int.*	175	175	175	175	175
	peak**	225	225	225	225	225
Max. Return Pressure w/o Drain Line or Max. Pressure in Drain Line, [bar]	cont. 0-100 RPM	140	140	140	140	140
	cont. 100-400 RPM	100	100	100	100	100
	cont. 400-800 RPM	50	50	50	50	50
	cont. >800 RPM	20	20	20	-	-
Max. Return Pressure with Drain Line [bar]	int.* 0-max. RPM	140	140	140	140	140
	cont.	140	140	140	140	140
	int.*	175	175	175	175	175
peak**	225	225	225	225	225	
Max. Starting Pressure with Unloaded Shift, [bar]	4	4	4	4	4	4
Min. Starting Torque [daNm]	at max. press. drop cont.	0,7	1,2	2,1	3,4	3,3
	at max. press. drop int.*	1,0	1,7	2,9	4,8	4,6
Min. Speed***, [RPM]		50	40	30	30	25
Weight, avg. [kg] For "F" flange: +0,2 kg	MM	1,9	2,0	2,1	2,2	2,3
	MMS	2,0	2,1	2,2	2,3	2,4
	MMP	2,2	2,3	2,4	2,5	2,6
	MMD	2,6	2,7	2,8	2,9	3,0

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

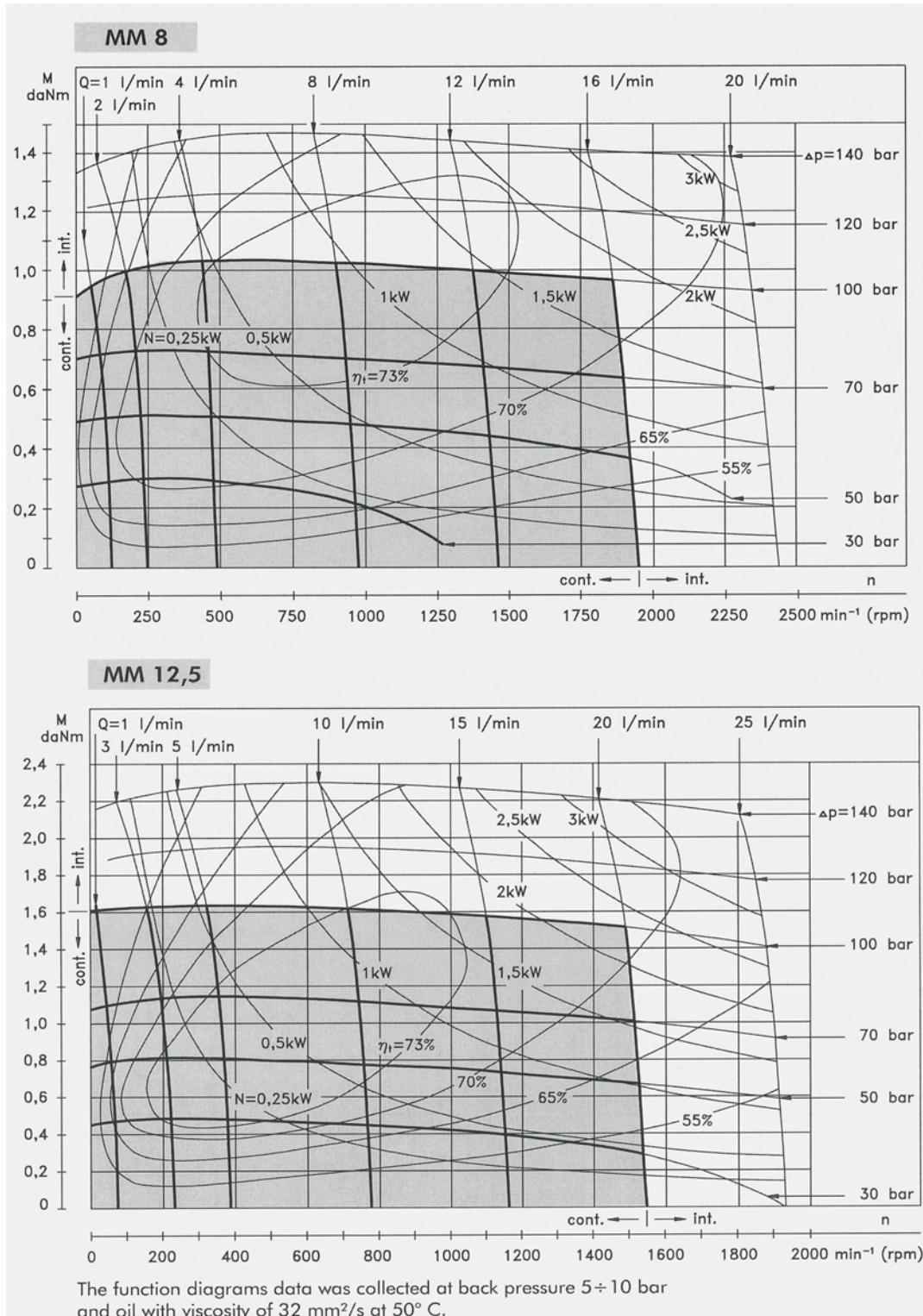
** Piekbelasting: max. 1% per minuut.

*** Voor toerentallen van 20ltr./min of minder neem contact op met onze medewerkers

1. Tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen.
2. Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering 25 micron of beter.
3. Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN 51524) of HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals synthetische olieën, dient er overlegt te worden.
4. Aanbevolen minerale viscositeit is 13mm² bij 50° C.
5. Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.
6. De levensduur van de motoren kan men verhogen als men de aandrijfas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

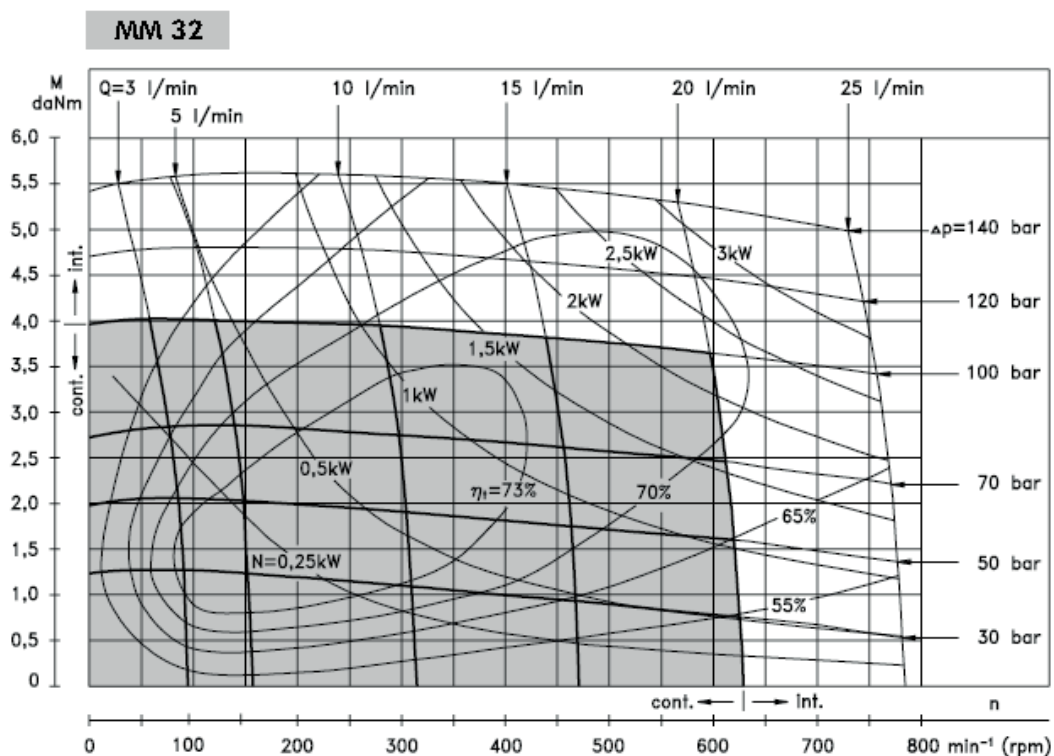
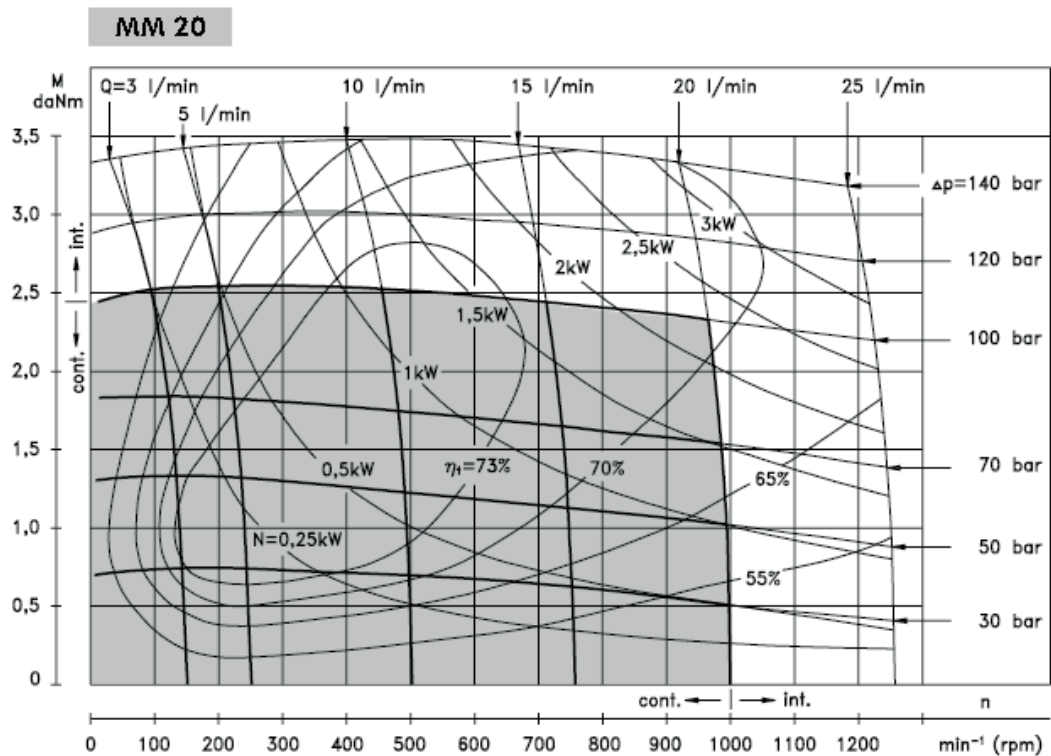
MM Orbitmotoren

Functiediagrammen



MM Orbitmotoren

Funciediagrammen

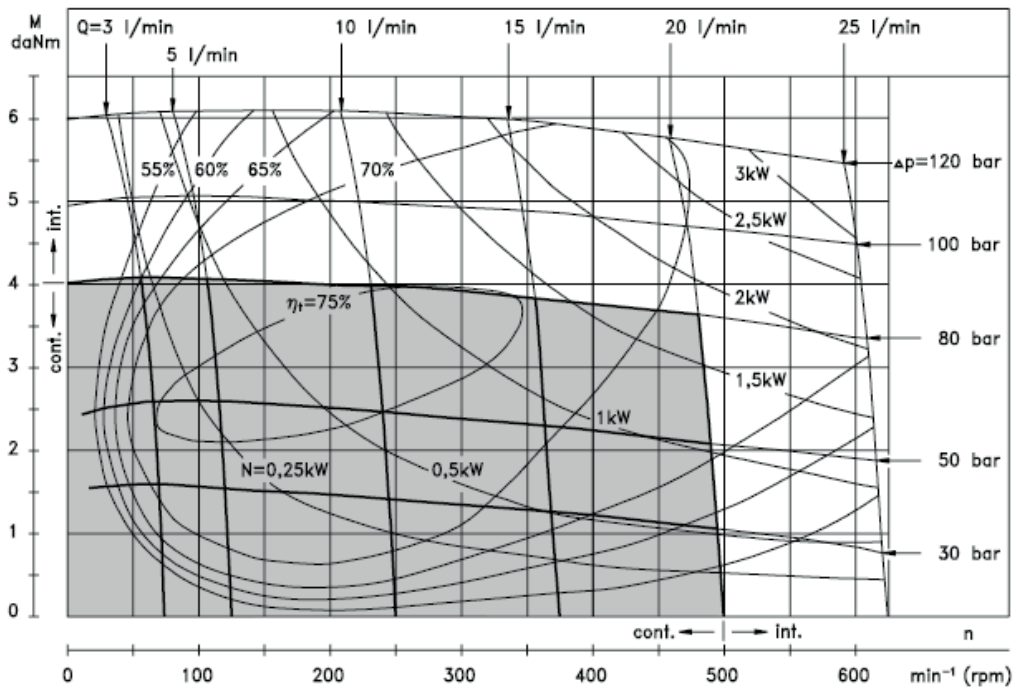


The function diagrams data was collected at back pressure 5 : 10 bar and oil with viscosity of 32 mm²/s at 50° C.

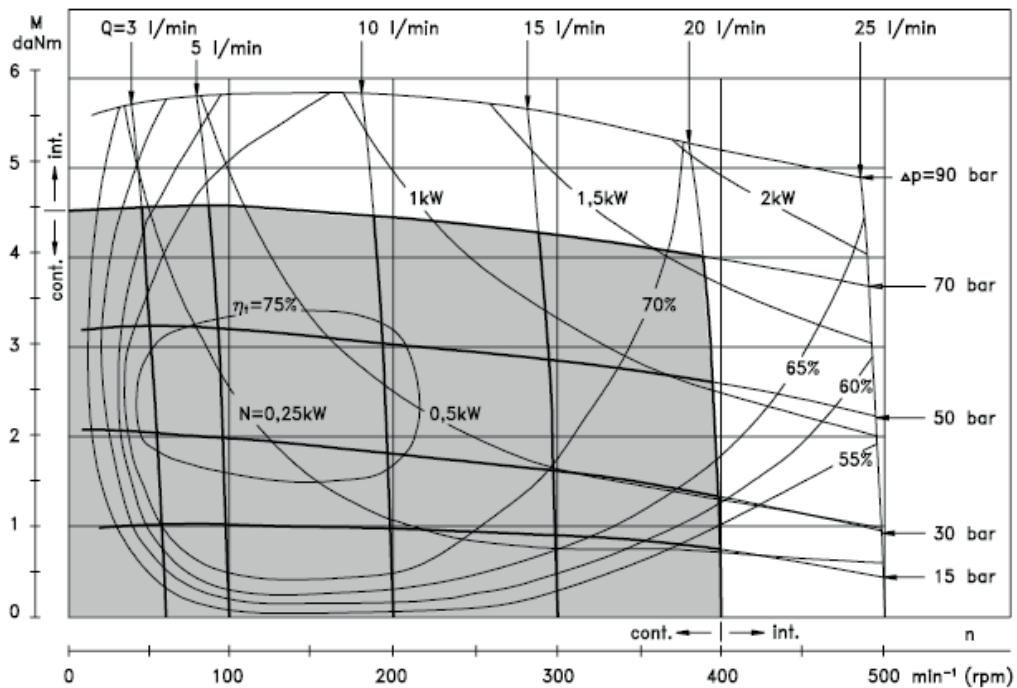
MM Orbitmotoren

Functiediagrammen

MM 40



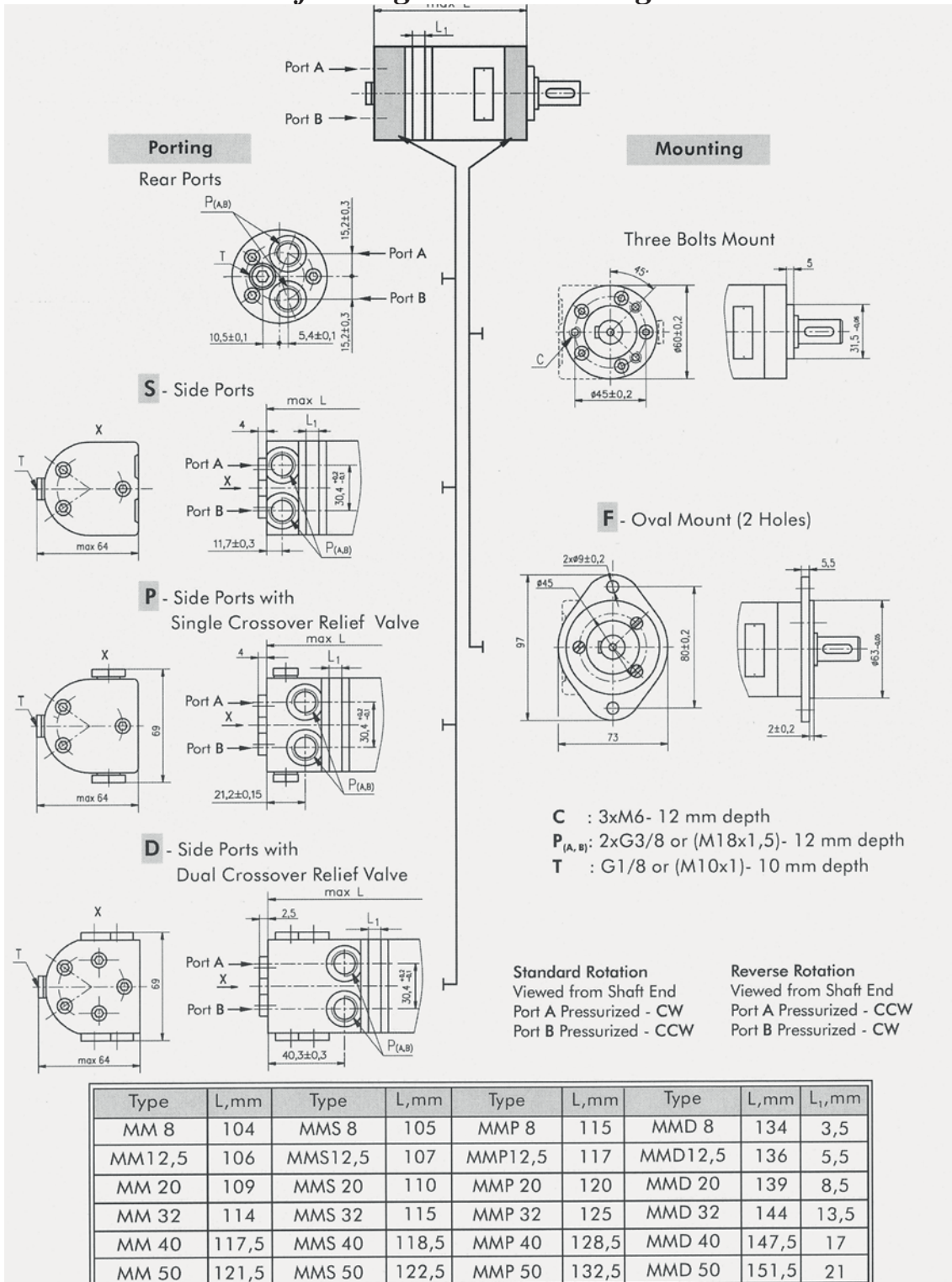
MM 50



The function diagrams data was collected at back pressure 5 : 10 bar and oil with viscosity of $32 \text{ mm}^2/\text{s}$ at 50°C .

MM Orbitmotoren

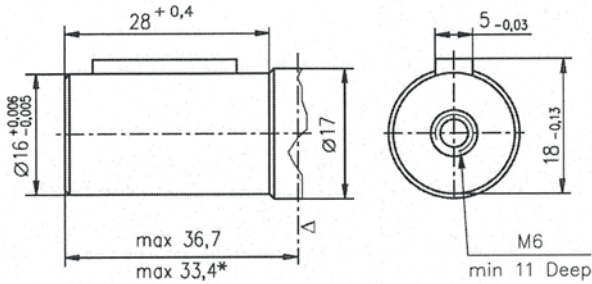
Afmetingen en uitvoeringen



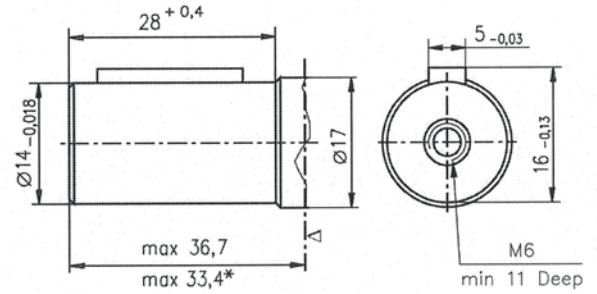
MM

Orbitmotoren mogelijke assen.

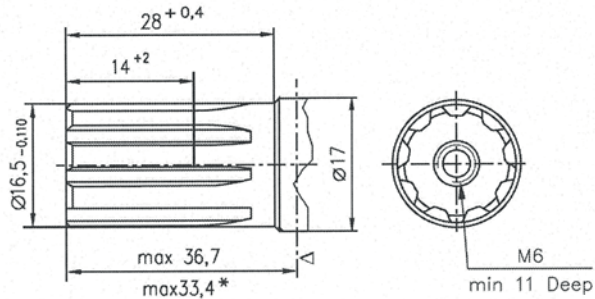
C - $\varnothing 16$ straight, Parallel key 5x5x16 DIN 6885
 Max. Torque 3,9 daNm



CK - $\varnothing 14$ Straight, Parallel key 5x5x16 DIN 6885
 Max. Torque 3 daNm

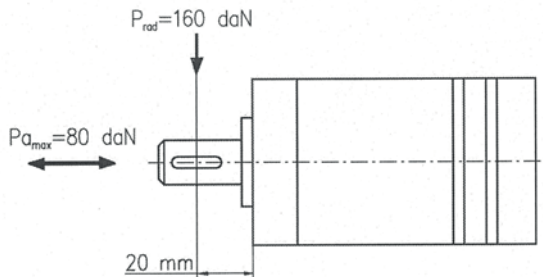


SH - $\varnothing 16,5$ Splined, B17x14 DIN 5482
 Max. Torque 4,4 daNm



▽ - Motor Mounting Surface
 * For F Mounting

PERMISSIBLE SHAFT LOAD



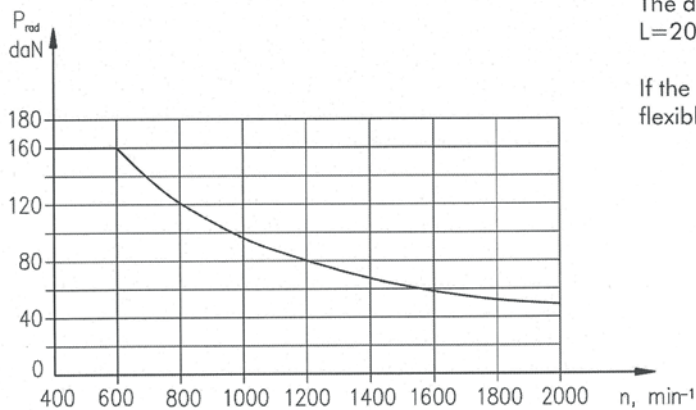
The permissible radial shaft load [Prad] is calculated from the distance [L] between the point of load application and the mounting surface:

$$P_{rad} = \frac{600}{n} \times \frac{13040}{(61,5+L)}, \text{ [daN]}$$

[L in mm; L ≤ 80]

The drawing shows the permissible radial load when L = 20 mm.

If the calculated shaft load exceeds the permissible, a flexible coupling must be used.



MM

Orbitmotoren bestelcodes

	1	2	3	4	5	6	7	8	9	10
MM										

Pos.1 - Adjustment Option

omit - without valve

P - Side ports with single crossover relief valve

D - Side ports with dual crossover relief valve

Pos.2 - Mounting Flange

omit - Three bolts mount

F - Oval mount, two holes

Pos.3 - Port type (not valid for P and D version)

omit - Rear ports

S - Side ports

Pos.4 - Displacement code

8 - 8,2 [cm³/rev]

12,5 - 12,9 [cm³/rev]

20 - 20,0[cm³/rev]

32 - 31,8[cm³/rev]

40 - 40,0[cm³/rev]

50 - 50,0[cm³/rev]

Pos. 5 - Shaft Extensions*

C - ø16 straight, Parallel key 5x5x16 DIN 6885

VC - ø16 straight, Parallel key 5x5x16 DIN 6885
with corrosion resistant bushing

CK - ø14 straight, Parallel key 5x5x16 DIN 6885

SH - ø16,5 splined, B17x14 DIN 5482

Pos. 6 - Ports

omit - BSPP (ISO 228)

M - Metric (ISO 262)

Pos. 7 - Line to controlled ** (see page 4)

/L - B→A (left running)

/R - A→B (right running)

Pos. 8 - Valve Rated Pressure ***

/50 - Δ p=50 bar

/100 - Δ p=100 bar

Pos. 9 - Special Features (see page 46)

Pos.10 - Design Series

omit - Factory specified

NOTES:

* The permissible output torque for shafts must not be exceeded!

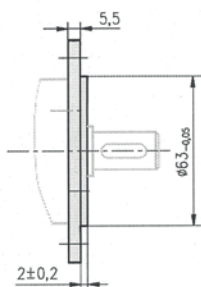
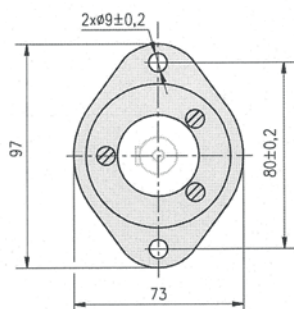
** For "P" option useful only.

*** For "P" and "D" option useful only.

The hydraulic motors are mangano-phosphatized as standard.

F - FLANGE KIT (2 Holes)

Order No:48443 014 00



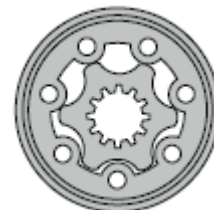
Flange Kit includes 3 screws - M6x14
for attaching flange to the motor.

MP Orbitmotoren



Deze hydrauliek motoren produceren een hoog Draaimoment bij lage toerentallen en worden ingezet waar een vermogen tot circa 11 KW verlangt wordt.

Deze motoren worden toegepast in conveyers, aanvoersystemen voor robots en manipulatoren, metaal bewerking machines, gras maaiers etc.



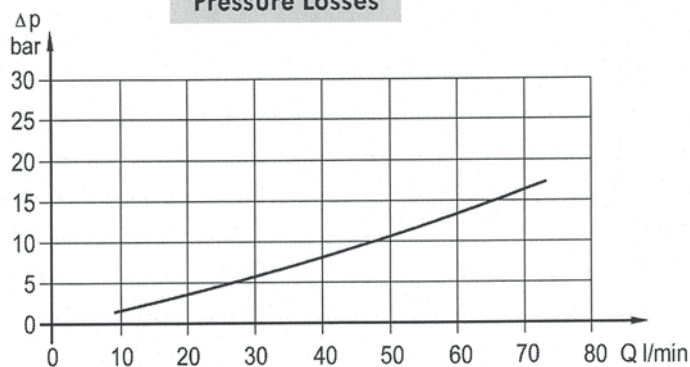
Algemene informatie:

Displacement, [cm ³ /rev.]	25 ÷ 623,6
Max. Speed, [RPM]	95 ÷ 1600
Max. Torque, [daNm]	3,3 ÷ 50
Max. Output, [kW]	3,3 ÷ 10,5
Max. Pressure Drop, [bar]	55 ÷ 140
Max. Oil Flow, [l/min]	40 ÷ 60
Min. Speed, [RPM]	10
Pressure fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, [°C]	-30 ÷ 90
Optimal Viscosity range, [mm ² /s]	20 ÷ 75
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop (bar)	Viscosity (mm ² /s)	Oil flow in drain line (l/min)
100	20	2,5
	35	1,8
140	20	3,5
	35	2,8

Pressure Losses



MP

Orbitmotoren

Technische informatie

Informatie voor MP... motors met C, CO, SH, K en SA AS (ø28.56 SEAL DIAMETER)

Type	MP														
	25	32	40	50	80	100	125	160	200	250	315	400	500	630	
Displacement, [cm ³ /rev.]	25	32	40	49,5	79,2	99	123,8	158,4	198	247,5	316,8	396	495	623,6	
Max. Speed, [RPM]	cont.	1600	1560	1500	1210	755	605	486	378	303	242	190	150	120	95
	int.*	1800	1720	1750	1515	945	755	605	472	378	303	236	189	150	120
Max. Torque [daNm]	cont.	3,3	4,3	6,2	9,4	15,1	19,3	23,7	31,3	36,6	38	38	36	39	44
	int.*	4,7	6,1	8,2	11,9	19,5	23,7	29,8	37,8	45,6	58,3	56	59	57	64
	peak**	6,7	8,6	10,7	14,3	22,4	27,5	36,5	43,8	55	68,5	85	85,4	78	82
Max. Output, [kW]	cont.	4,5	5,8	8,4	10,1	10,2	10,5	10	10,1	10	7,5	5,7	4,6	3,5	3,3
	int.*	6,1	7,8	11,6	12,2	12,5	12,8	12	12,1	12	12	9	7,8	7,2	5,6
Max. Pressure Drop [bar]	cont.	100	100	120	140	140	140	140	140	140	110	90	70	60	55
	int.*	140	140	155	175	175	175	175	175	175	175	140	115	90	80
	peak**	225	225	225	225	225	225	225	225	225	225	225	180	130	110
Max. Oil Flow [l/min]	cont.	40	50	60	60	60	60	60	60	60	60	60	60	60	60
	int.*	45	55	70	70	70	70	70	70	70	70	70	70	70	70
Max. Inlet Pressure [bar]	cont.	175	175	175	175	175	175	175	175	175	175	175	175	140	140
	int.*	200	200	200	200	200	200	200	200	200	200	200	200	175	175
	peak**	225	225	225	225	225	225	225	225	225	225	225	225	225	225
Max. Return Pressure with Drain Line [bar]	cont.	175	175	175	175	175	175	175	175	175	175	175	175	140	140
	int.*	200	200	200	200	200	200	200	200	200	200	200	200	175	175
	peak**	225	225	225	225	225	225	225	225	225	225	225	225	225	225
Max. Starting Pressure with Unloaded Shaft, [bar]		10	10	10	10	10	10	9	8	7	6	5	5	5	5
Min. Starting Torque [daNm]	at max. press. drop cont.	3	4	5,4	7,8	13,2	16,6	20,7	28,2	33,5	33,6	34,4	34,5	36	41,5
	at max. press. drop int.*	4,2	5,6	6,9	10	16,8	21	26,6	35,5	42,6	54,2	61,9	60,8	54	62
Min. Speed***, [RPM]		20	15	10	10	10	10	10	10	10	10	10	10	10	10
Weight, avg. [kg]	MP(F)	5,6	5,6	5,7	5,8	5,9	6,1	6,2	6,4	6,6	6,8	7,1	7,6	8,9	9,5
	MPQ(N)	5,0	5,0	5,1	5,2	5,3	5,5	5,6	5,8	6,0	6,2	6,5	6,8	8,3	9,0
	MP(F)(N)E	6,1	6,1	6,2	6,3	6,4	6,6	6,7	6,9	7,1	7,3	7,6	8,1	9,3	10
	MPW(N)	5,3	5,3	5,4	5,5	5,6	5,8	5,9	6,1	6,3	6,5	6,8	7,2	8,6	9,2
	MPQ(N)E	5,5	5,5	5,6	5,7	5,8	6,0	6,1	6,3	6,5	6,7	7,0	7,3	8,8	8,5

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting: max. 1% per minuut.

*** Voor toerentallen van 20ltr./min of minder neem contact op met onze medewerkers

7. Tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen.

8. Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering 25 micron of beter.

9. Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN 51524) of HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals synthetische olieën, dient er overlegt te worden.

10. Aanbevolen minerale viscositeit is 13mm² bij 50° C.

11. Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.

12. De levensduur van de motoren kan men verhogen als men de aandrijfjas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

MP

Orbitmotoren

Technische informatie

Informatie voor MP... motors met CB, KB, OB en HB assen (ø35 SEAL DIAMETER)

Type	MP														
	25	32	40	50	80	100	125	160	200	250	315	400	500	630	
Displacement, [cm ³ /rev.]	25	32	40	49,5	79,2	99	123,8	158,4	198	247,5	316,8	396	495	623,6	
Max. Speed, [RPM]	cont.	1600	1560	1500	1210	755	605	486	378	303	242	190	150	120	95
	int.*	1800	1720	1750	1515	945	755	605	472	378	303	236	189	150	120
Max. Torque [daNm]	cont.	3,3	4,3	6,2	9,4	15,1	19,3	23,7	31,3	36,6	47	48,6	50	39	44
	int.*	4,7	6,1	8,2	11,9	19,5	23,7	29,8	37,8	45,6	58,3	56	59	57	64
	peak**	6,7	8,6	10,7	14,3	22,4	27,5	36,5	43,8	55	68,5	85	85,4	78	82
Max. Output, [kW]	cont.	4,5	5,8	8,4	10,1	10,2	10,5	10	10,1	9,5	9,5	7,6	6,2	3,5	3,3
	int.*	6,1	7,8	11,6	12,2	12,5	12,8	12	12,1	12,5	12	9	7,8	7,2	5,6
Max. Pressure	cont.	100	100	120	140	140	140	140	140	140	120	95	60	55	
Drop [bar]	int.*	140	140	155	175	175	175	175	175	175	140	115	90	80	
	peak**	225	225	225	225	225	225	225	225	225	225	180	130	110	
Max. Oil Flow [l/min]	cont.	40	50	60	60	60	60	60	60	60	60	60	60	60	
	int.*	45	55	70	70	70	70	70	70	70	70	70	70	70	
Max. Inlet Pressure [bar]	cont.	175	175	175	175	175	175	175	175	175	175	175	140	140	
	int.*	200	200	200	200	200	200	200	200	200	200	200	175	175	
	peak**	225	225	225	225	225	225	225	225	225	225	225	225	225	
Max. Return Pressure with Drain Line [bar]	cont.	175	175	175	175	175	175	175	175	175	175	175	140	140	
	int.*	200	200	200	200	200	200	200	200	200	200	200	175	175	
	peak**	225	225	225	225	225	225	225	225	225	225	225	225	225	
Max. Starting Pressure with Unloaded Shaft, [bar]		10	10	10	10	10	10	9	8	7	6	5	5	5	
Min. Starting Torque [daNm]	at max. press. drop cont.	3	4	5,4	7,8	13,2	16,6	20,7	28,2	33,5	42,8	45,8	46,8	36	41,5
	at max. press. drop int.*	4,2	5,6	6,9	10	16,8	21	26,6	35,5	42,6	54,2	61,9	60,8	54	62
Min. Speed***, [RPM]		20	15	10	10	10	10	10	10	10	10	10	10	10	
Weight, avg. [kg]	MP(F)...B	5,6	5,6	5,7	5,9	6	6,2	6,3	6,5	6,7	6,9	7,2	7,7	9	9,6
	MP(F)E...B	6,1	6,1	6,2	6,4	6,5	6,7	6,8	6,9	7,2	7,4	7,7	8,2	9,4	10,1

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting: max. 1% per minuut.

*** Voor toerentallen van 20ltr./min of minder neem contact op met onze medewerkers

13. Tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen.

14. Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering 25 micron of beter.

15. Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN 51524) of HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals synthetische olieën, dient er overlegt te worden.

16. Aanbevolen minerale viscositeit is 13mm² bij 50° C.

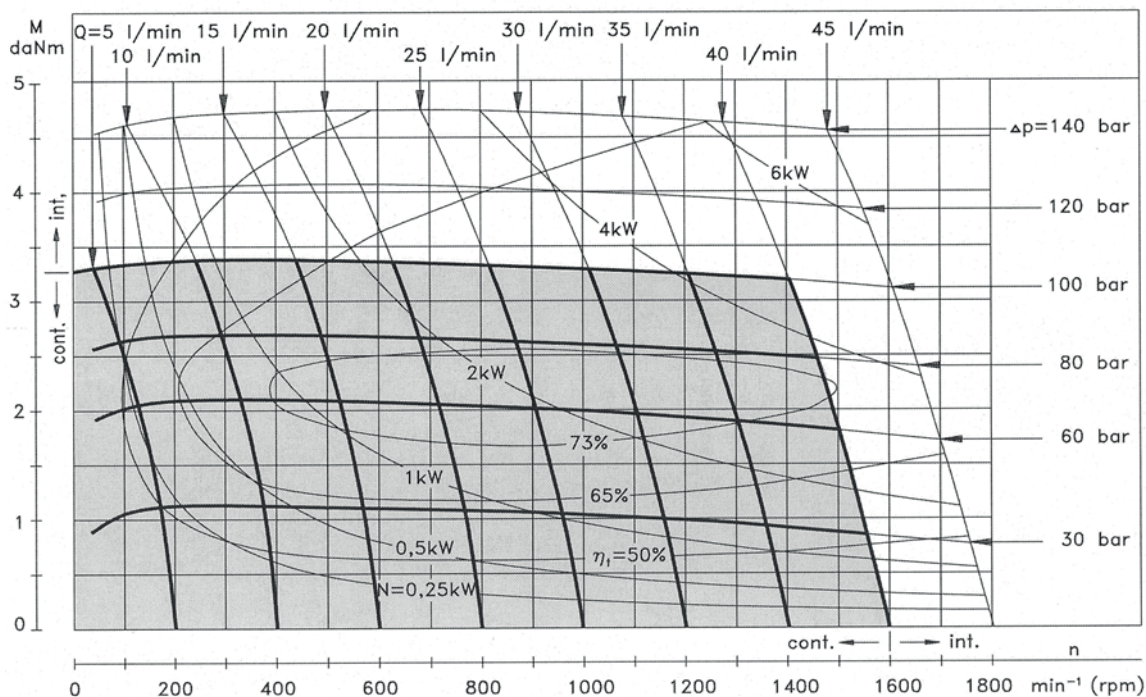
17. Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.

18. De levensduur van de motoren kan men verhogen als men de aandrijf as 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

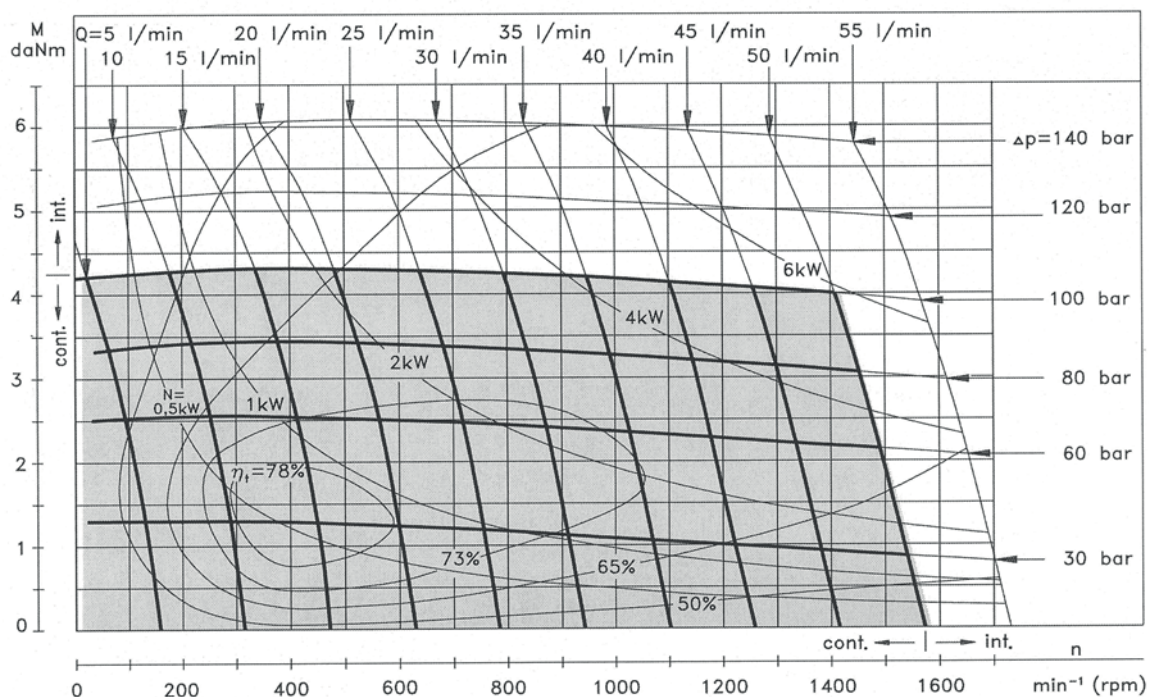
MP Orbitmotoren

Funciediagrammen

MP 25



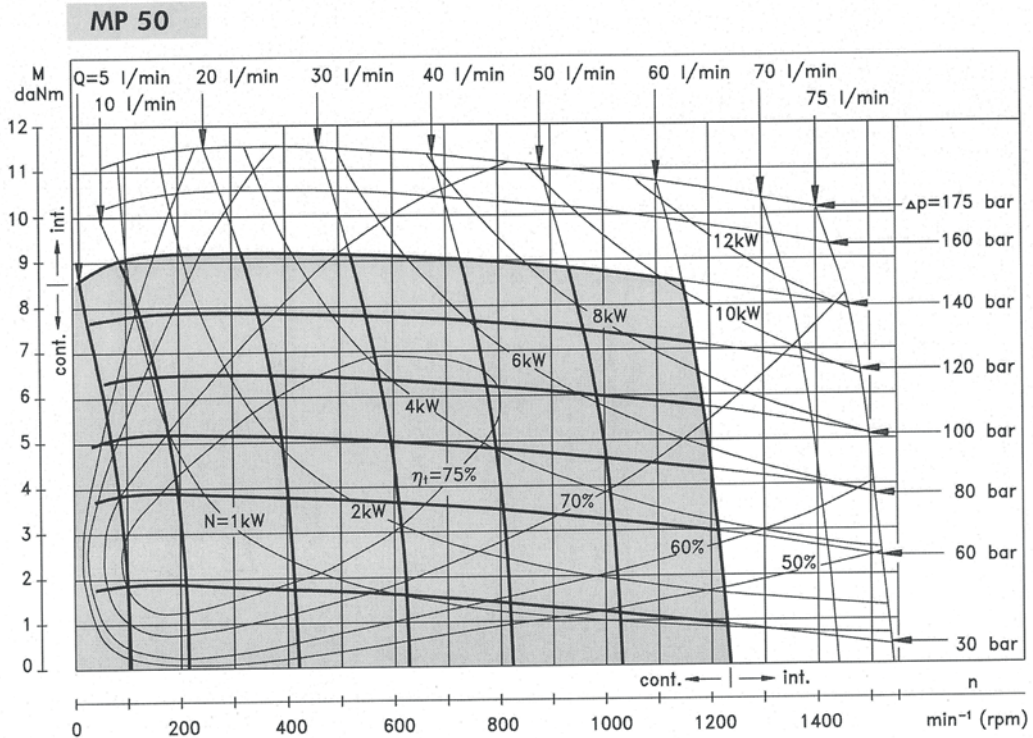
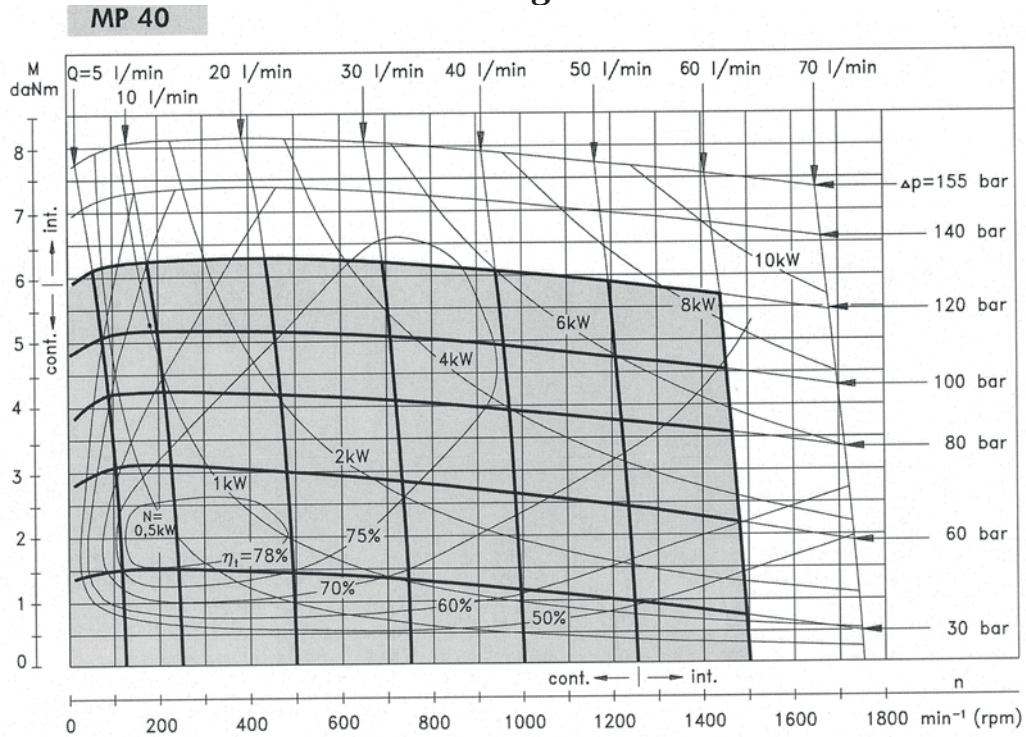
MP 32



The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

MP Orbitmotoren

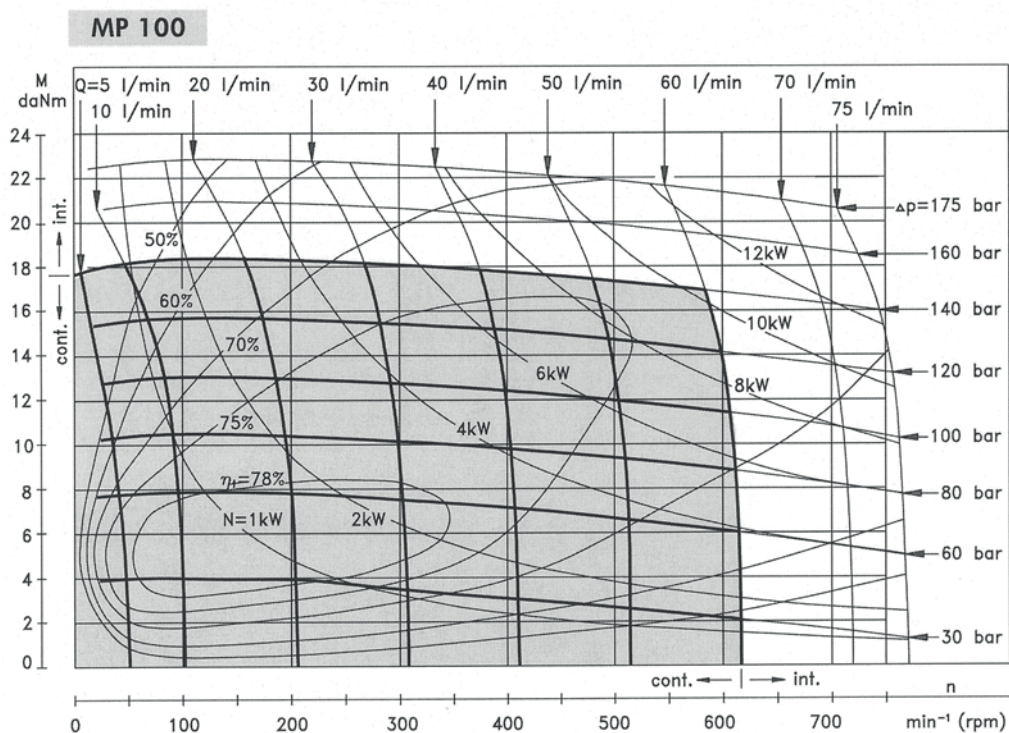
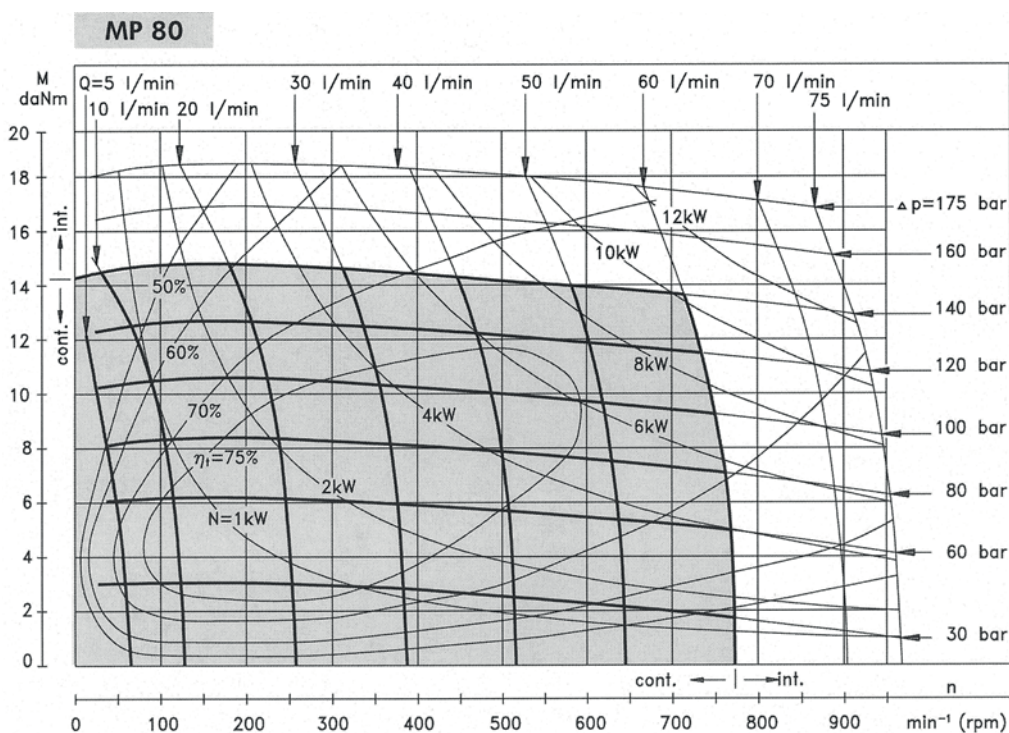
Functiediagrammen



The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

MP Orbitmotoren

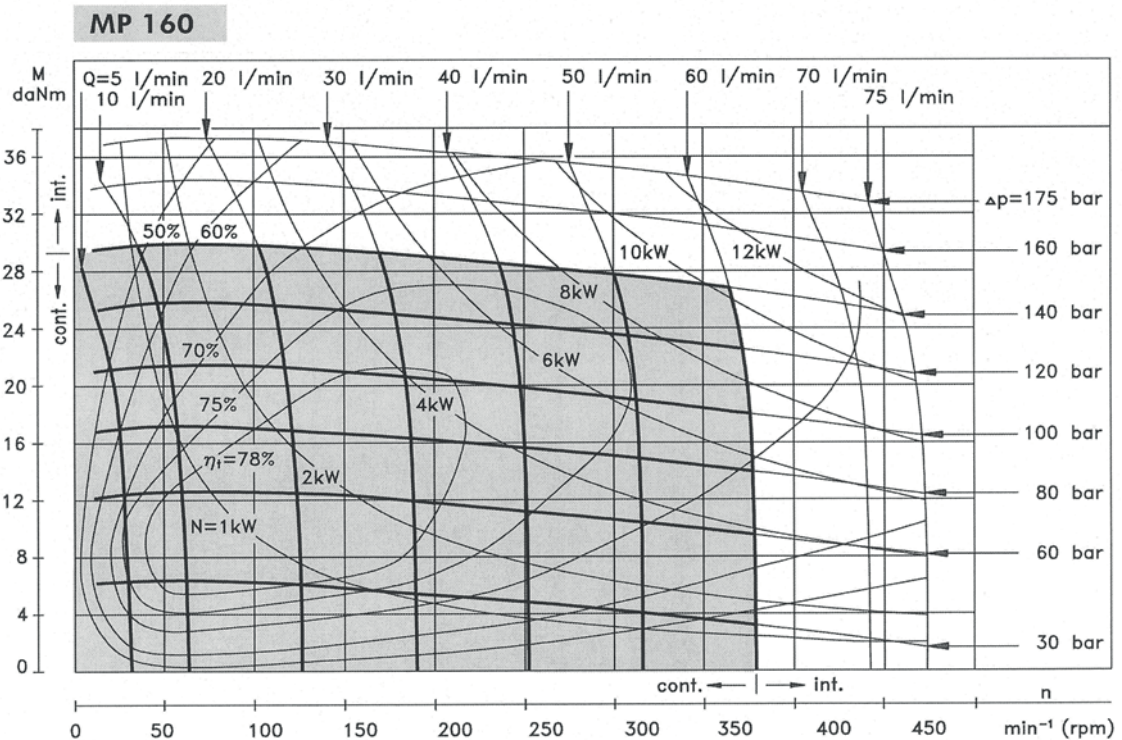
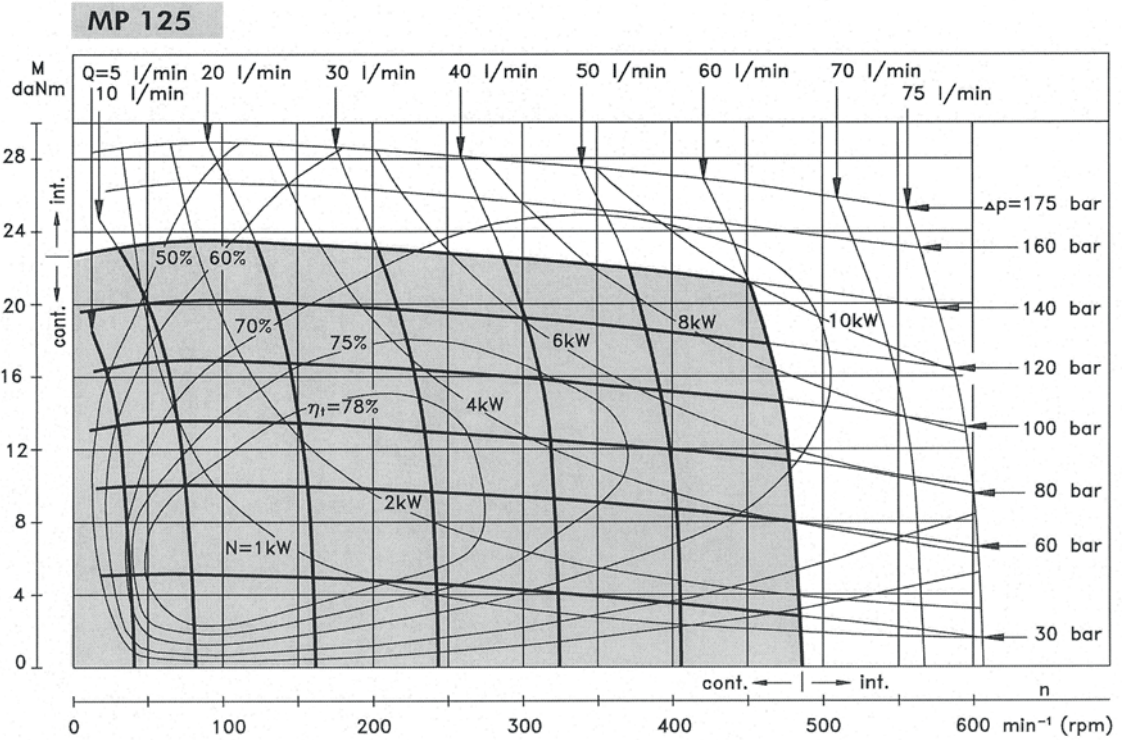
Funciediagrammen



The function diagrams data was collected at back pressure $5 \div 10$ bar and oil with viscosity of $32 \text{ mm}^2/\text{s}$ at 50°C .

MP Orbitmotoren

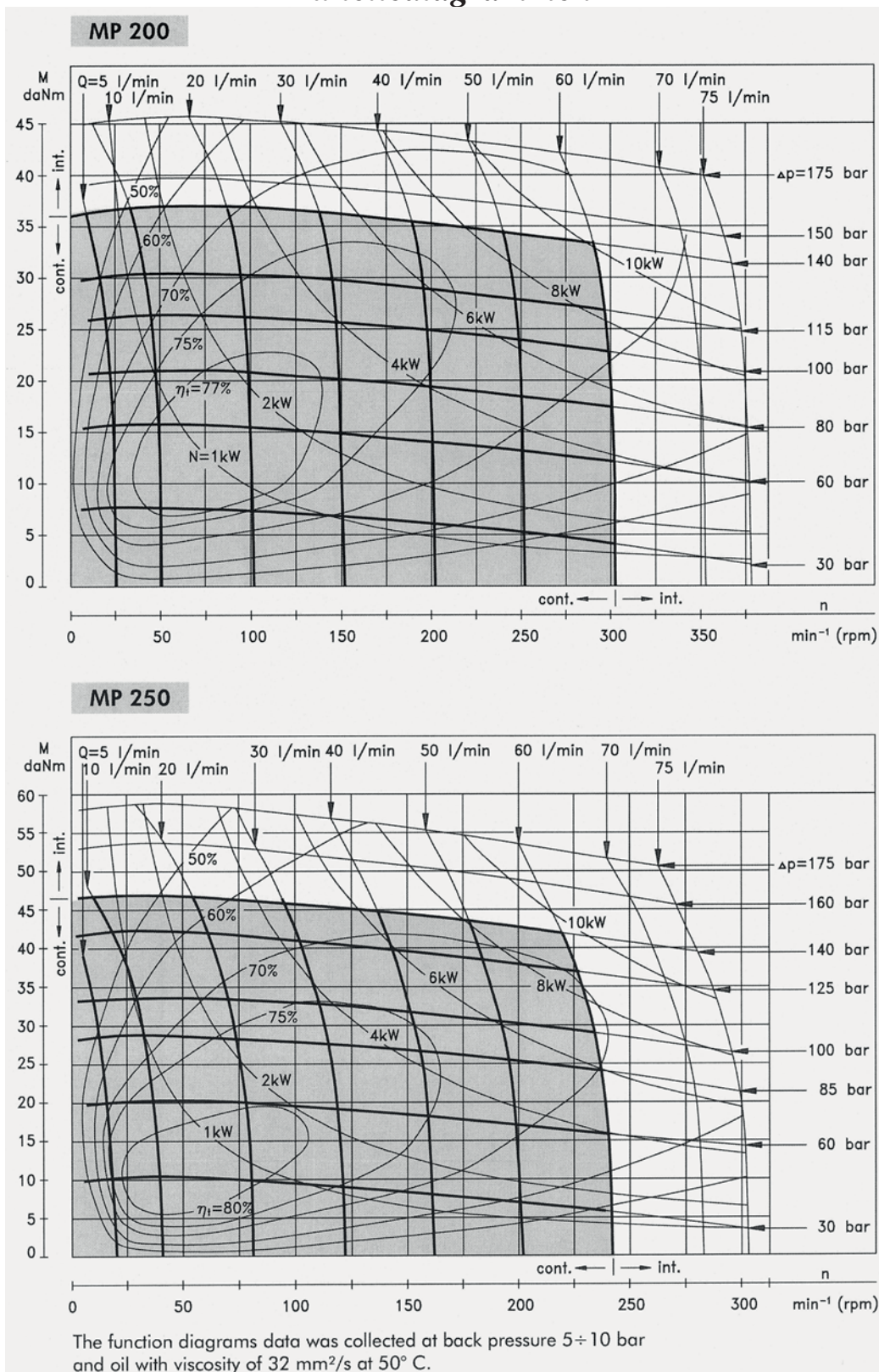
Functiediagrammen



The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

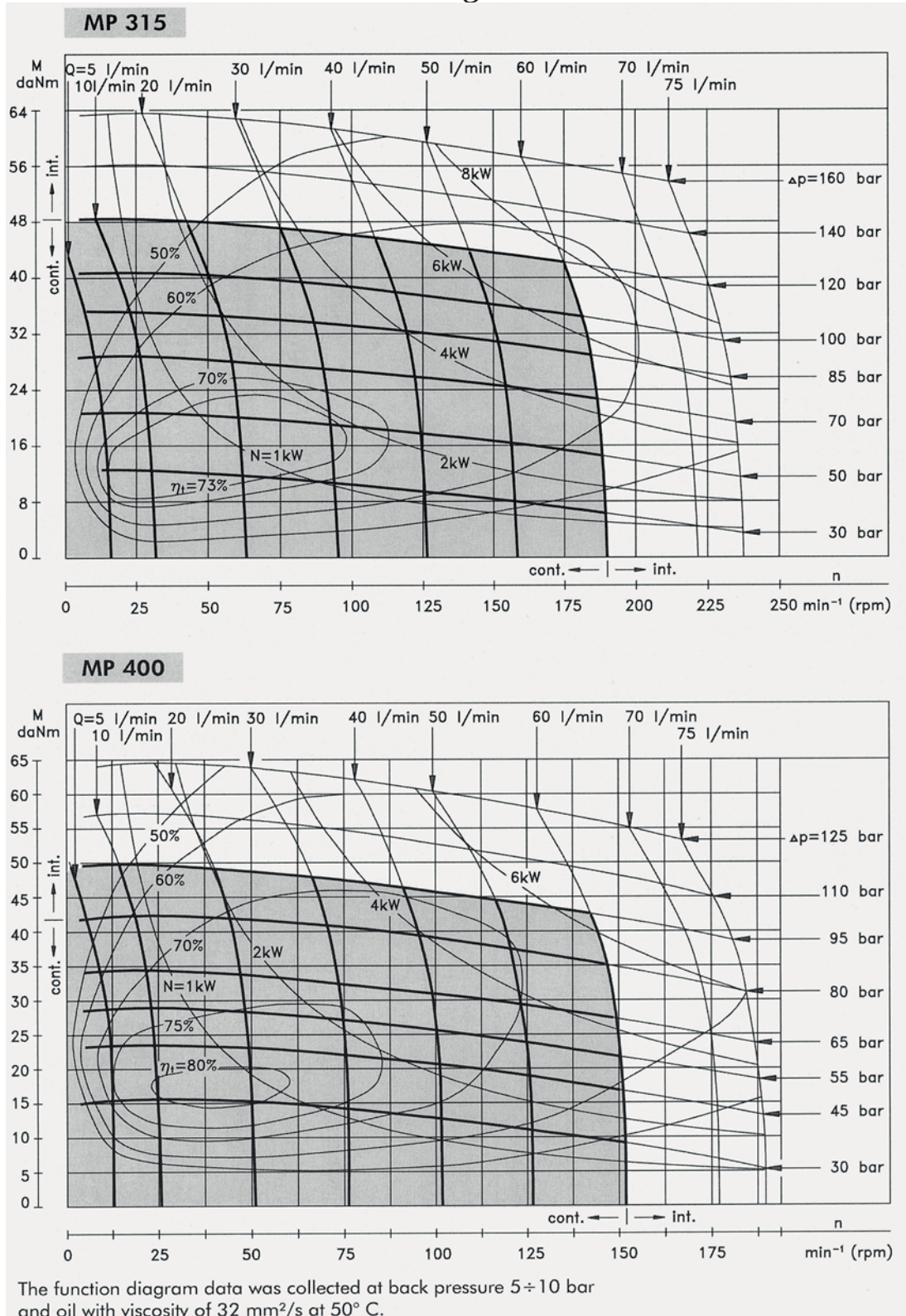
MP Orbitmotoren

Funciediagrammen



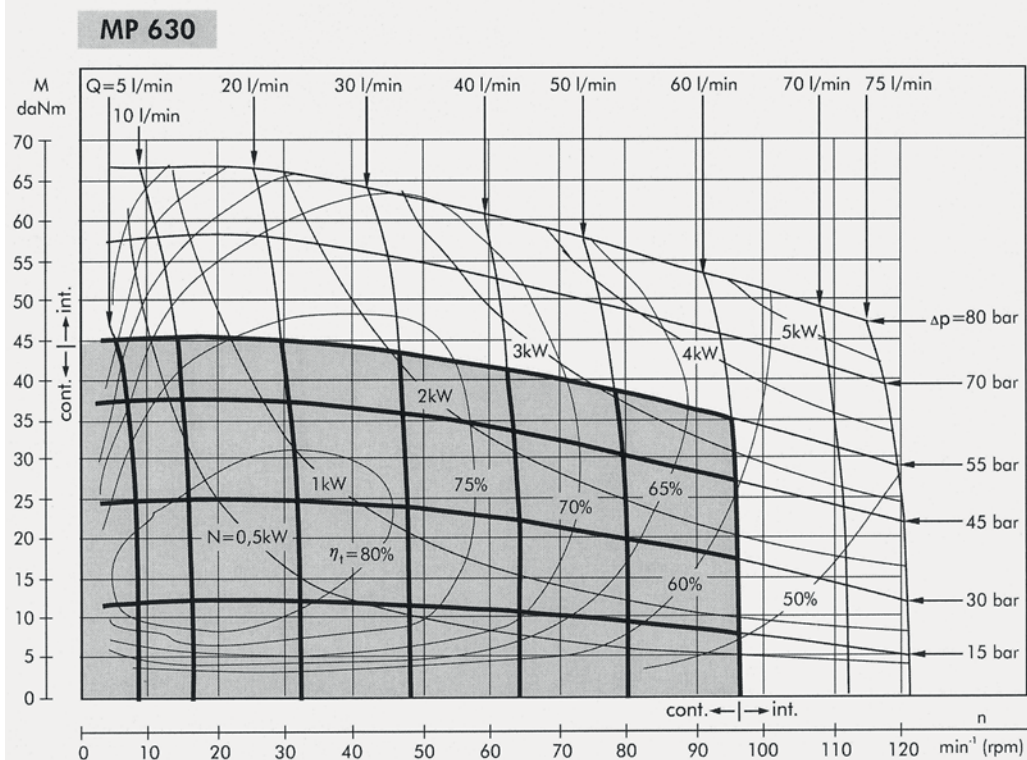
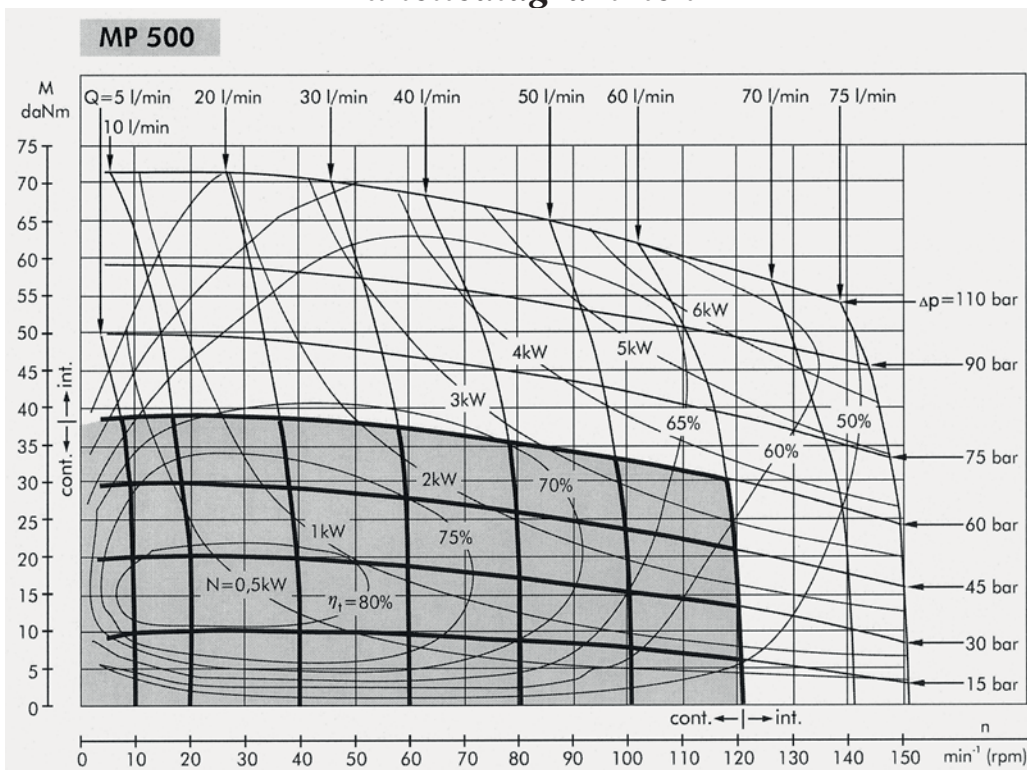
MP Orbitmotoren

Funciediagrammen



MP Orbitmotoren

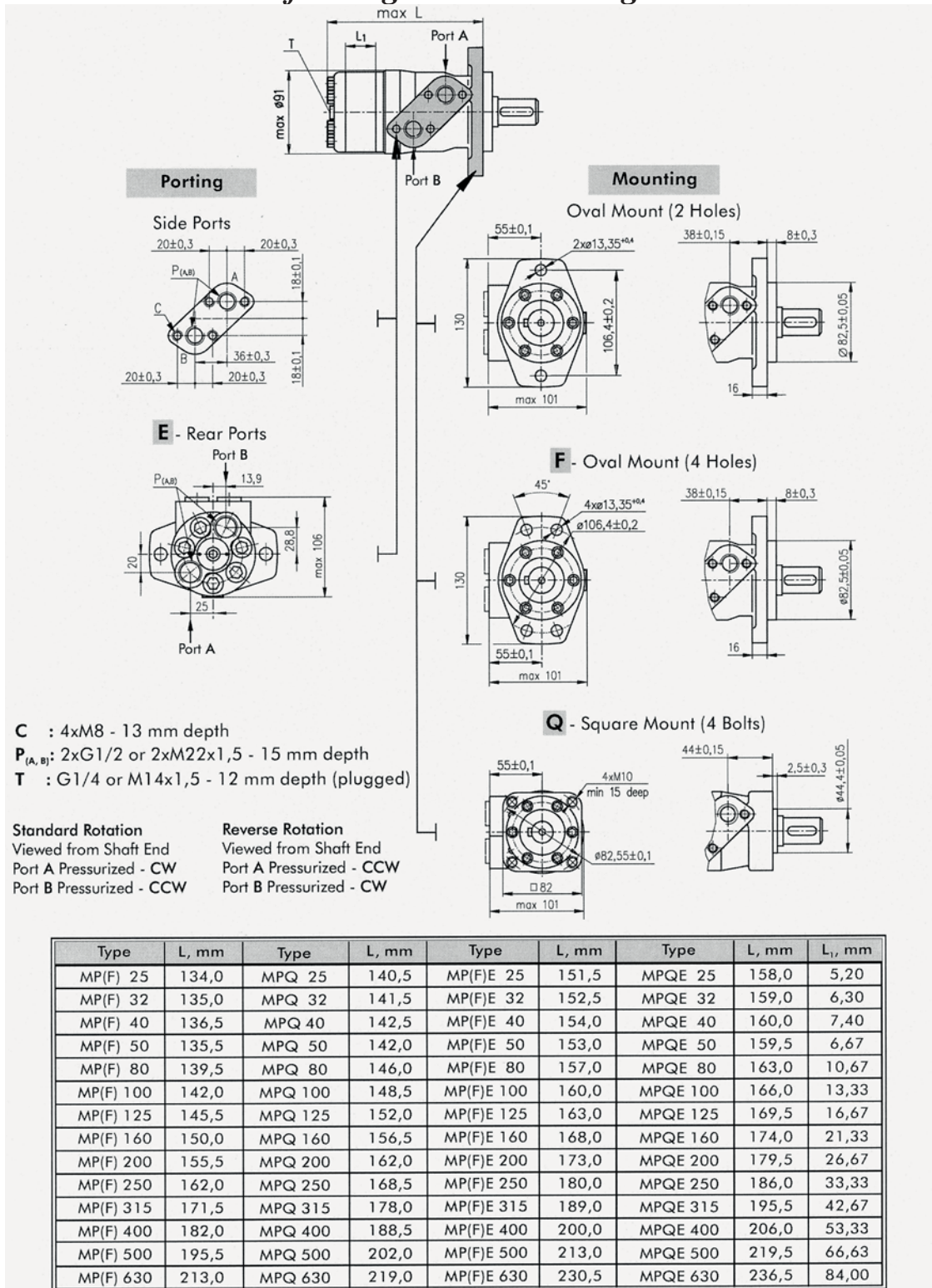
Funciediagrammen



The function diagram data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

MP Orbitmotoren

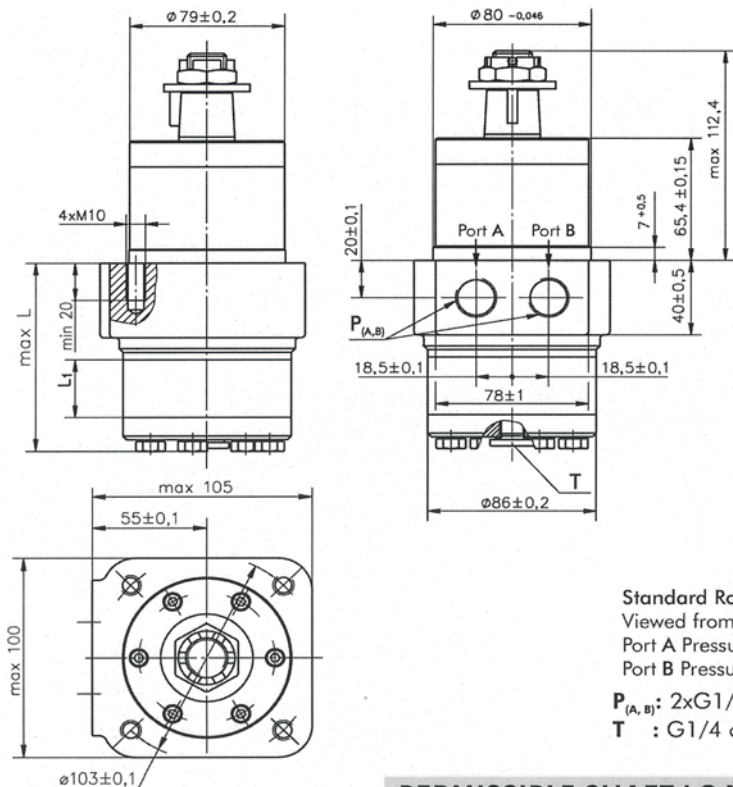
Afmetingen en uitvoeringen



MP Orbitmotoren

Afmetingen en uitvoeringen MPW

W - Wheel Mount



Type	L, mm	L ₁ , mm
MPW(N) 25	77,0	5,2
MPW(N) 32	78,0	6,3
MPW(N) 40	79,5	7,4
MPW(N) 50	78,5	6,67
MPW(N) 80	82,5	10,67
MPW(N) 100	85,0	13,33
MPW(N) 125	88,5	16,67
MPW(N) 160	93,0	21,33
MPW(N) 200	98,5	26,67
MPW(N) 250	105,0	33,33
MPW(N) 315	114,5	42,67
MPW(N) 400	125,0	53,33
MPW(N) 500	138,5	66,63
MPW(N) 630	156,0	84,0

Standard Rotation
Viewed from Shaft End
Port A Pressurized - CW
Port B Pressurized - CCW

Reverse Rotation
Viewed from Shaft End
Port A Pressurized - CCW
Port B Pressurized - CW

P_(A,B): 2xG1/2 or 2xM22x1,5 - 15 mm depth
T: G1/4 or M14x1,5 - 12 mm depth (plugged)

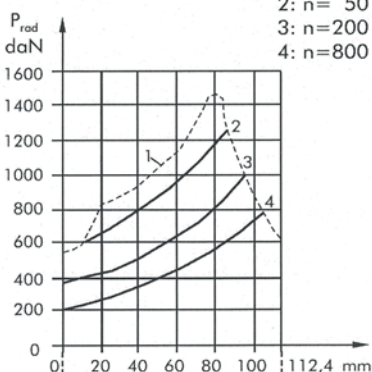
PERMISSIBLE SHAFT LOADS

MPWN

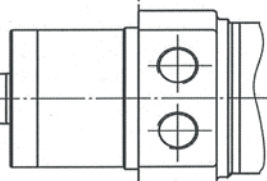
MPW

The curves apply to a B10 bearing life of 2000 hours.

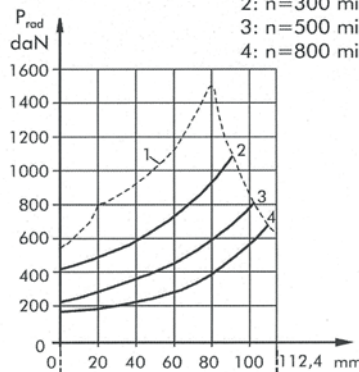
- 1: Max. radial shaft load
- 2: n = 50 min⁻¹
- 3: n = 200 min⁻¹
- 4: n = 800 min⁻¹



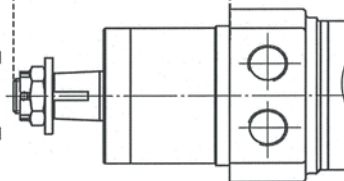
$P_{a,max} = 150 \text{ daN}$
 $P_{b,max} = 200 \text{ daN}$



- 1: Max. radial shaft load
- 2: n = 300 min⁻¹
- 3: n = 500 min⁻¹
- 4: n = 800 min⁻¹



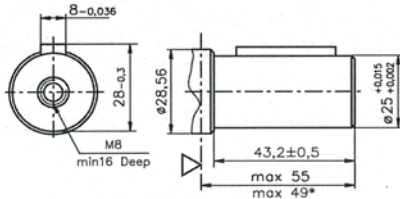
$P_{a,max} = 150 \text{ daN}$
 $P_{b,max} = 200 \text{ daN}$



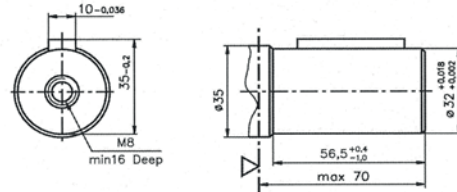
MP+MR Orbitmotoren

Mogelijke assen

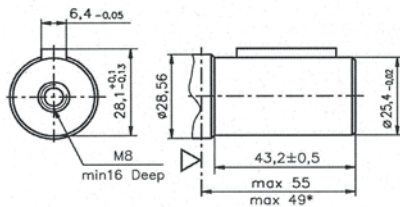
C - $\varnothing 25$ straight, Parallel key A8x7x32 DIN 6885
Max. Torque 34 daNm



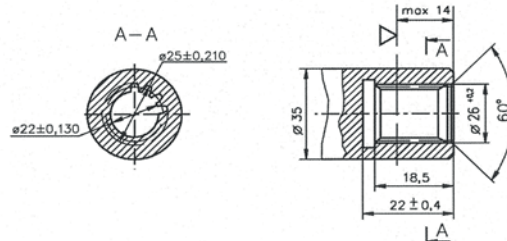
CB - $\varnothing 32$ straight, Parallel key A10x8x45 DIN 6885
Max. Torque 77 daNm



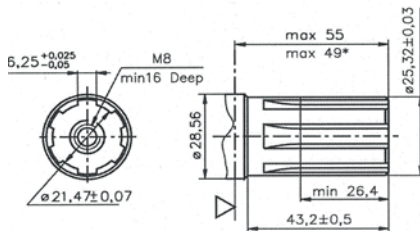
CO - $\varnothing 1"$ straight, Parallel key $\frac{1}{4}" \times \frac{1}{4}" \times \frac{1}{4}"$ BS46
Max. Torque 34 daNm



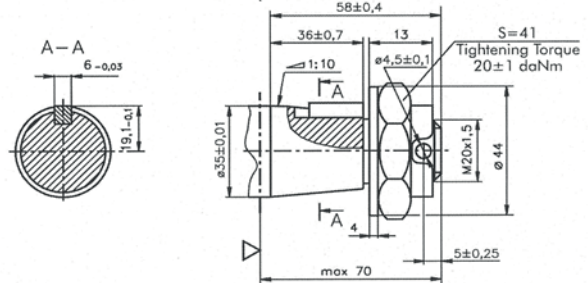
SB - splined A25x22xH10 DIN 5482
Max. Torque 34 daNm



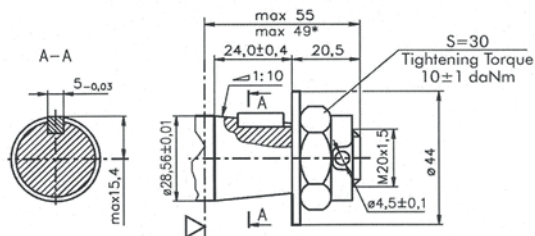
SH - splined, BS 2059 (SAE 6B)
Max. Torque 40 daNm



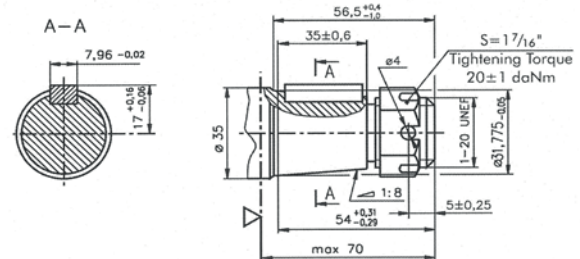
KB - tapered 1:10, Parallel key B6x6x20 DIN 6885
Max. Torque 77 daNm



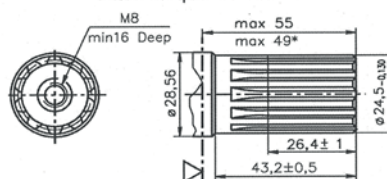
K - tapered 1:10, Parallel key B5x5x14 DIN 6885
Max. Torque 40 daNm



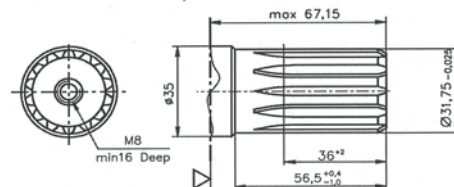
OB - tapered 1:8 SAEJ 501, Parallel key $\frac{5}{16}" \times \frac{5}{16}" \times \frac{1}{4}"$ BS46
Max. Torque 77 daNm



SA - splined, B25x22h9 DIN 5482
Max. Torque 40 daNm



HB - $\varnothing 1\frac{1}{4}"$ splined 14T, ANSI B92.1-1976 Norm
Max. Torque 77 daNm



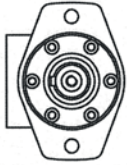
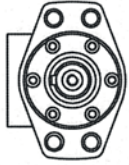
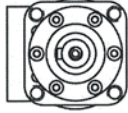
▽ - Motor Mounting Surface

MP/MR

Orbitmotoren

Toegestane asbelasting

De toegestane radiale as belasting P_{rad} hangt af van de snelheid (RPM) en de afstand (L) van de plaats van de belasting t.o.v. de montageflens.

Mounting Flange			
Shaft Version	cylindrical - C, CO tapered - K, splined - SH	splined - HB cylindrical - CB	cylindrical - C, CO
Radial Shaft Load P_{rad}^*	$\frac{800}{n} \times \frac{25000}{95+L}$, daN	$\frac{800}{n} \times \frac{18750}{95+L}$, daN	$\frac{800}{n} \times \frac{25000}{101+L}$, daN

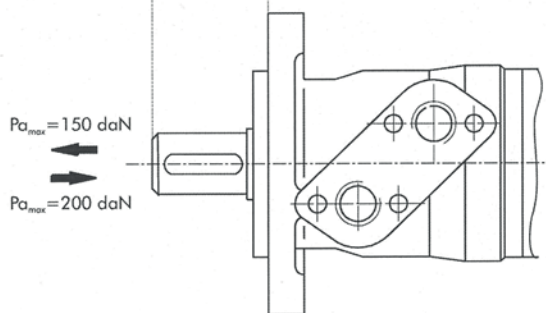
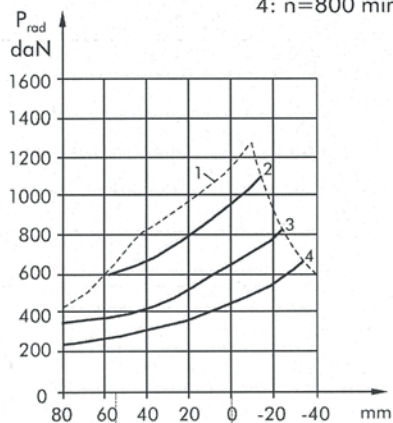
$n < 200 \text{ min}^{-1}$; max $P_{rad} = 800 \text{ daN}$

* $n \geq 200 \text{ min}^{-1}$; $L < 55 \text{ mm}$

MPN and MRN

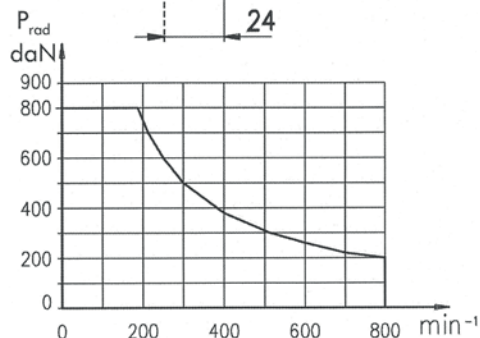
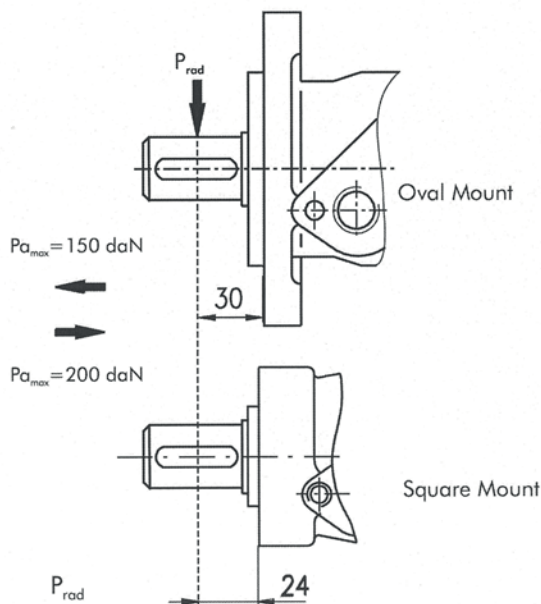
The curves apply to a B10 bearing life of 2000 hours.

- 1: Max. radial shaft load
- 2: $n = 50 \text{ min}^{-1}$
- 3: $n = 200 \text{ min}^{-1}$
- 4: $n = 800 \text{ min}^{-1}$



MP and MR

Radial Shaft Load P_{rad} for C, CO Shaft Extensions by $L = 30$ (24) mm



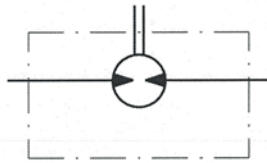
MP+MR

Orbitmotoren, maximaal toegestane druk op de as-afdichting

MP/MR...U1 motors with high pressure seal and without drain connection:

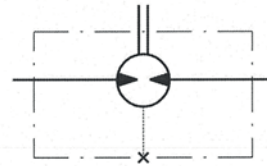
The shaft seal pressure equals the average of input pressure and return pressure.

$$P_{\text{seal}} = \frac{P_{\text{input}} + P_{\text{return}}}{2}$$



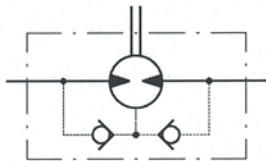
MP/MR...U motors with high pressure seal and drain connection:

The shaft seal pressure equals the pressure in the drain line.



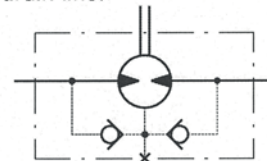
MP/MR...1 motors with low pressure seal or standard shaft seal and without drain connection:

The shaft seal pressure never exceeds the pressure in the return line.

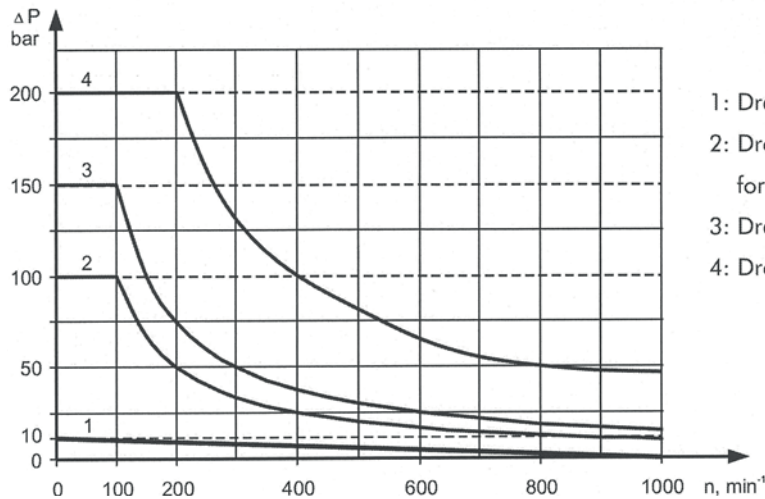


MP/MR... motors with low pressure seal or standard shaft seal and with drain connection:

The shaft seal pressure equals the pressure in the drain line.



Max. return pressure without drain line or max. pressure in the drain line



- 1: Drawing for Low Pressure Seal
- 2: Drawing for Standard Shaft Seal for "...B" shafts
- 3: Drawing for Standard Shaft Seal ("D" Seal)
- 4: Drawing for High Pressure Seal ("U" Seal)

— - continuous operations
 - - - - - intermittent operations

MP

Orbitmotoren, bestelgegevens

1	2	3	4	5	6	7	8	9	10
MP									
Pos. 1 - Mounting Flange									
omit	- Oval mount, two holes								
F	- Oval mount, four holes								
Q	- Square mount, four bolts								
W	- Wheel mount								
Pos. 2 - Option (needle bearings)									
omit	- none								
N	- with needle bearings								
Pos. 3 - Port type									
omit	- Side ports								
E	- Rear ports								
Pos. 4 - Displacement code									
25*	- 25,0 [cm ³ /rev]								
32*	- 32,0 [cm ³ /rev]								
40*	- 40,0 [cm ³ /rev]								
50	- 49,5 [cm ³ /rev]								
80	- 79,2 [cm ³ /rev]								
100	- 99,0 [cm ³ /rev]								
125	- 123,8 [cm ³ /rev]								
160	- 158,4 [cm ³ /rev]								
200	- 198,0 [cm ³ /rev]								
250	- 247,5 [cm ³ /rev]								
315	- 316,8 [cm ³ /rev]								
400	- 396,0 [cm ³ /rev]								
500	- 495,0 [cm ³ /rev]								
630	- 623,6 [cm ³ /rev]								
Pos. 5 - Shaft Extensions** (see page 24)									
C	- ø25 straight, Parallel key A8x7x32 DIN6885								
VC	- ø25 straight, Parallel key A8x7x32 DIN6885 with corrosion resistant bushing								
CO	- ø1" straight, Parallel key ¼"x¼"x1¼" BS46								
VCO	- ø1" straight, Parallel key ¼"x¼"x1¼" BS46 with corrosion resistant bushing								
SH	- ø25,32 splined BS 2059 (SAE 6B)								
VSH	- ø25,32 splined BS 2059 (SAE 6B) with corrosion resistant bushing								
K	- ø28,56 tapered 1:10, Parallel key B5x5x14 DIN6885								
SA	- ø24,5 splined B 25x22 DIN 5482								
VSA	- ø24,5 splined B 25x22 DIN 5482 with corrosion resistant bushing								
CB	- ø32 straight, Parallel key A10x8x45 DIN6885								
KB	- ø35 tapered 1:10, Parallel key B6x6x20 DIN6885								
SB	- splined A 25x22 DIN 5482								
OB	- ø1¼" tapered 1:8, Parallel key ⅝"x⅝"x1¼" BS46								
HB	- ø1¼" splined 14T ANSI B92.1 - 1976								
Pos. 6 - Shaft Seal Version (see page 26)									
omit	- Low pressure shaft seal or Standard shaft seal for "...B" shaft								
D	- Standard shaft seal								
U	- High pressure shaft seal (without check valves)								
Pos. 7 - Drain Port									
omit	- with drain port								
1	- without drain port								
Pos. 8 - Ports									
omit	- BSPP (ISO 228)								
M	- Metric (ISO 262)								
Pos. 9 - Special Features (see page 46)									
Pos. 10 - Design Series									
omit	- Factory specified								

* Not with Low Pressure Seal

** The permissible output torque for shafts must not be exceeded!

NOTES: The following combinations are not allowed:

- **Q** flange with "...B" shafts;
- **W** flange with "...B" shafts or **E** rear ports;
- **N** option with "...B" shafts, Low Pressure Seal or **U** option;
- "...B" shafts with **D** and **U** shaft seals.

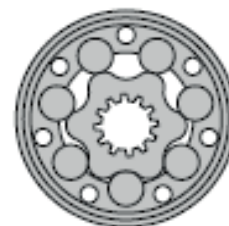
The hydraulic motors are mangano-phosphatized as standard.

MR Orbitmotoren



Deze hydrauliek motoren gebruikt men in een rijaandrijving voor langzaamrijdende voertuigen.

Deze motoren worden toegepast in conveyers, aanvoersystemen voor robots en manipulators, metaal bewerking machines, gras maaiers etc.



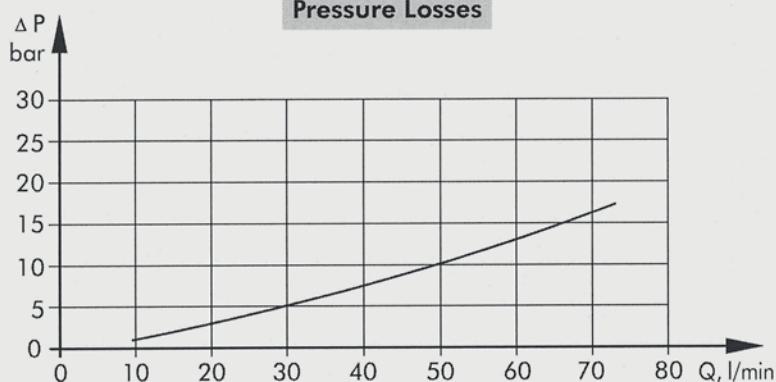
Algemene informatie:

Displacement,	[cm ³ /rev.]	51,5 ÷ 397
Max. Speed,	[RPM]	150 ÷ 775
Max. Torque,	[daNm]	10,1 ÷ 61
Max. Output,	[kW]	5 ÷ 13
Max. Pressure Drop,	[bar]	70 ÷ 175
Max. Oil Flow,	[l/min]	40 ÷ 60
Min. Speed,	[RPM]	10
Pressure fluid		Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range,	[°C]	-30 ÷ 90
Optimal Viscosity range,	[mm ² /s]	20 ÷ 75
Filtration		ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop (bar)	Viscosity (mm ² /s)	Oil flow in drain line (l/min)
100	20	2,5
	35	1,8
140	20	3,5
	35	2,8

Pressure Losses



MR

Orbitmotoren

Technische Informatie

Informatie voor MR... motors met C,CO,SH, K en SH assen (ø28,56 SEAL DIAMETER)

Type	MR									
	50	80	100	125	160	200	250	315	400	
Displacement, [cm ³ /rev.]	51,5	80,3	99,8	125,7	159,6	199,8	250,1	315,7	397	
Max. Speed, [RPM]	cont.	775	750	600	475	375	300	240	190	150
	int.*	970	940	750	600	470	375	300	240	190
Max. Torque [daNm]	cont.	10	20	24	30	39	38,5	39	36	38
	int.*	13	22	28	34	43	46	47	47	47
	peak**	17	27	32	37	46	56	60	61	61
Max. Output, [kW]	cont.	7	12,5	13	12,5	11,5	9	8	5	4,8
	int.*	8,5	15	15	14,5	14	12	9,5	8	6,8
Max. Pressure	cont.	140	175	175	175	175	140	110	85	65
Drop [bar]	int.*	175	200	200	200	200	175	140	115	90
	peak**	225	225	225	225	225	225	200	150	115
Max. Oil Flow [l/min]	cont.	40	60	60	60	60	60	60	60	60
	int.*	50	75	75	75	75	75	75	75	75
Max. Inlet Pressure [bar]	cont.	175	175	175	175	175	175	175	175	175
	int.*	200	200	200	200	200	200	200	200	200
	peak**	225	225	225	225	225	225	225	225	225
Max. Return Pressure with Drain Line [bar]	cont.	175	175	175	175	175	175	175	175	175
	int.*	200	200	200	200	200	200	200	200	200
	peak**	225	225	225	225	225	225	225	225	225
Max. Starting Pressure with Unloaded Shaft, [bar]		10	10	10	9	7	5	4	3	3
Min. Starting Torque [daNm]	at max. press. drop cont.	8	15	20	25	32	33	31	31,5	31,5
	at max. press. drop int.*	10	17	23	28	37	40	48	50	50
Min. Speed***, [RPM]		10	10	10	10	10	10	10	10	10
Weight, avg. [kg] For rear ports: +0,650 kg	MR(F)	6,8	6,9	7,2	7,3	7,5	8	8,4	9,1	9,8
	MRQ(N)	6,2	6,3	6,6	6,8	7,0	7,2	7,8	8,6	9,3

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting: max. 1% per minuut.

*** Voor toerentallen van 20ltr./min of minder neem contact op met onze medewerkers

- 1 Tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen.
- 2 Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering 25 micron of beter.
- 3 Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN 51524) of HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals synthetische olieën, dient er overlegt te worden.
- 4 Aanbevolen minerale viscositeit is 13mm² bij 50° C.
- 5 Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.
- 6 De levensduur van de motoren kan men verhogen als men de aandrijf-as 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

MR Orbitmotoren

Technische Informatie

Informatie voor MR... motors met CB, KB, OB en HB assen (ø35 SEAL DIAMETER)

Type	MR									
	50	80	100	125	160	200	250	315	400	
Displacement, [cm ³ /rev.]	51,5	80,3	99,8	125,7	159,6	199,8	250,1	315,7	397	
Max. Speed, [RPM]	cont.	775	750	600	475	375	300	240	190	150
	int.*	970	940	750	600	470	375	300	240	190
Max. Torque [daNm]	cont.	10	20	24	30	39	45	54	55	61
	int.*	13	22	28	34	43	50	61	69	69
	peak**	17	27	32	37	46	56	71	84	87
Max. Output, [kW]	cont.	7	12,5	13	12,5	11,5	11	10	9	7,8
	int.*	8,5	15	15	14,5	14	13	12	10	10,6
Max. Pressure	cont.	140	175	175	175	175	175	175	135	110
Drop [bar]	int.*	175	200	200	200	200	200	200	175	140
	peak**	225	225	225	225	225	225	225	210	175
Max. Oil Flow [l/min]	cont.	40	60	60	60	60	60	60	60	60
	int.*	50	75	75	75	75	75	75	75	75
Max. Inlet Pressure [bar]	cont.	175	175	175	175	175	175	175	175	175
	int.*	200	200	200	200	200	200	200	200	200
	peak**	225	225	225	225	225	225	225	225	225
Max. Return Pressure with Drain Line [bar]	cont.	175	175	175	175	175	175	175	175	175
	int.*	200	200	200	200	200	200	200	200	200
	peak**	225	225	225	225	225	225	225	225	225
Max. Starting Pressure with Unloaded Shaft, [bar]		10	10	10	9	7	5	4	3	3
Min. Starting Torque [daNm]	at max. press. drop cont.	8	15	20	25	32	41	50	50	50
	at max. press. drop int.*	10	17	23	28	37	46	55	66	61
Min. Speed***, [RPM]		10	10	10	10	10	10	10	10	10
Weight, avg. [kg] For rear ports: +0,650 kg	MR(F)	6,9	7	7,3	7,4	7,6	8,1	8,5	9,2	9,9

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

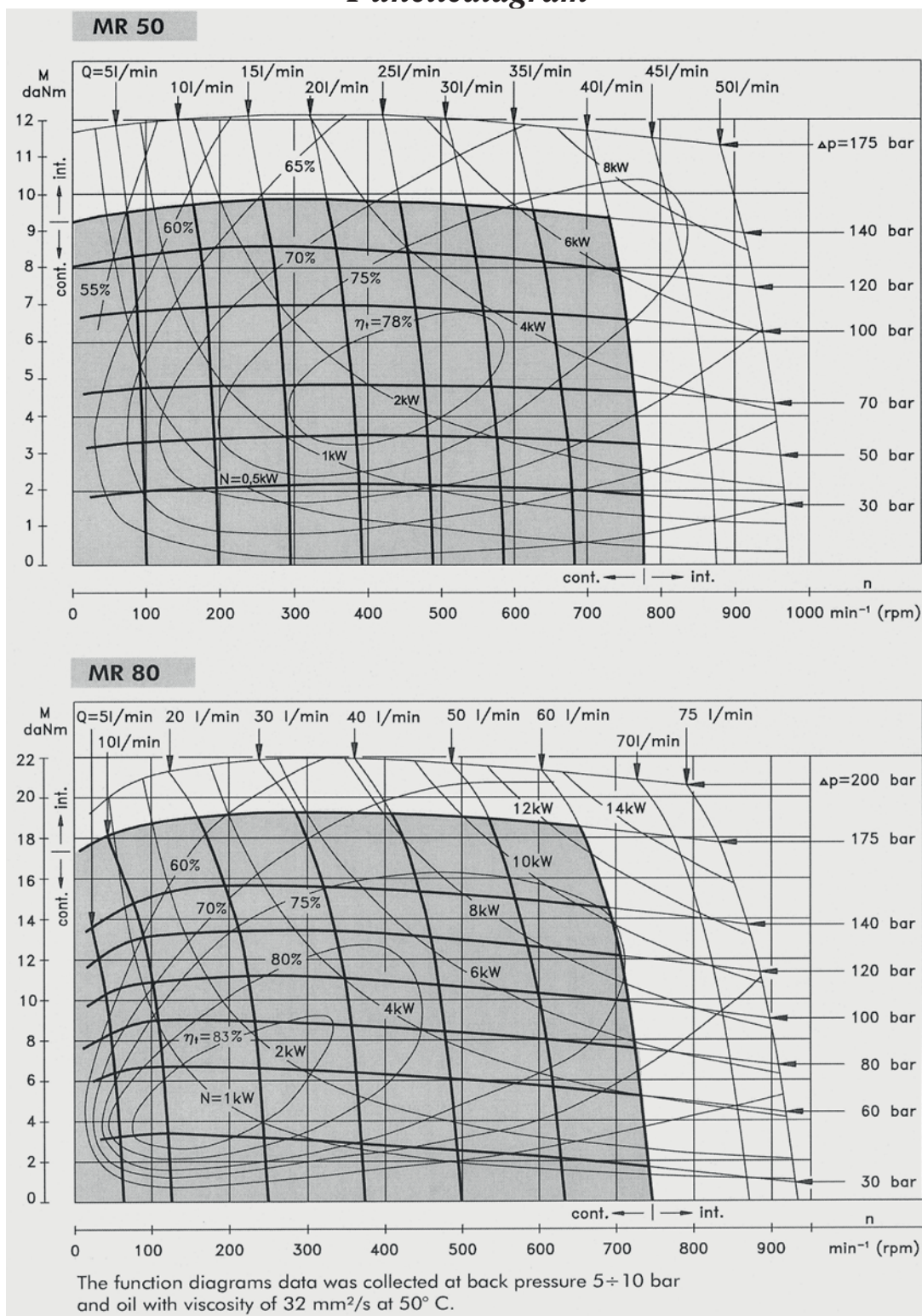
** Piekbelasting: max. 1% per minuut.

*** Voor toerentallen van 20ltr./min of minder neem contact op met onze medewerkers

- 1 Tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen.
- 2 Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering 25 micron of beter.
- 3 Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN 51524) of HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals synthetische olieën, dient er overlegt te worden.
- 4 Aanbevolen minerale viscositeit is 13mm² bij 50° C.
- 5 Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.
- 6 De levensduur van de motoren kan men verhogen als men de aandrijfjas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

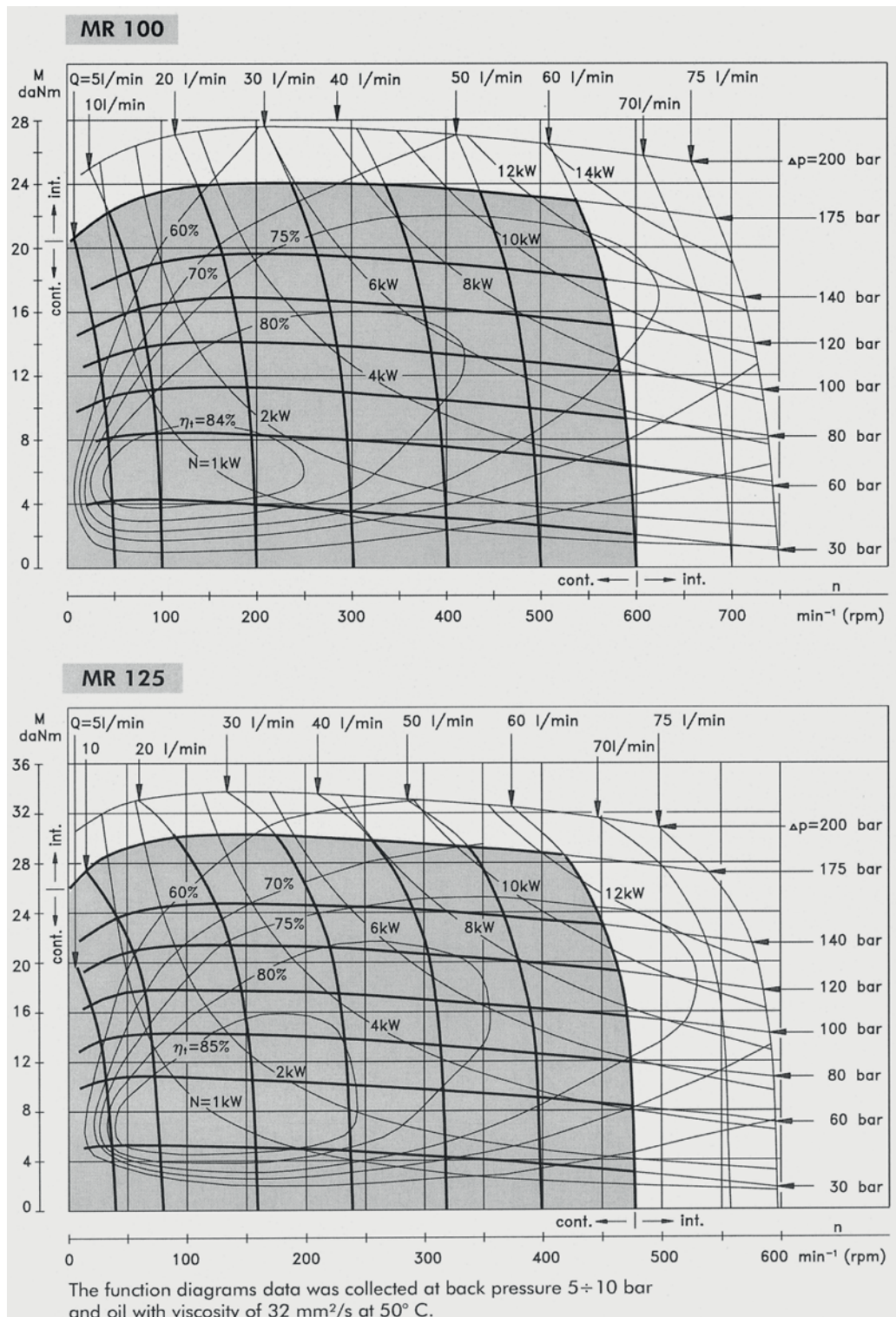
MR Orbitmotoren

Funciedigram



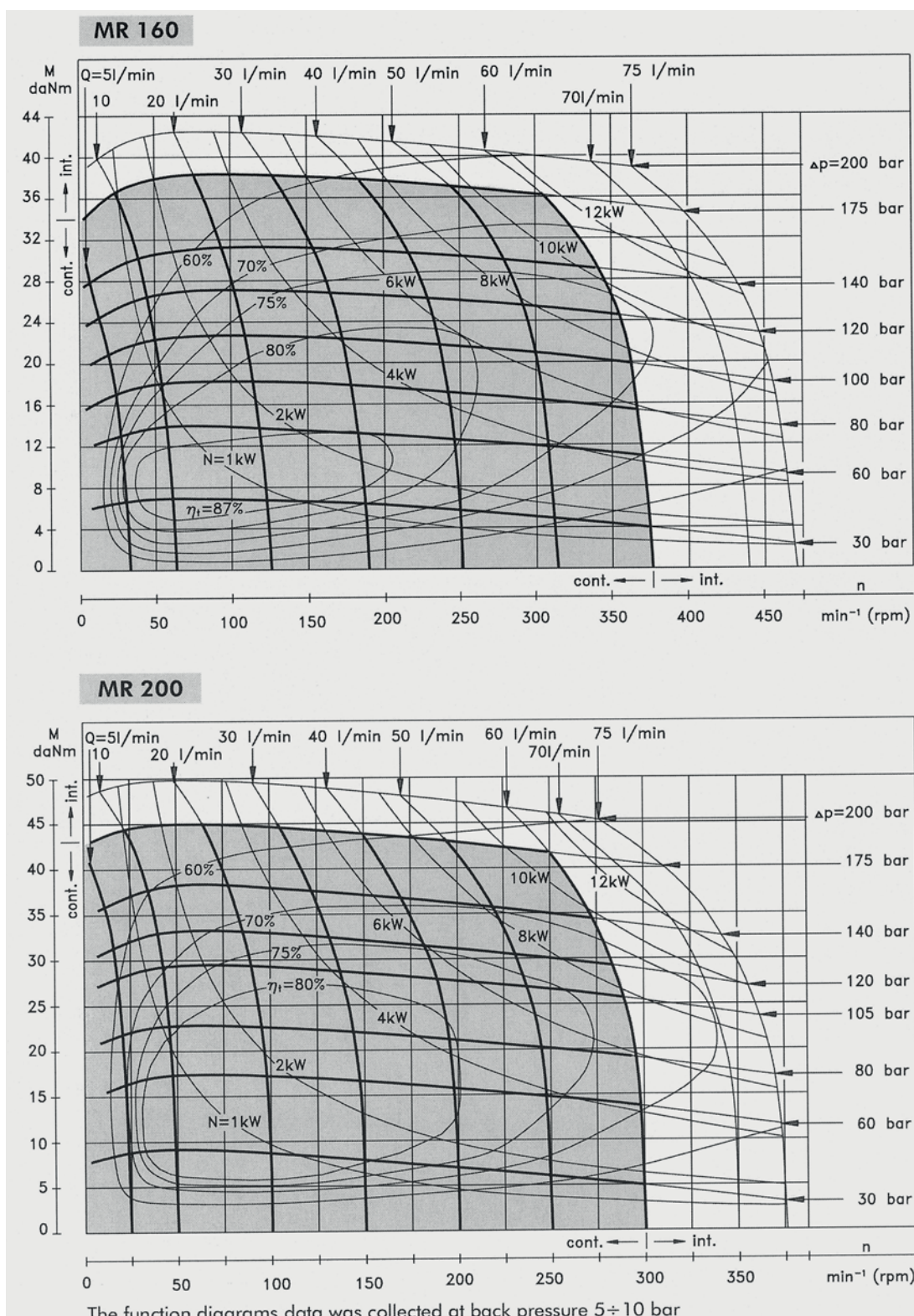
MR Orbitmotoren

Functiediagrammen



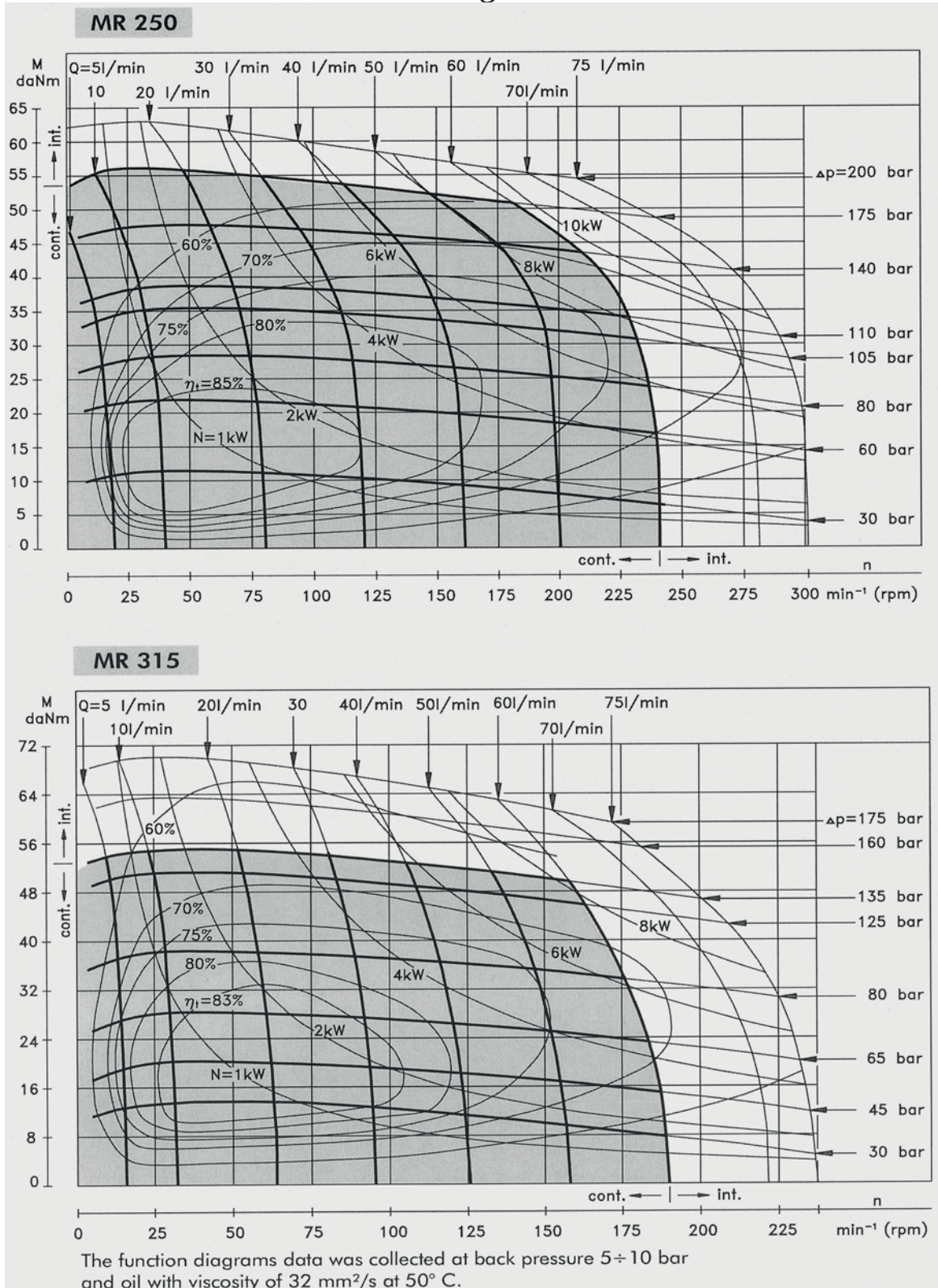
MR Orbitmotoren

Funciediagrammen



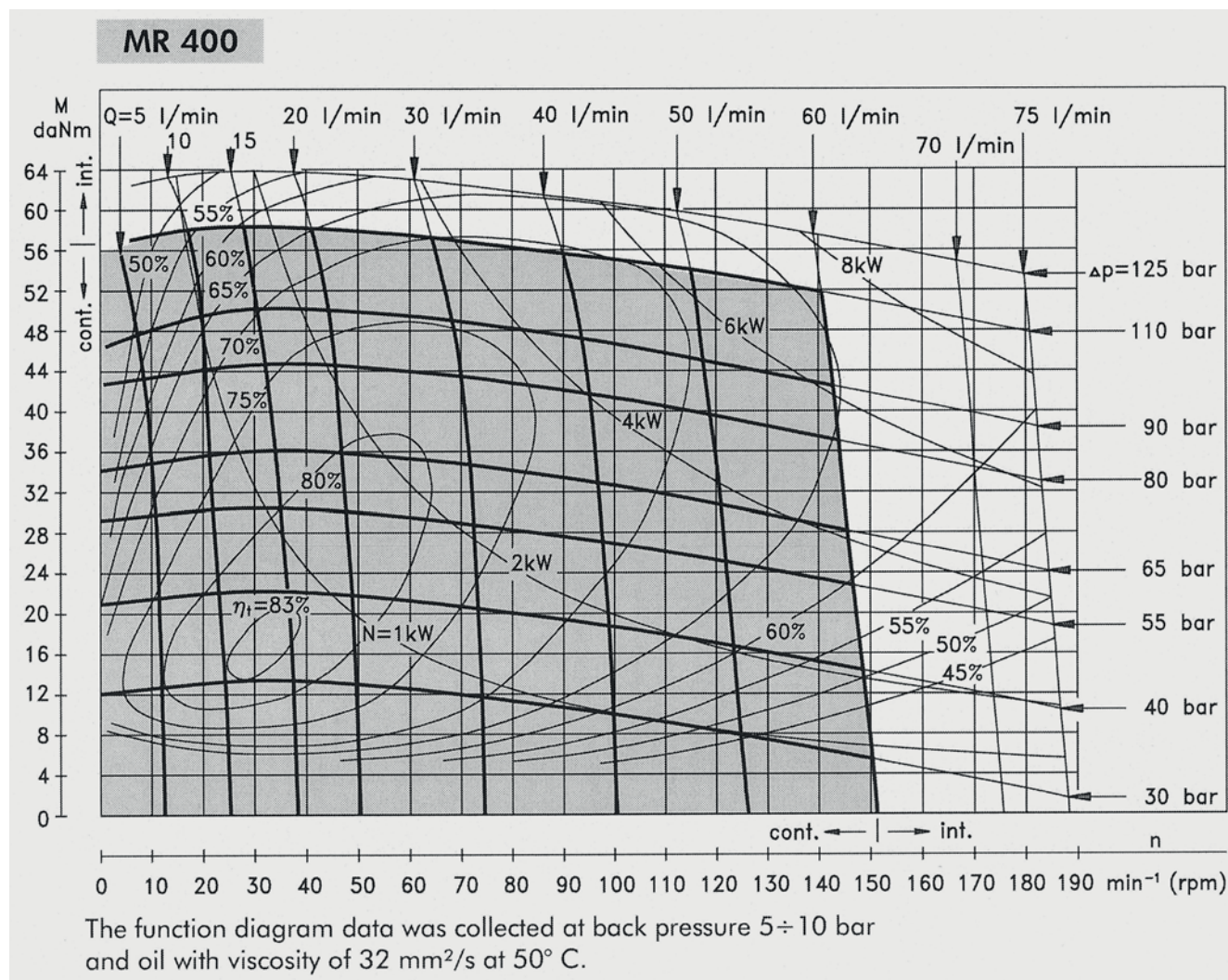
MR Orbitmotoren

Functiediagrammen



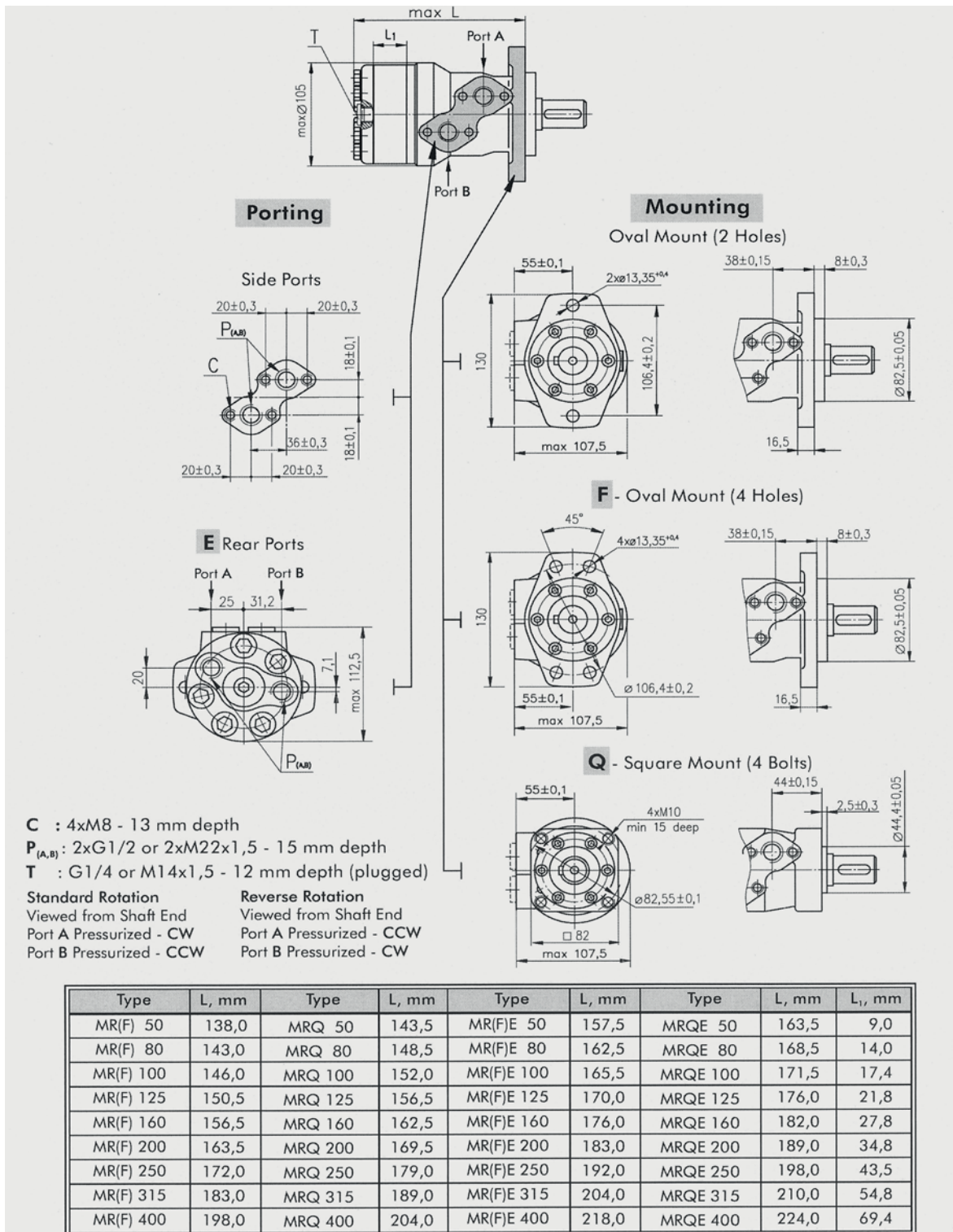
MR
Orbitmotoren

Funciediagram



MR Orbitmotoren

Afmetingen en uitvoeringen



MR Orbitmotoren

Bestelgegevens

	1	2	3	4	5	6	7	8	9	10
MR										
Pos.1 - Mounting Flange										
omit - Oval mount, two holes										
F	- Oval mount, four holes									
Q	- Square mount, four bolts									
Pos.2 - Option (needle bearings)										
omit - none										
N	- with needle bearings									
Pos.3 - Port type										
omit - Side ports										
E	- Rear ports									
Pos.4 - Displacement code										
50	- 51,5 [cm ³ /rev]									
80	- 80,3 [cm ³ /rev]									
100	- 99,8 [cm ³ /rev]									
125	- 125,7 [cm ³ /rev]									
160	- 159,6 [cm ³ /rev]									
200	- 199,8 [cm ³ /rev]									
250	- 250,1 [cm ³ /rev]									
315	- 315,7 [cm ³ /rev]									
400	- 397,0 [cm ³ /rev]									
Pos.5 - Shaft Extensions*(see page 24)										
C	- ø25 straight, Parallel key A8x7x32 DIN6885									
VC	- ø25 straight, Parallel key A8x7x32 DIN6885 with corrosion resistant bushing									
CO	- ø1" straight, Parallel key 1/4"x1/4"x1 1/4" BS46									
VCO	- ø1" straight, Parallel key 1/4"x1/4"x1 1/4" BS46 with corrosion resistant bushing									
SH	- ø25,32 splined BS 2059 (SAE 6B)									
VSH	- ø25,32 splined BS 2059 (SAE 6B) with corrosion resistant bushing									
K	- ø28,56 tapered 1:10, Parallel key B5x5x14 DIN6885									
SA	- ø24,5 splined B 25x22 DIN 5482									
VSA	- ø24,5 splined B 25x22 DIN 5482 with corrosion resistant bushing									
CB - ø32 straight, Parallel key A10x8x45 DIN6885										
KB - ø35 tapered 1:10, Parallel key B6x6x20 DIN6885										
SB - splined A 25x22 DIN 5482										
OB - ø1 1/4" tapered 1:8, Parallel key 5/16"x5/16"x1 1/4" BS46										
HB - ø1 1/4" splined 14T ANSI B92.1 - 1976										
Pos. 6 - Shaft Seal Version (see page 26)										
omit - Low pressure shaft seal or Standard shaft seal for "...B" shaft										
D	- Standard shaft seal									
U	- High pressure shaft seal (without check valves)									
Pos. 7 - Drain Port										
omit - with drain port										
1	- without drain port									
Pos. 8 - Ports										
omit - BSPP (ISO 228)										
M	- Metric (ISO 262)									
Pos. 9 - Special Features (see page 46)										
Pos.10 - Design Series										
omit - Factory specified										

* The permissible output torque for shafts must not be exceeded!

NOTES:1. The following combinations are not allowed:- **Q** flange with "...B" shafts;
 - **N** option with "...B" shafts, Low Pressure Seal or **U** option;
 - "...B" shafts with **D** and **U** shaft seals.

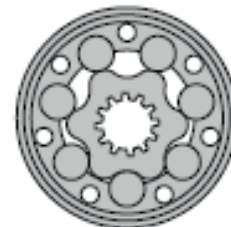
The hydraulic motors are mangano-phosphatized as standard.

MH

Orbitmotoren



Deze hydrauliek motoren worden toegepast in een rijaandrijving voor rijdende voertuigen. Deze motoren worden toegepast in conveyers, aanvoersystemen voor robots en manipulators, metaal bewerking machines, landbouwmachines etc.



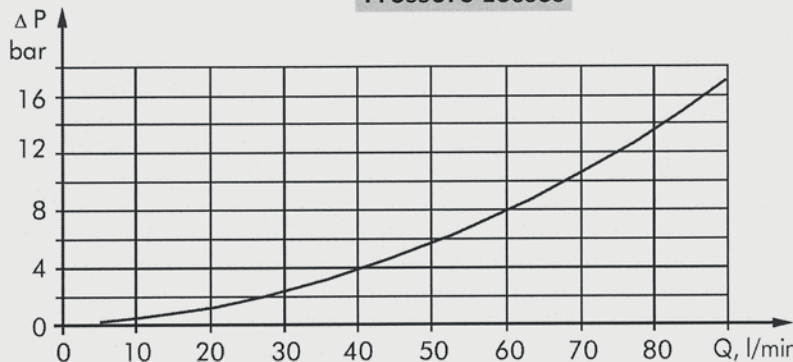
Algemene informatie:

Displacement,	[cm ³ /rev.]	201,3 ÷ 502,4
Max. Speed,	[RPM]	150 ÷ 370
Max. Torque,	[daNm]	51 ÷ 85
Max. Output,	[kW]	11 ÷ 16
Max. Pressure Drop,	[bar]	175 ÷ 125
Max. Oil Flow,	[l/min]	75
Min. Speed,	[RPM]	5 ÷ 10
Pressure fluid		Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range,	[°C]	-30 ÷ 90
Optimal Viscosity range, [mm ² /s]		20 ÷ 75
Filtration		ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop (bar)	Viscosity (mm ² /s)	Oil flow in drain line (l/min)
100	20	2,5
	35	1,8
140	20	3,5
	35	2,8

Pressure Losses



MH

Orbitmotoren

Technische informatie

Type	MH					
	200	250	315	400	500	
Displacement, [cm ³ /rev.]	201,3	252	314,9	396,8	502,4	
Max. Speed, [RPM]	cont.	370	295	235	185	150
	int.*	445	350	285	225	180
Max. Torque [daNm]	cont.	51	61	74	84	85
	int.*	58	70	82	98	104
	peak**	64	79	98	109	117
Max. Output, [kW]	cont.	16	16	14	12,5	11
	int.*	18,5	18,5	15,5	15	14
Max. Pressure Drop [bar]	cont.	175	175	175	155	125
	int.*	200	200	200	190	160
	peak**	225	225	225	210	180
Max. Oil Flow [l/min]	cont.	75	75	75	75	75
	int.*	90	90	90	90	90
Max. Inlet Pressure [bar]	cont.	200	200	200	200	200
	int.*	225	225	225	225	225
	peak**	250	250	250	250	250
Max. Starting Pressure with Unloaded Shaft, [bar]	5	5	5	5	5	
Min. Starting Torque [daNm]	at max. press. drop cont.	39	52	66	72	72
	at max. press. drop int.*	45	59	73	88	88
Min. Speed***, [RPM]	10	10	8	5	5	
Weight, avg. [kg]	10,5	11	11,5	12,3	13	

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting: max. 1% per minuut.

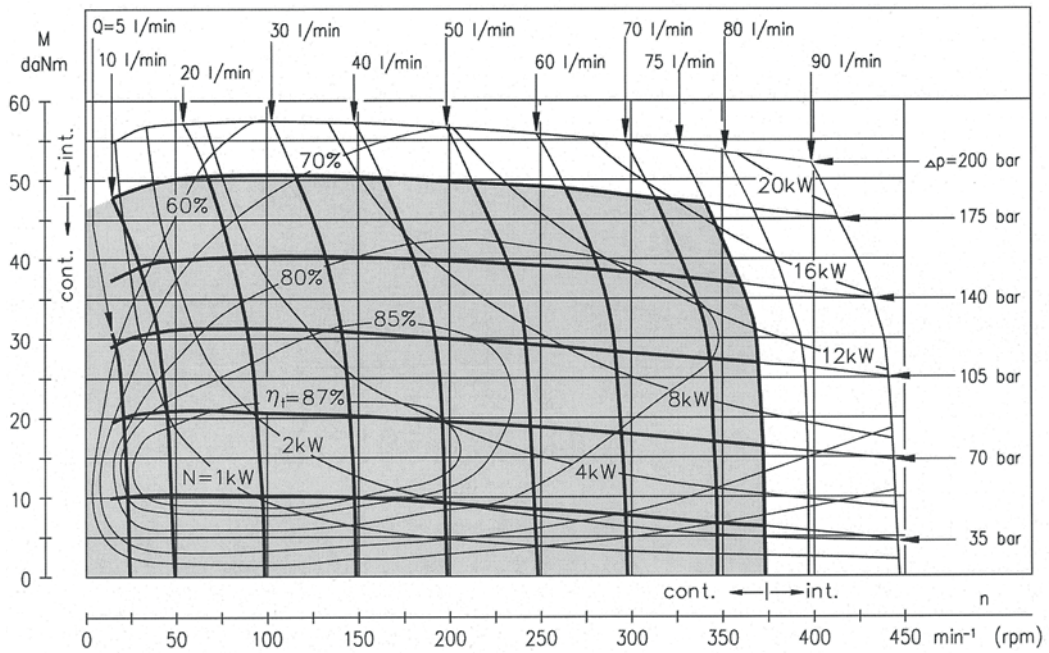
*** Voor toerentallen van 20ltr./min of minder neem contact op met onze medewerkers

- 1 Tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen.
- 2 Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering 25 micron of beter.
- 3 Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN 51524) of HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals synthetische olieën, dient er overlegt te worden.
- 7 Aanbevolen minerale viscositeit is 13mm² bij 50° C.
- 8 Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.
- 9 De levensduur van de motoren kan men verhogen als men de aandrijfjas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

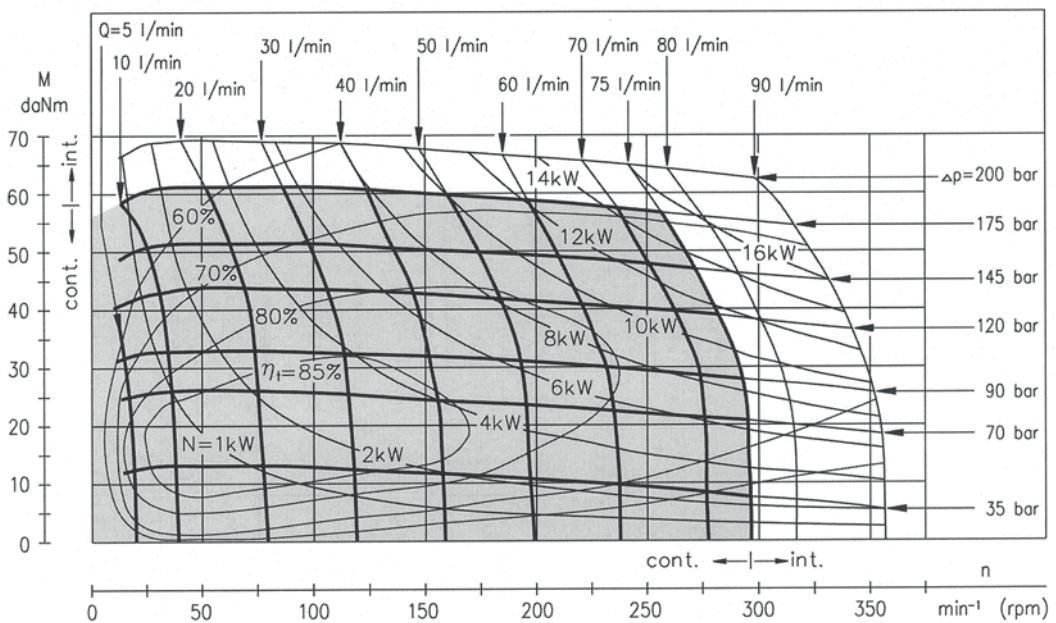
MH Orbitmotoren

Functiediagrammen

MH 200



MH 250

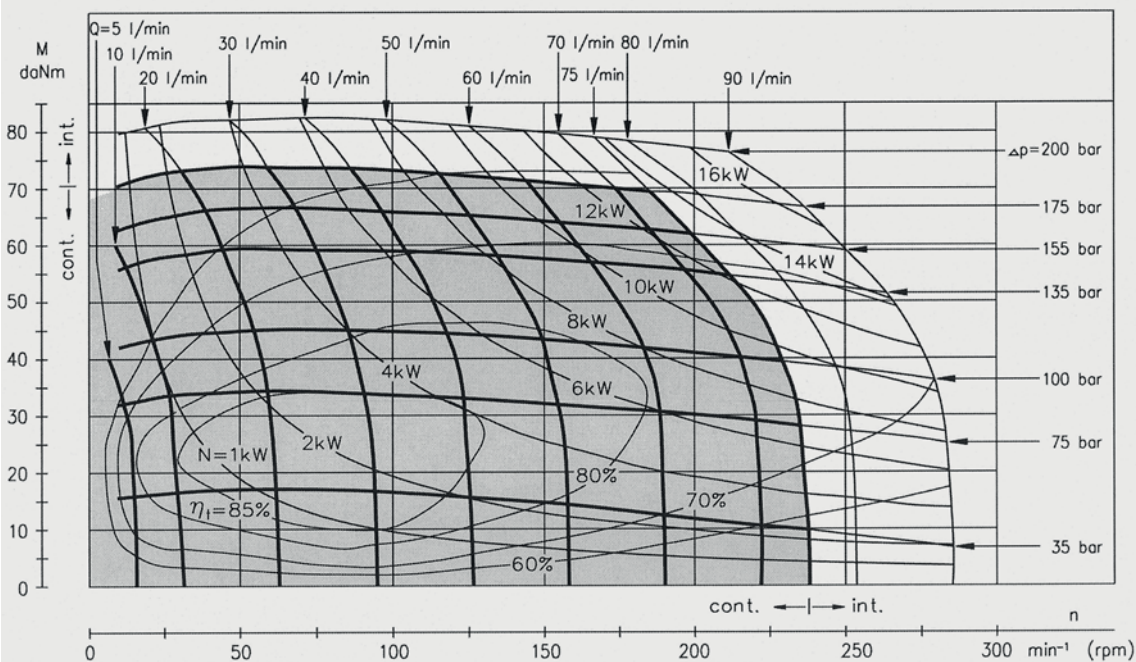


The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

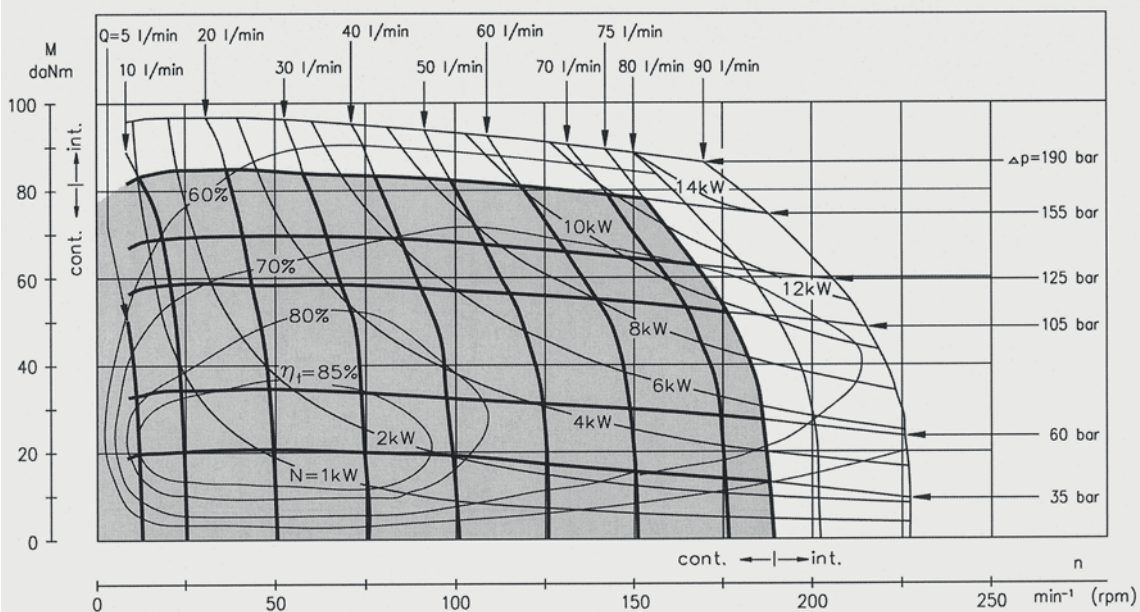
MH Orbitmotoren

Funciediagrammen

MH 315



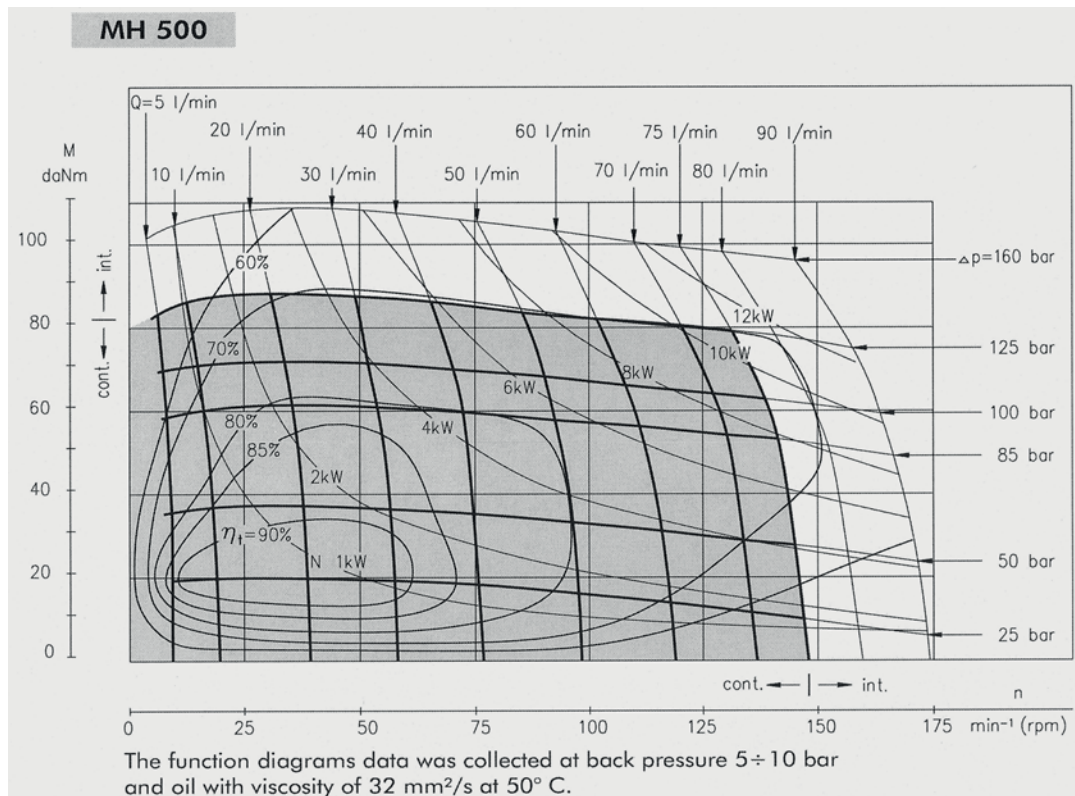
MH 400



The function diagrams data was collected at back pressure 5÷10 bar and oil with viscosity of 32 mm²/s at 50° C.

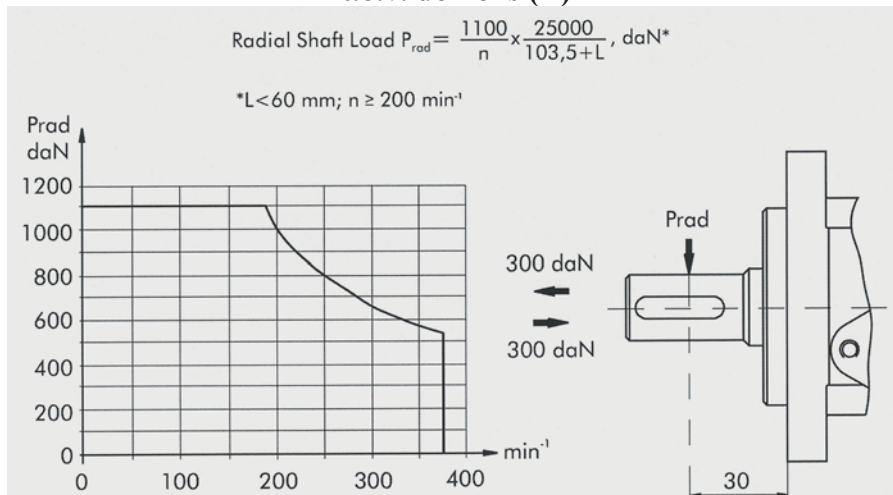
MH
Orbitmotoren

Functiediagrammen



Toegestane asbelasting MH motoren

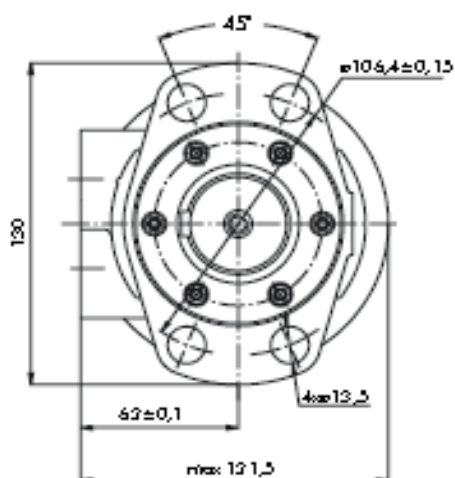
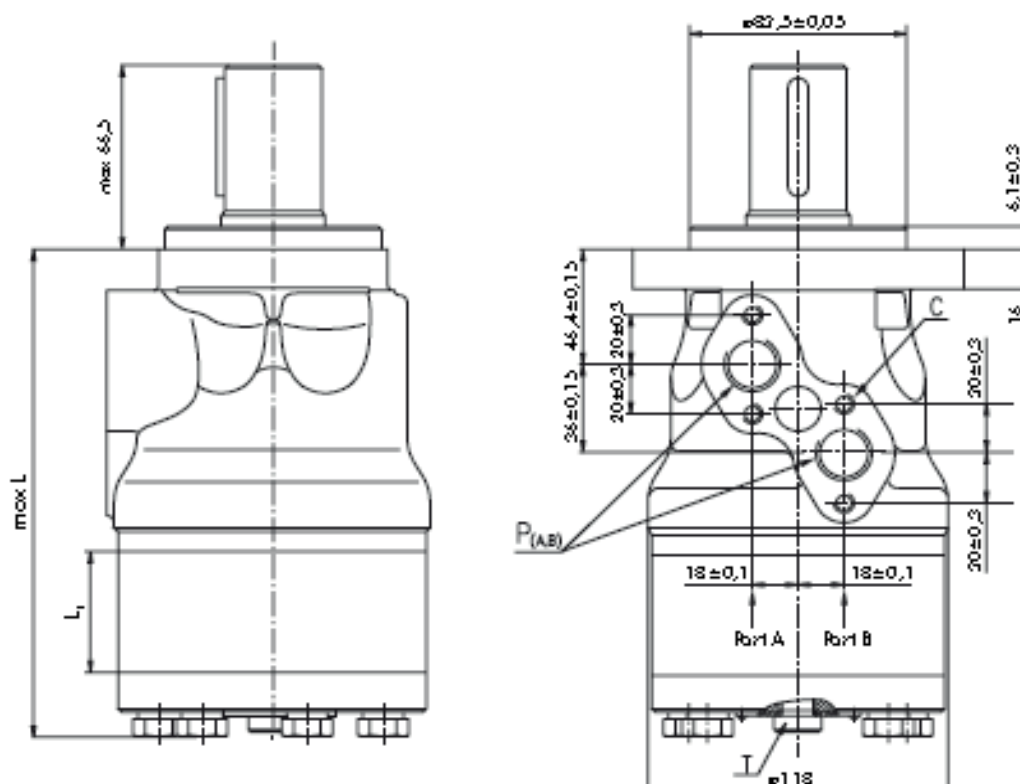
De toegestane radiale asbelasting (Prad) hangt af van de snelheid RPM en afstand van de last t.o.v. de flens (L)



MH Orbitmotoren

Afmetingen en uitvoeringen

Magneto Maunt (4 holes)



Type	L, mm	L ₁ , mm
MH 200	169	27,8
MH 250	176	34,8
MH 315	184	43,5
MH 400	196	54,8
MH 500	211	69,4

C : 4xM8 13 mm depth

P_(A,B) : 2xG1/2 or 2xM2 2x1,5 1.5 mm depth

T : G1/4 or M1 4x1,5 12 mm depth (plugged)

Standard Rotation

Viewed from Shaft End

Port A Pressurized - CW

Port B Pressurized - CCW

Reverse Rotation

Viewed from Shaft End

Port A Pressurized - CCW

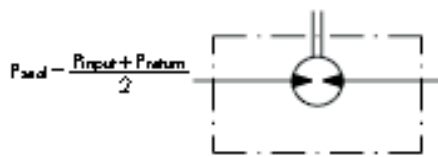
Port B Pressurized - CW

MH Orbitmotoren

Maximaal toegestane druk op de asafdichting

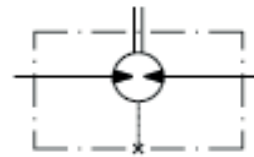
MH...UT motors with high pressure seal and without drain connection:

The shaft seal pressure equals the average of input pressure and return pressure.



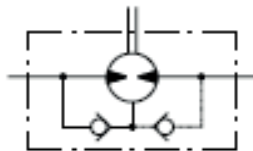
MH...U motors with high pressure seal and drain connection:

The shaft seal pressure equals the pressure in the drain line.



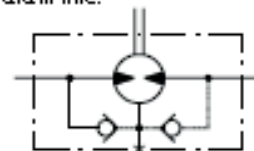
MH...T motors with standard shaft seal and without drain connection:

The shaft seal pressure never exceeds the pressure in the return line.

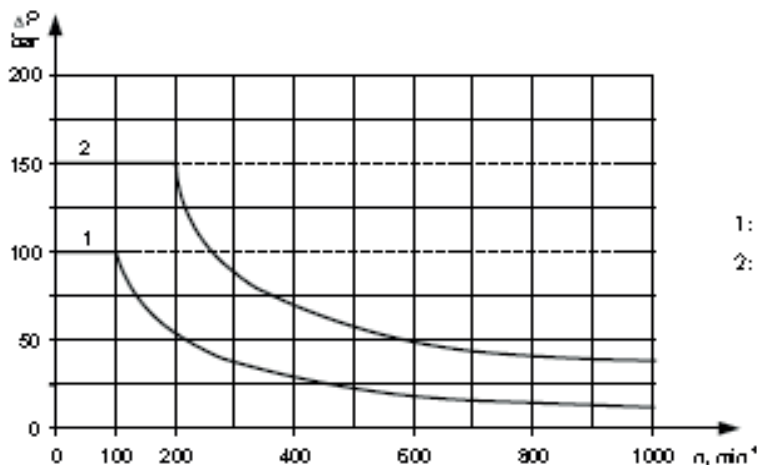


MH... motors with standard shaft seal and with drain connection:

The shaft seal pressure equals the pressure in the drain line.



Max. return pressure without drain line or max. pressure in the drain line



1: Drawing for Standard Shaft Seal

2: Drawing for High Pressure Seal ('U' Seal)

— continuous operations

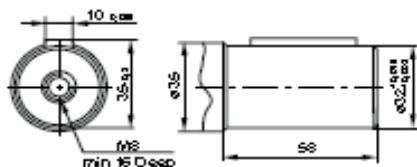
- - - intermittent operations

MH

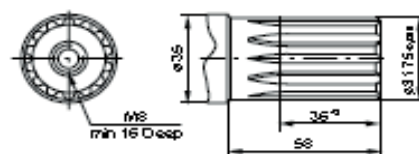
Orbitmotoren

Mogelijke assen

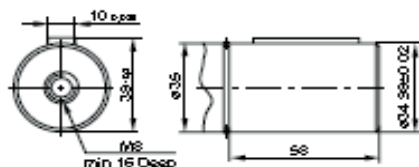
C . $\varnothing 32$ straight, Parallel key A10x8x45 DIN 6885
Max. Torque 77 daNm



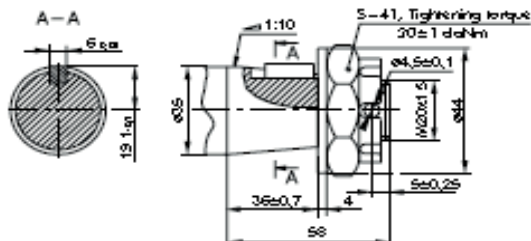
SH . $\varnothing 1\frac{1}{2}$ splined 14T, DP 12/24 ANSI B92.1-1976
Max. Torque 95 daNm



CB . $\varnothing 35$ straight, Parallel key A10x8x45 DIN 6885
Max. Torque 95 daNm



K . tapered 1:10, Parallel key B6x6x20 DIN 6885
Max. Torque 95 daNm



Bestelgegevens

	1	2	3	4	5	6	7
MH							

Pos. 1	Displacement code
200	201,3 [cm ³ /rev]
250	252,0 [cm ³ /rev]
315	314,9 [cm ³ /rev]
400	396,8 [cm ³ /rev]
500	502,4 [cm ³ /rev]
Pos. 2	Shaft Extensions *
C	$\varnothing 32$ straight, Parallel key A10x8x45 DIN 6885
SH	$\varnothing 1\frac{1}{2}$ splined 14T ANSI B92.1-1970
CB	$\varnothing 35$ straight, Parallel key A10x8x45 DIN 6885
K	$\varnothing 35$ tapered 1:10, Parallel key B6x6x20 DIN 6885

Pos. 3	Shaft Seal Version (see page 44)
omit	Standard shaft seal
L	High pressure shaft seal (without check valves)
Pos. 4	Drain Port
omit	with drain port
1	without drain port
Pos. 5	Ports
omit	BSPP (ISO 228)
M	Metric (ISO 262)
Pos. 6	Special Features (see page 44)
omit	factory specified

MM, MP,MR, MH Orbitmotoren

SPECIALS

Special Feature Description	Order Code	Motor type						
		JMM	JMP	JMPN	JMPW	JMR	JMRN	JMH
Motor for Speed Sensor*	RS	○	○	-	-	○	-	○
Low Leakage	LL	○	○	-	○	○	-	○
Low Speed Valving	LSV	-	-	-	○	○	-	○
Free Running	FR	○	○	-	○	○	-	○
Reverse Rotation	R	○	○	○	○	○	○	○
Paint**	P	○	○	○	○	○	○	○
Corrosion Protected Paint**	PC	○	○	○	○	○	○	○
Check Valves		S	S***	S	S	S***	S	S

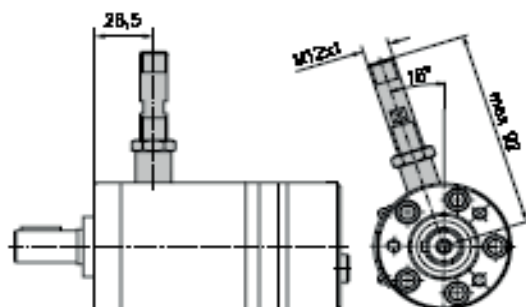
- Optional
 - Not applicable
 S Standard

- * for sensor ordering see pages 47-48
 ** color at customer's request.
 *** without check valves for "U" shaft seal versions (see page 26)

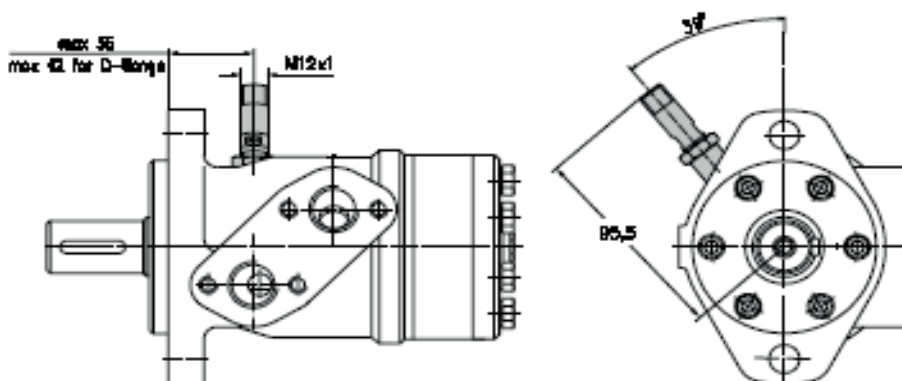
MM, MP, MR, MH Orbitmotoren

MET SPEEDSENSOR

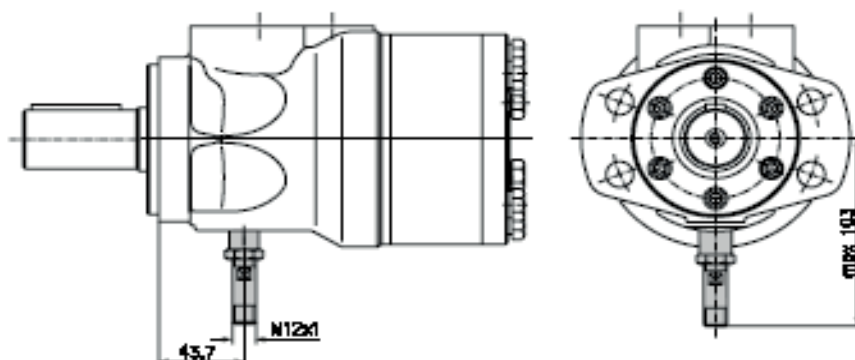
MM...RS



MP...RS and MR...RS



MH...RS

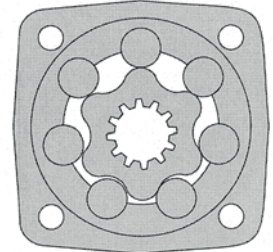


MS

Orbitmotoren



De MS motoren zijn met 7 rollen in tandkransen 6 tanden in een sterwiel uitgerust. Deze rollen en de effectieve hydraulische smering van de lagerset beperken de wrijving bij de tandwieldraaiing tot een minimum.



De MS motoren worden toegepast op Conveyors, metaal verwerkingmachines, Landbouwmachines etc.

De MS motor is met de volgende opties verkrijgbaar ; standaard, wielflens, korte uitvoering, motor met rem, tacho aansluiting, speed sensor, poorten achter en zijaansluiting, as recht, splined en taps.

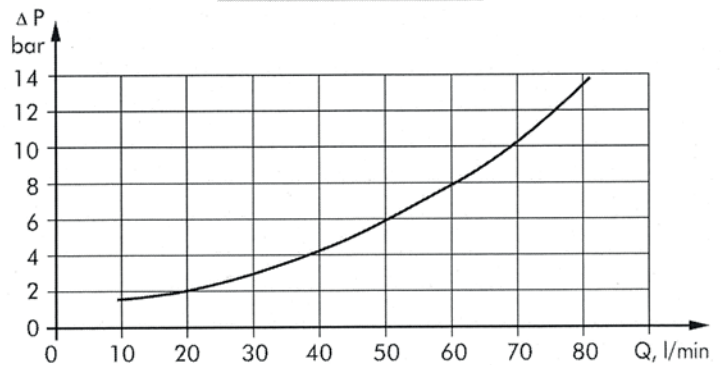
Algemene informatie

Displacement,	[cm ³ /rev.]	80,5 ÷ 564,9
Max. Speed,	[RPM]	130 ÷ 810
Max. Torque,	[daNm]	23 ÷ 85
Max. Output,	[kW]	18 ÷ 6,9
Max. Pressure Drop,	[bar]	105 ÷ 210
Max. Oil Flow,	[l/min]	75
Min. Speed,	[RPM]	5 ÷ 10
Permissible Shaft Loads,	[daN]	P _a = 500
Pressure fluid		Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range,	[°C]	-30 ÷ 90
Optimal Viscosity range,	[mm ² /s]	20 ÷ 75
Filtration		ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop (bar)	Viscosity (mm ² /s)	Oil flow in drain line (l/min)
140	20	1,5
	35	1
210	20	3
	35	2

Pressure Losses



MS Orbitmotoren

Technische informatie

Type	MS 80	MS 100	MS 125	MS 160	MS 200	
Displacement [cm ³ /rev.]	80,5	100	125,7	159,7	200	
Max. Speed, [RPM]	cont.	810	750	600	470	375
	Int.*	1000	900	720	560	450
Max. Torque [daNm]	cont.	24	30,5	37,5	49	61
	Int.*	31	39	49	60	72
Max. Output [kW]	cont.	15,5	18	18	16,5	16,5
	int.*	19,5	22,5	22,5	23	22
Max. Pressure Drop [bar]	cont.	210	210	210	210	210
	Int.*	275	275	275	260	250
	peak**	295	295	295	280	270
Max. Oil Flow [l/min]	cont.	65	75	75	75	75
	Int.*	80	90	90	90	90
Max. Inlet Pressure [bar]	cont.	230	230	230	230	230
	Int.*	295	295	295	295	295
	peak**	300	300	300	300	300
Max. Return Pressure with Drain Line [bar]	cont.	140	140	140	140	140
	Int.*	175	175	175	175	175
	peak**	210	210	210	210	210
Max. Starting Pressure with Unloaded Shaft, [bar]	12	10	10	8	8	
Min. Starting Torque [daNm]	at max. press. drop cont.	18	23	29	37	47
	at max. press. drop Int.*	23,5	30	38	46	56
Min. Speed***, [RPM]	10	10	8	8	6	
Weight, [kg] For Rear Ports +0,4 kg	MS(F)	9,9	10,1	10,4	10,8	11,2
	MSW	10,4	10,6	10,9	11,3	11,7
	MSS	7,9	8,1	8,4	8,8	9,2
	MSV	5,8	6	6,3	6,7	7,1
	MSQ	10,3	10,5	10,8	11,2	11,6
	MSB	16,9	17,1	17,4	17,8	18,2

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting maximaal 1% per minuut

*** Voor toerentallen van 5 RPM of minder dan opgegeven, neem contact op met M+S of onze medewerkers.

1 tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen

2 Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering van 25 micron of beter.

3 Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN51524) of

HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals syntetische olieën dient er overlegt te worden.

4 Aanbevolen minerale viscositeit is 13mm² bij 50C°.

5 Aanbevolen maximum olietemperatuur tijdens gebruik is 85 C°.

6 De levensduur van de motoren kan men verhogen als men de aandrijfjas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

MS Orbitmotoren

Technische informatie

Type	MS 250	MS 315	MS 400	MS 475	MS 525	MS 565	
Displacement [cm ³ /rev.]	250	314,9	397	474,6	522,7	564,9	
Max. Speed, [RPM]	cont.	300	240	190	160	145	130
	Int.*	360	290	230	190	175	160
Max. Torque [daNm]	cont.	72	82,5	86,5	85	85	85
	Int.*	87	100	99	99	99	99
Max. Output [kW]	cont.	15,5	15	11	8,4	7,6	6,9
	int.*	18	17	12,5	11,3	10,4	9,6
Max. Pressure Drop [bar]	cont.	200	200	160	130	115	105
	Int.*	250	240	190	150	135	125
	peak**	270	260	210	170	155	145
Max. Oil Flow [l/min]	cont.	75	75	75	75	75	75
	Int.*	90	90	90	90	90	90
Max. Inlet Pressure [bar]	cont.	230	230	230	230	230	230
	Int.*	295	295	295	295	295	295
	peak**	300	300	300	300	300	300
Max. Return Pressure with Drain Line [bar]	cont.	140	140	140	140	140	140
	Int.*	175	175	175	175	175	175
	peak**	210	210	210	210	210	210
Max. Starting Pressure with Unloaded Shaft, [bar]	8	8	8	8	8	8	
Min. Starting Torque [daNm]	at max. press. drop cont.	56	71	71	71	71	71
	at max. press. drop Int.*	70	85	84	84	84	84
Min. Speed***, [RPM]	6	5	5	5	5	5	
Weight, [kg] For Rear Ports +0,4 kg	MS(F)	11,7	12,4	13,3	14,4	14,6	15
	MSW	12,2	12,9	13,8	14,6	15,1	15,5
	MSS	9,7	10,4	11,3	12,1	12,6	13
	MSV	7,6	8,3	9,2	10	10,5	10,9
	MSQ	12,1	12,8	13,7	14,5	15,0	15,4
	MSB	18,7	19,4	20,3	21,1	21,6	23

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting maximaal 1% per minuut

*** Voor toerentallen van 5 RPM of minder dan opgegeven, neem contact op met M+S of onze medewerkers.

1 tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen

2 Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering van 25 micron of beter.

3 Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN51524) of

HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals syntetische olieën dient er overlegt te worden.

4 Aanbevolen minerale viscositeit is 13mm² bij 50C°.

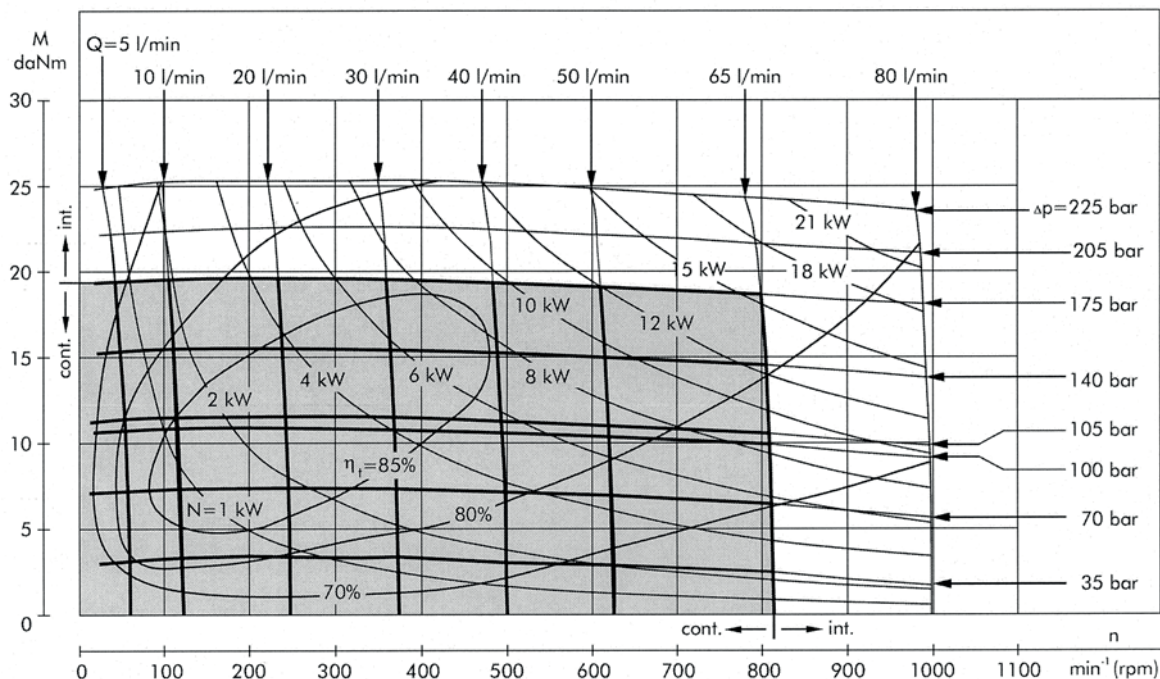
5 Aanbevolen maximum olietemperatuur tijdens gebruik is 85 C°.

6 De levensduur van de motoren kan men verhogen als men de aandrijfjas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

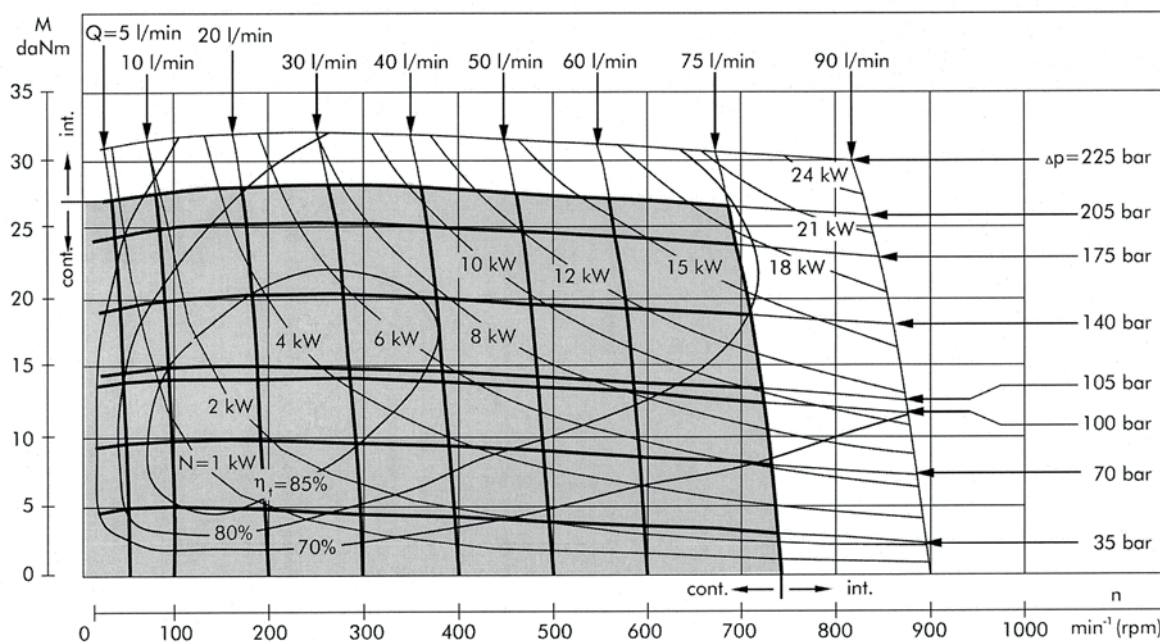
MS Orbitmotoren

Funciediagrammen

MS 80



MS 100

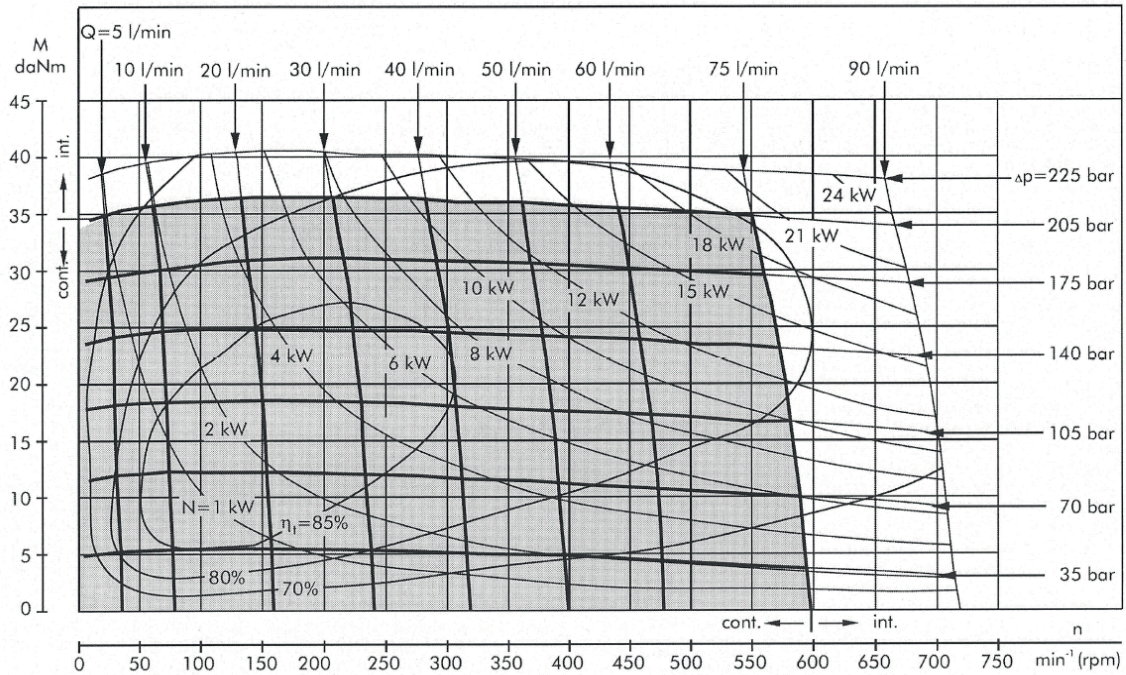


The function diagrams data was collected at back pressure 5 ± 10 bar and oil with viscosity of 32 mm²/s at 50° C.

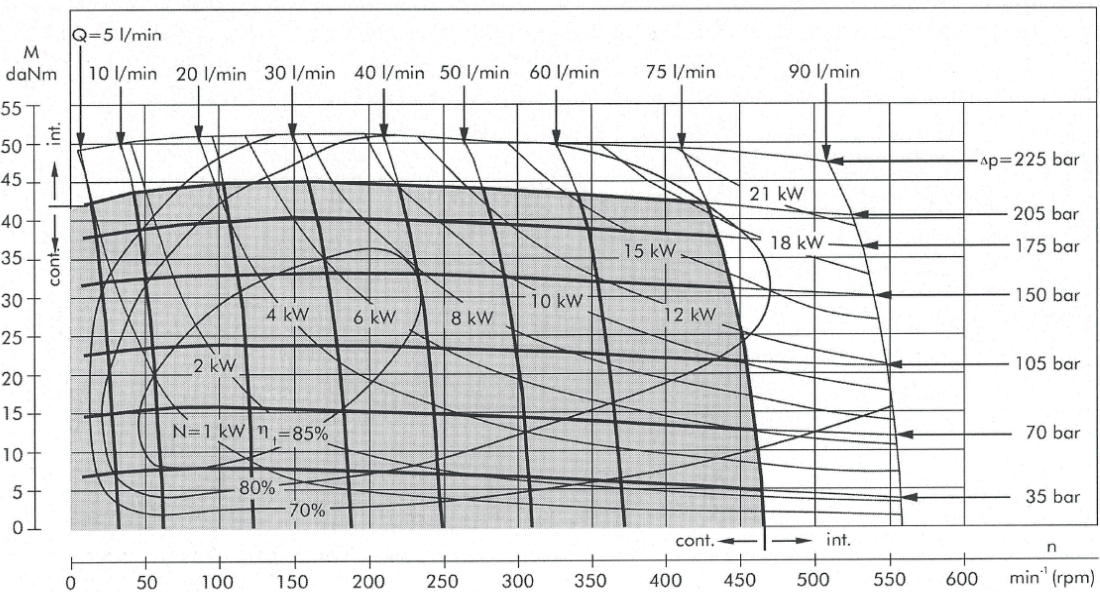
MS Orbitmotoren

Functiediagrammen

MS 125



MS 160

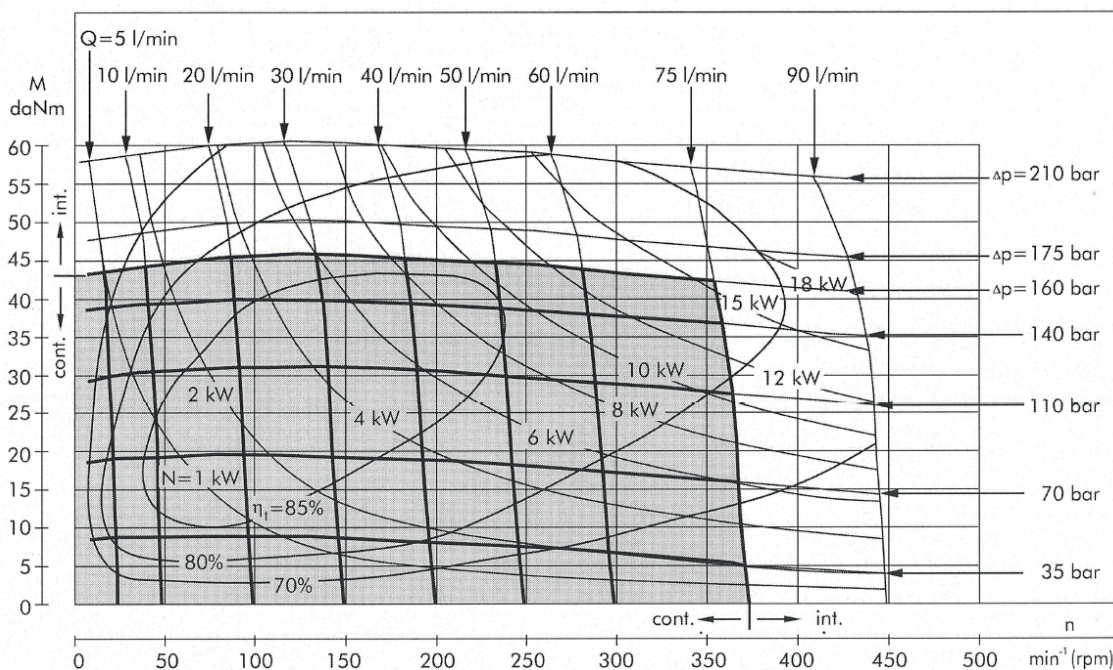


The function diagrams data was collected at back pressure $5 \div 10$ bar and oil with viscosity of $32 \text{ mm}^2/\text{s}$ at 50°C .

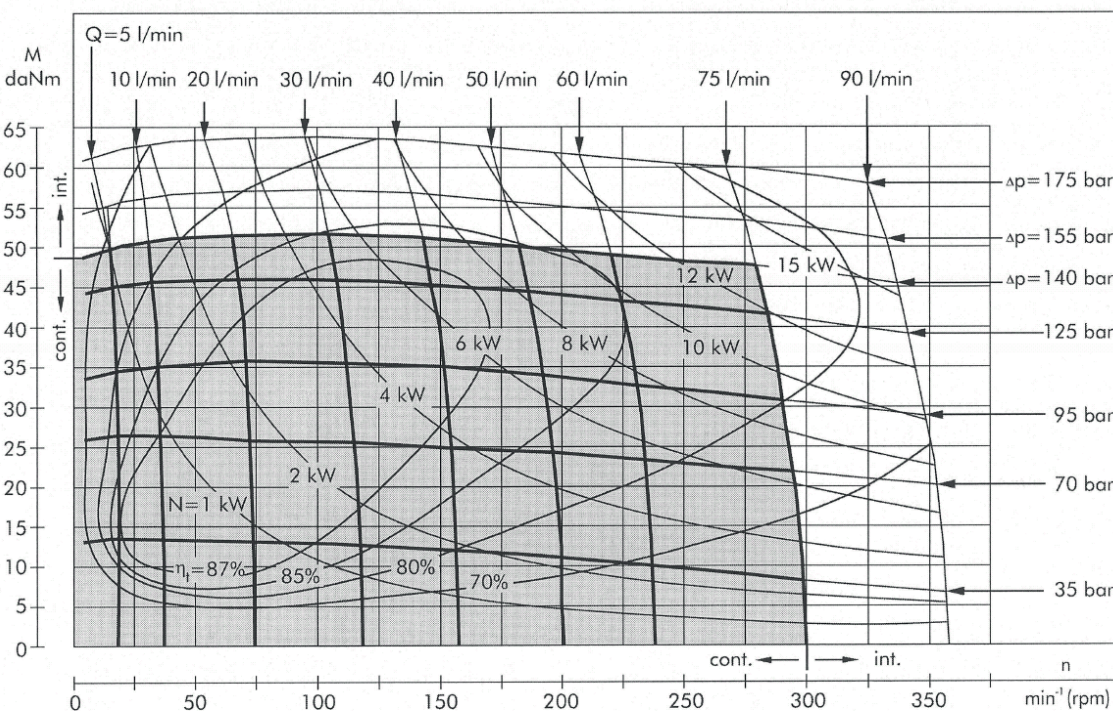
MS Orbitmotoren

Funciediagrammen

MS 200



MS 250

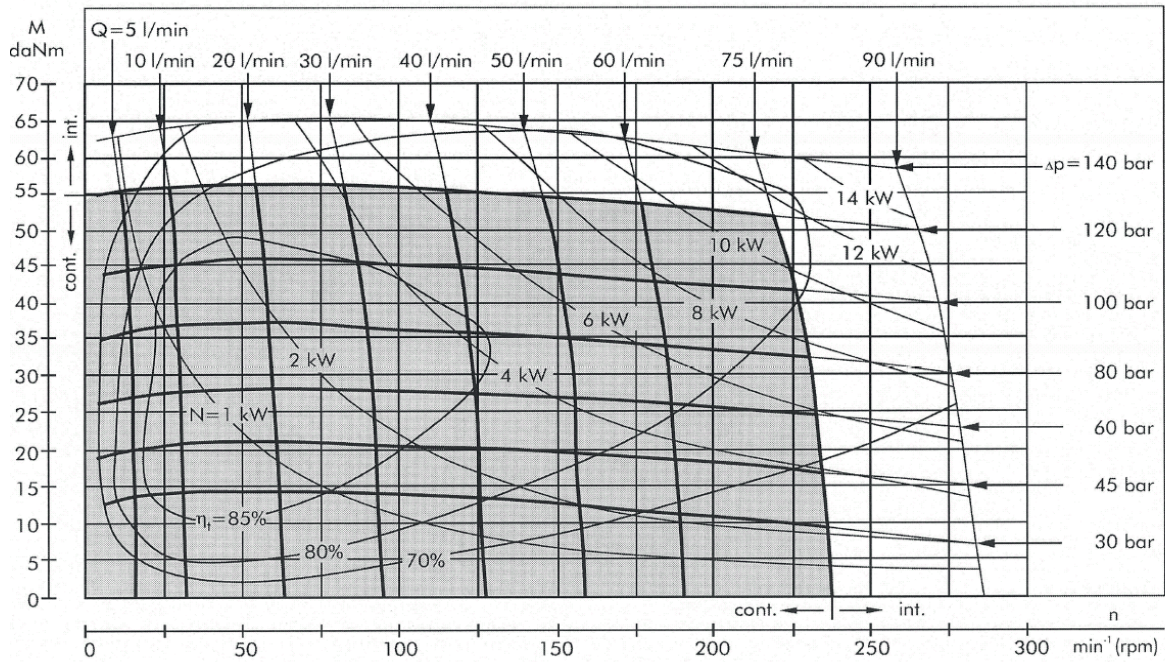


The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

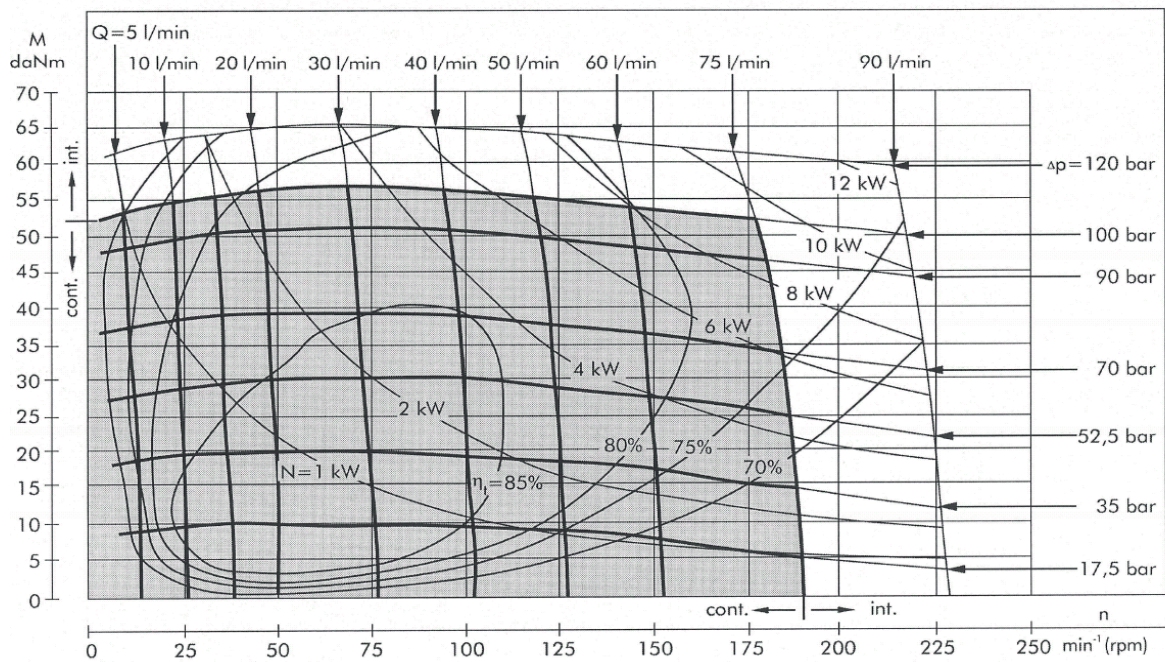
MS Orbitmotoren

Functiediagrammen

MS 315



MS 400

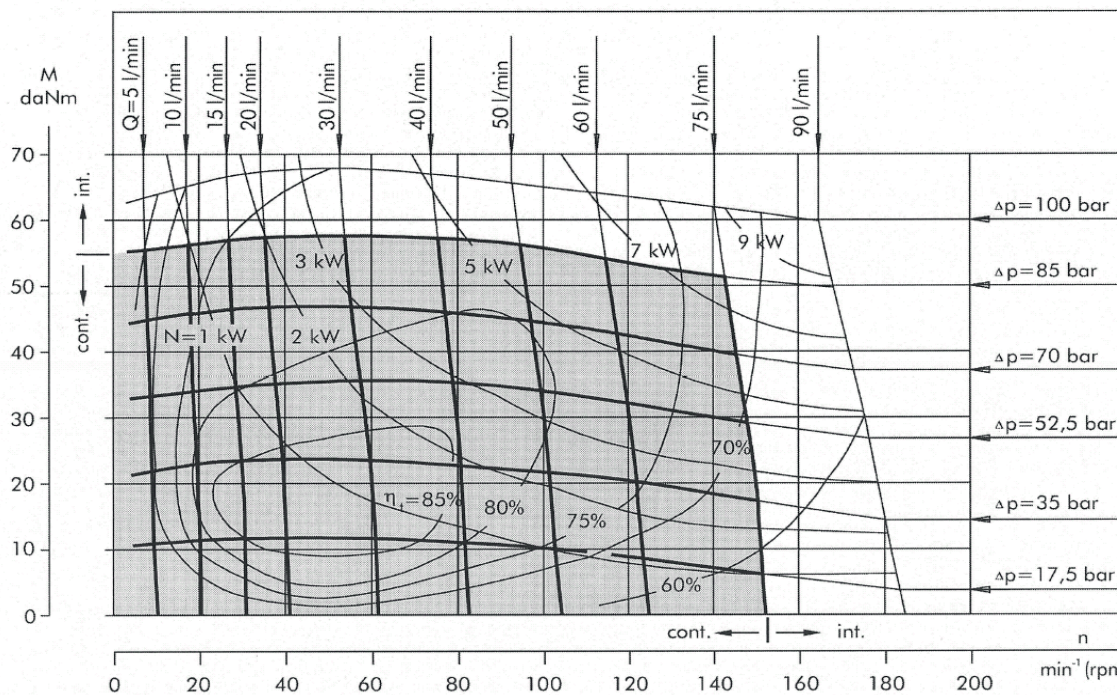


The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

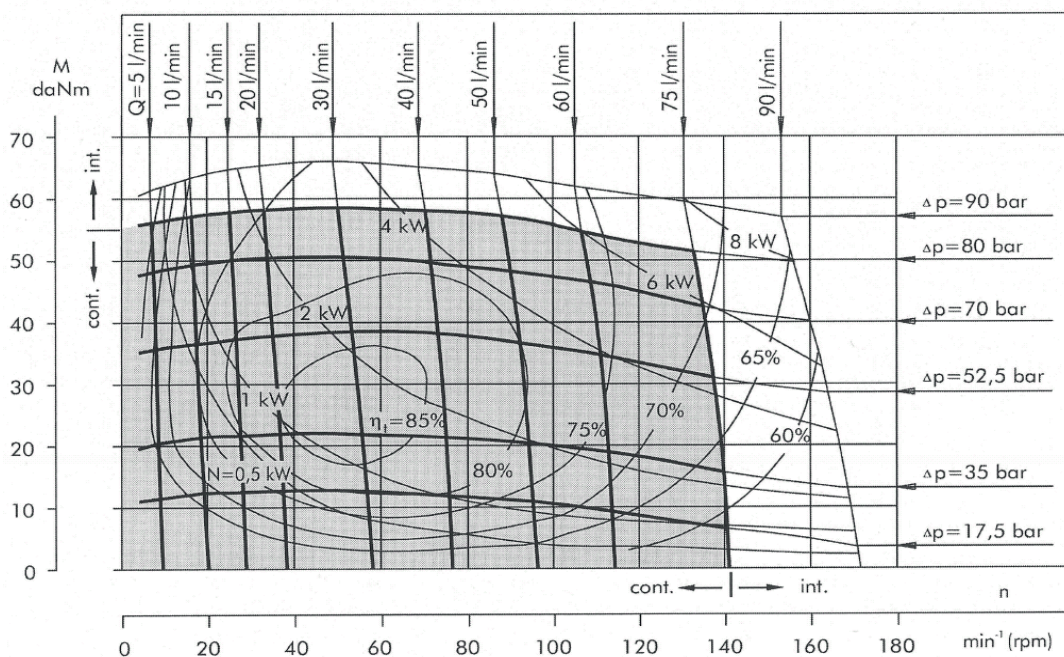
MS Orbitmotoren

Funciediagrammen

MS 475



MS 525

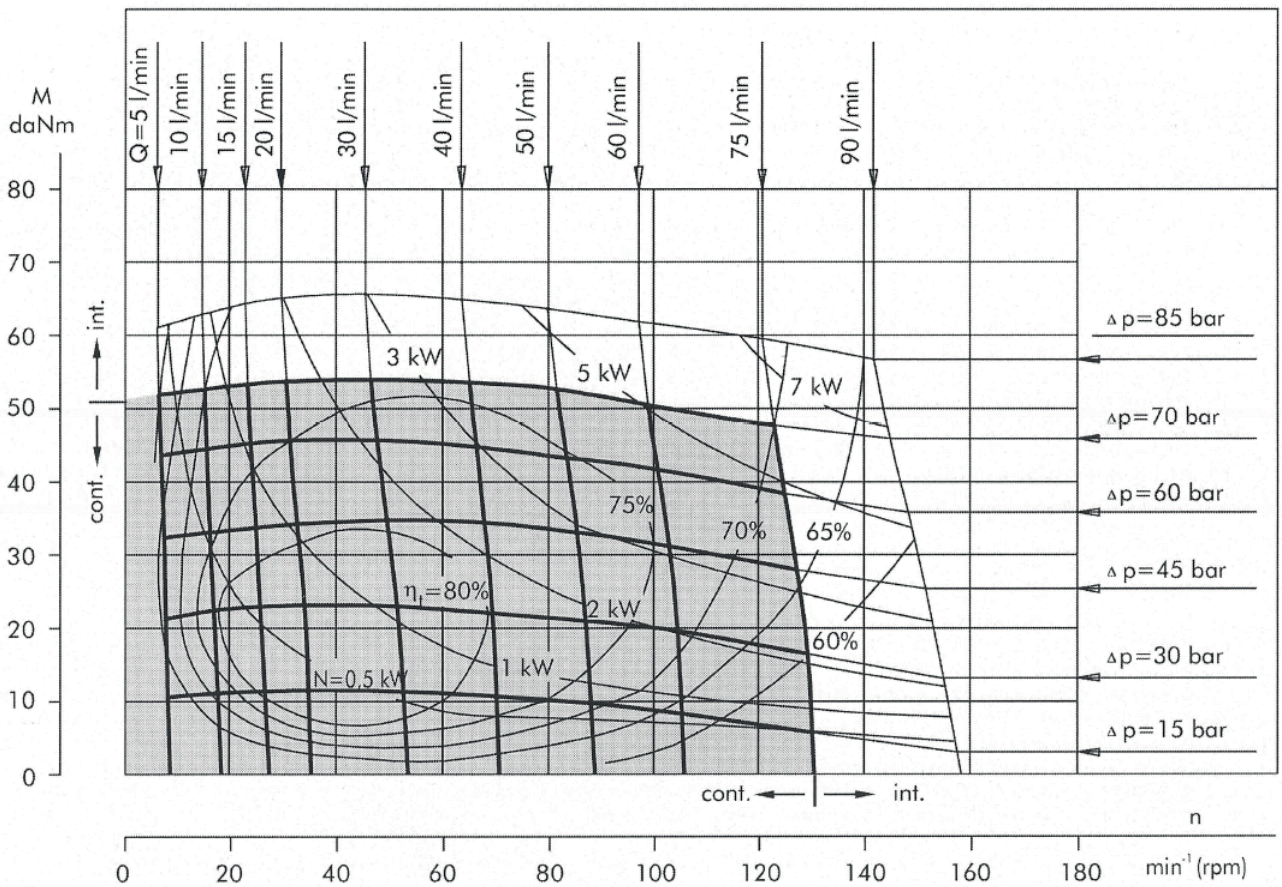


The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

MS
Orbitmotoren

Functiediagrammen

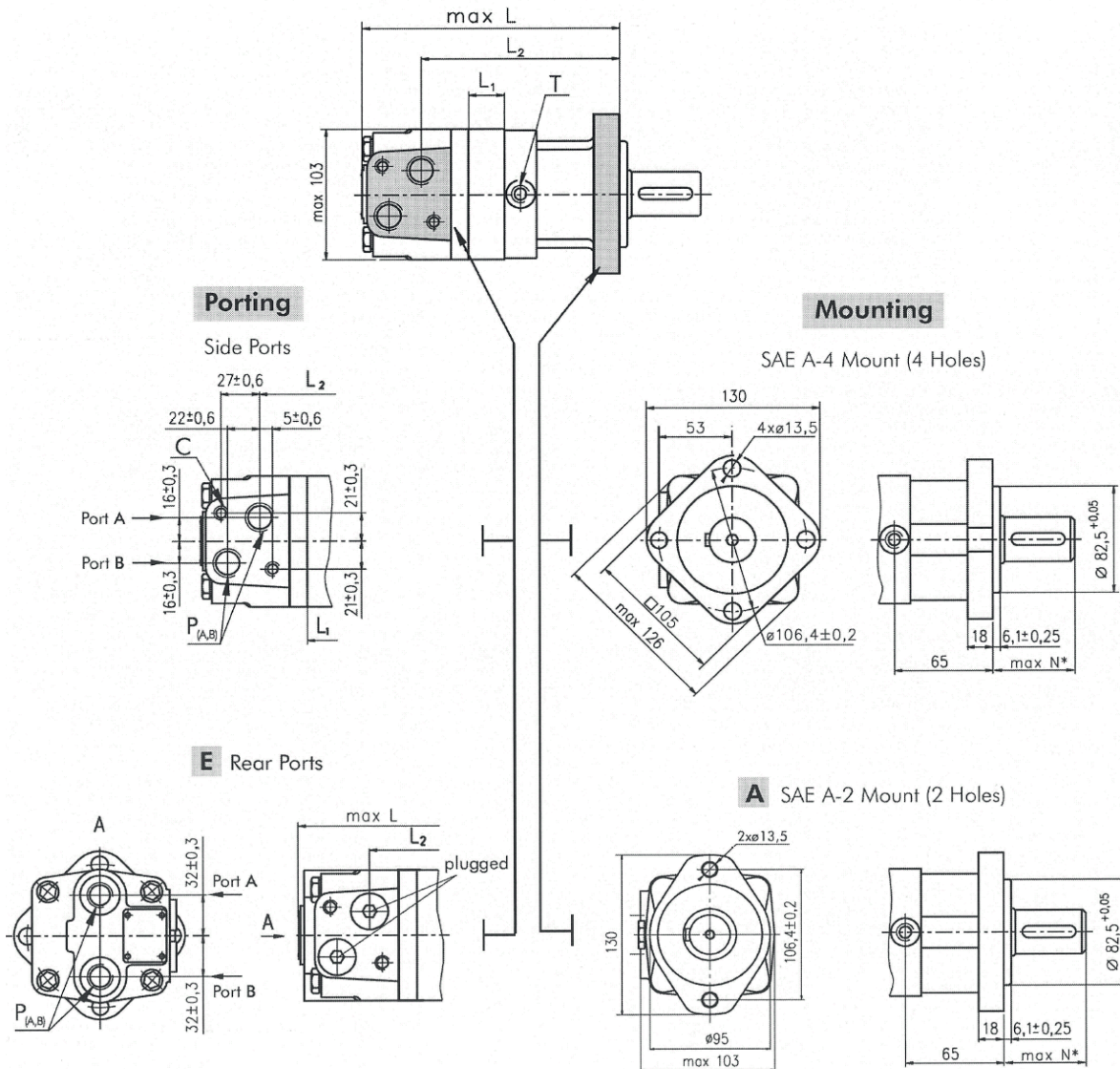
MS 565



The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

MS Orbitmotoren

Afmetingen en uitvoeringen



*For N see page 17

C: 2xM10-12 mm depth
P_(A,B): 2xG1/2 or 2xM22x1,5-15 mm depth
T: G ¼ or M14x1,5- 12 mm depth (plugged)

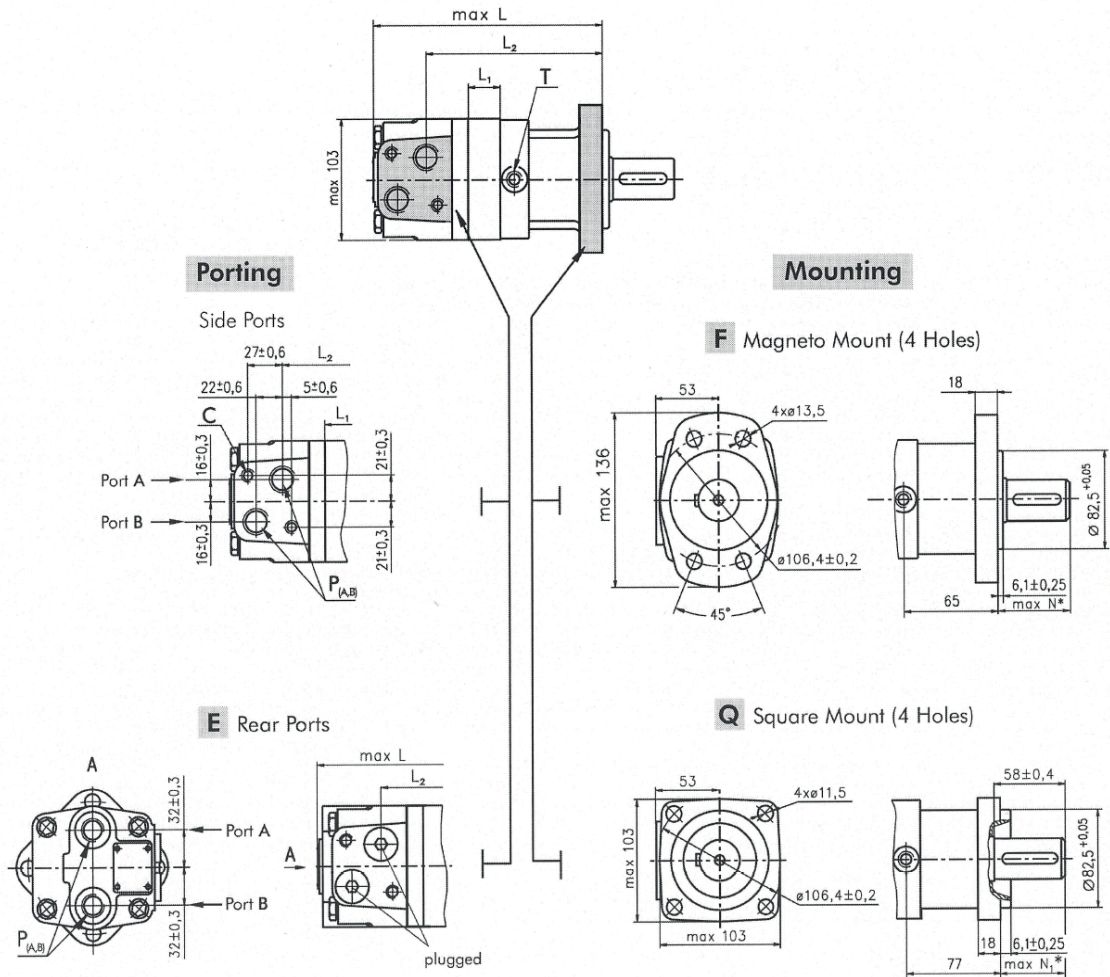
Standard Rotation
 Viewed from Shaft End
 Port A Pressurized - CW
 Port B Pressurized - CCW

Reverse Rotation
 Viewed from Shaft End
 Port A Pressurized - CCW
 Port B Pressurized - CW

Type	L, mm	L ₂ , mm	Type	L, mm	L ₂ , mm
MS(A) 80	168	124	MS(A)E 80	173	14
MS(A) 100	171	129	MS(A)E 100	177	17,4
MS(A) 125	176	132	MS(A)E 125	181	21,8
MS(A) 160	182	138	MS(A)E 160	187	27,8
MS(A) 200	189	145	MS(A)E 200	194	34,8
MS(A) 250	197	154	MS(A)E 250	203	43,5
MS(A) 315	209	165	MS(A)E 315	214	54,8
MS(A) 400	223	179	MS(A)E 400	228	69,4
MS(A) 475	237	193	MS(A)E 475	242	82,6
MS(A) 525	229	185	MS(A)E 525	234	74,5
MS(A) 565	235	191	MS(A)E 565	240	80,2

MS Orbitmotoren

Afmetingen en uitvoeringen



C: 2xM10-12 mm depth
P_(A,B): 2xG1/2 or 2xM22x1,5-15 mm depth
T: G 1/4 or M14x1,5- 12 mm depth (plugged)

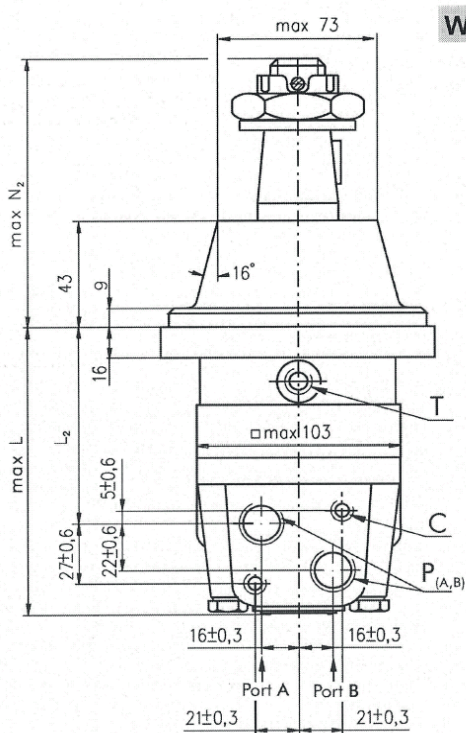
Standard Rotation
 Viewed from Shaft End
 Port A Pressurized - CW
 Port B Pressurized - CCW

Reverse Rotation
 Viewed from Shaft End
 Port A Pressurized - CCW
 Port B Pressurized - CW

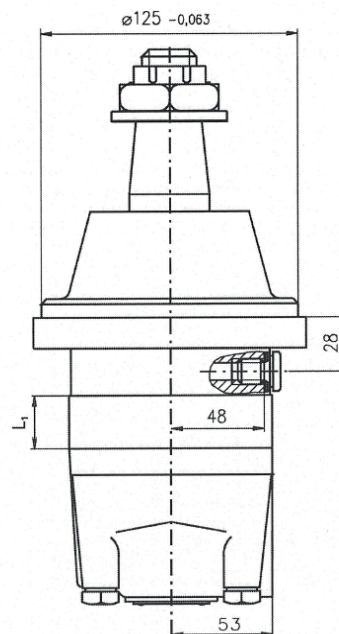
Type	L, mm	L ₂ , mm	Type	L, mm	L ₂ , mm	Type	L, mm	Type	L, mm	L ₁ , mm
MSF 80	168	124	MSQ 80	179	136	MSFE 80	173	MSQE 80	185	14
MSF 100	171	129	MSQ 100	183	140	MSFE 100	177	MSQE 100	189	17,4
MSF 125	176	132	MSQ 125	187	144	MSFE 125	181	MSQE 125	193	21,8
MSF 160	182	138	MSQ 160	193	150	MSFE 160	187	MSQE 160	199	27,8
MSF 200	189	145	MSQ 200	200	157	MSFE 200	194	MSQE 200	206	34,8
MSF 250	197	154	MSQ 250	209	166	MSFE 250	203	MSQE 250	215	43,5
MSF 315	209	165	MSQ 315	220	177	MSFE 315	214	MSQE 315	226	54,8
MSF 400	223	179	MSQ 400	235	192	MSFE 400	228	MSQE 400	241	69,4
MSF 475	237	193	MSQ 475	247	205	MSFE 475	242	MSQE 475	254	82,6
MSF 525	229	185	MSQ 525	240	197	MSFE 525	234	MSQE 525	246	74,5
MSF 565	235	191	MSQ 565	246	203	MSFE 565	240	MSQE 565	252	80,2

MS Orbitmotoren

Afmetingen en uitvoeringen MSW

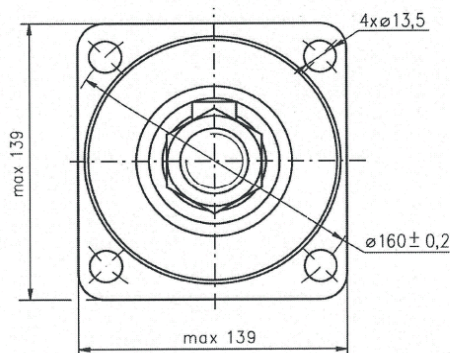
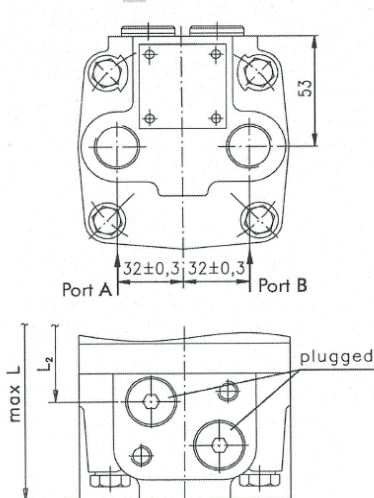


W Wheel Mount



C: 2xM10-12 mm depth
P_(A,B): 2xG1/2 or 2xM22x1,5-15 mm depth
T: G ¼ or M14x1,5 - 12 mm depth(plugged)

E Rear Port



*For N₂ see page 17

Standard Rotation
 Viewed from Shaft End
 Port A Pressurized - CW
 Port B Pressurized - CCW

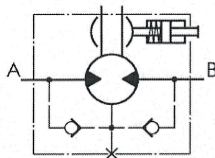
Reverse Rotation
 Viewed from Shaft End
 Port A Pressurized - CCW
 Port B Pressurized - CW

Type	L ₁ , mm	L ₁ , mm	L ₂ , mm	Type	L, mm
MSW 80	129	14	87	MSWE 80	138
MSW100	133	17,4	91	MSWE 100	142
MSW 125	137	21,8	95	MSWE 125	146
MSW 160	143	27,8	101	MSWE 160	152
MSW 200	150	34,8	108	MSWE 200	159
MSW 250	159	43,5	117	MSWE 250	168
MSW 315	170	54,8	128	MSWE 315	179
MSW 400	184	69,4	143	MSWE 400	194
MSW 475	198	82,6	156	MSWE 475	207
MSW 525	190	74,5	148	MSWE 525	199
MSW 565	196	80,2	154	MSWE 565	205

MS Orbitmotoren

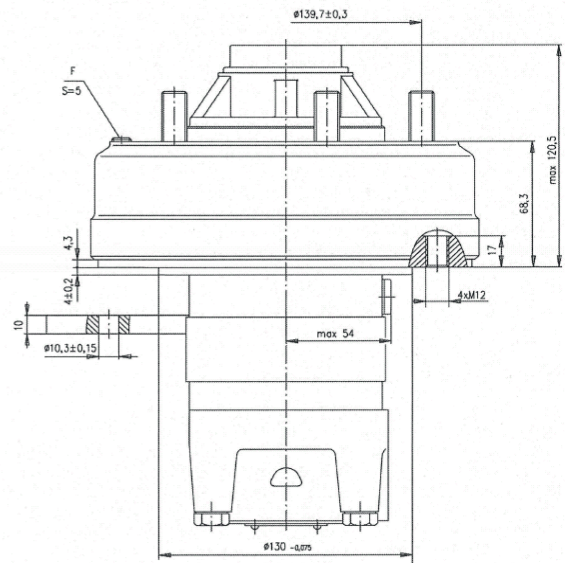
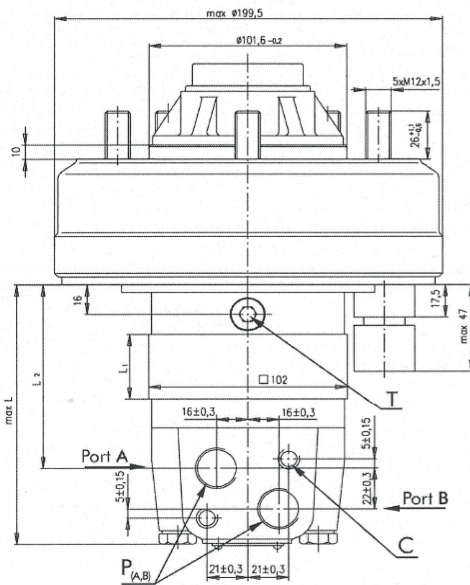
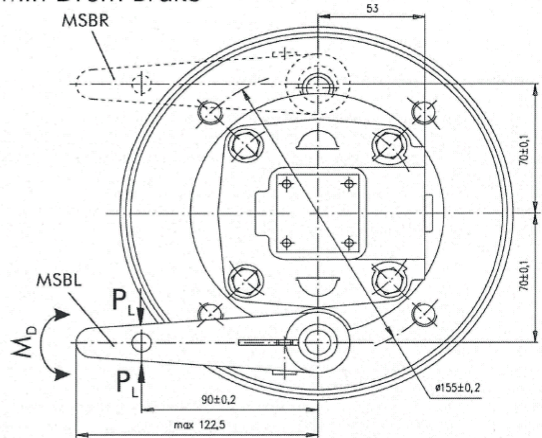
Afmetingen en uitvoeringen MSB

B Motor with Drum Brake

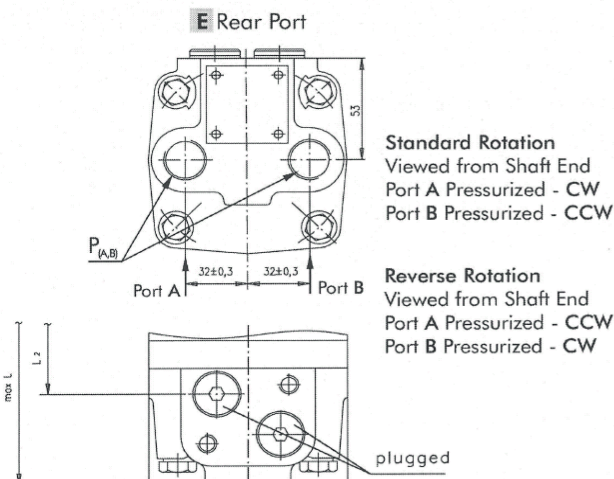


Actuating the brake level, the brake shaft is turned. The rectangular shape of the inner part of this shaft forces the brake pads to be pressed against the brake drum. This brakes the wheel or the winch drum.

Releasing the level, the springs pull it and the brake pads back to the initial position. The motor output shaft is released. Minimum angle adjustment is 10°. It can be adjusted by dismounting the level. Depending on the application You can choose the actuating direction of the brake level. The rod connection actuating the brake should be capable of moving at last 25 mm from neutral to extreme position.



C: 2xM10-12 mm depth
F: Inspection hole for checking brake lining
T: G 1/4 or M14x1,5 - 12 mm depth (plugged)
P_(A,B): 2xG1/2 or 2xM22x1,5-15 mm depth

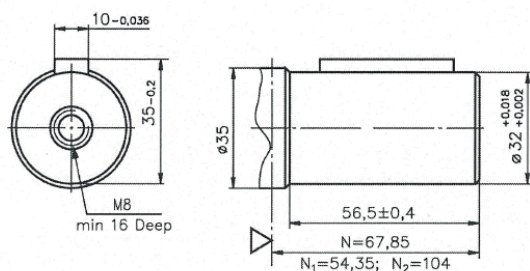


Type	L, mm	L ₁ , mm	L ₂ , mm	Type	L, mm
MSB 80	119	14	74	MSBE 80	127
MSB100	122	17,4	77	MSBE 100	130
MSB 125	126	21,8	82	MSBE 125	134
MSB 160	132	27,8	88	MSBE 160	140
MSB 200	139	34,8	95	MSBE 200	147
MSB 250	148	43,5	110	MSBE 250	156
MSB 315	159	54,8	115	MSBE 315	167
MSB 400	174	69,4	130	MSBE 400	182
MSB 475	188	82,6	143	MSBE 475	196
MSB 525	180	74,5	135	MSBE 525	188
MSB 565	186	80,2	141	MSBE 565	192

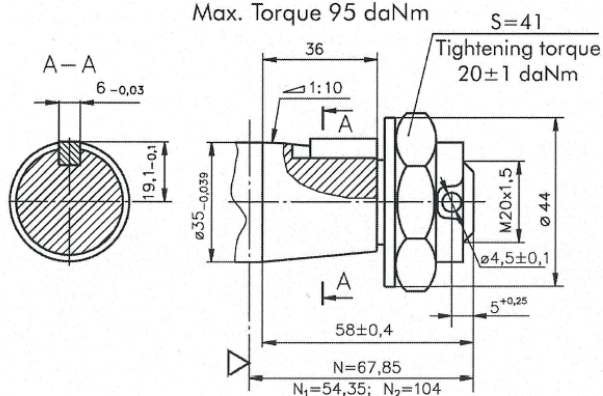
MS Orbitmotoren

Mogelijke assen

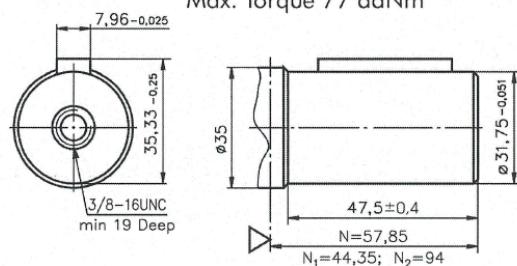
C - $\varnothing 32$ straight, Parallel key A10x8x45 DIN 6885
 Max. Torque 77 daNm



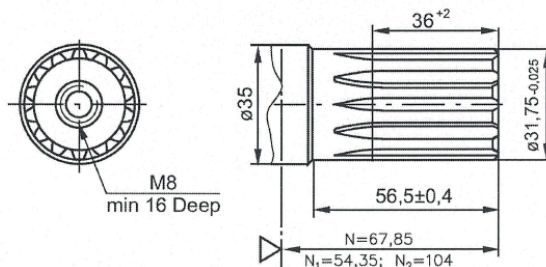
K - tapered 1:10, Parallel key B6x6x20 DIN 6885
 Max. Torque 95 daNm



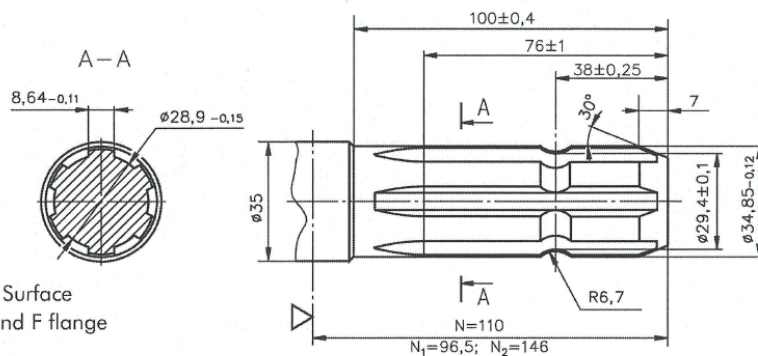
CO - $\varnothing 1\frac{1}{4}$ " straight, Parallel key $\frac{5}{16}$ "x $\frac{5}{16}$ "x $1\frac{1}{4}$ "BS46
 Max. Torque 77 daNm



SH - $\varnothing 1\frac{1}{4}$ " splined 14T, DP12/24 ANSI B92.1-1976
 Max. Torque 95 daNm



SL - $\varnothing 34,85$ p.t.o. DIN 9611 Form 1
 Max. Torque 77 daNm

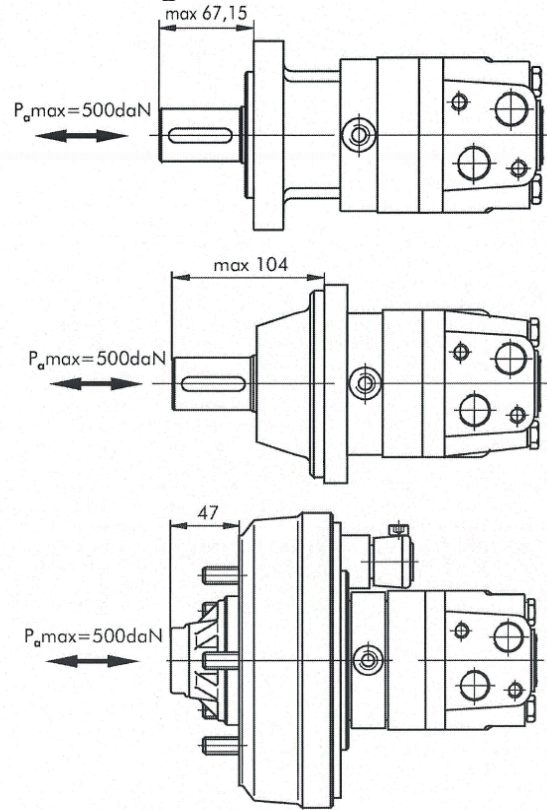
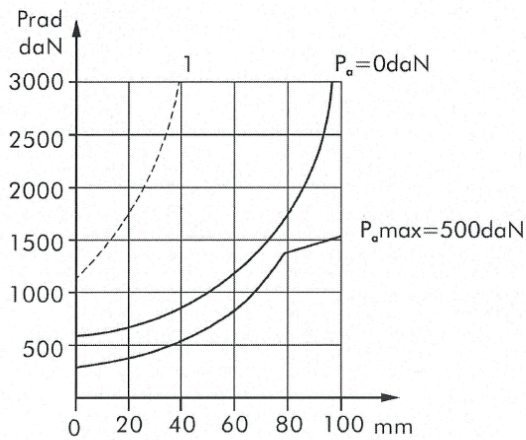


▽ - Motor Mounting Surface
 N - for standart, A and F flange
 N₁ - for Q flange
 N₂ - for W flange

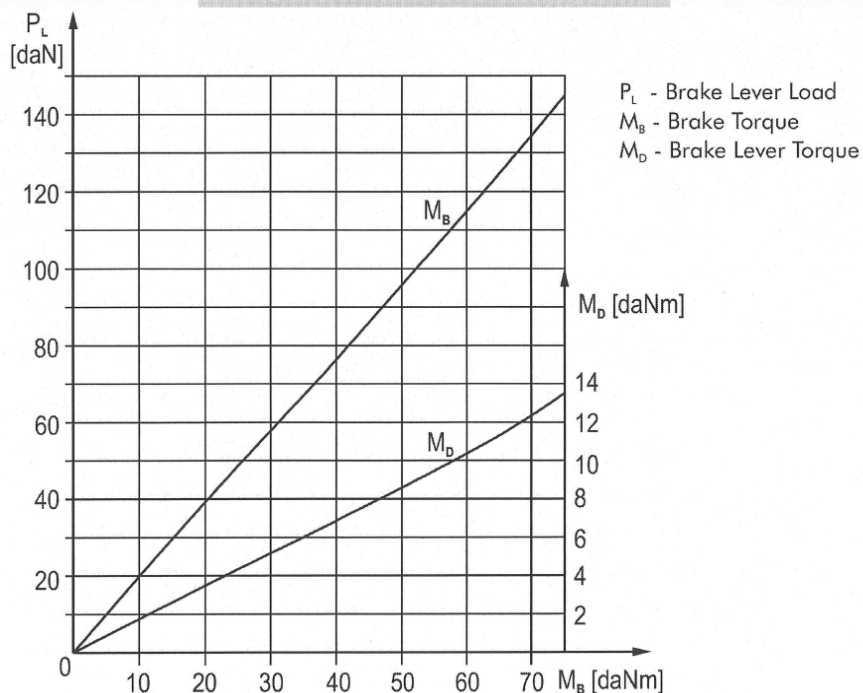
MS Orbitmotoren

Mogelijke as belasting

The output shaft runs in tapered bearings that permit high axial and radial forces. Curve "1" shows max. radial shaft load. Any shaft load exceeding the values quoted in the curve will seriously reduce motor life. The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.

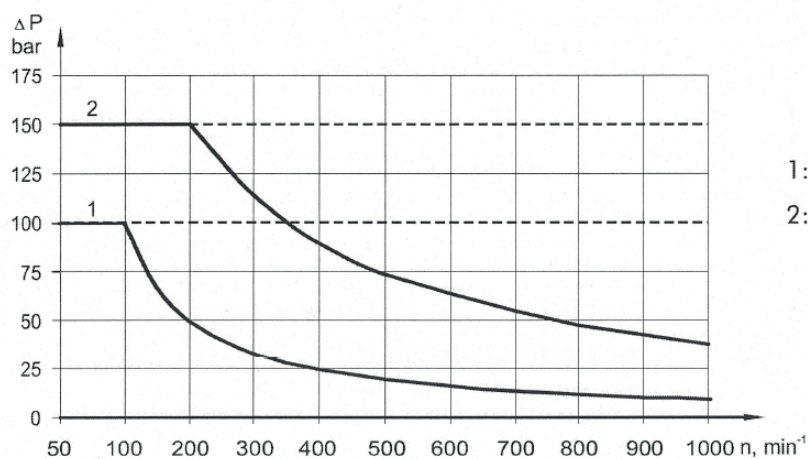


FUNCTION DIAGRAM MSB



MS Orbitmotoren

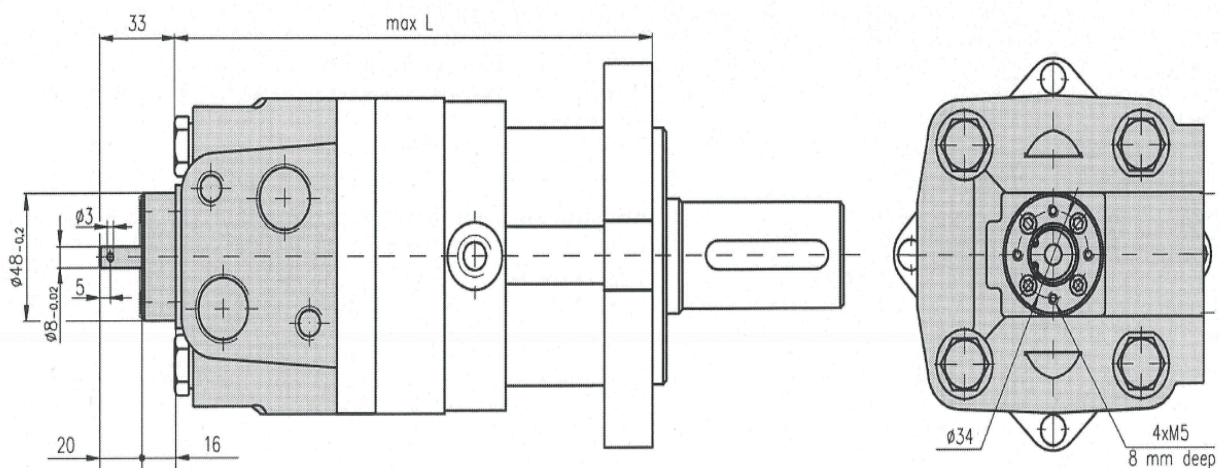
Maximale druk asafdichting Max. return pressure without drain line or max. pressure in the drain line



1: Drawing for Standard Shaft Seal
 2: Drawing for High Pressure Seal ("U" Seal)

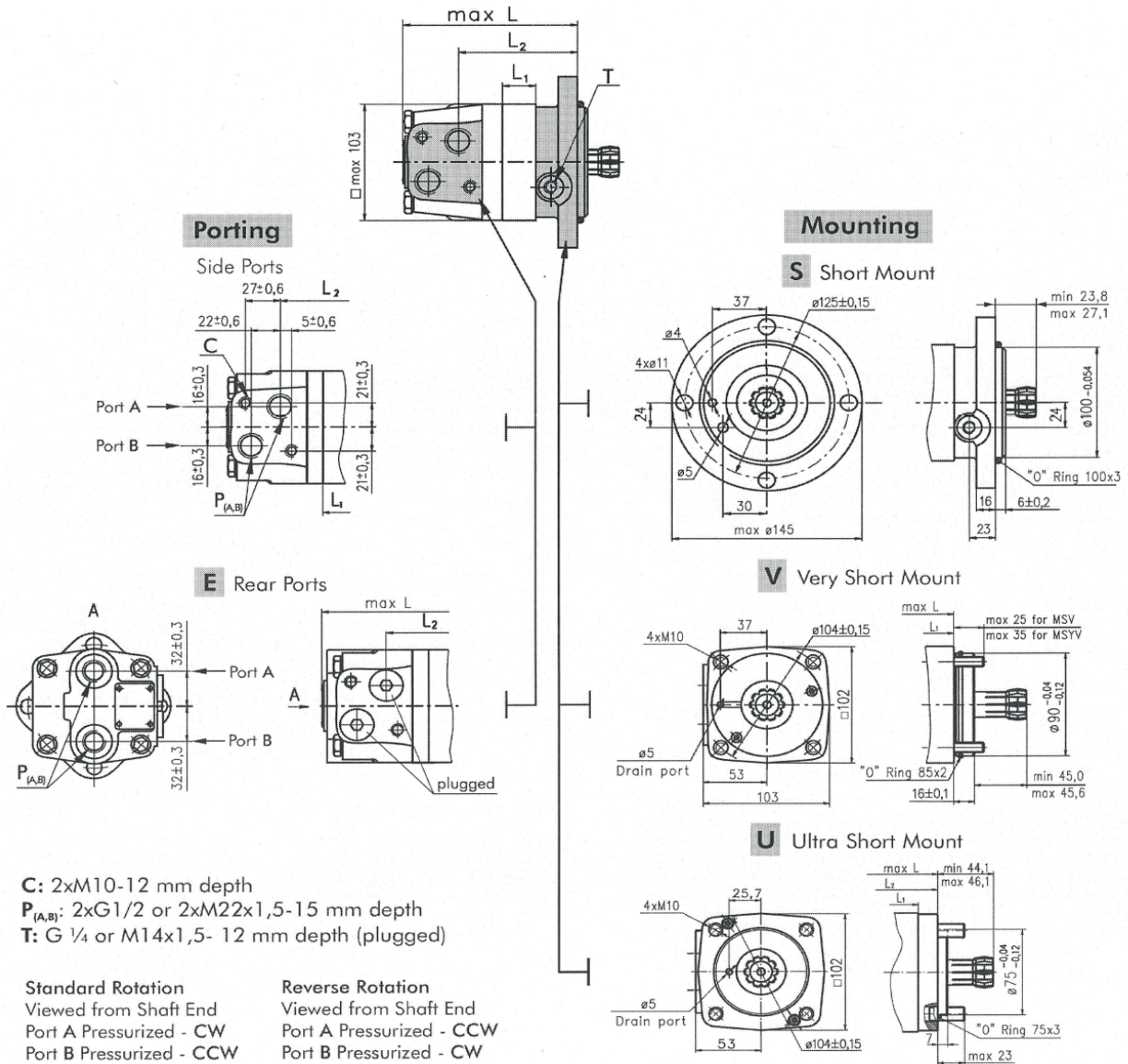
— - continuous operations
 - - - - intermittent operations

Motor met tachoansluiting



MS Orbitmotoren

Afmetingen en uitvoeringen MSS, MSV en MSU

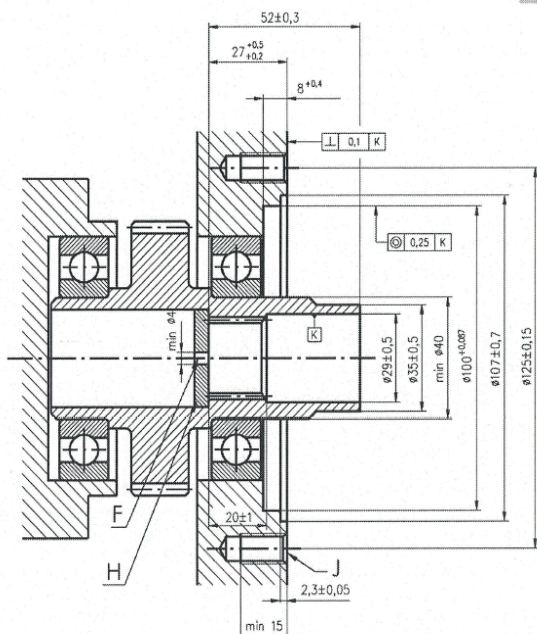


Type	L, mm	L ₂ , mm	Type	L, mm	Type	L, mm	L ₂ , mm	Type	L, mm	Type	L, mm	L ₂ , mm	Type	L, mm	L ₁ , mm
MSS 80	125	83	MSSE 80	134	MSV 80	91	47	MSVE 80	97	MSU 80	105,5	63	MSUE 80	111,5	14
MSS 100	129	87	MSSE 100	138	MSV 100	94	50,5	MSVE 100	100	MSU 100	109	66,5	MSUE 100	115	17,4
MSS 125	133	90	MSSE 125	141	MSV 125	100	55	MSVE 125	105	MSU 125	113	71	MSUE 125	119	21,8
MSS 160	139	96	MSSE 160	147	MSV 160	106	61	MSVE 160	111	MSU 160	119	77	MSUE 160	125	27,8
MSS 200	146	103	MSSE 200	154	MSV 200	113	68	MSVE 200	118	MSU 200	126	84	MSUE 200	132	34,8
MSS 250	155	112	MSSE 250	163	MSV 250	121	76,5	MSVE 250	126	MSU 250	135	92,5	MSUE 250	141	43,5
MSS 315	166	123	MSSE 315	174	MSV 315	133	88	MSVE 315	138	MSU 315	146	104	MSUE 315	152	54,8
MSS 400	181	138	MSSE 400	189	MSV 400	147	103	MSVE 400	153	MSU 400	160	119	MSUE 400	167	69,4
MSS 475	194	152	MSSE 475	203	MSV 475	161	116	MSVE 475	166	MSU 475	174	132	MSUE 475	180	82,6
MSS 525	186	144	MSSE 525	195	MSV 525	153	108	MSVE 525	158	MSU 525	166	124	MSUE 525	172	74,5
MSS 565	192	150	MSSE 565	201	MSV 565	159	114	MSVE 565	164	MSU 565	172	130	MSUE 565	178	80,2

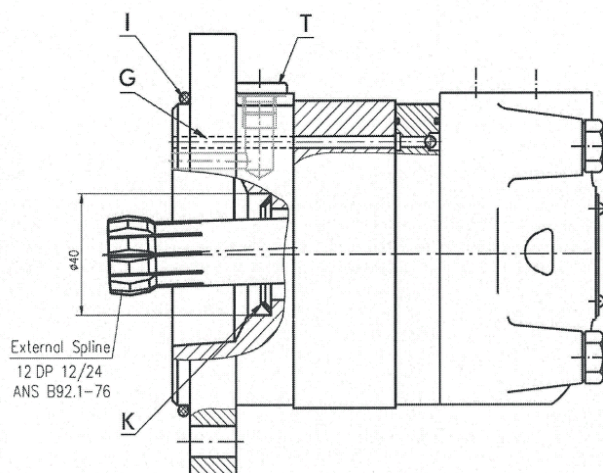
MS Orbitmotoren

Afmetingen

For MSS

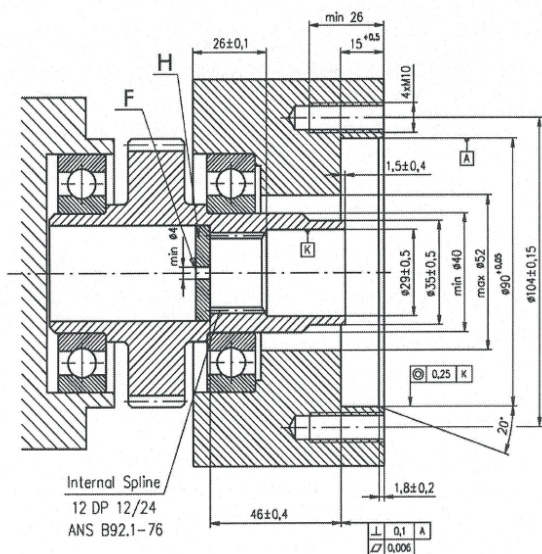


- F: Oil circulation hole
- H: Hardened stop plate
- J: 4xM10-16 mm depth, 90°

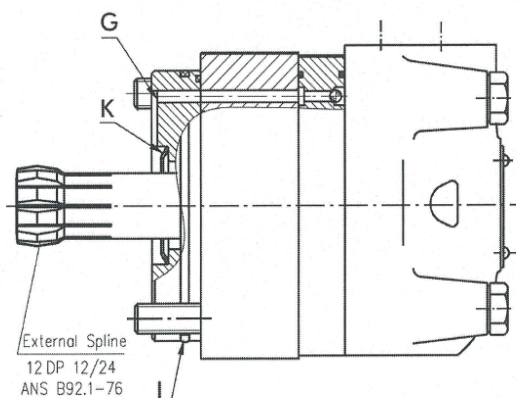


- G: Internal drain channel
- I: O-Ring 100x3mm
- K: Conical seal ring
- T: Drain connection G1/4 or M14x1,5

For MSV



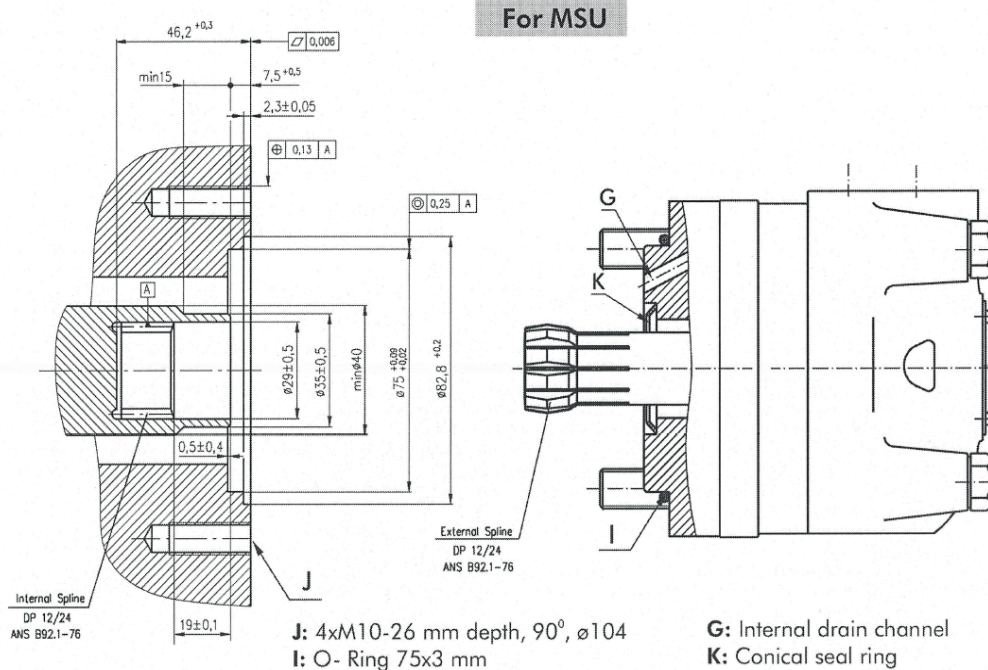
- F: Oil circulation hole
- H: Hardened stop plate



- G: Internal drain channel
- I: O-Ring 85x2 mm
- K: Conical seal ring

MS Orbitmotoren

Afmetingen



DRAIN CONNECTION

A drain line ought to be used when pressure in the return line can exceed the permissible pressure. It can be connected:

- For MSS at the drain port of the motor;
- For MSV and MSU at the drain connection of the attached component. The maximum pressure in the drain line is limited by the attached component and its shaft seal.

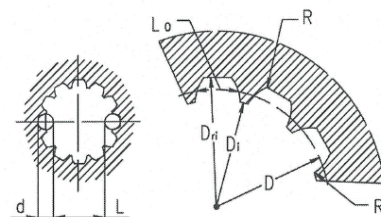
The drain line must be possible for oil to flow freely between motor and attached component and must be led to the tank. The maximum pressure in the drain line is limited by the attached component and its seal.

INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

Standard ANS B92.1-1976, class 5
 [m=2.1166; corrected x.m=+0.8]

Parameter	Symbol	Value (mm)
Fillet Root Side Fit		mm
Number of Teeth	z	12
Diametral Pitch	DP	12/24
Pressure Angle		30°
Pitch Dia.	D	25,4
Major Dia.	D _{ri}	28,0 _{±0,1}
Minor Dia.	D _i	23,0 ^{+0,033}
Space Width [Circular]	L _o	4,308 ± 0,020
Fillet Radius	R	0,2
Max. Measurement between Pin	L	17,62 ^{+0,15}
Pin Dia.	d	4,835 ± 0,001

Above are when hardened



Hardening Specification:
 HV=750±50 on the surface
 HV=560 at 0,7±0,2 mm case depth
 Material 20 MoCr4 EN 10084 or better

MS Orbitmotoren

Bestelcode

	1	2	3	4	5	6	7	8	9
MS									

Pos. 1 - Mounting Flange

omit - SAE A-4 mount, four holes

A - SAE A-2 mount, two holes

F - Magneto mount, four holes

Q - Square mount, four holes

B - Motor with drum brake

S - Short mount

V - Very short mount

U - Ultra short mount

W - Wheel mount

Pos. 5 - Shaft Seal Version (see page 19)

omit - Low pressure seal

U - High pressure seal

Pos. 6 - Ports

omit - BSPP (ISO 228)

M - Metric (ISO 262)

Pos. 7 - Actuating Direction**

/R - Right

/L - Left

Pos. 2 - Port type

omit - Side ports

E - Rear ports

Pos. 8 - Special Features (see page 65)

Pos. 9 - Design Series

omit - Factory specified

Pos. 3 - Displacement code

80 - 80,5 [cm³/rev]

100 - 100,0 [cm³/rev]

125 - 125,7 [cm³/rev]

160 - 159,7 [cm³/rev]

200 - 200,0 [cm³/rev]

250 - 250,0 [cm³/rev]

315 - 314,9 [cm³/rev]

400 - 397,0 [cm³/rev]

475 - 474,6 [cm³/rev]

525 - 522,7 [cm³/rev]

565 - 564,9 [cm³/rev]

Pos. 4 - Shaft Extensions*

omit - for **B**, **S**, **U** and **V** mounting flange

C - \varnothing 32 straight, Parallel key A10x8x45 DIN6885

CO - \varnothing 1 1/4" straight, Parallel key $\frac{5}{16}$ "x $\frac{5}{16}$ "x1 1/4" BS46

K - \varnothing 35 tapered 1:10, Parallel key B6x6x20 DIN6885

SL - \varnothing 34,85 p.t.o. DIN 9611 Form 1

SH - \varnothing 1 1/4" splined 14T ANSI B92.1-1976

NOTES:

* The permissible output torque for shafts must not be exceeded!

** Only for MSB

The hydraulic motors are mangano-phosphatized as standard.

MSY Orbitmotoren



De MSY motor is een motor vergelijkbaar met de MS motoren maar met een hogere drukval en grotere maximale torque, dus groter vermogen

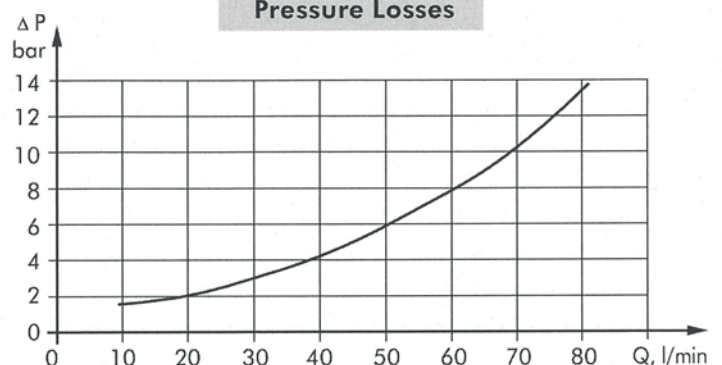
Algemene informatie

Displacement, [cm ³ /rev.]	200 ÷ 474,6
Max. Speed, [RPM]	155 ÷ 375
Max. Torque, [daNm]	56,6 ÷ 91
Max. Output, [kW]	9 ÷ 18,1
Max. Pressure Drop, [bar]	140 ÷ 200
Max. Oil Flow, [l/min]	75
Min. Speed, [RPM]	5 ÷ 8
Permissible Shaft Loads, [daN]	P _o = 500
Pressure fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, [°C]	-30 ÷ 90
Optimal Viscosity range, [mm ² /s]	20 ÷ 75
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop (bar)	Viscosity (mm ² /s)	Oil flow in drain line (l/min)
140	20	1,5
	35	1
210	20	3
	35	2

Pressure Losses



MSY Orbitmotoren

Technische Informatie

Type	MSY 200	MSY 250	MSY 315	MSY 400	MSY 475
Displacement [cm ³ /rev.]	200	250	314,9	397	474,6
Max. Speed, [RPM]	cont.	375	300	240	185
	Int.*	450	360	285	225
Max. Torque [daNm]	cont.	56,6	70,8	90,0	90,0
	Int.*	64,5	80,6	96,0	97,0
	peak**	65	80,6	108	110
Max. Output [kW]	cont.	18,1	18,0	17	11,0
	int.*	24,0	23,8	20,2	12
Max. Pressure Drop [bar]	cont.	200	200	200	160
	Int.*	225	225	220	175
	peak**	225	225	225	200
Max. Oil Flow [l/min]	cont.	75	75	75	75
	Int.*	90	90	90	90
Max. Inlet Pressure [bar]	cont.	210	210	210	210
	Int.*	250	250	250	250
	peak**	300	300	300	300
Max. Return Pressure with Drain Line [bar]	cont.	140	140	140	140
	Int.*	175	175	175	175
	peak**	210	210	210	210
Max. Starting Pressure with Unloaded Shaft, [bar]	8	8	8	8	8
Min. Starting Torque [daNm]	at max. press. drop cont.	46,2	58,0	73,8	72,0
	at max. press. drop Int.*	50,7	63,6	79,2	78,7
Min. Speed***, [RPM]	6	6	5	5	5
Weight, [kg]	MSY (F)	11,2	11,7	12,4	13,3
For Rear Ports	MSYW	11,7	12,2	12,9	13,8
+0,4 kg	MSYQ	11,6	12,1	12,8	13,7

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting maximaal 1% per minuut

*** Voor toerentallen van 5 RPM of minder dan opgegeven, neem contact op met M+S of onze medewerkers.

1 tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen

2 Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering van 25 micron of beter.

3 Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN51524) of

HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals syntetische olieën dient er overlegt te worden.

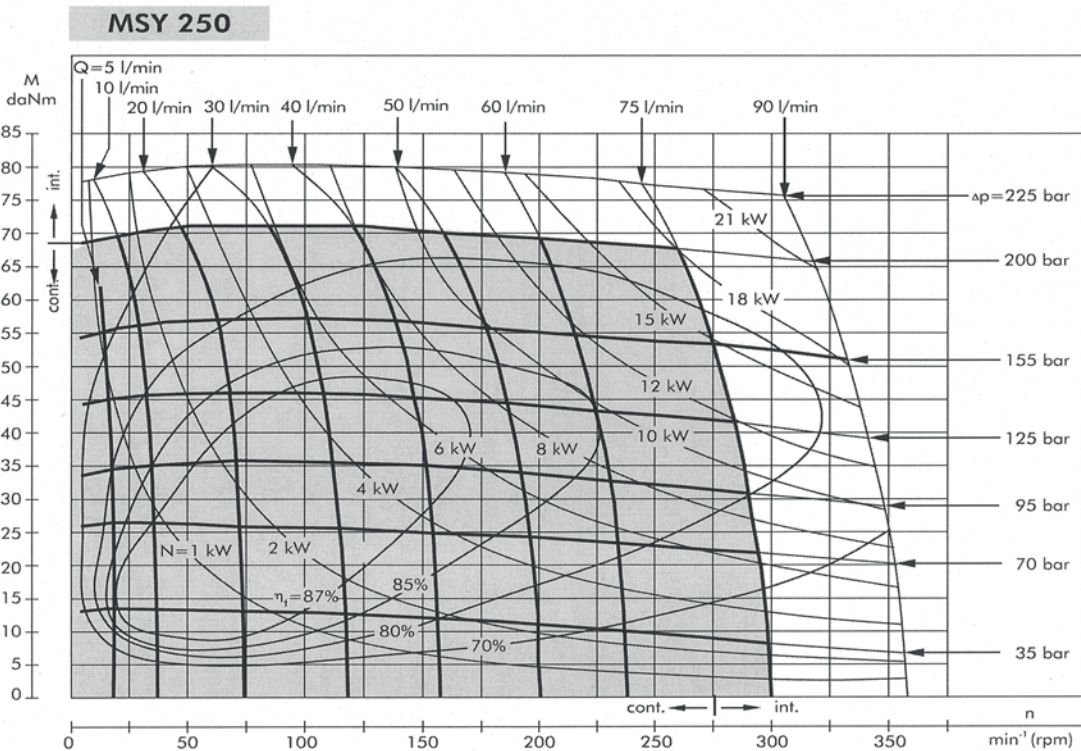
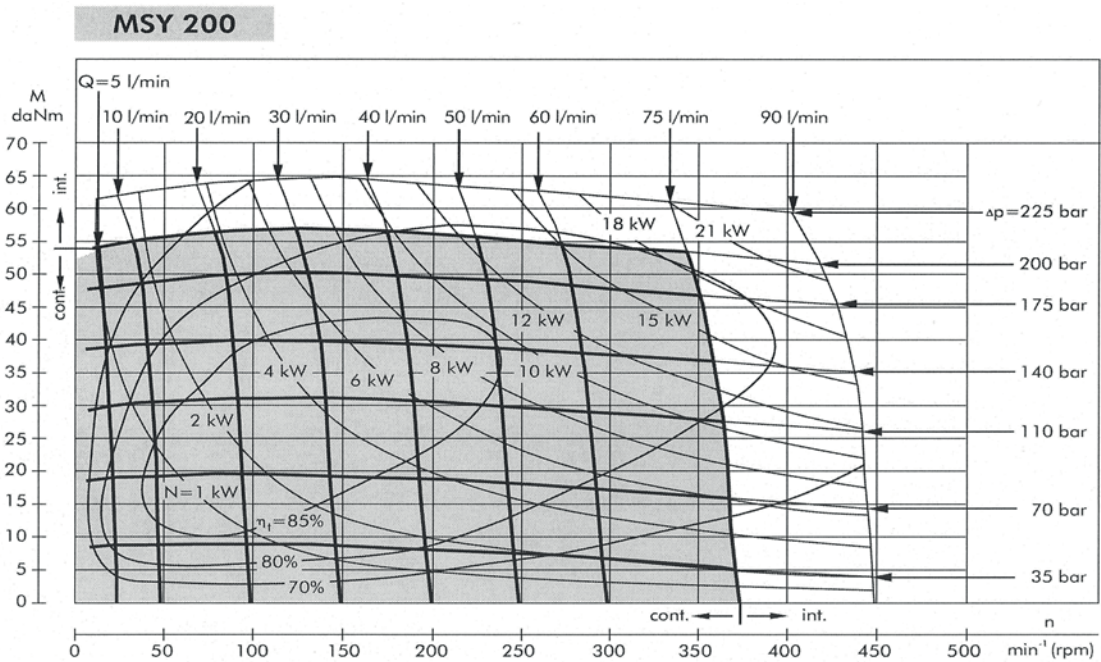
4 Aanbevolen minerale viscositeit is 13mm² bij 50C°.

5 Aanbevolen maximum olietemperatuur tijdens gebruik is 85 C°.

6 De levensduur van de motoren kan men verhogen als men de aandrijfas 10 tot 15 minuten onbelast laat draaien voor de motor volledig te belasten.

MSY Orbitmotoren

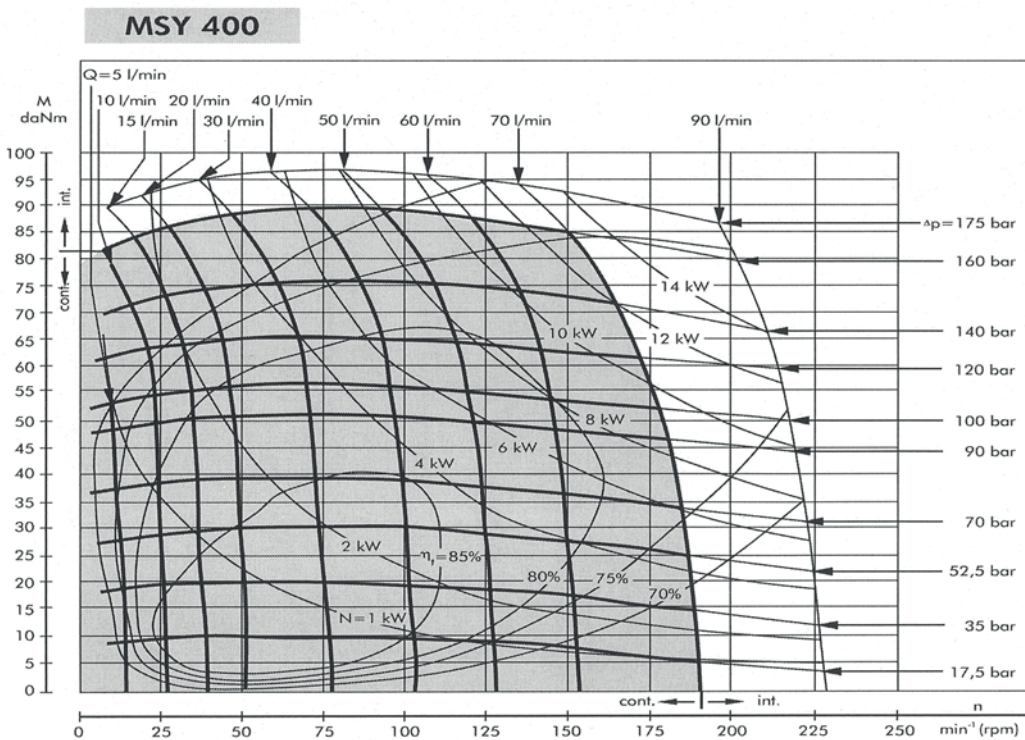
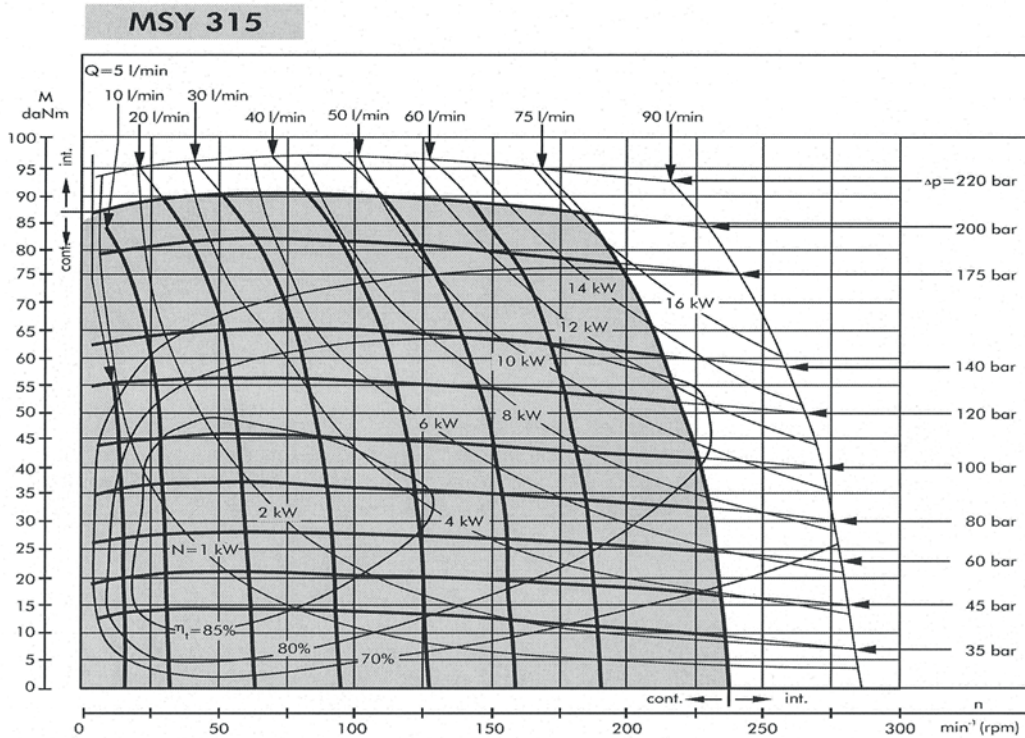
Functiediagrammen



The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

MSY Orbitmotoren

Funciediagrammen

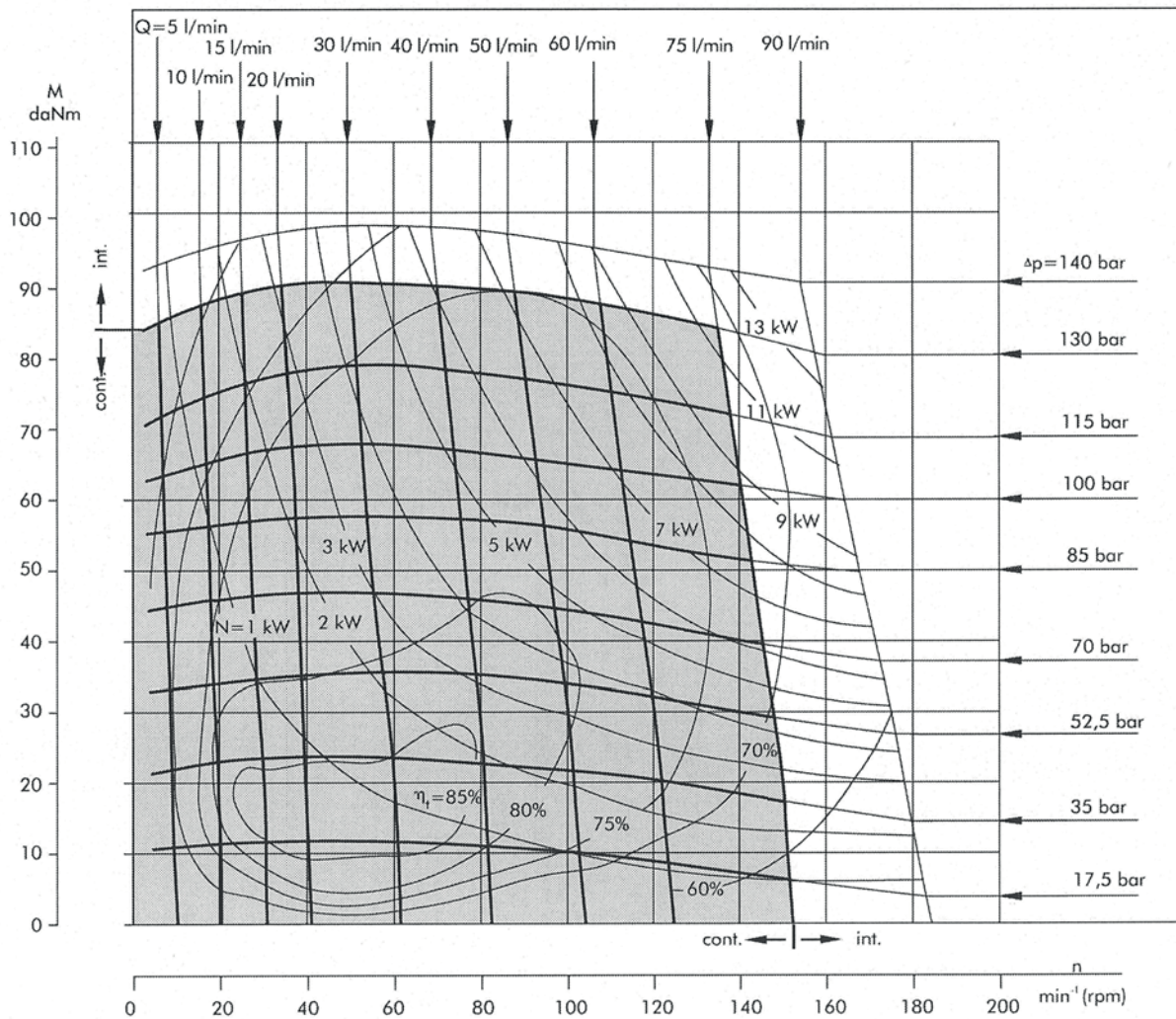


The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

MSY
Orbitmotoren

Functiediagrammen

MSY 475



The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

MSY

Orbitmotoren

Bestelgegevens

	1	2	3	4	5	6	7	8	9
MSY									

Pos.1 - Mounting Flange

- omit - SAE A-4 mount, four holes
- A** - SAE A-2 mount, two holes
- F** - Magneto mount, four holes
- Q** - Square mount, four holes
- B** - Motor with drum brake
- S** - Short mount
- V** - Very short mount
- W** - Wheel mount

Pos.2 - Port type

- omit - Side ports
- E** - Rear ports

Pos.3 - Displacement code

- 200** - 200,0 [cm³/rev]
- 250** - 250,0 [cm³/rev]
- 315** - 314,9 [cm³/rev]
- 400** - 397,0 [cm³/rev]
- 475** - 474,5 [cm³/rev]

Pos. 4 - Shaft Extensions*

- omit - for **B**, **S** and **V** mounting flange
- C** - ø32 straight, Parallel key A10x8x45 DIN6885
- K** - ø35 tapered 1:10, Parallel key B6x6x20 DIN6885
- SL** - ø34,85 p.t.o. DIN 9611 Form 1
- SH** - ø1 1/4" splined 14T ANS B92.1-1976

Pos. 5 - Shaft Seal Version (see page 19)

- omit - Low pressure seal
- U** - High pressure seal

Pos. 6 - Ports

- omit - BSPP (ISO 228)
- M** - Metric (ISO 262)

Pos. 7 - Actuating Direction**

- /R** - Right
- /L** - Left

Pos. 8 - Special Features (see page 65)

Pos. 9 - Design Series

- omit - Factory specified

NOTES:

* The permissible output torque for shafts must not be exceeded!

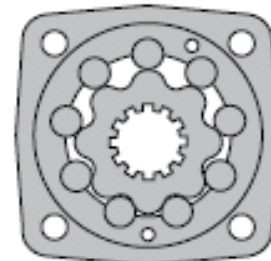
** Only for MSYB

The hydraulic motors are mangano-phosphatized as standard.

MT Orbitmotoren

De krachtige MT motoren worden geleverd in de bouwgroten van 160 tot 725 cm³ en biedt een vermogen tot 40kW.

De MT is zeer geschikt in systemen met een piekdruk tot 250 bar.



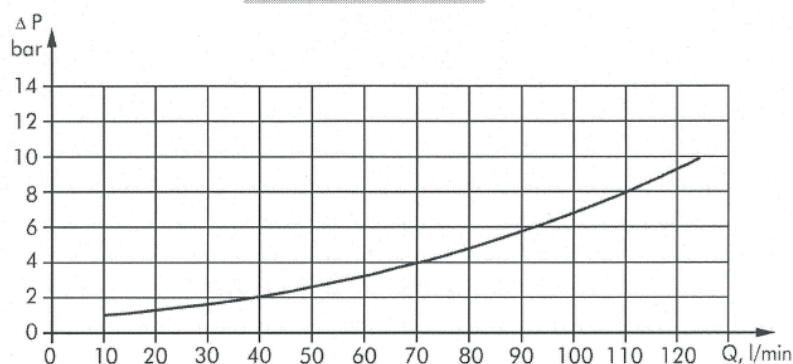
Algemene informatie

Displacement, [cm ³ /rev.]	161,1 ÷ 724,3
Max. Speed, [RPM]	172 ÷ 625
Max. Torque, [daNm]	47 ÷ 122
Max. Output, [kW]	20,2 ÷ 33,5
Max. Pressure Drop, [bar]	120 ÷ 200
Max. Oil Flow, [l/min]	100 ÷ 125
Min. Speed, [RPM]	5 ÷ 10
Permissible Shaft Loads, [daN]	P _a = 1000
Pressure fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, [°C]	-30 ÷ 90
Optimal Viscosity range, [mm ² /s]	20 ÷ 75
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop (bar)	Viscosity (mm ² /s)	Oil flow in drain line (l/min)
140	20	2,5
	35	1,5
210	20	5
	35	3

Pressure Losses



MT

Orbitmotoren

Technische informatie

Type	MT 160	MT 200	MT 250	MT 315	MT 400	MT 500	MT 630	MT 725
Displacement [cm ³ /rev.]	161,1	201,4	251,8	326,3	410,9	523,6	631,2	724,3
Max. Speed, [RPM]	cont.	625	625	500	380	305	240	172
	Int.*	780	750	600	460	365	285	210
Max. Torque [daNm]	cont.	47	59	73	95	108	122	120
	Int.*	56	71	88	114	126	137	140
	peak**	66	82	102	133	144	160	165
Max. Output [kW]	cont.	26,5	33,5	33,5	33,5	30	26,5	20,2
	int.*	32	40	40	40	35	30	27,5
Max. Pressure Drop [bar]	cont.	200	200	200	200	180	160	120
	Int.*	240	240	240	240	210	180	140
	peak**	280	280	280	280	240	210	165
Max. Oil Flow [l/min]	cont.	100	125	125	125	125	125	125
	Int.*	125	150	150	150	150	150	151,4
Max. Inlet Pressure [bar]	cont.	210	210	210	210	210	210	210
	Int.*	250	250	250	250	250	250	250
	peak**	300	300	300	300	300	300	300
Max. Return Pressure with Drain Line [bar]	cont.	140	140	140	140	140	140	140
	Int.*	175	175	175	175	175	175	175
	peak**	210	210	210	210	210	210	210
Max. Starting Pressure with Unloaded Shaft, [bar]	10	10	10	10	10	10	10	10
Min. Starting Torque [daNm]	at max. press. drop cont.	34	43	53	74	84	95	95
	at max. press. drop Int.*	41	52	63	89	97	106	115
Min. Speed***, [RPM]	10	9	8	7	6	5	5	5
Weight, [kg]	MT	20	20,5	21	22	23	24	23,5
	For Rear Ports MTW	22	22,5	23	24	25	26	25,5
	+0,45 kg MTS	15	15,5	16	17	18	19	18,5
	MTV	11	11,5	12	13	14	15	14,5

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting maximaal 1% per minuut

*** Voor toerentallen van 5 RPM of minder dan opgegeven, neem contact op met M+S of onze medewerkers.

1 tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen

2 Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering van 25 micron of beter.

3 Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN51524) of

HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals syntetische olieën dient er overlegt te worden.

4 Aanbevolen minerale viscositeit is 13mm² bij 50C°.

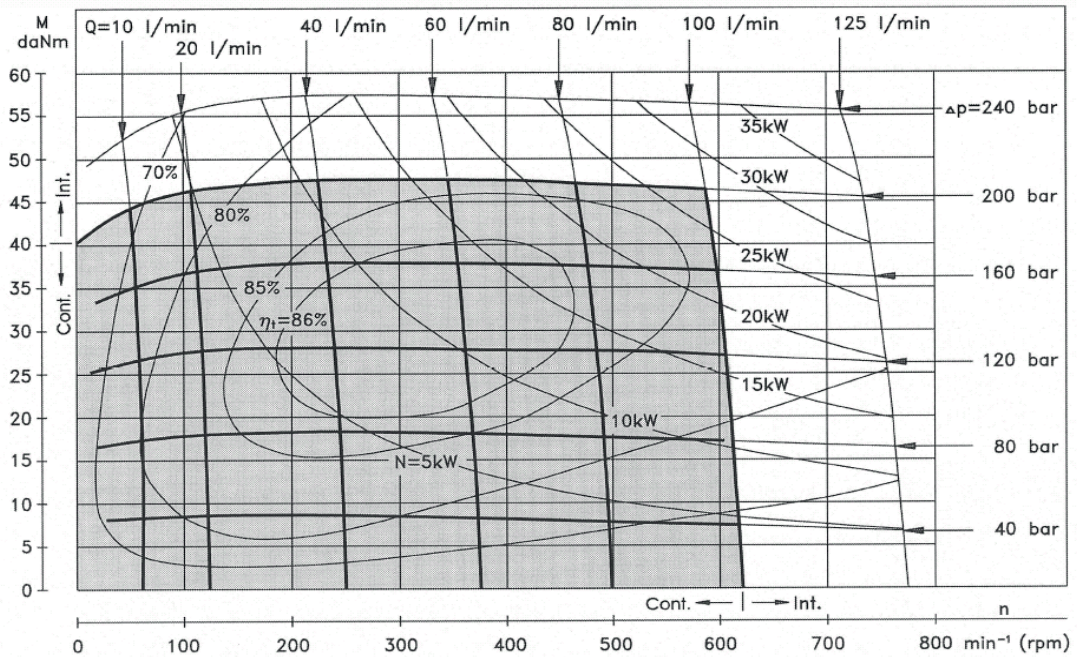
5 Aanbevolen maximum olietemperatuur tijdens gebruik is 85 C°.

6 De levensduur van de motoren kan men verhogen als men de aandrijfjas 10 tot 15 minuten onbelast laat draaien voor de motor volledig te belasten.

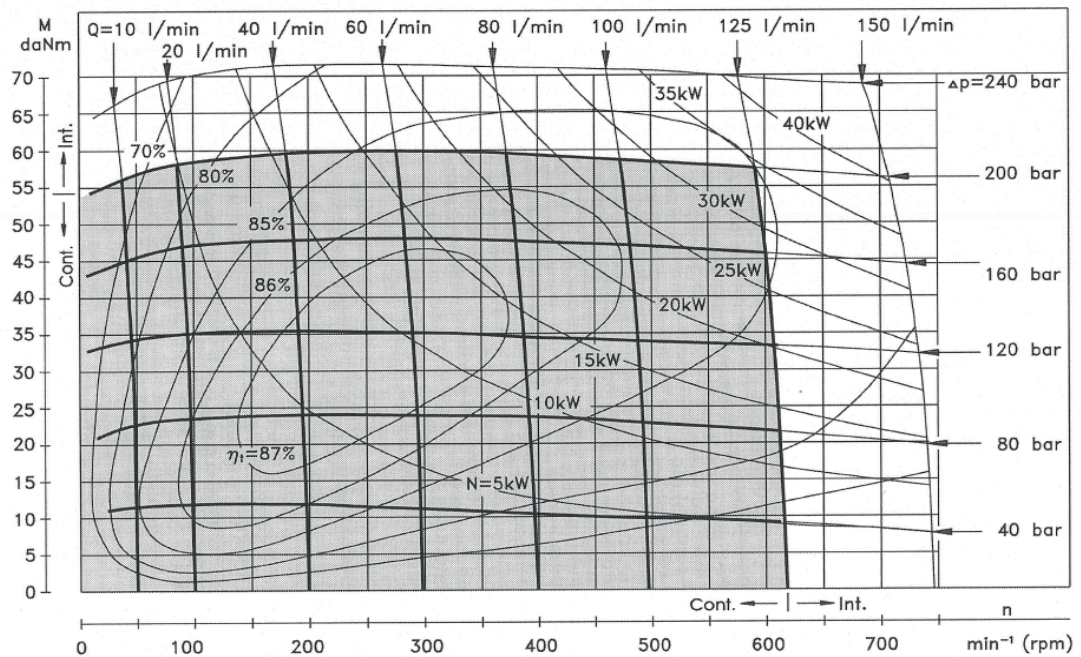
MT Orbitmotoren

Functiediagrammen

MT 160



MT 200

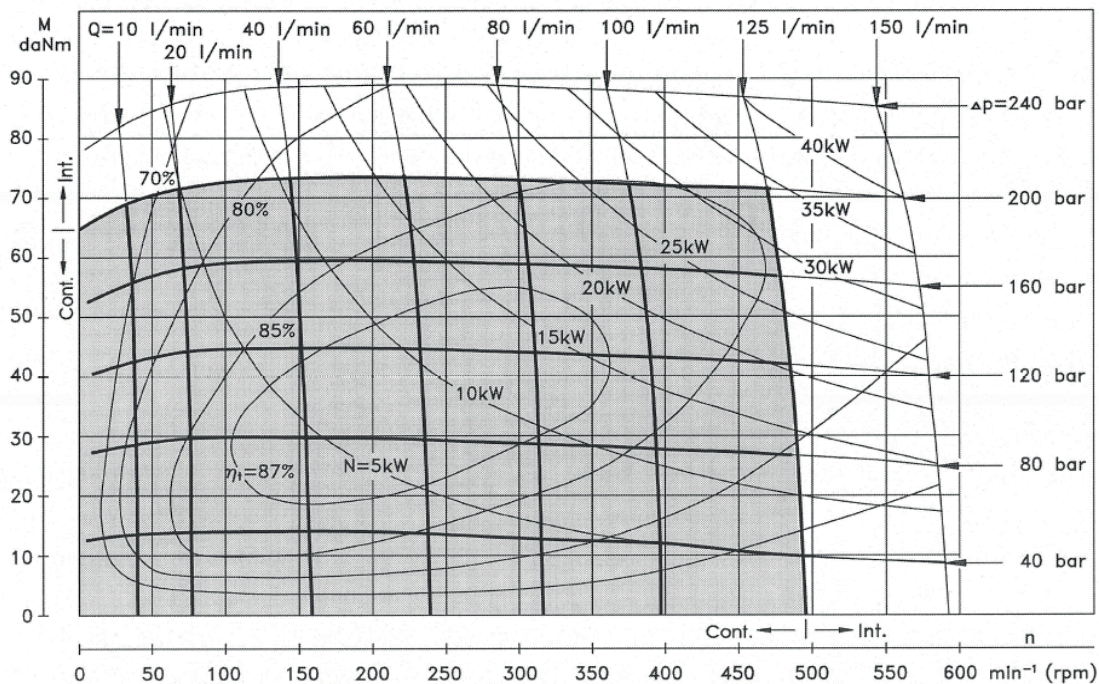


The function diagrams data was collected at back pressure $5 \div 10$ bar and oil with viscosity of $32 \text{ mm}^2/\text{s}$ at 50°C .

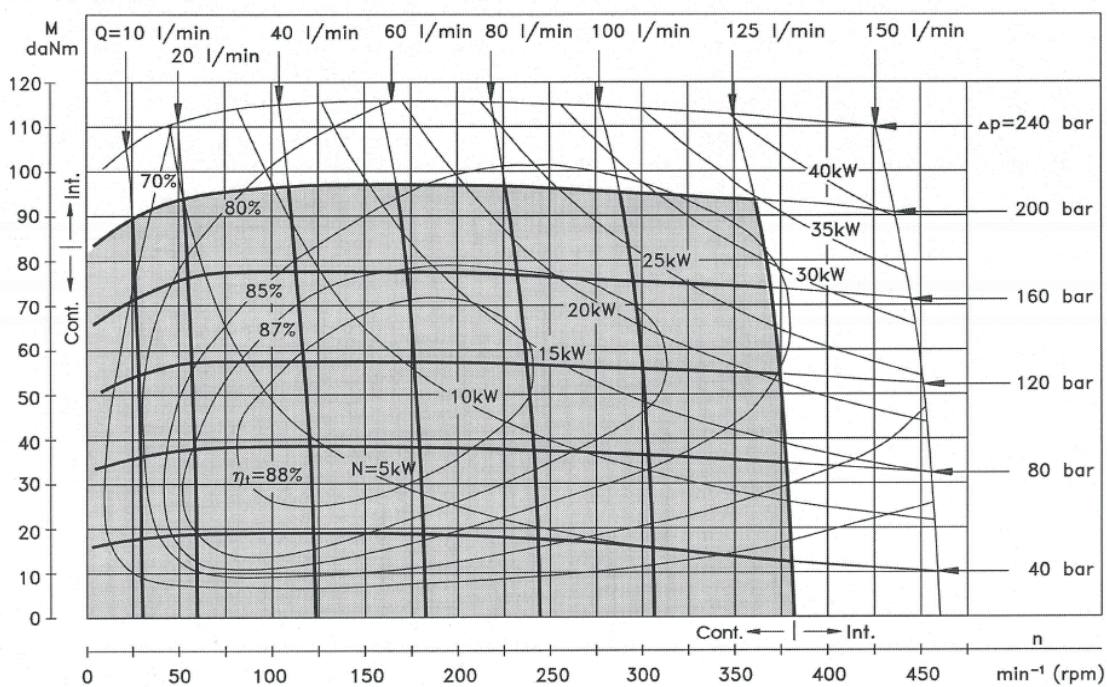
MT Orbitmotoren

Funciediagrammen

MT 250



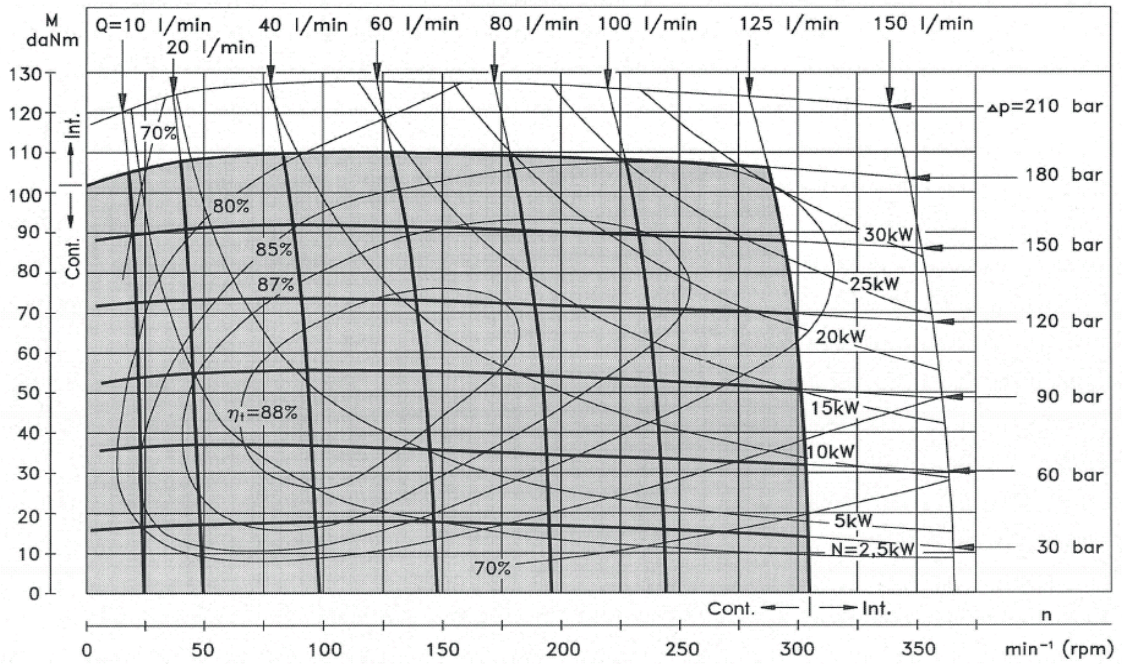
MT 315



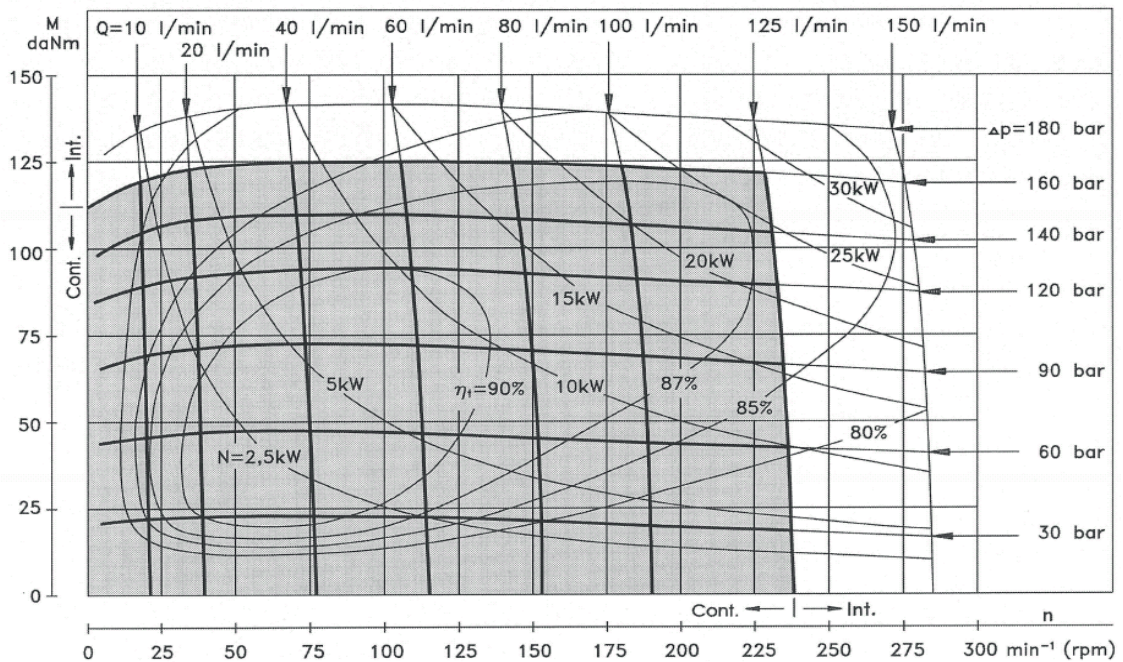
MT Orbitmotoren

Functiediagrammen

MT 400



MT 500

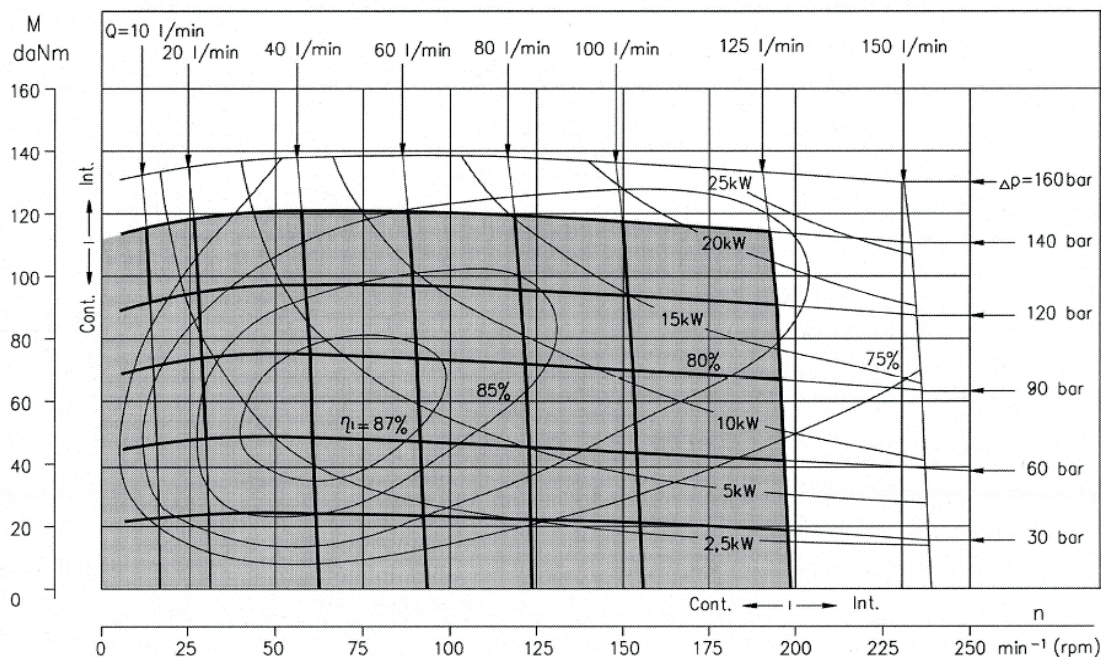


The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

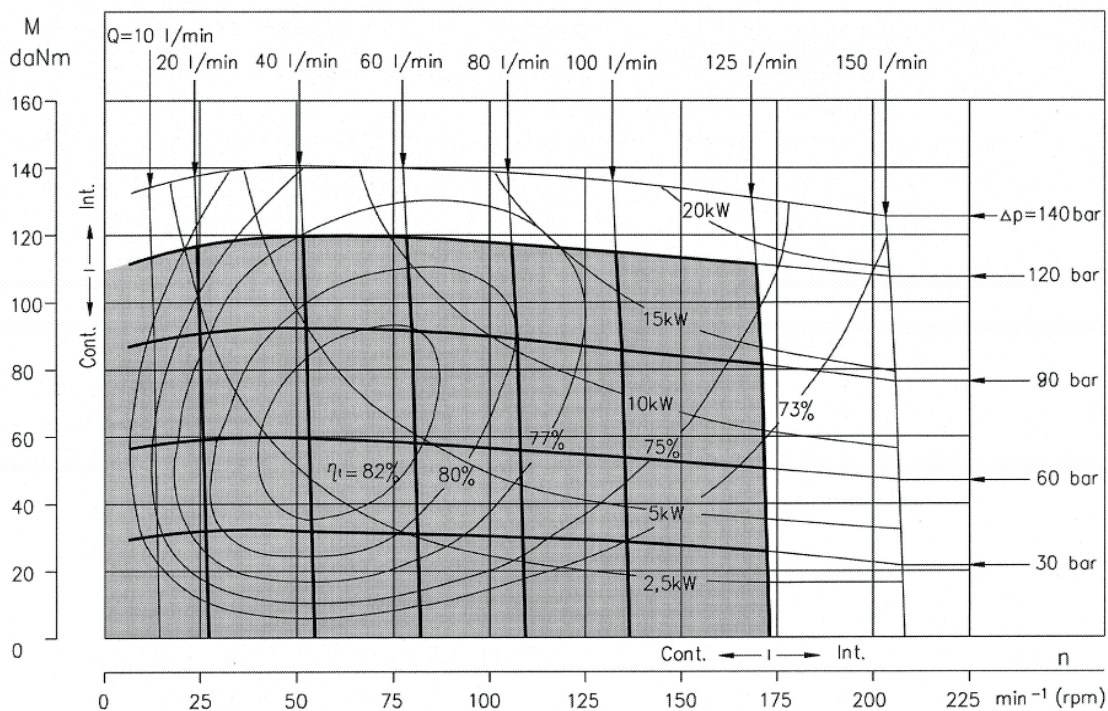
MT Orbitmotoren

Funciediagrammen

MT 630



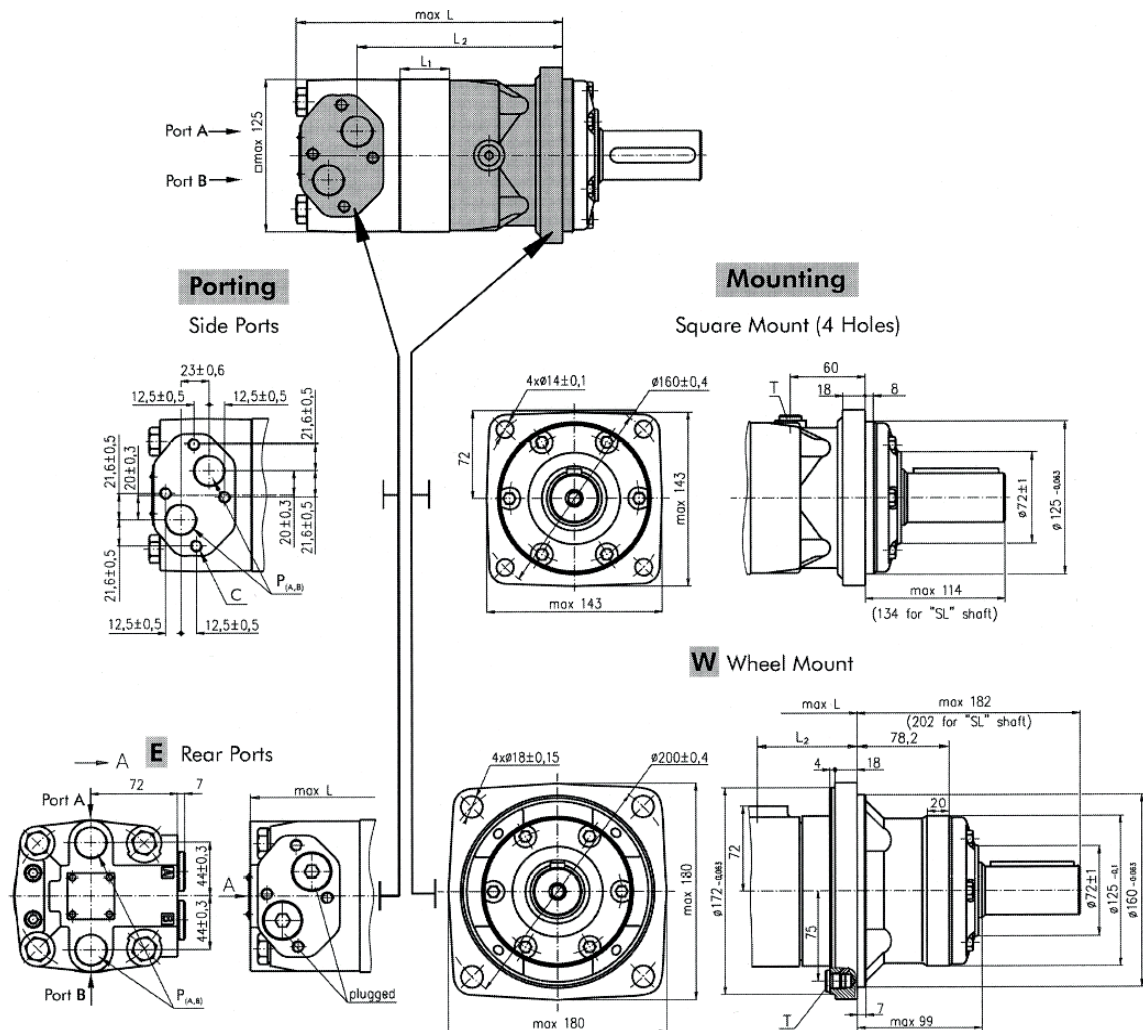
MT 725



The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

MT Orbitmotoren

Afmetingen en uitvoeringen



Standard Rotation
 Viewed from Shaft End
 Port A Pressurized - CW
 Port B Pressurized - CCW

Reverse Rotation
 Viewed from Shaft End
 Port A Pressurized - CCW
 Port B Pressurized - CW

C: 4xM10-10 mm depth
P_(A,B): 2xG3/4 or 2xM27x2-17 mm depth
T: G 1/4 or M14x1,5 - 12 mm depth (plugged)

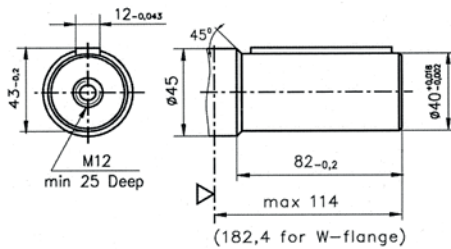
Type	L ₁ , mm	Type	L ₁ , mm	L ₂ , mm	Type	L ₁ , mm	Type	L ₁ , mm	L ₂ , mm	*L ₁ , mm
MT 160	190	MTE 160	200	140	MTW 160	123	MTWE 160	133	73	16,5
MT 200	195	MTE 200	205	145	MTW 200	128	MTWE 200	138	78	21,5
MT 250	201	MTE 250	211	151	MTW 250	134	MTWE 250	144	84	27,8
MT 315	211	MTE 315	221	161	MTW 315	144	MTWE 315	154	94	37,0
MT 400	221	MTE 400	231	171	MTW 400	154	MTWE 400	164	104	47,5
MT 500	235	MTE 500	245	185	MTW 500	168	MTWE 500	178	118	61,5
MT 630	231	MTE 630	241	181	MTW 630	164	MTWE 630	174	114	57,5
MT 725	240	MTE 725	250	190	MTW 725	173	MTWE 725	183	123	66,5

* The width of the roll-gerotor is 3,5 mm greater than L₁.

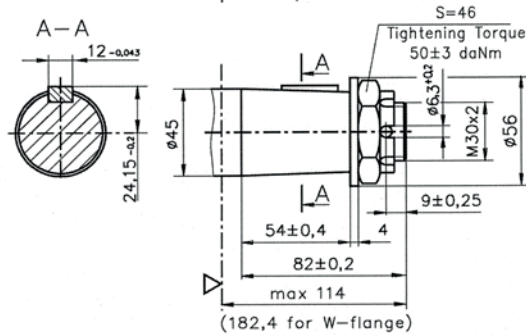
MT Orbitmotoren

Mogelijke assen

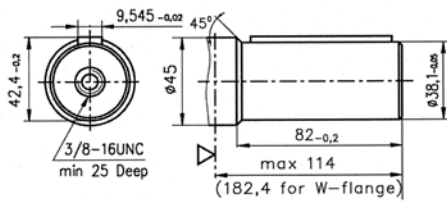
C - $\phi 40$ straight, Parallel key A 12x8x70 DIN 6885
Max. Torque 132,8 daNm



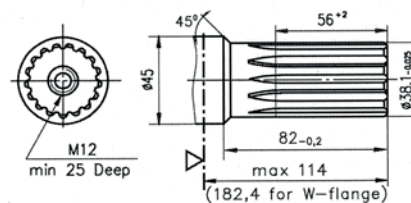
K -tapered 1:10, Parallel key B 12x8x28 DIN 6885
Max. Torque 210,7 daNm



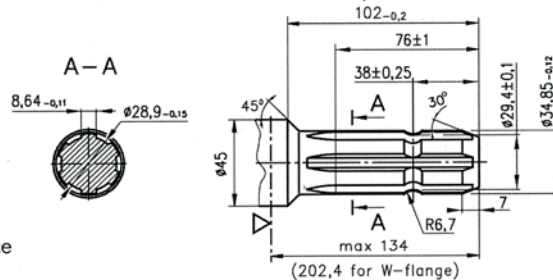
CO - $\phi 1\frac{1}{2}$ " straight, Parallel key $\frac{3}{8}$ "x $\frac{3}{8}$ "x $2\frac{1}{4}$ " BS46
Max. Torque 132,8 daNm



SH - $\phi 1\frac{1}{2}$ " splined 17T, DP 12/24 ANSI B92.1-1976
Max. Torque 132,8 daNm



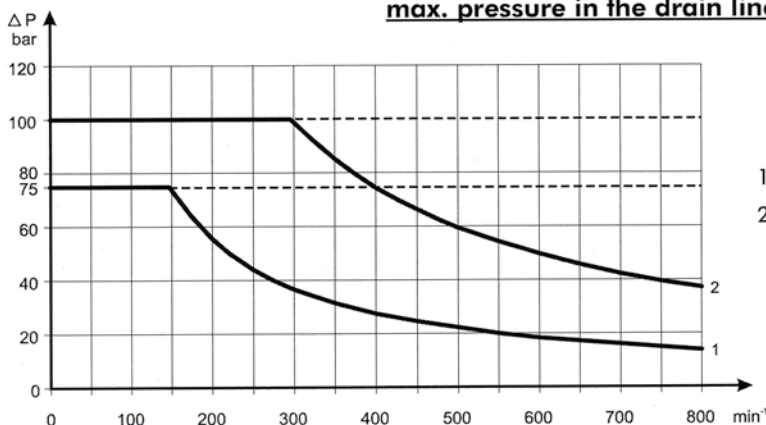
SL - $\phi 34,85$ p.t.o. DIN 9611 Form 1
Max. Torque 77 daNm



▽ - Motor Mounting Surface

MAX. PERMISSIBLE SHAFT SEAL PRESSURE for MT motors

Max. return pressure without drain line or
max. pressure in the drain line



1: Drawing for Standard Shaft Seal
2: Drawing for High Pressure Seal ("U" Seal)

— - continuous operations
- - - - intermittent operations

MT Orbitmotoren

Bestelgegevens

ORDER CODE

	1	2	3	4	5	6	7	8
MT								

Pos.1 - Mounting Flange

omit - Square mount, four holes

S - Short mount

V - Veryshort mount

W - Wheel mount

Pos.2 - Port type

omit - Side ports

E - Rear ports

Pos.3 - Displacement code

160 - 161,1 [cm³/rev]

200 - 201,4 [cm³/rev]

250 - 251,8 [cm³/rev]

315 - 326,3 [cm³/rev]

400 - 410,9 [cm³/rev]

500 - 523,6 [cm³/rev]

630 - 631,2 [cm³/rev]

725 - 724,3 [cm³/rev]

Pos.4 - Shaft Extensions*

omit - for **S** and **V** mounting flange

C - ø40 straight, Parallel key A12x8x70 DIN6885

CO - ø1½" straight, Parallel key ³/₈"x³/₈"x2¼" BS46

K - ø45 tapered 1:10, Parallel key B12x8x28 DIN6885

SL - ø34,85 p.t.o. DIN 9611 Form 1

SH - ø1½" splined 17T ANS B92.1-1976

Pos.5 - Shaft Seal Version (see page 38)

omit - Low pressure seal

U - High pressure seal

Pos.6 - Ports

omit - BSPP (ISO 228)

M - Metric (ISO 262)

Pos.7 - Special Features (see page 65)

Pos.8 - Design Series

omit - Factory specified

NOTES:

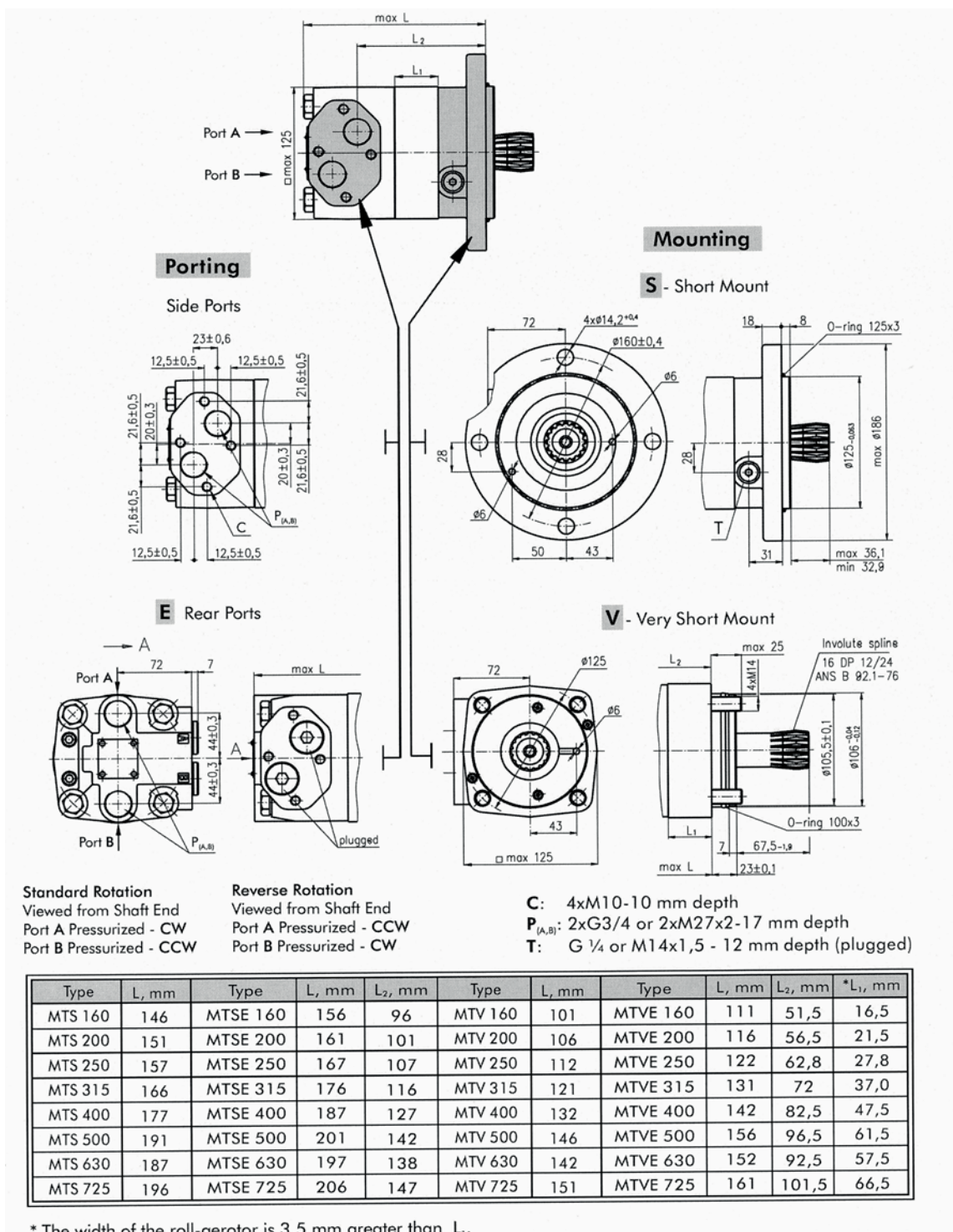
* The permissible output torque for shafts must not be exceeded!

The hydraulic motors are mangano-phosphatized as standard.

Overige gegevens op aanvraag leverbaar

MTS, MTV Orbitmotoren

Afmetingen en uitvoeringen MTS, MTV



Overige gegevens op aanvraag verkrijgbaar

MTM

Orbitmotoren

De krachtige nieuwe MTM motoren worden geleverd in de bouwgroten van 200 tot 725 cm³ en biedt een vermogen tot 41kW.

De MTM is zeer geschikt in een systeem met drukken tot 420 bar.

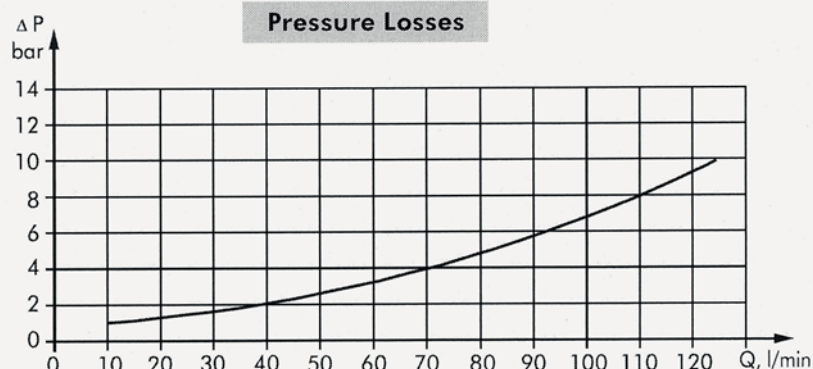
Algemene informatie

Displacement, [cm ³ /rev.]	201,4 ÷ 724,3
Max. Speed, [RPM]	625 ÷ 170
Max. Torque, [daNm]	72 ÷ 175
Max. Output, [kW]	28 ÷ 41
Max. Pressure Drop, [bar]	250 ÷ 160
Max. Oil Flow, [l/min]	125
Min. Speed, [RPM]	5
Permissible Shaft Loads, [daN]	P _a = 1000
Pressure fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, [°C]	-30 ÷ 90
Optimal Viscosity range, [mm ² /s]	20 ÷ 75
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop (bar)	Viscosity (mm ² /s)	Oil flow in drain line (l/min)
140	20	2,5
	35	1,5
210	20	5
	35	3

Pressure Losses



MOTOREN

MTM

Orbitmotoren

Technische informatie

Type	MTM 200	MTM 250	MTM 315	MTM 400	MTM 470	MTM 500	MTM 630	MTM 725	
Displacement [cm ³ /rev.]	201,4	251,8	326,3	410,9	475	523,6	631,2	724	
Max. Speed, [RPM]	cont.	625	500	380	305	260	240	185	170
	Int.*	750	600	460	365	315	285	225	215
Max. Torque [daNm]	cont.	72	90	116	147	171	172	175	160
	Int.*	102	128	163	206	215	215	215	192
	peak**	115	144	186	235	240	240	250	240
Max. Output [kW]	cont.	41	41	41	41	41	37,5	28	26
	int.*	65	70	70	75	55	51	42	40
Max. Pressure Drop [bar]	cont.	250	250	250	250	250	230	185	160
	Int.*	350	350	350	350	315	280	225	210
	peak**	400	400	400	400	350	320	270	260
Max. Oil Flow [l/min]	cont.	125	125	125	125	125	125	125	125
	Int.*	150	150	150	150	150	150	150	150
Max. Inlet Pressure [bar]	cont.	270	270	270	270	270	270	270	270
	Int.*	370	370	370	370	370	370	370	370
	peak**	420	420	420	420	420	420	420	420
Max. Return Pressure without Drain Line or Max. Pressure in Drain Line , [bar]	cont. 0-100 RPM	75	75	75	75	75	75	75	75
	cont. 100-300 RPM	40	40	40	40	40	40	40	40
	cont. >300 RPM	20	20	20	20	20	-	-	-
Max. Return Pressure with Drain Line [bar]	Int.* 0-max. RPM	75	75	75	75	75	75	75	75
	cont.	270	270	270	270	270	270	270	270
	Int.*	370	370	370	370	370	370	370	370
Max. Starting Pressure with Unloaded Shaft, [bar]	Peak**	420	420	420	420	420	420	420	420
		6	6	6	6	6	6	6	6
Min. Starting Torque [daNm]		60	75	97	122	142	143	145	148
Min. Speed***, [RPM]		5	5	5	5	5	5	5	5
Weight, [kg]	MTM	26,9	27,3	28,1	29	29,7	30,2	29,7	31
	MTMW	27,4	27,8	28,6	29,5	30,2	30,7	30,2	31,5
	MTMV	15,7	16,1	16,9	17,8	18,5	19	18,5	19,8

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting maximaal 1% per minuut

*** Voor toerentallen van 5 RPM of minder dan opgegeven, neem contact op met M+S of onze medewerkers.

1 tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen

2 Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering van 25 micron of beter.

3 Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN51524) of

HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals syntetische olieën dient er overlegt te worden.

4 Aanbevolen minerale viscositeit is 13mm² bij 50°C.

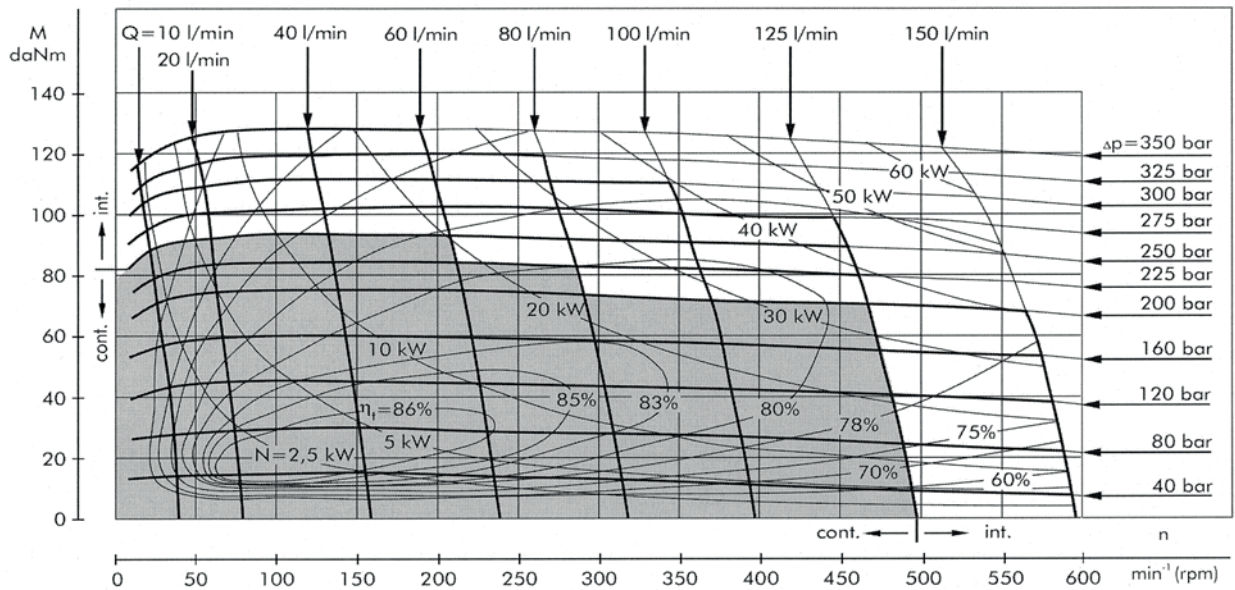
5 Aanbevolen maximum olietemperatuur tijdens gebruik is 85 °C.

6 De levensduur van de motoren kan men verhogen als men de aandrijfas 10 tot 15 minuten onbelast laat draaien voor de motor volledig te belasten.

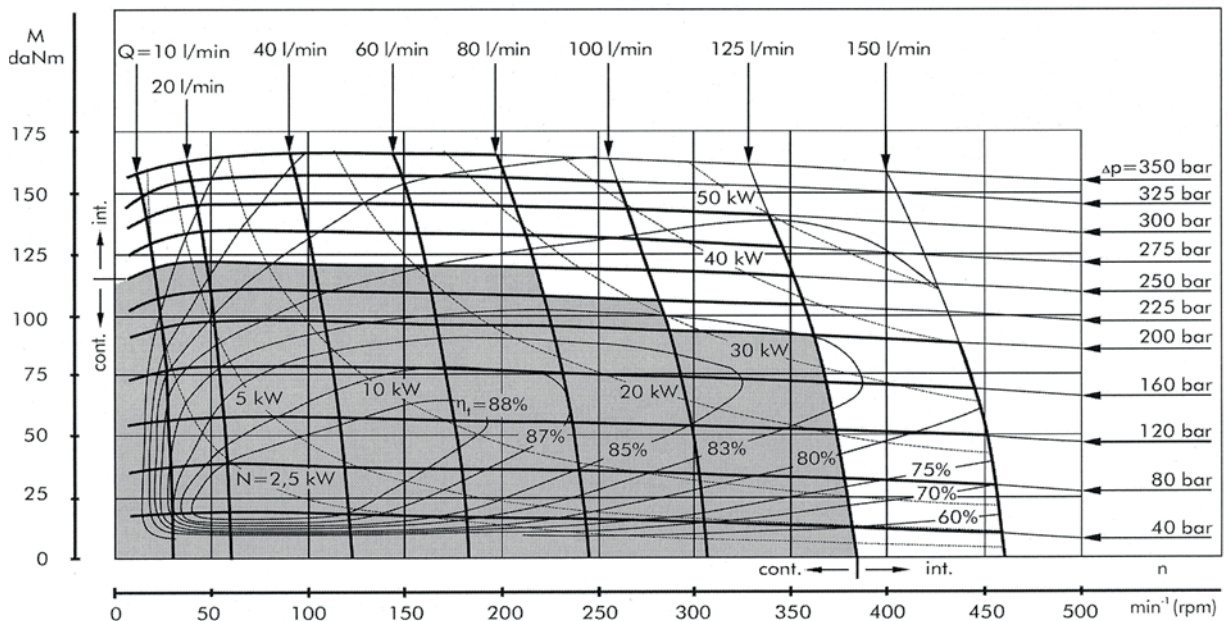
MTM Orbitmotoren

Functiediagrammen

MTM 250



MTM 315

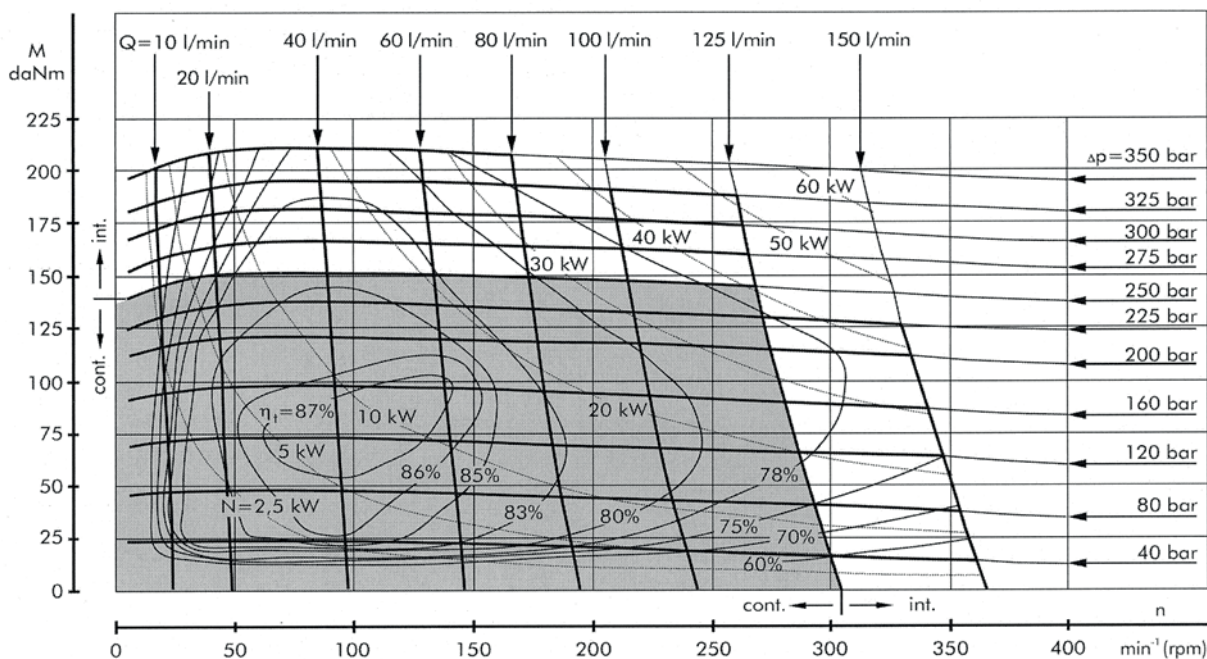


The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

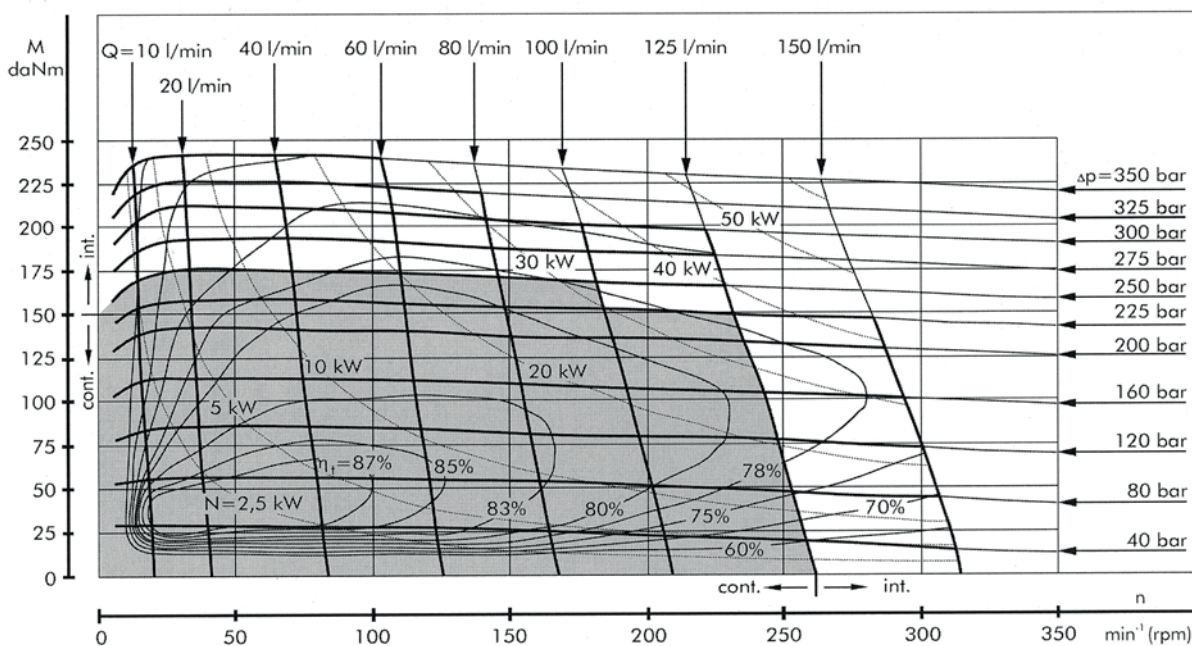
MTM Orbitmotoren

Funciediagrammen

MTM 400



MTM 470

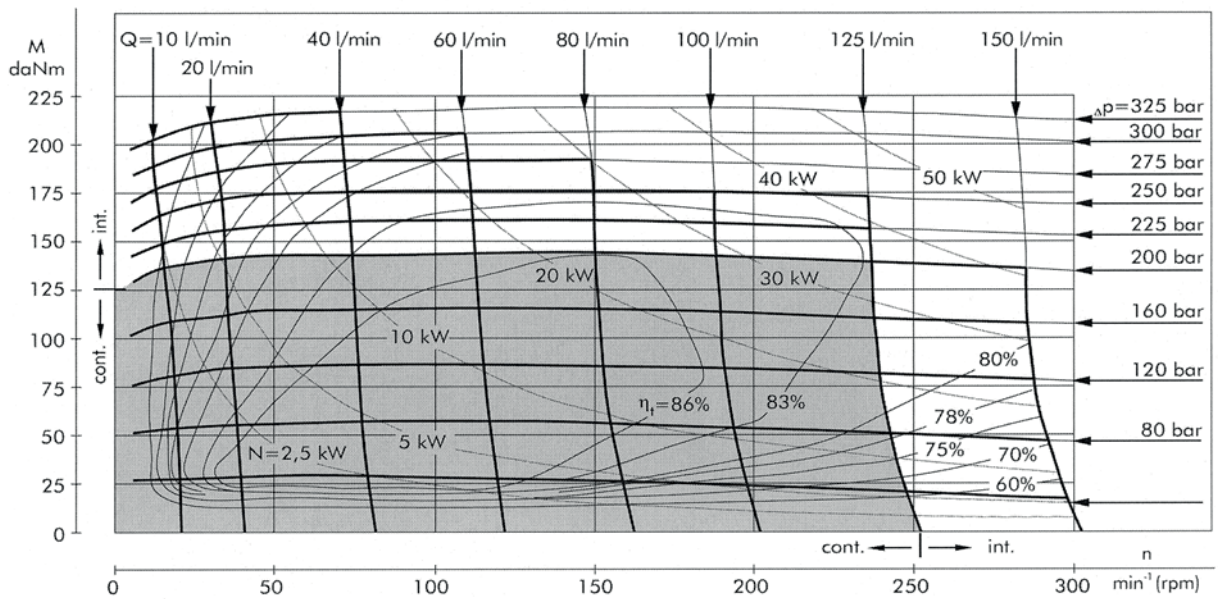


The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

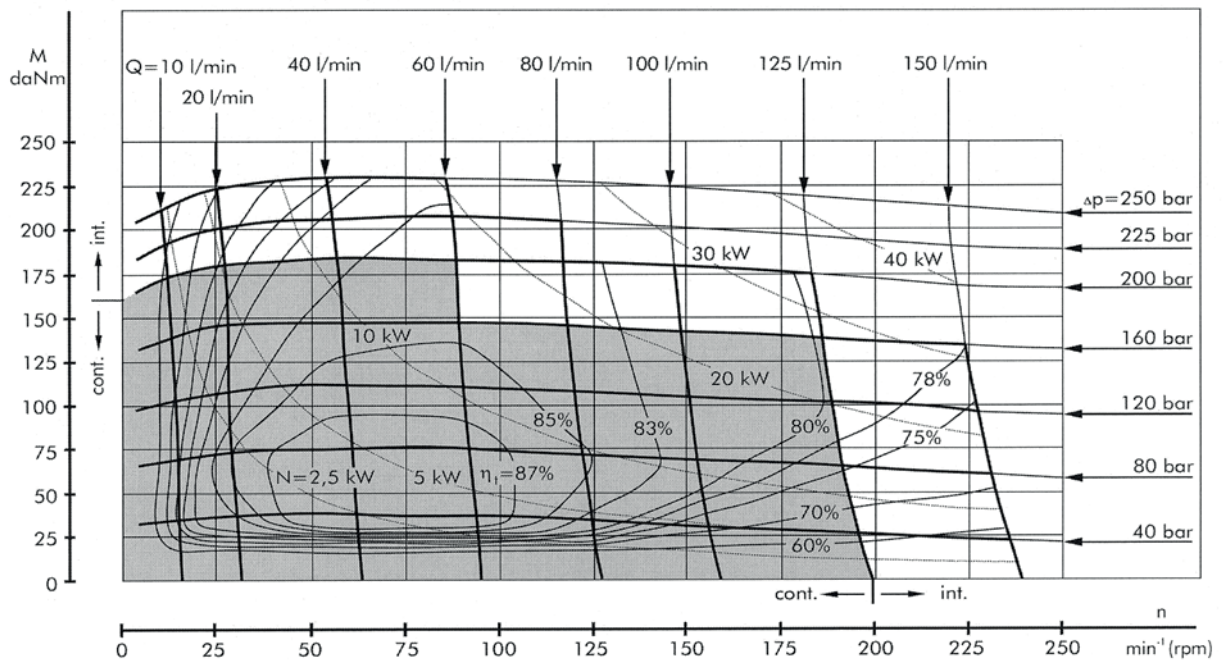
MTM Orbitmotoren

Functiediagrammen

MTM 500



MTM 630



The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

MTM

Orbitmotoren

Bestelgegevens

ORDER CODE

	1	2	3	4	5	6
MTM						

Pos. 1 - Mounting Flange

omit - 4-Bolt flange, spigot dia. \varnothing 160, BC \varnothing 200

C - 4-Bolt flange, spigot dia. \varnothing 125, BC \varnothing 160

W - Wheel motor

V - Veryshort mount, 9xM12 mounting bolts

6V - Veryshort mount, 6xM12 mounting bolts

Pos. 2 - Displacement code

200 - 201,4 [cm³/rev]

250 - 251,8 [cm³/rev]

315 - 326,3 [cm³/rev]

400 - 410,9 [cm³/rev]

470 - 475,0 [cm³/rev]

500 - 523,6 [cm³/rev]

630 - 631,2 [cm³/rev]

725 - 724,3 [cm³/rev]

Pos. 3 - Shaft Extensions*

C - \varnothing 40 straight, Parallel key A12x8x70 DIN6885

K - \varnothing 45 tapered 1:10, Parallel key B12x8x28 DIN6885

SH - \varnothing 1½" splined 17T ANSI B92.1-1976

Pos. 4 - Ports

omit - BSPP (ISO 228)

Pos. 5 - Special Features (see page 65)

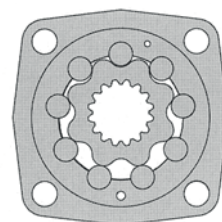
Pos. 6 - Design Series

omit - Factory specified

Overige gegevens op aanvraag beschikbaar

MV Orbitmotoren

De MV motor is een zeer krachtige motor van 315 tot 800 cm³ en is verkrijgbaar tot 64KW



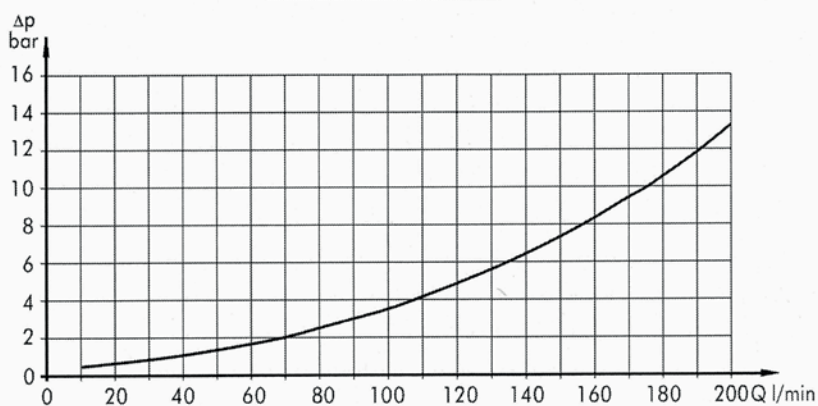
Algemene informatie

Displacement, [cm ³ /rev.]	314,5 ÷ 801,8
Max. Speed, [RPM]	250 ÷ 510
Max. Torque, [daNm]	92 ÷ 188
Max. Output, [kW]	42,5 ÷ 53,5
Max. Pressure Drop, [bar]	160 ÷ 200
Max. Oil Flow, [l/min]	160 ÷ 200
Min. Speed, [RPM]	5 ÷ 10
Permissible Shaft Loads, [daN]	P _a = 1500
Pressure fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, [°C]	-30 ÷ 90
Optimal Viscosity range, [mm ² /s]	20 ÷ 75
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop (bar)	Viscosity (mm ² /s)	Oil flow in drain line (l/min)
140	20	3
	35	2
210	20	6
	35	4

Pressure Losses



MV Orbitmotoren

Technische Informatie

Type	MV 315	MV 400	MV 500	MV 630	MV 800	
Displacement [cm ³ /rev.]	314,5	400,9	499,6	629,1	801,8	
Max. Speed, [RPM]	cont.	510	500	400	315	250
	Int.*	630	600	480	380	300
Max. Torque [daNm]	cont.	92	118	146	166	188
	Int.*	111	141	176	194	211
	peak**	129	164	205	221	247
Max. Output [kW]	cont.	42,5	53,5	53,5	48	42,5
	int.*	51	64	64	56	48
Max. Pressure Drop [bar]	cont.	200	200	200	180	160
	Int.*	240	240	240	210	180
	peak**	280	280	280	240	210
Max. Oil Flow [l/min]	cont.	160	200	200	200	200
	Int.*	200	240	240	240	240
Max. Inlet Pressure [bar]	cont.	210	210	210	210	210
	Int.*	250	250	250	250	250
	peak**	300	300	300	300	300
Max. Return Pressure without Drain Line or Max. Pressure in Drain Line, [bar]	cont. 0-100 RPM	60	60	60	60	60
	cont. 100-300 RPM	30	30	30	30	30
	cont. >300 RPM	20	20	20	20	20
	Int.* 0-max. RPM	75	75	75	75	75
Max. Return Pressure with Drain Line [bar]	cont.	140	140	140	140	140
	Int.*	175	175	175	175	175
	peak**	210	210	210	210	210
Max. Starting Pressure with Unloaded Shaft, [bar]		8	8	8	8	8
Min. Starting Torque [daNm]	at max. press. drop cont.	71	91	113	133	151
	at max. press. drop Int.*	85	109	136	155	170
Min. Speed***, [RPM]		10	9	8	6	5
Weight, avg. [kg]	MV	31,8	32,6	33,5	34,9	36,5
	MVW	32,4	33,2	34,1	35,5	37,1
	MVS	22,7	23,5	24,4	25,6	27,7

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting maximaal 1% per minuut

*** Voor toerentallen van 5 RPM of minder dan opgegeven, neem contact op met M+S of onze medewerkers.

1 tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen

2 Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering van 25 micron of beter.

3 Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN51524) of

HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals syntetische olieën dient er overlegt te worden.

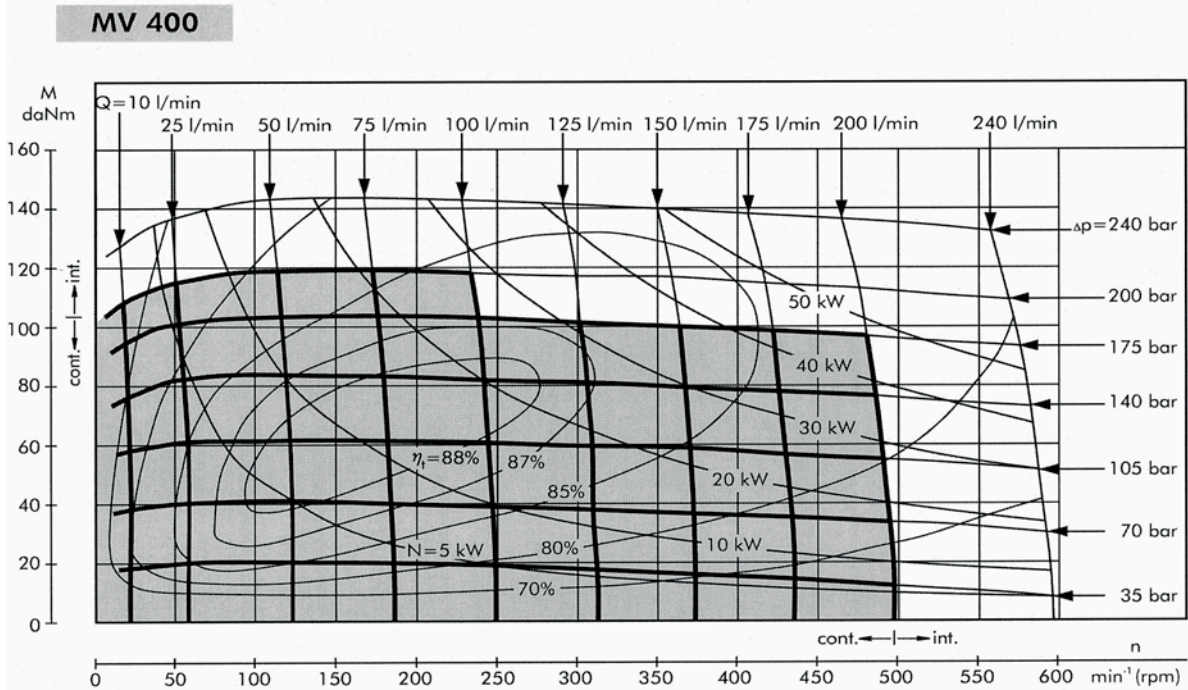
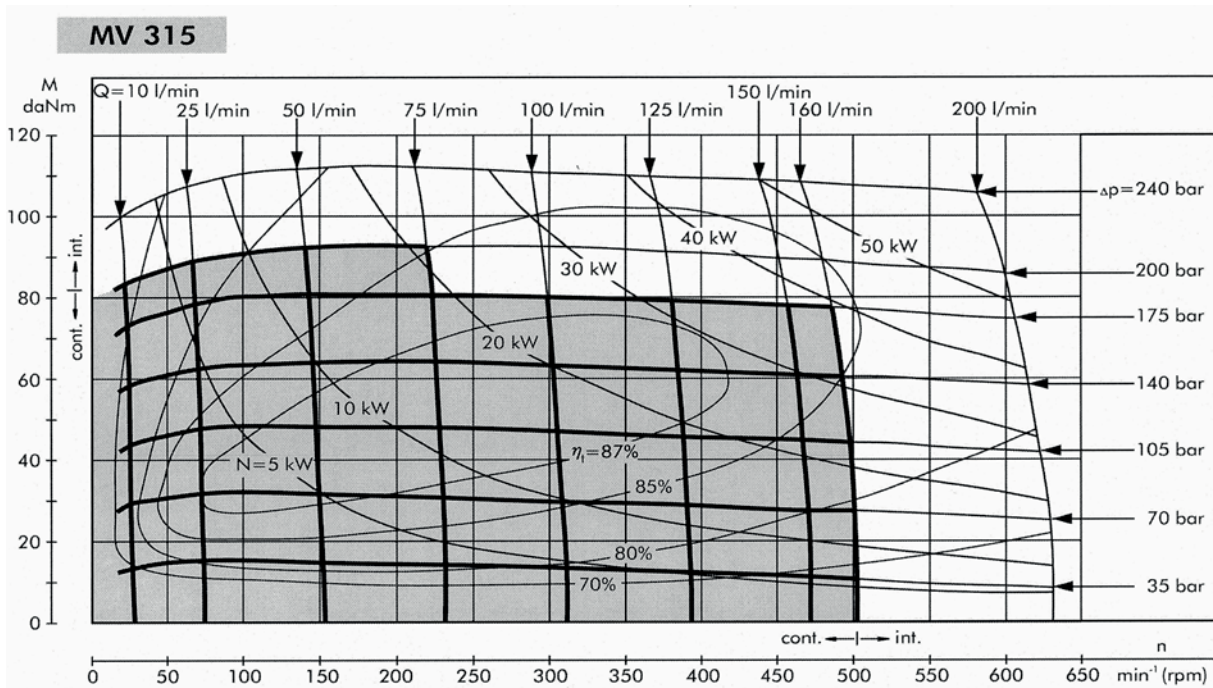
4 Aanbevolen minerale viscositeit is 13mm² bij 50°C.

5 Aanbevolen maximum olietemperatuur tijdens gebruik is 85 °C.

6 De levensduur van de motoren kan men verhogen als men de aandrijfas 10 tot 15 minuten onbelast laat draaien voor de motor volledig te belasten.

MV Orbitmotoren

Functiediagrammen

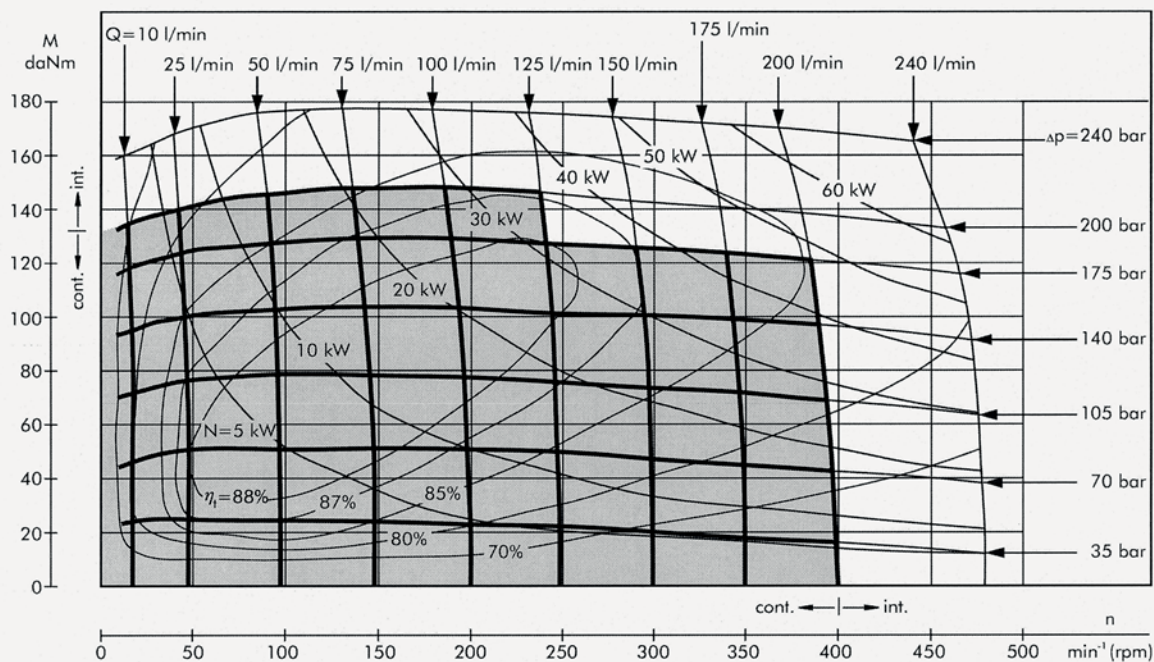


The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

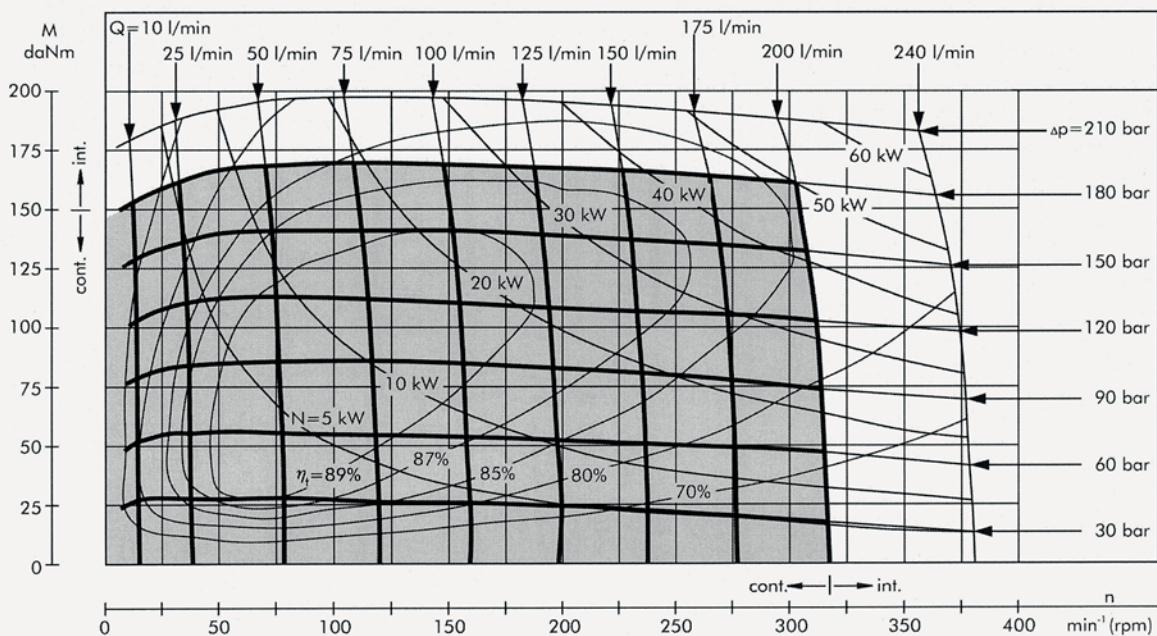
MV Orbitmotoren

Funciediagrammen

MV 500



MV 630

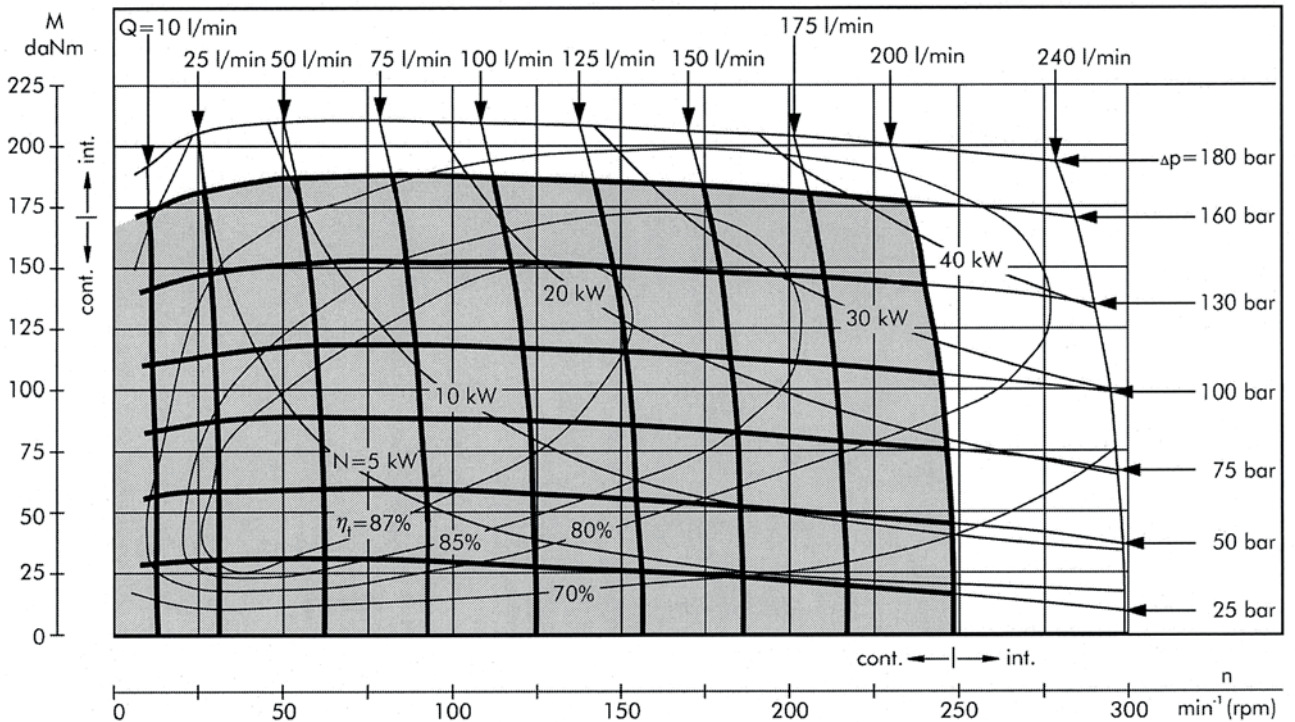


The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

MV Orbitmotoren

Functiediagram

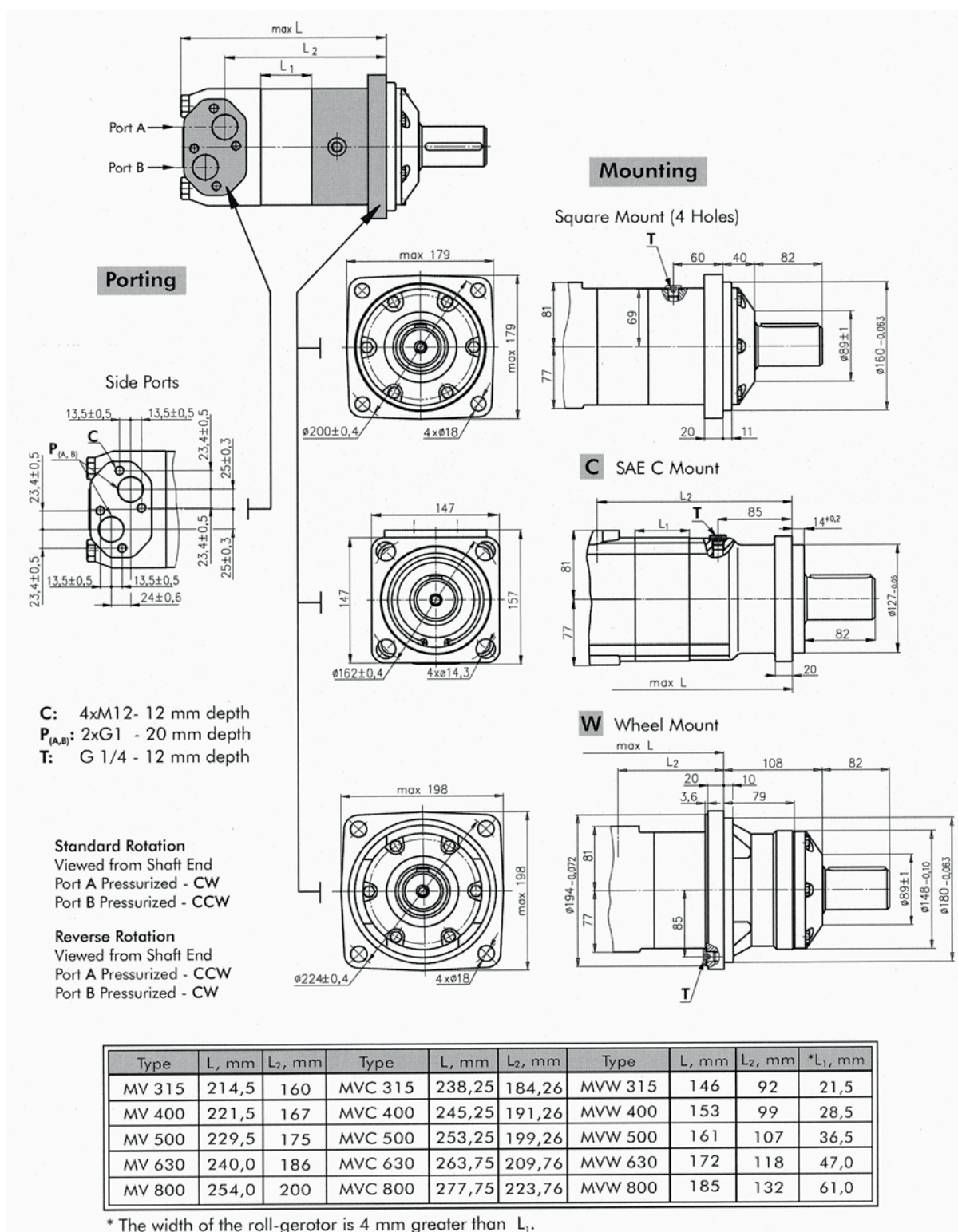
MV 800



The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

MV Orbitmotoren

Afmetingen en uitvoeringen

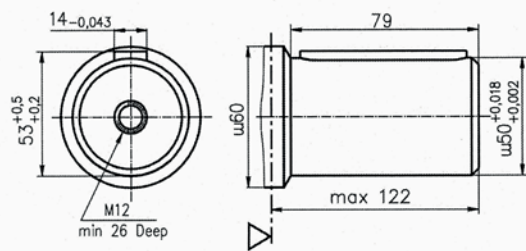


Gegevens MVS en MVV op aanvraag leverbaar

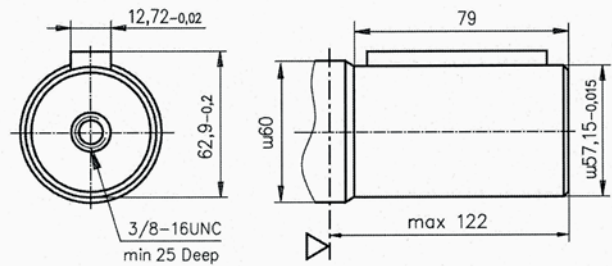
MV Orbitmotoren

Mogelijke assen

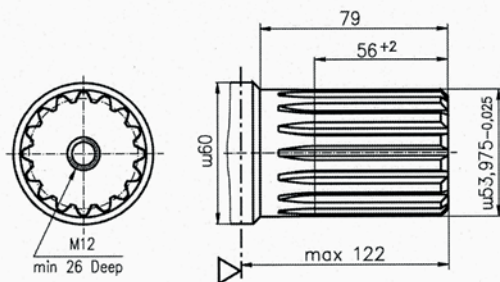
C - $\varnothing 50$ straight, Parallel key A14x9x70 DIN 6885



CO - $\varnothing 2\frac{1}{4}$ [57,15] straight, Parallel key $\frac{1}{2}$ "x $\frac{1}{2}$ "x $2\frac{1}{4}$ " BS46

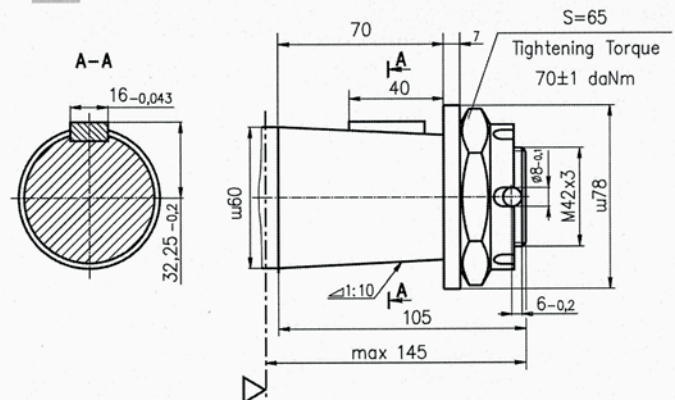


SH - $\varnothing 2\frac{1}{8}$ "splined, 16 DP 8/16 ANS B92.1-1976



▽ - Motor Mounting Surface

K - tapered 1:10, Parallel key B16x10x32 DIN 6885



Bestelcodes

	1	2	3	4	5
MV					

Pos. 1 - Mounting Flange

- omit - Square mount, four holes
- C** - SAE C mount
- W** - Wheel mount
- S** - Short mount
- V** - Very short mount

Pos. 2 - Displacement code

- 315** - 314,5 [cm³/rev]
- 400** - 400,9 [cm³/rev]
- 500** - 499,6 [cm³/rev]
- 630** - 629,1 [cm³/rev]
- 800** - 801,8 [cm³/rev]

Pos. 3 - Shaft extensions*

- omit - for **S** and **V** mounting flange
- C** - $\varnothing 50$ straight, Parallel key A14x9x70 DIN6885
- CO** - $\varnothing 2\frac{1}{4}$ " straight, Parallel key $\frac{1}{2}$ "x $\frac{1}{2}$ "x $2\frac{1}{4}$ " BS46
- SH** - $\varnothing 2\frac{1}{8}$ " splined, ANS B92.1-1976
- K** - $\varnothing 60$ tapered 1:10, Parallel key B16x10x32 DIN6885

Pos. 4 - Special Features (see page 65)

Pos. 5 - Design Series

- omit - Factory specified

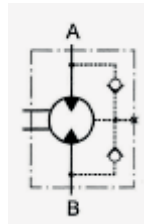
NOTES:

- * The permissible output torque for shafts must not be exceeded!
- The hydraulic motors are mangano- phosphatized as standard.

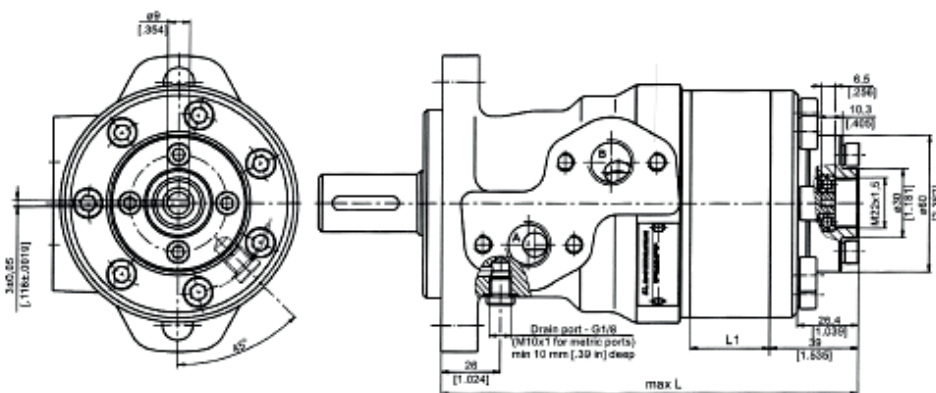
MR...T

Orbitmotor MR met tacho aansluiting

MR motoren zijn verkrijgbaar met een tacho aandrijf-as. Met tacho aansluiting kunt u de snelheid van de motor registreren. De tacho as gaat 6x zo snel als de uitgaande as.



OUTLINE DIMENSIONS REFERENCE



Type	L, mm [in]	L ₁ , mm [in]
MR 50	157 [6.18]	9,0 [.35]
MR 80	162 [6.38]	14,0 [.55]
MR 100	165 [6.50]	17,4 [.69]
MR 125	170 [6.69]	21,8 [.86]
MR 160	176 [6.93]	27,8 [1.09]
MR 200	183 [7.20]	34,8 [1.37]
MR 250	192 [7.56]	43,5 [1.71]
MR 315	204 [8.03]	54,8 [2.16]
MR 400	218 [8.58]	69,4 [2.73]



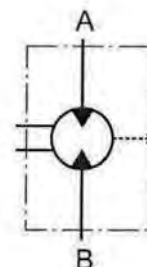
Let op !! Radiale en axiale krachten aan de tacho as moeten ten alle tijden worden voorkomen. Maximale torque aan de tacho as 0.1 daNm (.885 lb-in) Maximale continue retour druk zonder lekleiding is 20 bar (290 PSI)

De algemene technische kenmerken komen overeen met de standaard MR motoren. Er zijn geen veranderingen in de totale en aansluitmaten. Voor technische gegevens kijk vanaf pagina 7.21

MRNA

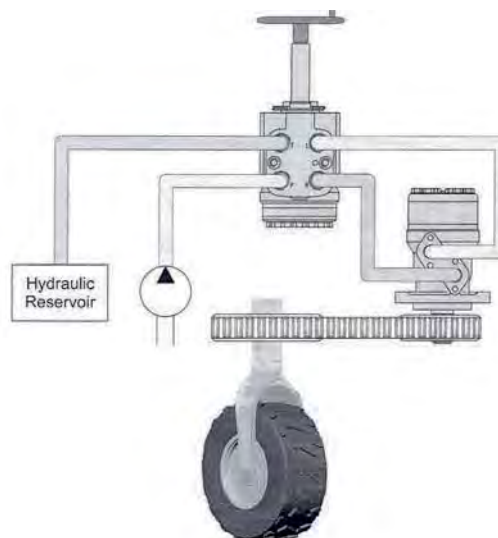
Orbitmotor

De MRNA is geschikt voor rij mechanismen waarbij er vraag is naar een soepele werking bij lage snelheid en hoge druk.



Goede opstart eigenschappen
 Precieze controle over de torque bij kleine flow.
 Soepele werking bij hoge druk en kleine olie flow.

De algemene technische gegevens komen overeen met de standaard MR motors met een seal van 28.56 doorsnee. Voor technische en aansluit gegevens verwijzen wij u naar pagina 7.21



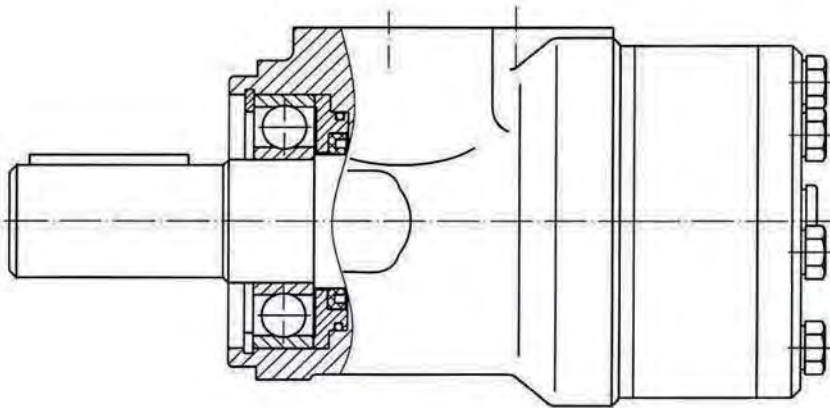
SPECIFICATIES.

Code	Displacement cm ³ /rev [in ³ /rev]	Max. Speed [RPM]	Max. Torque daNm [lb-in]				Max. Output kW [HP]				Max. Pressure Drop, bar [PSI]				Max. Oil Flow, lpm [GPM]
			C, CO shafts		SH, SA shafts		C, CO shafts		SH, SA shafts		C, CO shafts		SH, SA shafts		
			cont.	int*	cont.	int*	cont.	int*	cont.	int*	cont.	int*	cont.	int*	
MRNA 50	51,5 [3.14]	200	10 [885]	13 [1150]	10 [885]	13 [1150]	2,0 [2.68]	2,5 [3.35]	2,0 [2.68]	2,5 [3.35]	140 [2030]	175 [2540]	140 [2030]	175 [2540]	10,5 [2.8]
MRNA 80	80,3 [4.9]	200	20 [1770]	22 [1940]	20 [1770]	22 [1940]	3,0 [4.02]	3,5 [4.69]	3,0 [4.02]	3,5 [4.69]	175 [2540]	200 [2900]	175 [2540]	200 [2900]	16 [4.2]
MRNA 100	99,8 [6.09]	200	24 2120	28 [2480]	24 2120	28 [2480]	4,5 [6.03]	5,0 [6.71]	4,5 [6.03]	5,0 [6.71]	175 [2540]	200 [2900]	175 [2540]	200 [2900]	20 [5.3]
MRNA 125	125,7 [7.67]	200	30 [2650]	34 [3000]	30 [2650]	34 [3000]	5,5 [7.37]	6,0 [8.05]	5,5 [7.37]	6,0 [8.05]	175 [2540]	200 [2900]	175 [2540]	200 [2900]	25 [6.6]
MRNA 160	159,6 [9.74]	200	29 [2560]	39 [3450]	39 [3450]	43 [3800]	5,0 [6.71]	6,5 [8.05]	6,0 [8.05]	7,5 [10.05]	120 [1740]	175 [2540]	175 [2540]	200 [2900]	32 [8.5]
MRNA 200	199,8 [12.19]	200	29 [2560]	38,5 [3400]	38,5 [3400]	46 [4070]	5,0 [6.71]	7,0 [9.39]	6,5 [8.72]	9,0 [12.06]	105 [1520]	140 [2030]	140 [2030]	175 [2540]	40 [10.5]
MRNA 250	250,1 [15.26]	200	30 [2650]	39 [3450]	39 [3450]	47 [4160]	5,0 [6.71]	7,0 [9.39]	6,0 [8.05]	9,0 [12.06]	80 [1160]	110 [1600]	110 [1600]	140 [2030]	50 [13.2]
MRNA 315	315,7 [19.26]	190	30 [2650]	42 [3720]	36 [3450]	47 [4160]	5,0 [6.71]	7,5 [10.05]	6,0 [8.05]	8,5 [11.4]	70 [1020]	100 [1450]	85 [1230]	115 [1670]	65 [17.2]
MRNA 400	397,0 [24.4]	150	30 [2650]	40 [3540]	38 [3260]	47 [4160]	4,0 [5.36]	6,5 [8.72]	6,0 [8.05]	7,0 [9.39]	55 [800]	70 [1015]	65 [940]	90 [1300]	60 [15.8]

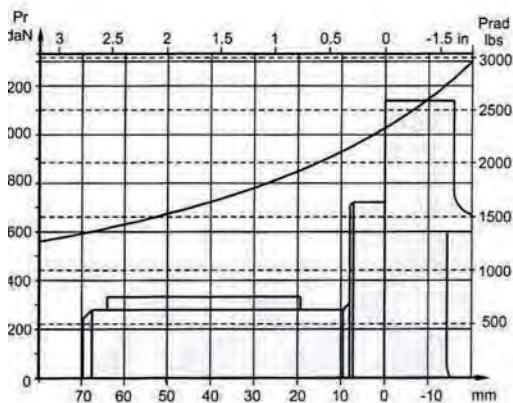
* Intermittent operation: the permissible values may occur for max. 10% of every minute.

MRFL Orbitmotor

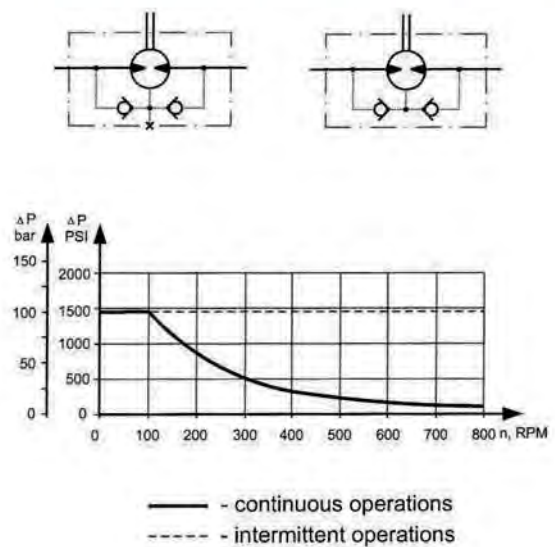
De hydraulische motor type MRFL... en MLHRFL... zijn ontworpen voor radiale piek belasting op de aandrijfvas (speciaal tijdens het starten en stoppen). Om de radiale krachten te weerstaan is er een radiale kogellager gemonteerd op de as van hydraulische motor. De algemene technische gegevens komen overeen met de standaard MRF $\varnothing 35$ afdichting diameter.



PERMISSIBLE SHAFT LOADS

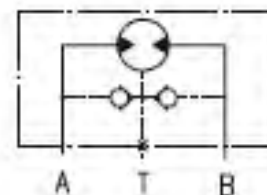


MAX. PERMISSIBLE SHAFT SEAL PRESSURE

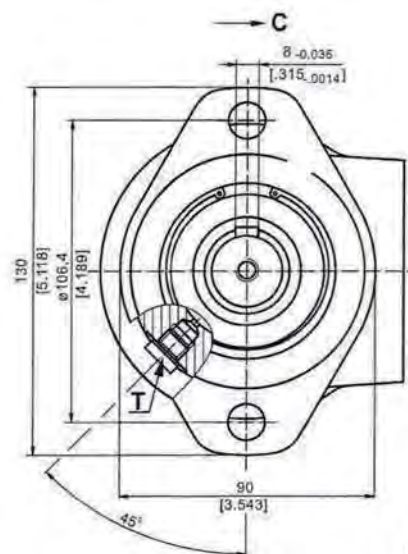
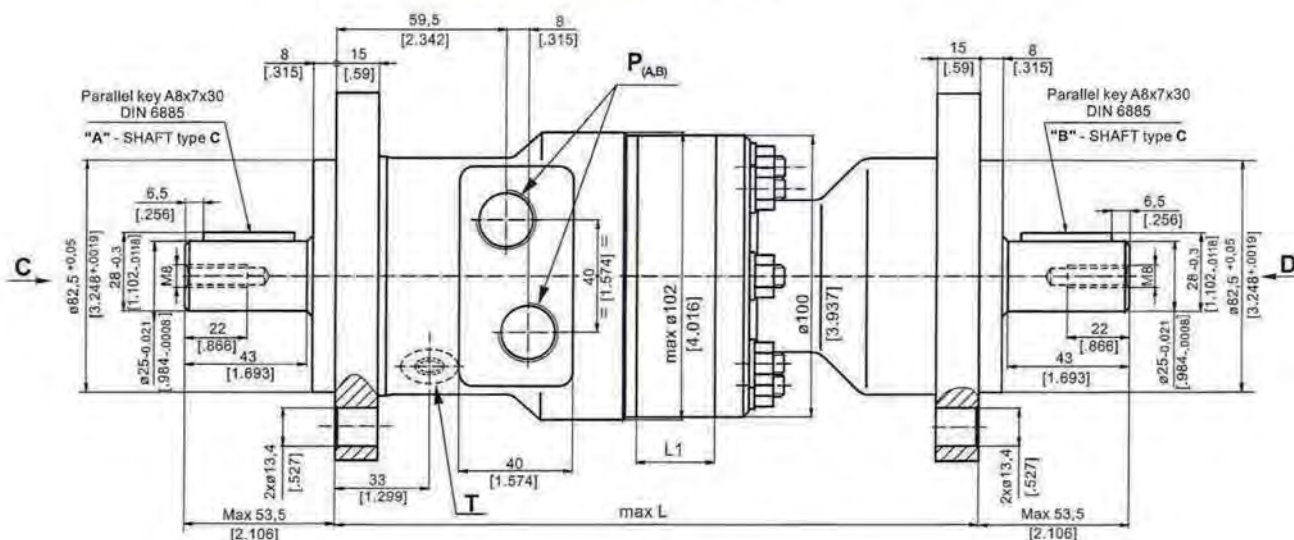


MRB

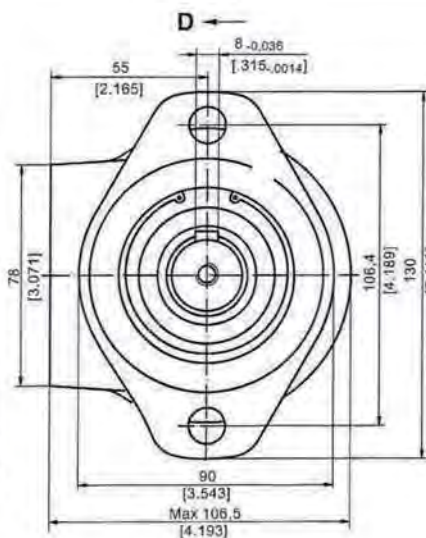
Orbitmotor met dubbele uitgaande as



OUTLINE DIMENSINS REFERENCE



Type	L, mm [in]	L ₁ , mm[in]
MRB 50	208,0 [8.19]	9,0 [.35]
MRB 80	213,0 [8.39]	14,0 [.55]
MRB 100	216,0 [8.50]	17,4 [.69]
MRB 125	220,5 [8.68]	21,8 [.86]
MRB 160	226,5 [8.92]	27,8 [1.09]
MRB 200	233,5 [9.19]	34,8 [1.37]
MRB 250	242,5 [9.55]	43,5 [1.71]
MRB 300	253,5 [9.98]	54,8 [2.16]
MRB 400	268,0 [10.55]	69,4 [2.73]



P_(A,B): 2xG1/2 - 18 mm [.71 in] depth
 T : G1/8 - 9 mm [.35 in] depth (plugged)



MRB Orbitmotor

Specificaties

SPECIFICATION DATA

Type	MRB 50 C/C	MRB 80 C/C	MRB 100 C/C	MRB 125 C/C	MRB 160 C/C	MRB 200 C/C	MRB 250 C/C	MRB 315 C/C	MRB 400 C/C
Displacement, cm ³ /rev [in ³ /rev]	51,5[3.14]	80,3[4.9]	99,8[6.09]	125,7[7.67]	159,6[9.74]	199,8[12.19]	250,1[15.26]	315,7[19.26]	397 [24.4]
Max. Speed, cont.	775	750	600	475	375	300	240	190	150
RPM, int.*	970	940	750	600	470	375	300	240	190
Max. Torque, cont.	10 [885]	19,5 [1725]	24 [2125]	30 [2655]	30 [2655]	30 [2655]	30 [2655]	30 [2655]	30 [2655]
daNm [lb-in], int.*	13 [1150]	22 [1947]	28 [2480]	34 [3010]	39 [3450]	39 [3450]	38 [3360]	42 [3720]	43 [3805]
Max. Torque "A" Shaft, cont.	8 [710]	11,5 [1000]	12 [1060]	20 [1770]	20 [1770]	20 [1770]	20 [1770]	20 [1770]	20 [1770]
daNm [lb-in], int.*	9,5 [840]	13 [1150]	14 [1240]	23 [2035]	23 [2035]	23 [2035]	23 [2035]	23 [2035]	23 [2035]
Max. Torque "B" Shaft, cont.	4 [355]	11,5 [1000]	12 [1060]	20 [1770]	20 [1770]	20 [1770]	20 [1770]	20 [1770]	20 [1770]
daNm [lb-in], int.*	5 [440]	13 [1150]	14 [1240]	23 [2035]	23 [2035]	23 [2035]	23 [2035]	23 [2035]	23 [2035]
Max. Output, cont.	7 [9.5]	12,5 [17]	13 [1150]	12,5 [17]	10 [13.4]	8 [10.7]	6 [8.0]	5 [6.7]	4 [5.4]
[kW] [HP], int.*	8,5 [11.9]	15 [20.1]	15 [20.1]	14,5	12,5 [17]	10 [13.4]	8 [10.7]	6,5 [8.7]	6 [8.0]
Max. Pressure Drop, cont.	140 [2030]	175 [2540]	175 [2540]	175 [2540]	130 [1885]	110 [1600]	80 [1160]	70 [1020]	55 [800]
bar [PSI], int.*	175 [2540]	200 [2900]	200 [2900]	200 [2900]	175 [2540]	140 [2030]	110 [1600]	100 [1450]	80 [1160]
Max. Oil Flow, cont.	40 [10.5]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]
lpm [GPM], int.*	50 [13.2]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]
Max. Return Pressure without Drain Line, bar [PSI]	cont. 0 - 100 RPM	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]
	cont. 100-200 RPM	50 [730]	50 [730]	50 [730]	50 [730]	50 [730]	50 [730]	50 [730]	50 [730]
	cont. 200-500 RPM	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]
	int.* 0 - max RPM	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]

* Intermittent operation: the permissible values may occur for max. 10% of every minute.

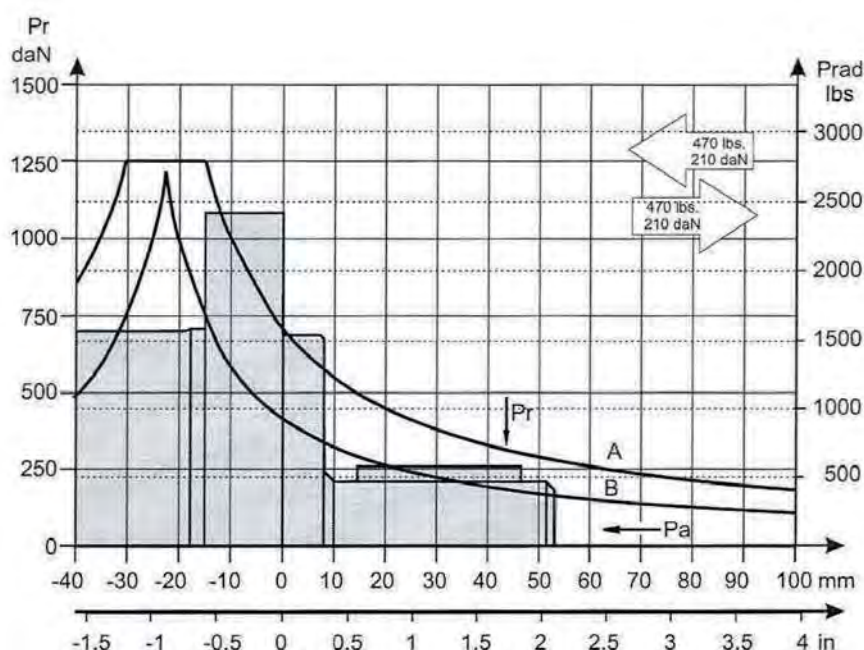
- Intermittent speed and intermittent pressure must not occur simultaneously.
- Recommended filtration is per ISO cleanliness code 20/16. A nominal filtration of 25 micron or better.
- Recommend using a premium quality, anti-wear type mineral based hydraulic oil HLP (DIN51524) or HM (ISO 6743/4). If using synthetic fluids consult the factory for alternative seal materials.
- Recommended minimum oil viscosity 13 mm²/s [70 SUS] at 50°C [122°F].
- Recommended maximum system operating temperature is 82°C [180°F].
- To assure optimum motor life fill with fluid prior to loading and run at moderate load and speed for 10-15 minutes.

MRB

Orbitmotor

Het belastingsdiagram is gegeven voor een gemiddelde levensduur van de afdichting van 1600 uur bij 200 toeren per minuut met een minerale olie die additieven bevat volgens ISO 281 (3.3) standaard.

De A curve geeft de maximale statische belasting weer toegestaan bij afdichtingen. De B curve geeft de maximale radiale piekbelasting bij een axiale belasting van 200 daN.



Bestelgegevens

1	2	3	4	5	6
MRB		/			

Pos. 1 - Displacement code

50	- 51,5 cm ³ /rev [3.14 in ³ /rev]
80	- 80,3 cm ³ /rev [4.90 in ³ /rev]
100	- 99,8 cm ³ /rev [6.09 in ³ /rev]
125	- 125,7 cm ³ /rev [7.67 in ³ /rev]
160	- 159,6 cm ³ /rev [9.74 in ³ /rev]
200	- 199,8 cm ³ /rev [12.19 in ³ /rev]
250	- 250,1 cm ³ /rev [15.26 in ³ /rev]
315	- 315,7 cm ³ /rev [19.26 in ³ /rev]
400	- 397,0 cm ³ /rev [24.40 in ³ /rev]

Pos. 2 - "A" Shaft Extensions*

C	- ø25 straight, Parallel key A8x7x30 DIN6885
---	--

Pos. 3 - "B" Shaft Extensions*

C	- ø25 straight, Parallel key A8x7x30 DIN6885
---	--

Pos. 4 - Special Features

omit	- none
LSV	- Low Speed Valve

Pos. 5 - Option (Paint)**

omit	- no Paint
P	- Painted
PC	- Corrosion Protected Paint

Pos. 6 - Design Series

omit	- Factory specified
------	---------------------

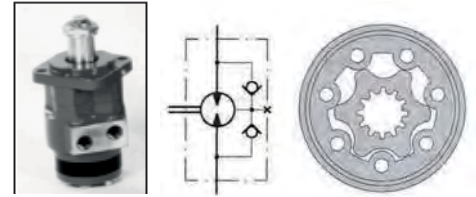
NOTES:

* For other shaft extensions please contact with "M+S Hydraulic".

** Color at customer's request.

The hydraulic motors are mangano-phosphatized as standard.

PL Orbitmotor



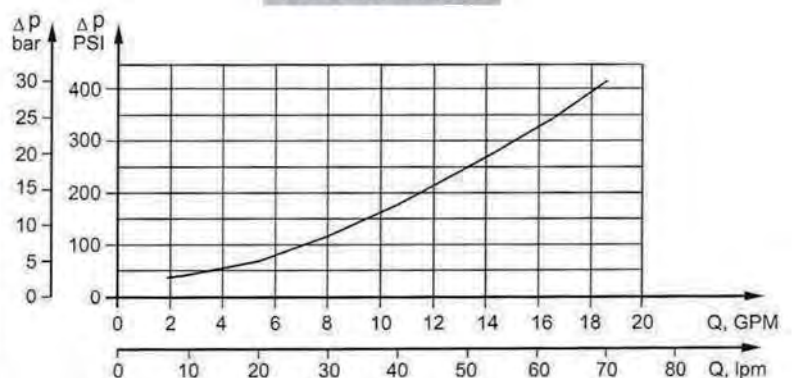
Algemene informatie

Max Displacement, cm ³ /rev [in ³ /rev]	396 [24.16]
Max. Speed, [RPM]	1515
Max. Torque, daNm [lb-in]	cont.: 50 [4415] int.: 59 [5222]
Max. Output, kW [HP]	17,5 [23.5]
Max. Pressure Drop, bar [PSI]	cont.: 140 [2030] int.: 175 [2540]
Max. Oil Flow, lpm [GPM]	75 [20]
Min. Speed, [RPM]	10
Pressure fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, °C [°F]	-40+140 [-40+284]
Optimal Viscosity range, mm ² /s [SUS]	20+75 [98+347]
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop bar [PSI]	Viscosity mm ² /s [SUS]	Oil flow in drain line lpm [GPM]
100 [1450]	20 [98]	2,5 [.660]
	35 [164]	1,8 [.476]
140 [2030]	20 [98]	3,5 [.925]
	35 [164]	2,8 [.740]

Pressure Losses



PL Orbitmotor

Technische informatie

Type	PL 50	PL 80	PL 100	PL 125	PL 160	PL 200	PL 250	PL 315	PL 400	
Displacement, in³/rev. [cm³/rev]	49,5 [3.02]	79,2 [4.83]	99 [6.04]	123,8 [7.55]	158,4 [9.66]	198 [12.1]	247,5 [15.1]	316,8 [19.3]	396 [24.16]	
Max. Speed, [RPM]	Cont.	1210	755	605	485	378	303	242	190	
	Int.*	1515	945	755	605	472	378	303	236	
Max. Torque in-lb [daNm]	Cont.	9,4 [832]	15,1 [1336]	19,3 [1708]	23,7 [2100]	31,3 [2770]	36,6 [3240]	47 [4160]	48,6 [4300]	50 [4425]
	Int.*	11,9 [1054]	19,5 [1725]	23,7 [2097]	29,8 [2637]	37,8 [3345]	45,6 [4035]	58,3 [5160]	56 [4956]	59 [5222]
	Peak**	14,0 [1240]	22,0 [1947]	27,0 [2390]	36,5 [3230]	42 [3717]	53 [4700]	67 [5930]	85 [7523]	85,4 [7560]
Max. Output HP [kW]	Cont.	9,9 [13.3]	9,9 [13.3]	9,9 [13.3]	9,9 [13.3]	11,7 [15.7]	10,3 [13.8]	9,8 [13.1]	7,6 [10.2]	6,6 [8.9]
	Int.*	12,5 [16.8]	12,5 [16.8]	12,5 [16.8]	12,5 [16.8]	12,5 [16.8]	15,5 [20.8]	17,5 [23.5]	8,2 [11]	9,2 [12.3]
Max. Pressure Drop PSI [bar]	Cont.	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	120 [1300]	95 [1015]
	Int.*	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	140 [2030]	115 [1665]
	Peak**	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	180 [2610]
Max. Oil Flow GPM [lpm]	Cont.	60 [16]	60 [16]	60 [16]	60 [16]	60 [16]	60 [16]	60 [16]	60 [16]	60 [16]
	Int.*	75 [20]	75 [20]	75 [20]	75 [20]	75 [20]	75 [20]	75 [20]	75 [20]	75 [20]
Max. Inlet Pressure PSI [bar]	Cont.	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]
	Int.*	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]
	Peak**	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]
Max. Return Pressure without Drain Line or Max. Pressure in Drain Line, PSI [bar]	Cont. 0-100 RPM	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]
	Cont. 100-300 RPM	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]
	Cont. 300-600 RPM	25 [365]	25 [365]	25 [365]	25 [365]	25 [365]	25 [365]	25 [365]	25 [365]	25 [365]
	Cont. >600 RPM	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]
Int.* 0-max. RPM	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	
Max. Return Pressure with Drain Line PSI [bar]	Cont.	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]
	Int.*	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]
	Peak**	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]
Max. Starting Pressure with Unloaded Shaft, PSI [bar]	10 [145]	10 [145]	10 [145]	9 [131]	8 [116]	7 [100]	6 [87]	5 [73]	5 [73]	
Min. Starting Torque in-lb [daNm]	7,7 [681]	13 [1150]	16,8 [1487]	21,0 [1860]	28,0 [2478]	32,2 [2850]	41,4 [3665]	43,0 [3805]	44,0 [3900]	
Min. Speed***, [RPM]	10	10	10	10	10	10	10	10	10	
Weight, lb [kg]	8,4 [18.5]	8,5 [18.7]	8,8 [19.4]	8,9 [19.6]	9,1 [20]	9,5 [20.9]	10,0 [22]	10,7 [23.6]	11,4 [25.1]	

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting: max. 1% per minuut.

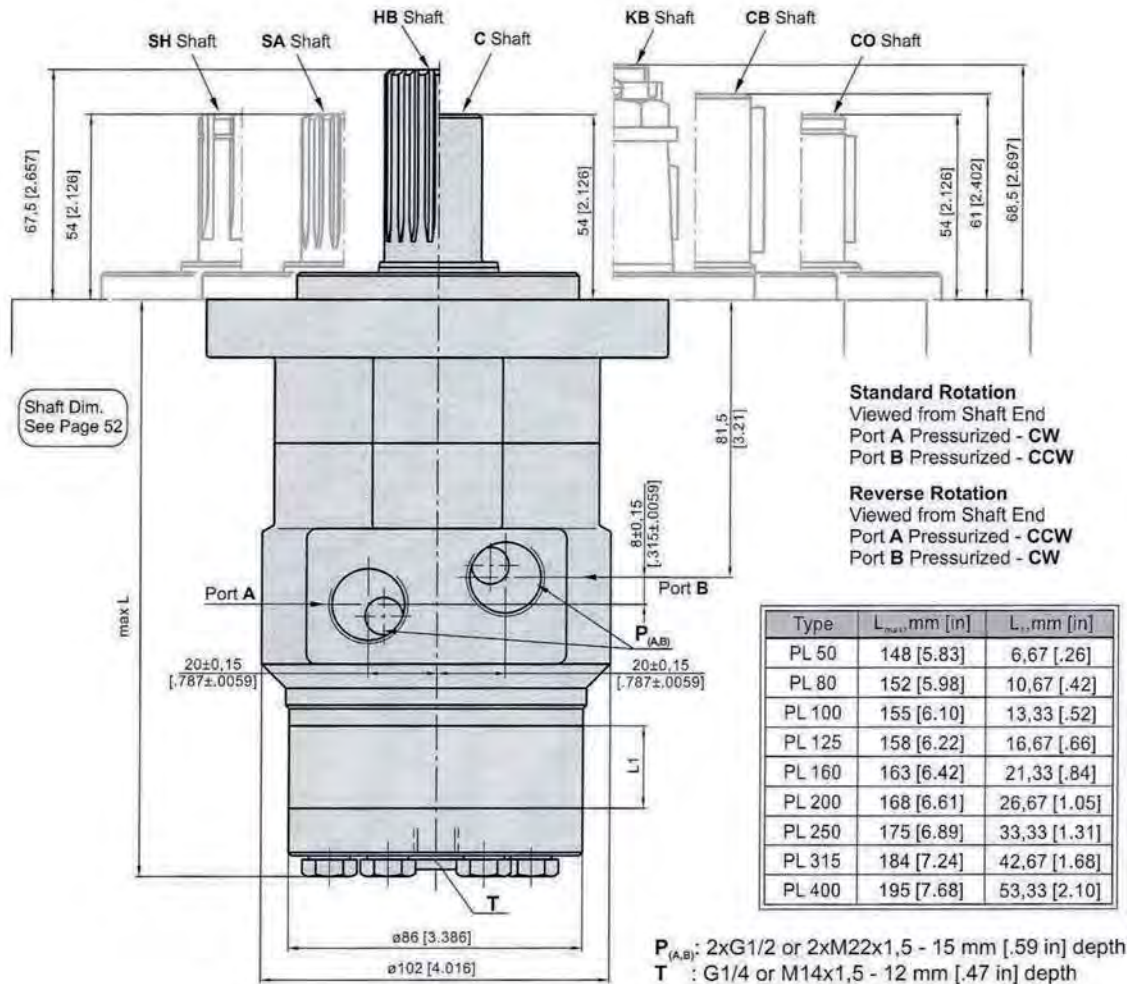
*** Voor toerentallen van 20ltr./min of minder neem contact op met onze medewerkers

1. Tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen.
2. Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering 25 micron of beter.
3. Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN 51524) of HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals synthetische olieën, dient er overlegt te worden.
4. Aanbevolen minerale viscositeit is 13mm² bij 50° C.
5. Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.

De levensduur van de motoren kan men verhogen als men de aandrijfias 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

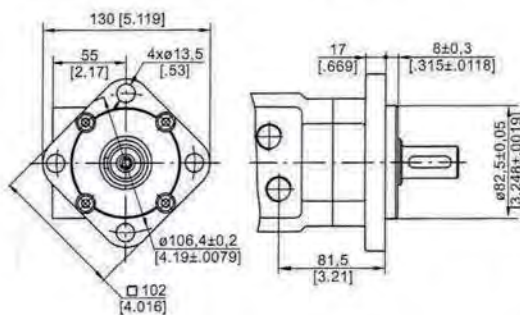
PL Orbitmotor

Afmetingen en uitvoeringen

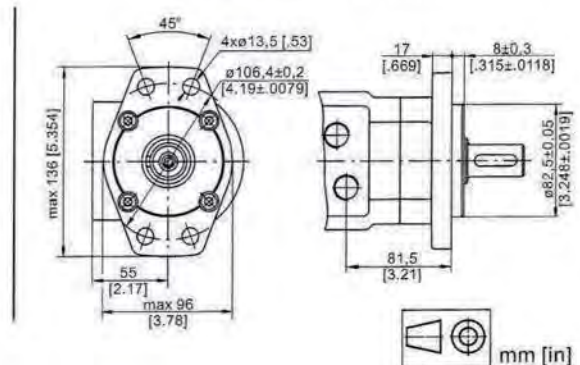


MOUNTING

Square Mount (4 Holes)



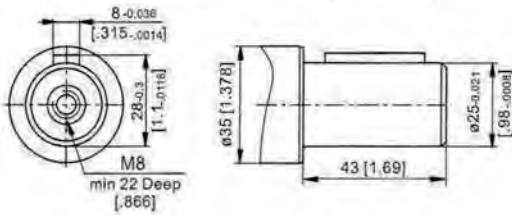
F Oval Mount (4 Holes)



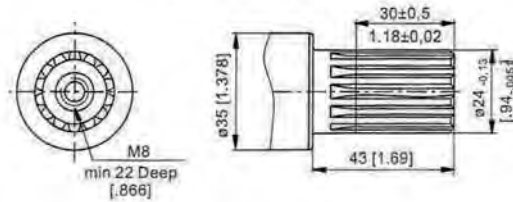
PL Orbitmotor

Mogelijke assen

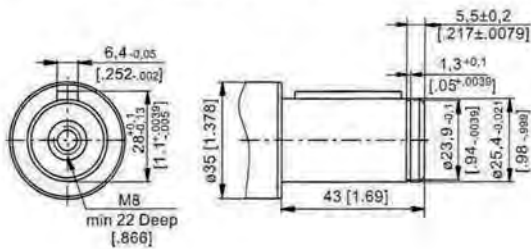
C - $\varnothing 25$ straight, Parallel key A8x7x30 DIN 6885
 Max. Torque 34 daNm [3010 lb-in]



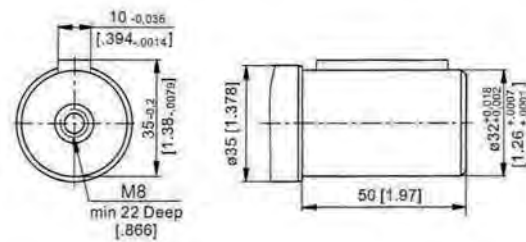
SA - splined B25x22 DIN 5482
 Max. Torque 40 daNm [3540 lb-in]



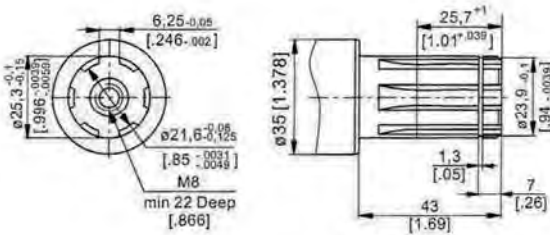
CO - $\varnothing 1"$ straight, Parallel key $\frac{1}{4} \times \frac{1}{4} \times \frac{1}{4}$ BS46
 Max. Torque 34 daNm [3010 lb-in]



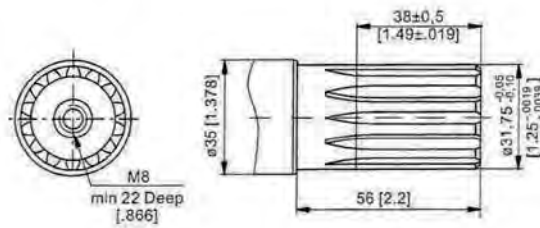
CB - $\varnothing 32$ straight, Parallel key A10x8x40 DIN 6885
 Max. Torque 77 daNm [6815 lb-in]



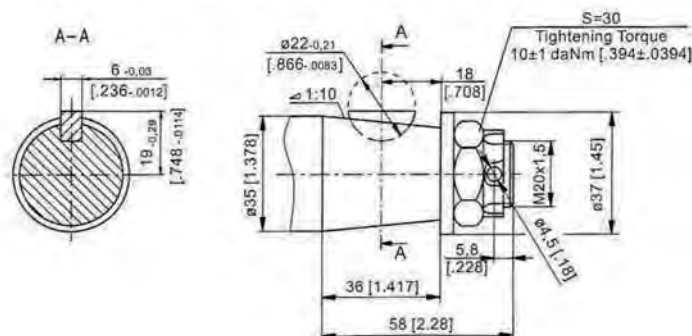
SH - splined, BS 2059 (SAE 6B)
 Max. Torque 40 daNm [3540 lb-in]



HB - $\varnothing 1\frac{1}{4}"$ splined 14T, DP12/24 ANSI B92.1-1976
 Max. Torque 95 daNm [8410 lb-in]



KB - tapered 1:10, Woodruff key 6x9 DIN6888
 Max. Torque 95 daNm [8410 lb-in]



PL Orbitmotor

Bestelcode

	1	2	3	4	5	6
PL						

Pos.1 - Mounting Flange

omit - Square mount, four holes

F - Oval mount, four holes

Pos.2 - Displacement code*

50	- 49,5 cm ³ /rev [3.02 in ³ /rev]
80	- 79,2 cm ³ /rev [4.83 in ³ /rev]
100	- 99,0 cm ³ /rev [6.04 in ³ /rev]
125	- 123,8 cm ³ /rev [7.55 in ³ /rev]
160	- 158,4 cm ³ /rev [9.66 in ³ /rev]
200	- 198,0 cm ³ /rev [12.10 in ³ /rev]
250	- 247,5 cm ³ /rev [15.10 in ³ /rev]
315	- 316,8 cm ³ /rev [19.30 in ³ /rev]
400	- 396,0 cm ³ /rev [24.16 in ³ /rev]

Pos.3 - Shaft Extensions**

B	- ø25 straight, Parallel key A8x7x30 DIN6885
CO	- ø1" straight, Parallel key 1/4"x1/4"x1 1/4" BS46
SH	- ø25,3 splined, BS 2059 (SAE 6B)
SA	- ø24 splined, B 25x22 DIN 5482
CB	- ø32 straight, Parallel key A10x8x40 DIN6885
HB	- ø1 1/4" splined 14T ANSI B92.1-1976
KB	- ø35 tapered 1:10, Woodruff key 6x9 DIN6888

Pos.4 - Ports

omit - BSPP (ISO 228)

M - Metric (ISO 262)

Pos.5 - Special Features (see page 98)

Pos.6 - Design Series

omit - Factory specified

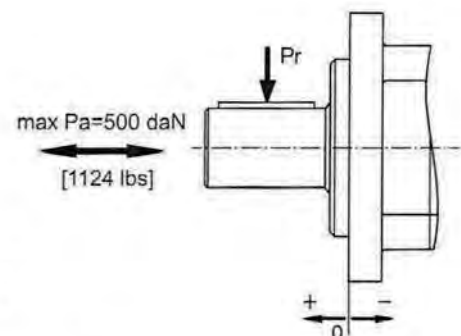
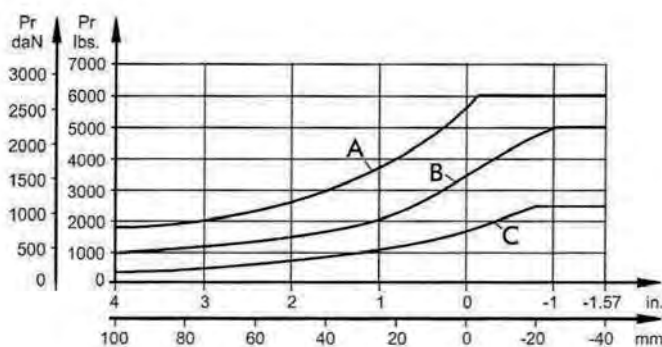
NOTES:

* For the Function Diagrams data please look at "M+S Hydraulic" Catalogue for MP motors, pages 19+23.

** The permissible output torque for shafts must not be exceeded!

The hydraulic motors are mangano-phosphatized as standard.

Toegestane as belasting PL en RL



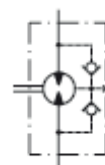
A - Max. static load affordable by the bearings.

B - Max. radial load at an axial load Pa=200 daN [450 lbs]

C - Max. radial load at an axial load Pa=500 daN [1124 lbs]

RL Orbitmotor

Deze motoren worden gebruikt bij Conveyors, aanvoer mechanisme voor de robot, metaalverwerkingsmachines etc.



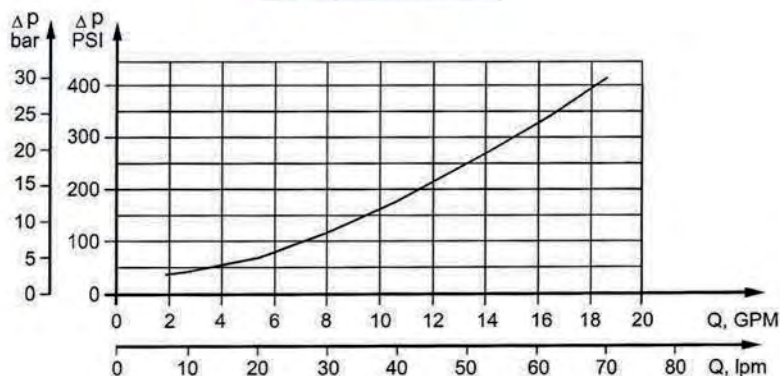
Algemene informatie

Max. Displacement, cm ³ /rev. [in ³ /rev.]	397 [24.4]
Max. Speed, [RPM]	970
Max. Torque, daNm [lb-in]	cont.: 61 [5400] int.: 69 [6100]
Max. Output, kW [HP]	16 [21.5]
Max. Pressure Drop, bar [PSI]	cont.:175 [2540] int.: 200 [2900]
Max. Oil Flow, lpm [GPM]	75 [20]
Min. Speed, [RPM]	10
Permissible Shaft Loads, daN [lbs]	P _a =500 [1124]
Pressure fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, °C [°F]	-40+140 [-40+284]
Optimal Viscosity range, mm ² /s [SUS]	20+75 [98+347]
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop bar [PSI]	Viscosity mm ² /s [SUS]	Oil flow in drain line lpm [GPM]
100 [1450]	20 [98]	2,5 [.660]
	35 [164]	1,8 [.476]
140 [2030]	20 [98]	3,5 [.925]
	35 [164]	2,8 [.740]

Pressure Losses



RL Orbitmotor

Specificaties

Type	RL 50	RL 80	RL 100	RL 125	RL 160	RL 200	RL 250	RL 315	RL 400	
Displacement, cm³/rev [in³/rev]	51,5 [3.14]	80,3 [4.90]	99,8 [6.09]	125,7 [7.67]	159,6 [9.74]	199,8 [12.19]	250,1 [15.26]	315,7 [19.26]	397 [24.4]	
Max. Speed, [RPM]	Cont.	775	750	600	475	375	300	240	190	
	Int.*	970	940	750	600	470	375	300	240	
Max. Torque, daNm [lb-in]	Cont.	10,1 [900]	20 [1770]	24 [2125]	30 [2655]	39 [3450]	45 [4000]	54 [4780]	55 [4870]	61 [5400]
	Int.*	13 [1150]	22,0 [1947]	28 [2480]	34 [3010]	43 [3805]	50 [4425]	61 [5400]	63 [5580]	69 [6100]
	Peak**	17 [1505]	27,0 [2390]	32 [2832]	37 [3275]	46 [4070]	56 [4960]	71 [6280]	83 [7350]	87 [7700]
Max. Output kW [HP]	Cont.	7 [9.5]	12,5 [17]	13 [17.4]	12,5 [16.8]	11,5 [15.4]	11 [14.8]	10 [13.4]	9 [12]	7,8 [10.5]
	Int.*	8,5 [11.9]	15 [20.1]	15 [20.1]	16 [21.5]	14 [18.8]	13 [17.4]	12 [16.1]	11 [14.8]	10,6 [14.2]
Max. Pressure Drop bar [PSI]	Cont.	140 [2030]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	135 [1980]	115 [1670]
	Int.*	175 [2540]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	160 [2320]	140 [2030]
	Peak**	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	210 [3045]	175 [2540]
Max. Oil Flow lpm [GPM]	Cont.	40 [11]	60 [16]	60 [16]	60 [16]	60 [16]	60 [16]	60 [16]	60 [16]	60 [16]
	Int.*	50 [13]	75 [20]	75 [20]	75 [20]	75 [20]	75 [20]	75 [20]	75 [20]	75 [20]
Max. Inlet Pressure bar [PSI]	Cont.	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]
	Int.*	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]
	Peak**	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]
Max. Return Pressure without Drain Line or Max. Pressure in Drain Line, bar [PSI]	Cont. 0-100 RPM	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]
	Cont. 100-300 RPM	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]
	Cont. 300-600 RPM	25 [365]	25 [365]	25 [365]	25 [365]	25 [365]	25 [365]	25 [365]	25 [365]	25 [365]
	Cont. >600 RPM	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]
Int.* 0-max. RPM	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	100 [1450]	
Max. Return Pressure with Drain Line bar [PSI]	Cont.	140 [2030]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]
	Int.*	175 [2540]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]
	Peak**	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]
Max. Starting Pressure with Unloaded Shaft, bar [PSI]	10 [145]	10 [145]	10 [145]	9 [130]	102 [7]	5 [73]	4 [58]	3 [44]	3 [44]	
Min. Starting Torque daNm [lb-in]	8 [710]	15 [1330]	20 [1770]	25 [2215]	2835 [32]	37 [3275]	45 [4000]	45 [4000]	49 [4340]	
Min. Speed***, [RPM]	10	10	10	10	10	10	10	10	10	
Weight, kg [lb]	8,5 [18.7]	8,6 [19]	8,9 [19.6]	9,0 [19.8]	9,2 [20.3]	9,6 [21.2]	10,1 [22.3]	10,8 [23.8]	11,5 [25.4]	

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting: max. 1% per minuut.

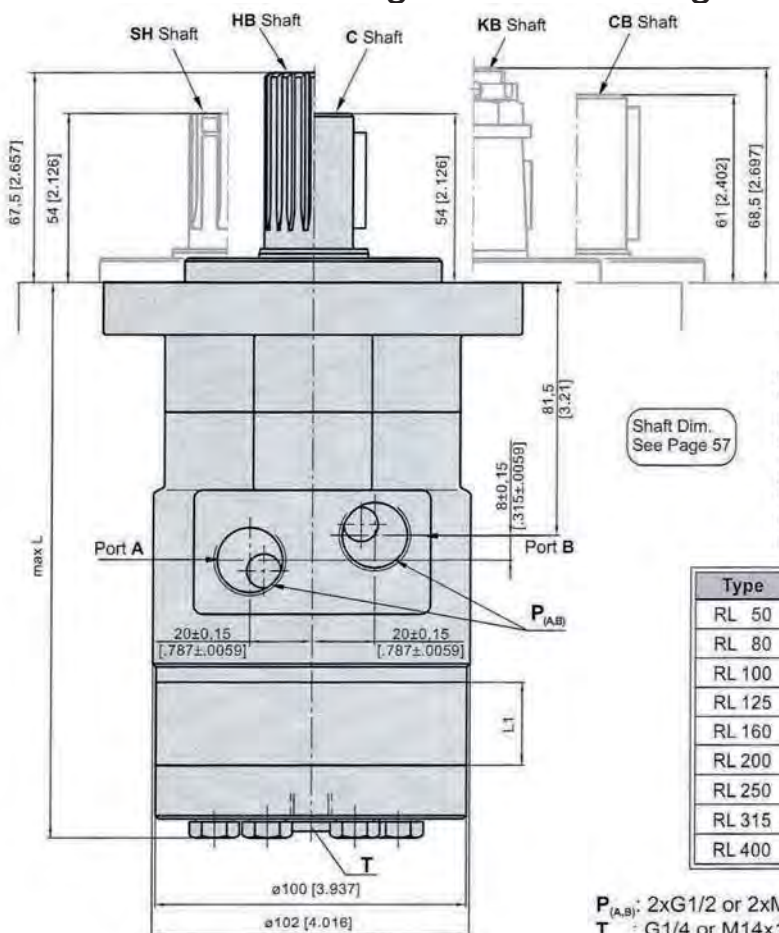
*** Voor toerentallen van 20ltr./min of minder neem contact op met onze medewerkers

6. Tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen.
7. Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering 25 micron of beter.
8. Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN 51524) of HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals synthetische olieën, dient er overlegt te worden.
9. Aanbevolen minerale viscositeit is 13mm² bij 50° C.
10. Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.

De levensduur van de motoren kan men verhogen als men de aandrijf-as 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

RL Orbitmotor

Afmetingen en uitvoeringen



Shaft Dim.
See Page 57

Standard Rotation
Viewed from Shaft End
Port A Pressurized - CW
Port B Pressurized - CCW

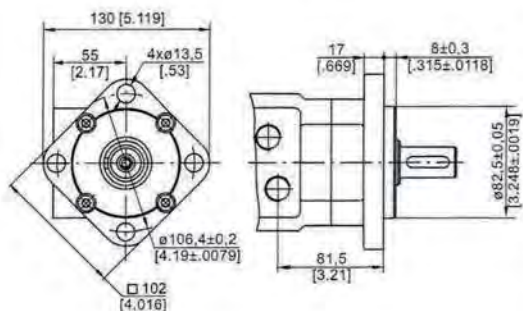
Reverse Rotation
Viewed from Shaft End
Port A Pressurized - CCW
Port B Pressurized - CW

Type	L, mm [in]	L ₁ , mm [in]
RL 50	152 [5.98]	9,0 [3.5]
RL 80	157 [6.18]	14,0 [5.5]
RL 100	160 [6.30]	17,4 [6.9]
RL 125	165 [6.50]	21,8 [8.6]
RL 160	171 [6.73]	27,8 [1.09]
RL 200	178 [7.01]	34,8 [1.37]
RL 250	187 [7.36]	43,5 [1.71]
RL 315	198 [7.80]	54,8 [2.16]
RL 400	212 [8.35]	69,4 [2.73]

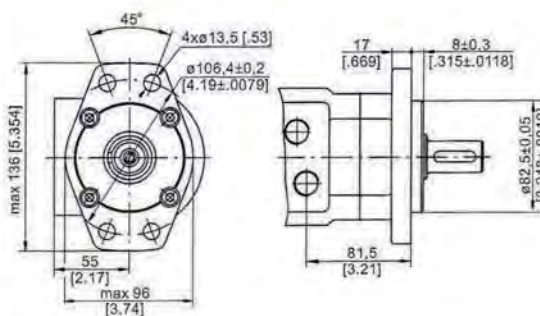
P_(A,B): 2xG1/2 or 2xM22x1,5 - 15 mm [.59 in] depth
 T : G1/4 or M14x1,5 - 12 mm [.47 in] depth

MOUNTING

Square Mount (4 Holes)



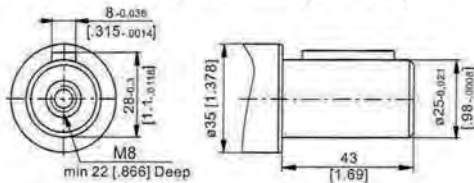
F Oval Mount (4 Holes)



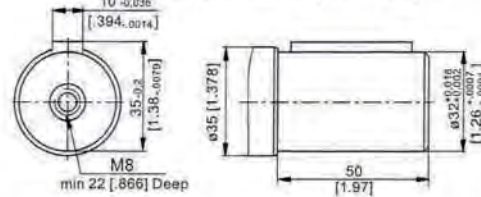
RL Orbitmotor

Mogelijke assen

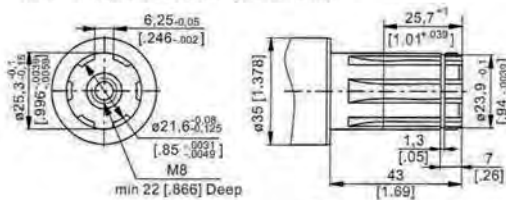
C - $\varnothing 25$ straight, Parallel key A8x7x30 DIN 6885
 Max. Torque 34 daNm [3010 lb-in]



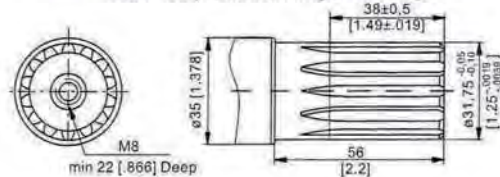
CB - $\varnothing 32$ straight, Parallel key A10x8x40 DIN 6885
 Max. Torque 77 daNm [6815 lb-in]



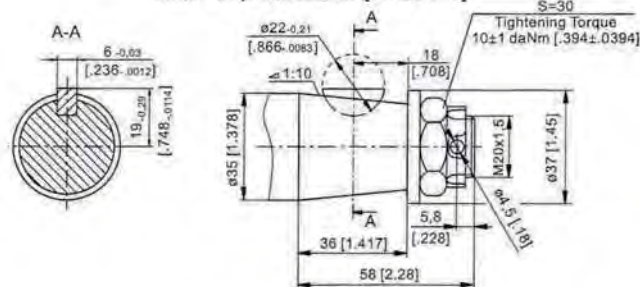
SH - splined, BS 2059 (SAE 6B)
 Max. Torque 40 daNm [3540 lb-in]



HB - $\varnothing 1\frac{1}{4}$ " splined 14T, DP12/24 ANSI B92.1-1976
 Max. Torque 95 daNm [8410 lb-in]



KB - tapered 1:10, Woodruff key 6x9 DIN6888
 Max. Torque 95 daNm [8410 lb-in]



ORDER CODE

1	2	3	4	5	6
RL					

Pos.1 - Mounting Flange

omit - Square mount, four holes

F - Oval mount, four holes

Pos.2 - Displacement code*

50	- 51,5 cm ³ /rev [3.14 in ³ /rev]
80	- 80,3 cm ³ /rev [4.90 in ³ /rev]
100	- 99,8 cm ³ /rev [6.09 in ³ /rev]
125	- 125,7 cm ³ /rev [7.67 in ³ /rev]
160	- 159,6 cm ³ /rev [9.74 in ³ /rev]
200	- 199,8 cm ³ /rev [12.19 in ³ /rev]
250	- 250,1 cm ³ /rev [15.26 in ³ /rev]
315	- 315,7 cm ³ /rev [19.26 in ³ /rev]
400	- 397,0 cm ³ /rev [24.40 in ³ /rev]

Pos.3 - Shaft Extensions**

C	- $\varnothing 25$ straight, Parallel key A8x7x30 DIN6885
CB	- $\varnothing 32$ straight, Parallel key A10x8x40 DIN6885
SH	- $\varnothing 25,3$ splined, BS 2059 (SAE 6B)
HB	- $\varnothing 1\frac{1}{4}$ " splined 14T ANSI B92.1-1976
KB	- $\varnothing 35$ tapered 1:10, Woodruff key 6x9 DIN6888

Pos.4 - Ports

omit	- BSPP (ISO 228)
M	- Metric (ISO 262)

Pos.5 - Special Features (see page 98)

Pos.6 - Design Series

omit - Factory specified

NOTES:

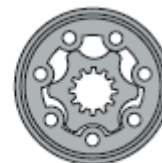
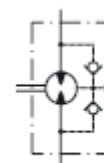
* For the Function Diagrams data please look at "M+S Hydraulic" Catalogue for MR motors, pages 37+41.

** The permissible output torque for shafts must not be exceeded!

The hydraulic motors are manganophosphatized as standard.

PK Orbitmotor

De hydraulische motor type PK wordt toegepast voor Conveyors, metaalbewerking machines etc.



De motor heeft de volgende mogelijkheden, antifrictie conische lagering, flens, as recht, splines en taps, poorten metrisch en bssp.

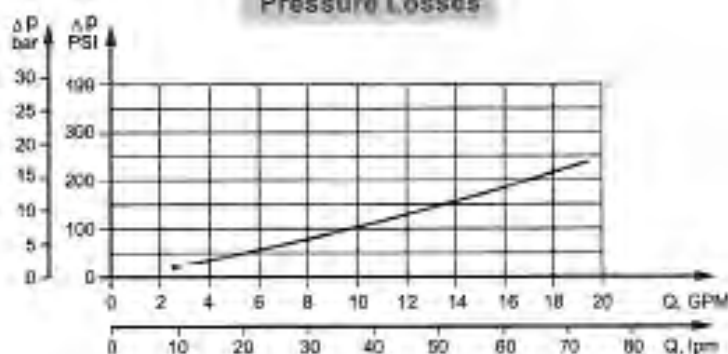
Algemene informatie

Max. Displacement, cm ³ /rev [in ³ /rev]	396 [24.16]
Max. Speed, [RPM]	1010
Max. Torque, daNm [lb-in]	cont.: 40,8 [3611] int.: 55,6 [4921]
Max. Output, kW [HP]	6,6 [11.5]
Max. Pressure Drop, bar [PSI]	cont.: 105 [1520] int.: 140 [2030]
Max. Oil Flow, lpm [GPM]	50 [13.2]
Min. Speed, [RPM]	10
Pressure fluid	Mineral based- HLP(DIN 51521) or HM(ISO 6713/4)
Temperature range, °C [°F]	-40+140 [-40+284]
Optimal Viscosity range, mm ² /s [SUS]	20+75 [98+347]
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop bar [PSI]	Viscosity mm ² /s [SUS]	Oil flow in drain line lpm [GPM]
100 [1450]	20 [98]	2,5 [.660]
	35 [164]	1,8 [.476]
140 [2030]	20 [98]	3,5 [.925]
	35 [164]	2,8 [.740]

Pressure Losses



PK Orbitmotor

Technische informatie

Type	PK 50	PK 80	PK 100	PK 125	PK 160	PK 200	PK 250	PK 315	PK 400	
Displacement, cm³/rev [in³/rev]	49,5[3.02]	79,2 [4.83]	99 [6.04]	123,8 [7.55]	158,4 [966]	198 [12.1]	247,5 [15.1]	316,8 [19.3]	396 [24.16]	
Max. Speed, [RPM]	Cont.	808	505	404	323	252	202	160	126	
	Int.*	1010	630	505	403	315	252	202	157	
Max. Torque daNm [lb-in]	Cont.	7 [619]	10,8 [956]	14,4 [1274]	17 [1504]	22 [1974]	27,5 [2434]	30,1 [2664]	31,7 [2805]	40,8 [3611]
	Int.*	9,2 [814]	14,6 [1292]	18,3 [1619]	22,9 [2026]	29,3 [2593]	36,6 [3239]	37,6 [3328]	44 [3894]	55,6 [4921]
	Peak**	13,6 [1203]	21,4 [1894]	26,1 [2310]	32,6 [2885]	41,8 [3700]	52,2 [4620]	51,5 [4558]	64,3 [5691]	80 [7080]
Max. Output kW [HP]	Cont.	5,2 [7.0]	5,2 [7.0]	5,2 [7.0]	5,2 [7.0]	5,2 [7.0]	5,2 [7.0]	4,6 [6.2]	3,4 [4.6]	3,4 [4.6]
	Int.*	8,6 [11.5]	8,6 [11.5]	8,6 [11.5]	8,6 [11.5]	8,6 [11.5]	8,6 [11.5]	7 [9.3]	5,8 [7.8]	5,8 [7.8]
Max. Pressure Drop bar [PSI]	Cont.	105 [1520]	105 [1520]	105 [1520]	105 [1520]	105 [1520]	105 [1520]	90 [1305]	70 [1015]	70 [1015]
	Int.*	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	115 [1665]	105 [1520]	105 [1520]
	Peak**	215 [3120]	215 [3120]	215 [3120]	215 [3120]	215 [3120]	215 [3120]	170 [2470]	170 [2470]	170 [2470]
Max. Oil Flow lpm [GPM]	Cont.	40 [10.5]	40 [10.5]	40 [10.5]	40 [10.5]	40 [10.5]	40 [10.5]	40 [10.5]	40 [10.5]	40 [10.5]
	Int.*	50 [13.2]	50 [13.2]	50 [13.2]	50 [13.2]	50 [13.2]	50 [13.2]	50 [13.2]	50 [13.2]	50 [13.2]
Max. Inlet Pressure bar [PSI]	Cont.	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]
	Int.*	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]
	Peak**	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]
Max. Return Pressure with Drain Line or Max. Pressure in Drain Line, bar [PSI]	Cont. 0-100 RPM	150 [2180]	150 [2180]	150 [2180]	150 [2180]	150 [2180]	150 [2180]	150 [2180]	150 [2180]	150 [2180]
	Cont. 100-300 RPM	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]
	Cont. 300-600 RPM	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]
	Cont. >600 RPM	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]
	Int.* 0-max. RPM	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]
Max. Starting Pressure with Unloaded Shaft, bar [PSI]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	
Min. Starting Torque, daNm [lb-in]	5,8 [513]	9,1 [805]	12,2 [1079]	14,5 [1283]	19,5 [1725]	24,8 [2195]	27,5 [2433]	29 [2567]	35,9 [3278]	
Min. Speed***, [RPM]	10	10	10	10	10	10	10	10	10	
Weight, kg [lb]	5 [11.1]	5,1 [11.2]	5,3 [11.7]	5,4 [11.9]	5,6 [12.3]	5,8 [12.8]	6 [13.2]	6,3 [13.9]	6,8 [15]	

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting: max. 1% per minuut.

*** Voor toerentallen van 20ltr./min of minder neem contact op met onze medewerkers

11. Tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen.

12. Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering 25 micron of beter.

13. Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN 51524) of HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals synthetische olieën, dient er overlegt te worden.

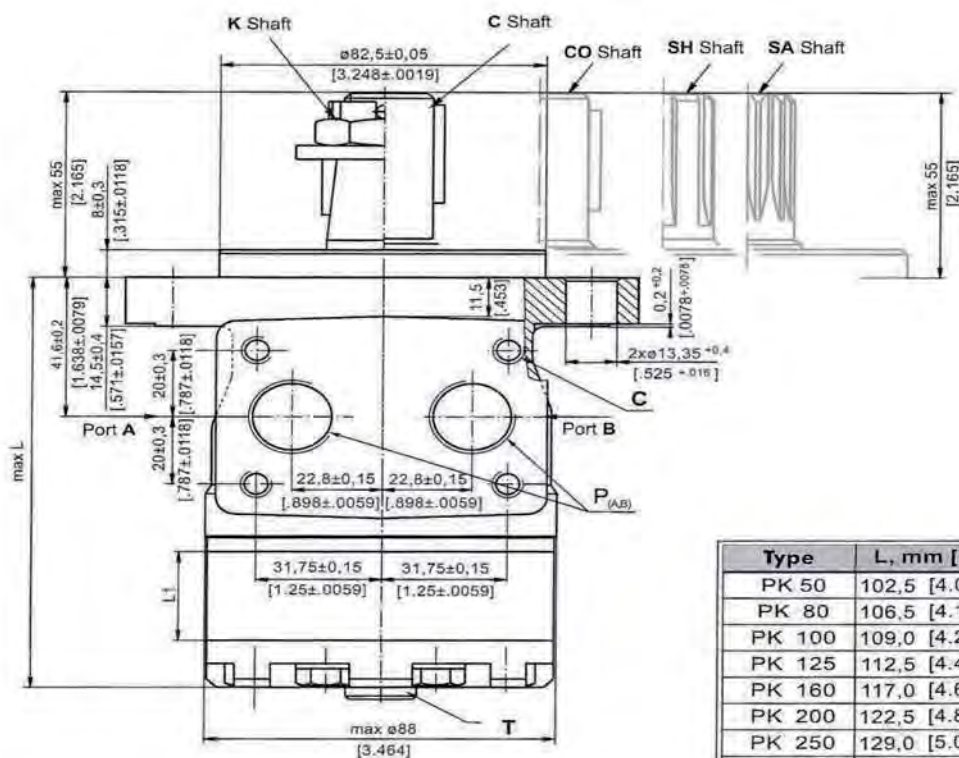
14. Aanbevolen minerale viscositeit is 13mm² bij 50° C.

15. Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.

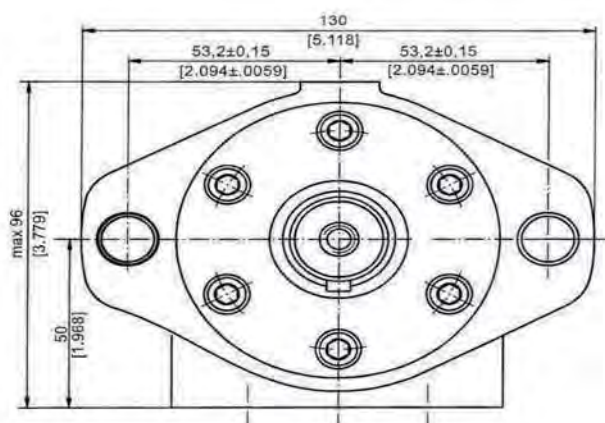
De levensduur van de motoren kan men verhogen als men de aandrijfas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

PK Orbitmotor

Afmetingen en uitvoeringen



Type	L, mm [in]	L ₁ , mm [in]
PK 50	102,5 [4.04]	6,67 [.26]
PK 80	106,5 [4.19]	10,67 [.42]
PK 100	109,0 [4.29]	13,33 [.52]
PK 125	112,5 [4.43]	16,67 [.66]
PK 160	117,0 [4.61]	21,33 [.84]
PK 200	122,5 [4.82]	26,67 [1.05]
PK 250	129,0 [5.08]	33,33 [1.31]
PK 315	138,5 [5.45]	42,67 [1.68]
PK 400	149,0 [5.87]	53,33 [2.10]



C : 4xM8 - 13 mm [.51 in] depth
P_(A,B): 2xG1/2 or 2xM22x1,5 - 15 mm [.59 in] depth
T : G1/4 or M14x1,5 - 8,5 mm [.33 in] depth (plugged)



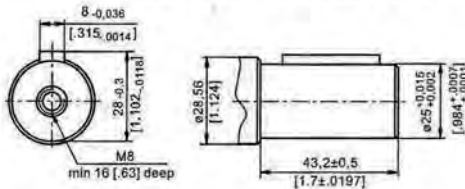
Standard Rotation
Viewed from Shaft End
Port A Pressurized - CW
Port B Pressurized - CCW

Reverse Rotation
Viewed from Shaft End
Port A Pressurized - CCW
Port B Pressurized - CW

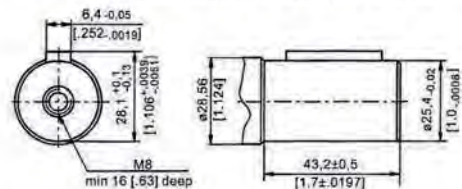
PK Orbitmotor

Mogelijke assen

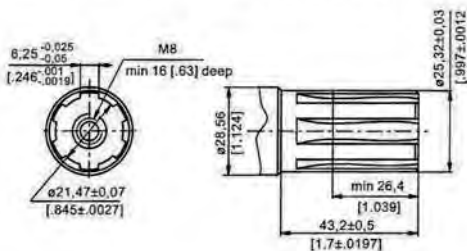
C - $\varnothing 25$ straight, Parallel key A8x7x32 DIN 6885
 Max. Torque 34 daNm [3010 lb-in]



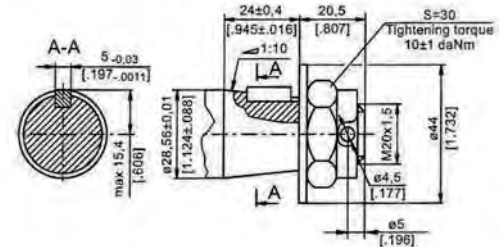
CO - $\varnothing 1"$ straight, Parallel key $\frac{1}{4}" \times \frac{1}{4}" \times 1\frac{1}{4}"$ BS46
 Max. Torque 34 daNm [3010 lb-in]



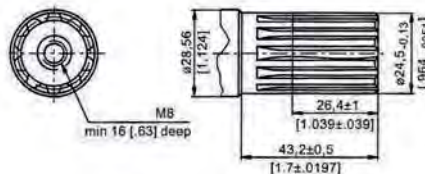
SH - splined, BS 2059 (SAE 6B)
 Max. Torque 40 daNm [3540 lb-in]



K - tapered 1:10, Parallel key B5x5x14 DIN 6885
 Max. Torque 40 daNm [3540 lb-in]



SA - splined, B25x22h9 DIN 5482
 Max. Torque 40 daNm [3540 lb-in]



ORDER CODE

1	2	3	4	5
PK				

Pos. 1 - Displacement code

50	- 49,5 cm ³ /rev [3.02 in ³ /rev]
80	- 79,2 cm ³ /rev [4.83 in ³ /rev]
100	- 99,0 cm ³ /rev [6.04 in ³ /rev]
125	- 123,8 cm ³ /rev [7.55 in ³ /rev]
160	- 158,4 cm ³ /rev [9.66 in ³ /rev]
200	- 198,0 cm ³ /rev [12.10 in ³ /rev]
250	- 247,5 cm ³ /rev [15.10 in ³ /rev]
315	- 316,8 cm ³ /rev [19.30 in ³ /rev]
400	- 396,0 cm ³ /rev [24.16 in ³ /rev]

Pos. 2 - Shaft Extensions*

C	- $\varnothing 25$ straight, Parallel key A8x7x32 DIN6885
CO	- $\varnothing 25,4$ straight, Parallel key $\frac{1}{4}" \times \frac{1}{4}" \times 1\frac{1}{4}"$ BS46
SH	- $\varnothing 25,32$ splined BS 2059 (SAE 6B)
K	- $\varnothing 28,56$ tapered 1:10, Parallel key, B5x5x14 DIN6885
SA	- $\varnothing 24,5$ splined B25x22h9 DIN 5482

Pos. 3 - Ports

omit	- BSPP (ISO 228)
M	- Metric (ISO 262)

Pos. 4 - Special Features (see page 98)

Pos. 5 - Design Series

omit	- Factory specified
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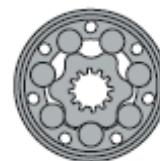
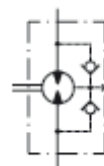
NOTE:

* The permissible output torque for shafts must be not exceeded!

The hydraulic motors are mangano-phosphatized as standard.

RK Orbitmotor

De hydraulische motor type RK wordt toegepast voor Conveyors, metaalbewerking machines etc.



De motor heeft de volgende mogelijkheden, antifrictie conische lagering, flens, as recht, splines en taps, poorten metrisch en bsp.

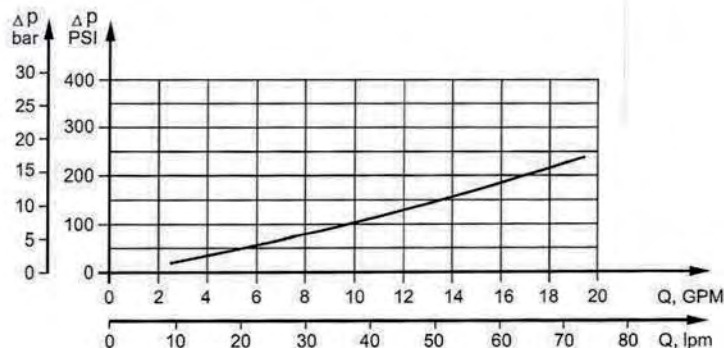
Algemene informatie

Max. Displacement, cm ³ /rev [in ³ /rev]	397 [24.4]
Max. Speed, [RPM]	970
Max. Torque, daNm [lb-in]	cont.: 40 [3540] int.: 50 [4425]
Max. Output, kW [HP]	12,8 [17.2]
Max. Pressure Drop, bar [PSI]	cont.: 140 [2030] int.: 175 [2540]
Max. Oil Flow, lpm [GPM]	75 [18.5]
Min. Speed, [RPM]	10
Pressure fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, °C [°F]	-40+140 [-40+284]
Optimal Viscosity range, mm ² /s [SUS]	20+75 [98+347]
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop bar [PSI]	Viscosity mm ² /s [SUS]	Oil flow in drain line lpm [GPM]
100 [1450]	20 [98]	2,5 [.660]
	35 [164]	1,8 [.476]
140 [2030]	20 [98]	3,5 [.925]
	35 [164]	2,8 [.740]

Pressure Losses



RK Orbitmotor

Technische informatie

Type	RK 50	RK 80	RK 100	RK 125	RK 160	RK 200	RK 250	RK 315	RK 400	
Displacement, cm³/rev [in³/rev]	51,5 [3.14]	80,3 [4.9]	99,8 [6.09]	125,5[7.67]	159,6[9.74]	199,8[12.19]	250,1[15.26]	315,7[19.26]	397 [24.4]	
Max. Speed, [RPM]	Cont.	775	750	600	475	375	300	240	150	
	Int.*	970	940	750	600	470	375	300	185	
Max. Torque daNm [lb-in]	Cont.	10 [850]	15,7 [1390]	19,8 [1750]	25 [2210]	32 [2830]	34 [3010]	40 [3540]	40 [3540]	40 [3540]
	Int.*	13 [1150]	19,5 [1725]	24 [2125]	30 [2655]	39 [3450]	42 [3717]	47 [4160]	50 [4425]	50 [4425]
	Peak**	17 [1505]	27 [2390]	32 [2830]	37 [3275]	46 [4070]	56 [4960]	64 [5665]	65 [5755]	65 [5755]
Max. Output kW [HP]	Cont.	9 [12.1]	10,4 [13.9]	10,8 [14.4]	10,8 [14.4]	10,4 [13.9]	8,8 [11.8]	8,1 [10.9]	7,4 [9.9]	6,2 [8.3]
	Int.*	10,4 [13.9]	12,6 [16.9]	12,8 [17.2]	12,5 [16.8]	11,5 [15.4]	10,2 [13.7]	9,4 [12.6]	7,8 [10.5]	7,1 [9.5]
Max. Pressure Drop bar [PSI]	Cont.	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	125 [1810]	110 [1600]	[1300]	75 [1090]
	Int.*	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	155 [2250]	140 [2030]	125 [1810]	90 [1305]
	Peak**	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	200 [2900]	150 [2175]	120 [1740]
Max. Oil Flow lpm [GPM]	Cont.	40 [10.5]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]
	Int.*	50 [13.2]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]
Max. Inlet Pressure bar [PSI]	Cont.	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]
	Int.*	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]
	Peak**	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]
Max. Return Pressure with Drain Line or Max. Pressure in Drain Line, bar [PSI]	Cont. 0-100 RPM	150 [2180]	150 [2180]	150 [2180]	150 [2180]	150 [2180]	150 [2180]	150 [2180]	150 [2180]	150 [2180]
	Cont. 100-300 RPM	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]
	Cont. 300-600 RPM	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]	50 [725]
	Cont. >600 RPM	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]
	Int.* 0-max. RPM	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]	15 [220]
Max. Starting Pressure with Unloaded Shaft, bar [PSI]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	
Min. Starting Torque, daNm [lb-in]	8 [710]	12 [1060]	16 [1420]	20 [1770]	25 [2215]	29 [2570]	28 [2480]	32 [2832]	35 [3100]	
Min. Speed***, [RPM]	10	10	10	10	10	10	10	10	10	
Weight, kg [lb]	6,2 [13.7]	6,3 [13.9]	6,6 [14.6]	6,7 [14.8]	6,9 [15.2]	7,4 [16.3]	7,8 [17.2]	8,5 [18.7]	9,3 [20.5]	

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting: max. 1% per minuut.

*** Voor toerentallen van 20l./min of minder neem contact op met onze medewerkers

16. Tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen.

17. Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering 25 micron of beter.

18. Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN 51524) of HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals synthetische olieën, dient er overlegt te worden.

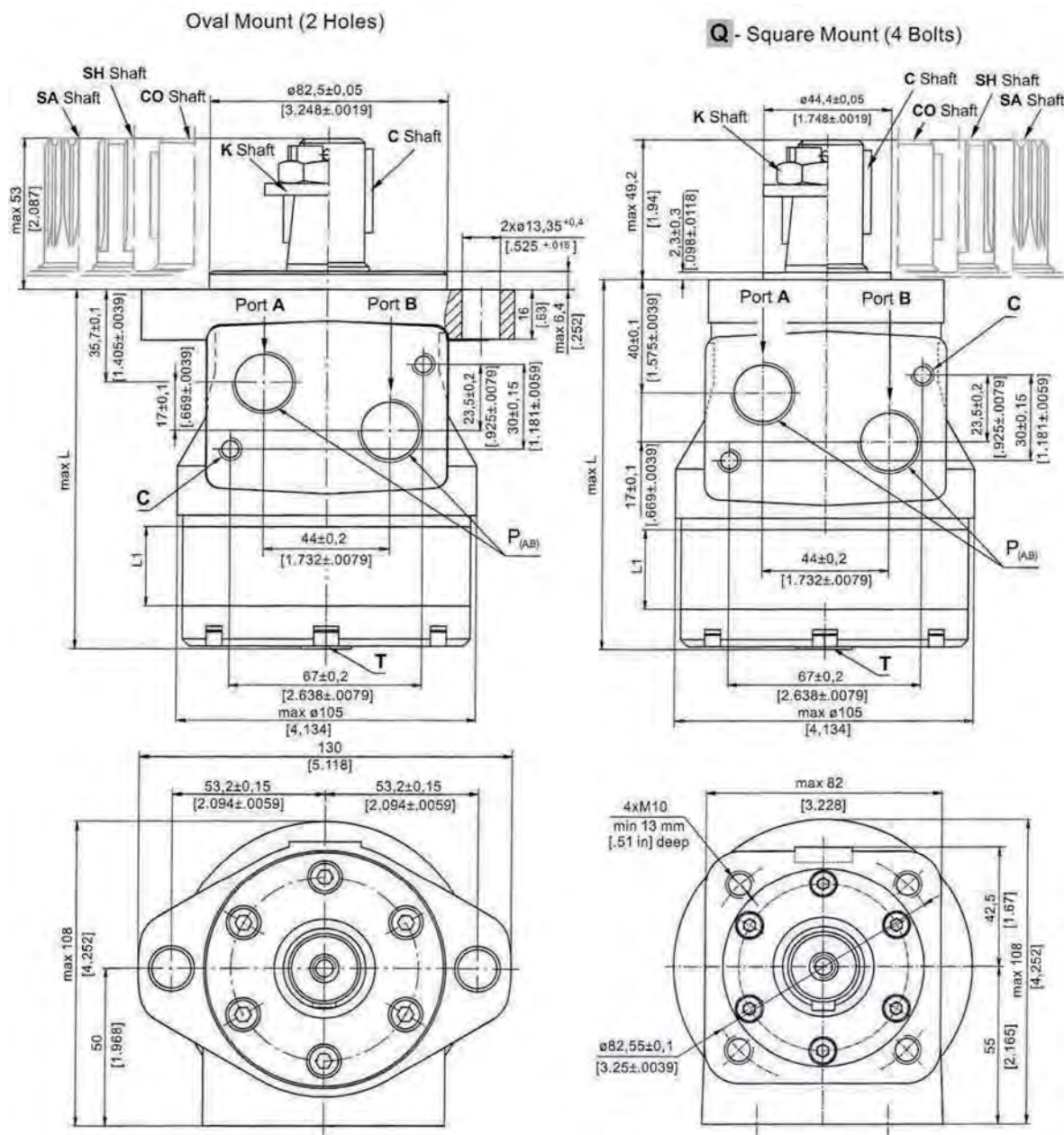
19. Aanbevolen minerale viscositeit is 13mm² bij 50° C.

20. Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.

De levensduur van de motoren kan men verhogen als men de aandrijfjas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

RK Orbitmotor

Afmetingen en uitvoeringen



- C** : 4xM8 - 13 mm [.51 in] depth
- P_(A,B)**: 2xG1/2 or 2xM22x1,5 - 15 mm [.59 in] depth
- T** : G1/4 or M14x1,5 - 8,5 mm [.33 in] depth (plugged)

Standard Rotation
Viewed from Shaft End
Port A Pressurized - **CW**
Port B Pressurized - **CCW**

Reverse Rotation
Viewed from Shaft End
Port A Pressurized - **CCW**
Port B Pressurized - **CW**

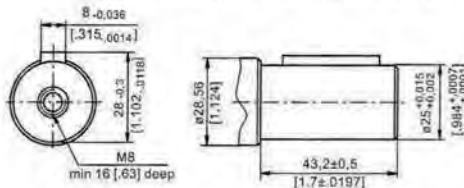


Type	L, mm [in]	Type	L, mm [in]	L ₁ , mm [in]
RK 50	109,5 [4.31]	RKQ 50	113,8 [4.48]	9,0 [.35]
RK 80	114,5 [4.51]	RKQ 80	118,8 [4.68]	14,0 [.55]
RK 100	118,0 [4.65]	RKQ 100	122,3 [4.82]	17,4 [.69]
RK 125	122,5 [4.82]	RKQ 125	126,8 [4.99]	21,8 [.86]
RK 160	128,5 [5.06]	RKQ 160	132,8 [5.23]	27,8 [1.09]
RK 200	135,5 [5.33]	RKQ 200	139,8 [5.50]	34,8 [1.37]
RK 250	144,0 [5.67]	RKQ 250	148,3 [5.84]	43,5 [1.71]
RK 315	155,5 [6.12]	RKQ 315	159,8 [6.29]	54,8 [2.16]
RK 400	170,0 [6.69]	RKQ 400	174,3 [6.86]	69,4 [2.73]

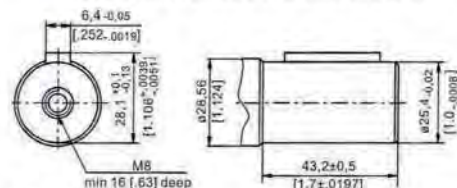
RK Orbitmotor

Mogelijke assen

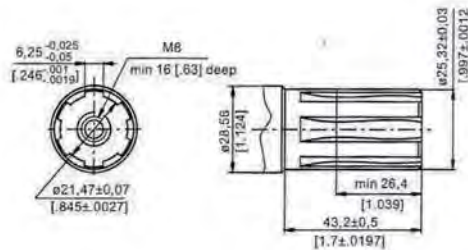
C - $\varnothing 25$ straight, Parallel key A8x7x32 DIN 6885
Max. Torque 34 daNm [3010 lb-in]



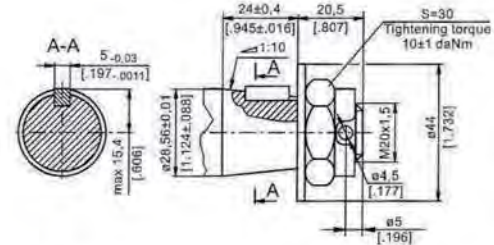
CO - $\varnothing 1"$ straight, Parallel key $\frac{1}{4} \times \frac{1}{4} \times \frac{1}{4}"$ BS46
Max. Torque 34 daNm [3010 lb-in]



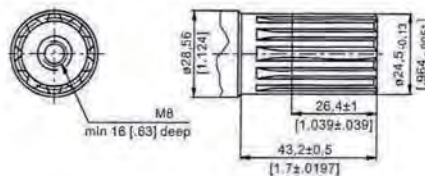
SH - splined, BS 2059 (SAE 6B)
Max. Torque 40 daNm [3540 lb-in]



K - tapered 1:10, Parallel key B5x5x14 DIN 6885
Max. Torque 40 daNm [3540 lb-in]



SA - splined, B25x22h9 DIN 5482
Max. Torque 40 daNm [3540 lb-in]



ORDER CODE

1	2	3	4	5	6
R	K				

Pos.1 - Mounting Flange

omit - Oval mount, two holes

Q - Square mount, four bolts

Pos.2 - Displacement code

50	- 51,5 cm ³ /rev [3.14 in ³ /rev]
80	- 80,3 cm ³ /rev [4.90 in ³ /rev]
100	- 99,8 cm ³ /rev [6.09 in ³ /rev]
125	- 125,7 cm ³ /rev [7.67 in ³ /rev]
160	- 159,6 cm ³ /rev [9.74 in ³ /rev]
200	- 199,8 cm ³ /rev [12.19 in ³ /rev]
250	- 250,1 cm ³ /rev [15.26 in ³ /rev]
315	- 315,7 cm ³ /rev [19.26 in ³ /rev]
400	- 397,0 cm ³ /rev [24.40 in ³ /rev]

Pos.3 - Shaft Extensions*

C	- $\varnothing 25$ straight, Parallel key A8x7x32 DIN6885
CO	- $\varnothing 25,4$ straight, Parallel key $\frac{1}{4} \times \frac{1}{4} \times \frac{1}{4}"$ BS46
SH	- $\varnothing 25,32$ splined BS 2059 (SAE 6B)
K	- $\varnothing 28,56$ tapered 1:10, Parallel key, B5x5x14 DIN6885
SA	- $\varnothing 24,5$ splined B25x22h9 DIN 5482

Pos.4 - Ports

omit	- BSPP (ISO 228)
M	- Metric (ISO 262)

Pos.5 - Special Features (see page 98)

Pos.6 - Design Series

omit - Factory specified

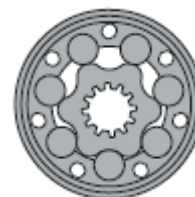
NOTE:

* The permissible output torque for shafts must be not exceeded!

The hydraulic motors are mangano-phosphatized as standard.

RW Orbitmotor

De hydraulische motor type RW wordt toegepast voor Conveyors, metaalbewerking machines etc.



De motor heeft de volgende mogelijkheden, roll-gorotor, wielflens, as afdichting voor hoge en lage drukken, as recht, splines en taps, poorten metrisch en bspp.

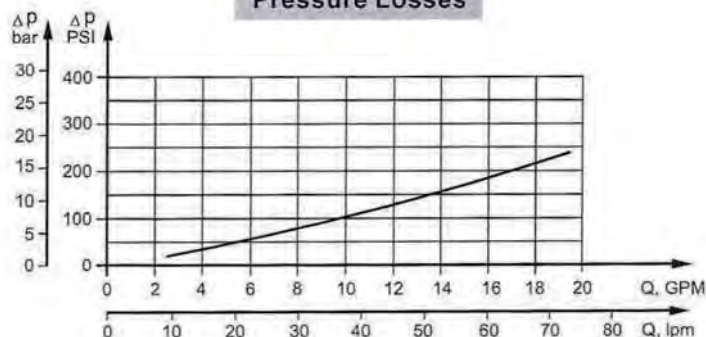
Algemene informatie

Max. Displacement, cm ³ /rev [in ³ /rev]	397 [24.4]
Max. Speed, [RPM]	1029
Max. Torque, daNm [lb-in]	cont.: 61 [5400] int.: 69 [6100]
Max. Output, kW [HP]	15 [20.1]
Max. Pressure Drop, bar [PSI]	cont.: 175 [2540] int.: 200 [2900]
Max. Oil Flow, lpm [GPM]	90 [23.8]
Min. Speed, [RPM]	10
Pressure fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, °C [°F]	-40÷140 [-40÷284]
Optimal Viscosity range, mm ² /s [SUS]	20÷75 [98÷347]
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop bar [PSI]	Viscosity mm ² /s [SUS]	Oil flow in drain line lpm [GPM]
100 [1450]	20 [98]	2,5 [.660]
	35 [164]	1,8 [.476]
140 [2030]	20 [98]	3,5 [.925]
	35 [164]	2,8 [.740]

Pressure Losses



RW Orbitmotor

Technische informatie

Type	RW 50	RW 80	RW 100	RW 125	RW 160	RW 200	RW 250	RW 315	RW 400	
Displacement, cm³/rev. [in ³ /rev.]	51,5 [3.14]	80,3 [4.90]	99,8 [6.09]	125,7 [7.67]	159,6 [9.74]	199,8 [12.19]	250,1 [15.26]	315,7 [19.26]	397 [24.4]	
Max. Speed, [RPM]	Cont.	775	750	600	475	375	300	300	240	190
	Int.*	1029	940	750	600	470	375	360	285	226
Max. Torque daNm [lb-in]	Cont.	10 [900]	20 [1770]	24 [2125]	30 [2655]	39 [3450]	45 [4000]	54 [4780]	55 [4870]	61 [5400]
	Int.*	13 [1150]	22 [1947]	28 [2480]	34 [3010]	43 [3805]	50 [4425]	61 [5400]	69 [6100]	69 [6100]
	Peak**	17 [1505]	27 [2390]	32 [2832]	37 [3275]	46 [4070]	56 [4960]	71 [6280]	84 [7430]	87 [7700]
Max. Output kW [HP]	Cont.	7 [9.5]	12,5 [17]	13 [17.4]	12,5 [16.8]	11,5 [15.4]	11 [14.8]	10 [13.4]	9 [12]	7,8 [10.5]
	Int.*	8,5 [11.9]	15 [20.1]	15 [20.1]	14,5 [19.5]	14 [18.8]	13 [17.4]	12 [16.1]	10 [13.4]	10,6 [14.2]
Max. Pressure Drop bar [PSI]	Cont.	140 [2030]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	135 [1960]	110 [1600]
	Int.*	175 [2540]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	175 [2540]	140 [2030]
	Peak**	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	210 [3045]	175 [2540]
Max. Oil Flow lpm [GPM]	Cont.	40 [10,6]	60 [15,9]	60 [15,9]	60 [15,9]	60 [15,9]	60 [15,9]	75 [19,8]	75 [19,8]	75 [19,8]
	Int.*	50 [13,2]	75 [19,8]	75 [19,8]	75 [19,8]	75 [19,8]	75 [19,8]	90 [23,8]	90 [23,8]	90 [23,8]
Max. Inlet Pressure bar [PSI]	Cont.	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]
	Int.*	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]
	Peak**	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]
Max. Return Pressure with Drain Line bar [PSI]	Cont.	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]
	Int.*	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]
	Peak**	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]
Max. Starting Pressure with Unloaded Shaft, bar [PSI]	10 [145]	10 [145]	10 [145]	9 [130]	7 [102]	5 [73]	5 [73]	5 [73]	5 [73]	
Min. Starting Torque daNm [lb-in]	At max.press. drop Cont.	8 [710]	15 [1330]	20 [1770]	25 [2215]	32 [2832]	41 [3630]	50 [4425]	50 [4425]	50 [4425]
	At max.press. drop Int.*	10 [885]	17 [1505]	23 [2035]	28 [2480]	37 [3275]	46 [4070]	55 [4870]	66 [5840]	61 [5400]
Min. Speed***, [RPM]	10	10	10	10	10	10	10	10	10	
Weight, kg [lb]	9,6 [21.2]	9,7 [21.4]	9,8 [21.7]	10,0 [22.1]	10,3 [22.7]	10,8 [23.8]	11,3 [24.9]	11,8 [26]	12,5 [27.63]	

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting: max. 1% per minuut.

*** Voor toerentallen van 20l./min of minder neem contact op met onze medewerkers

- Tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen.

- Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering 25 micron of beter.

- Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN 51524) of HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals synthetische olieën, dient er overlegt te worden.

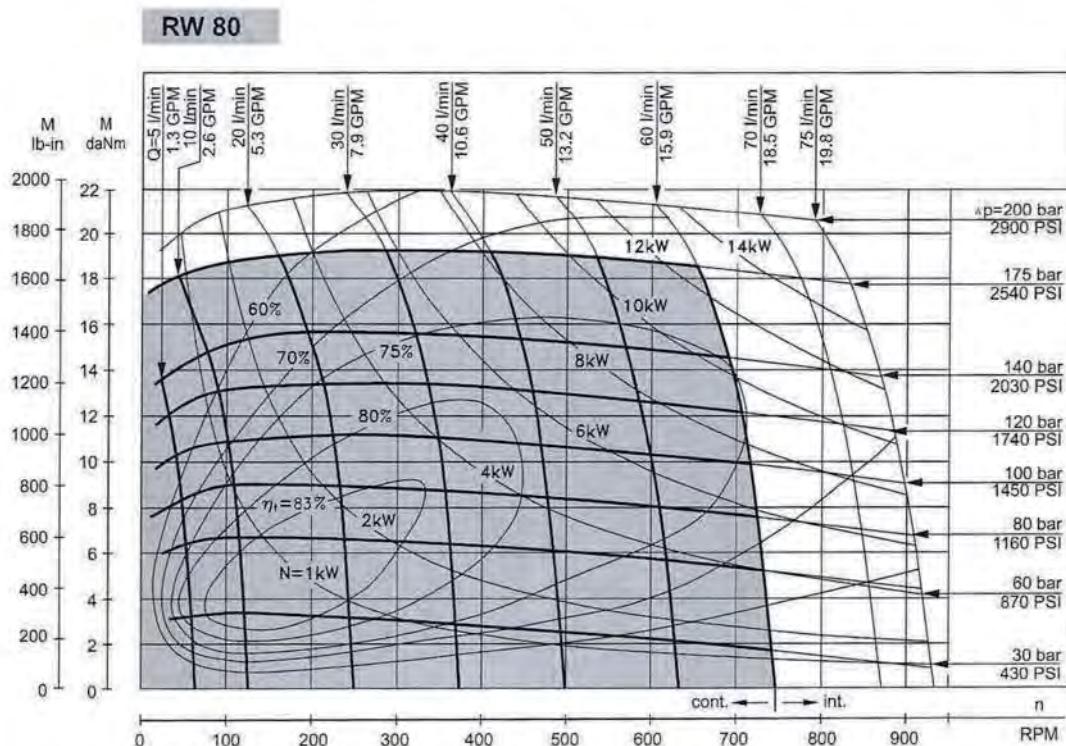
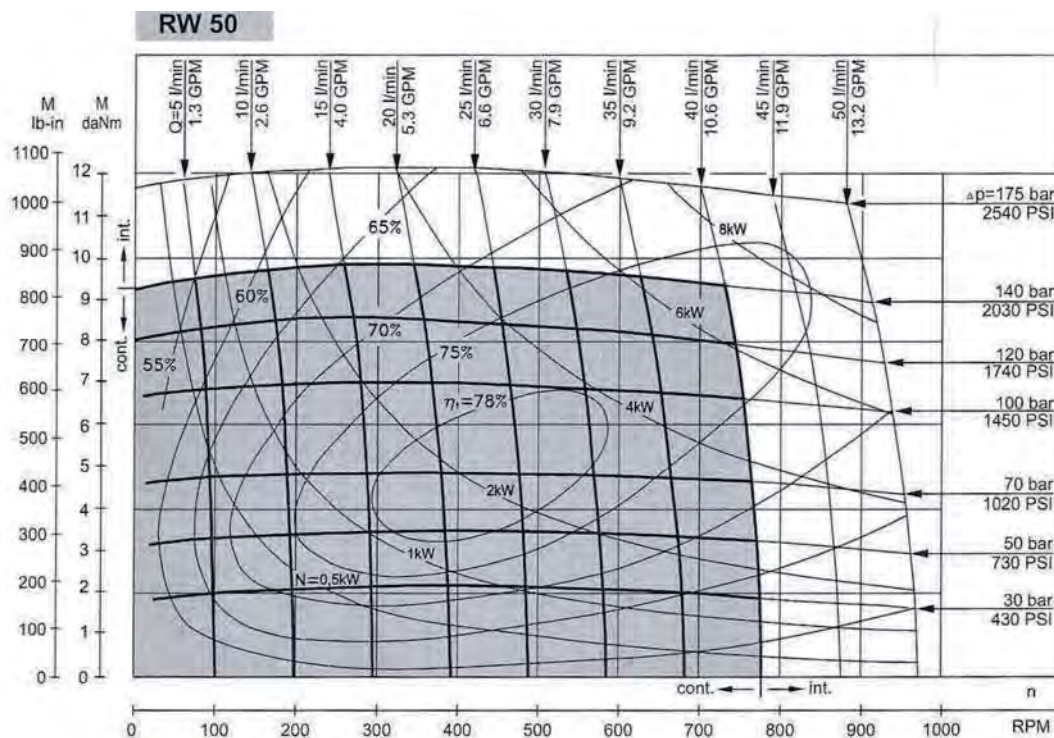
- Aanbevolen minerale viscositeit is 13mm² bij 50° C.

- Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.

De levensduur van de motoren kan men verhogen als men de aandrijfjas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

RW Orbitmotor

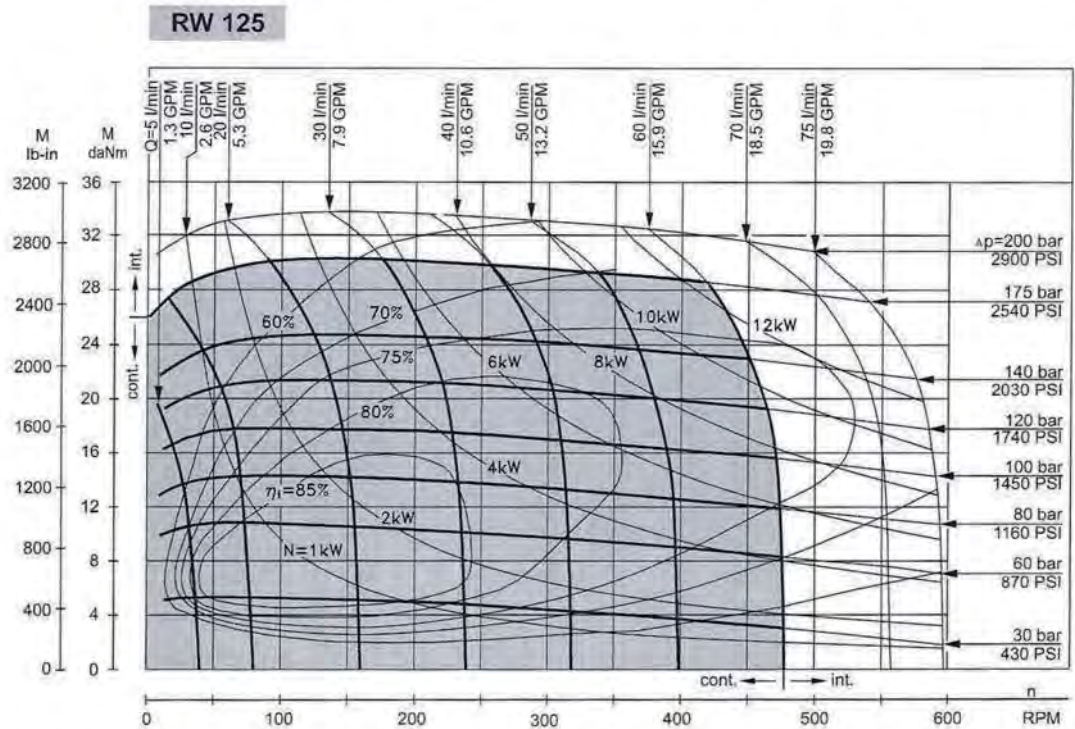
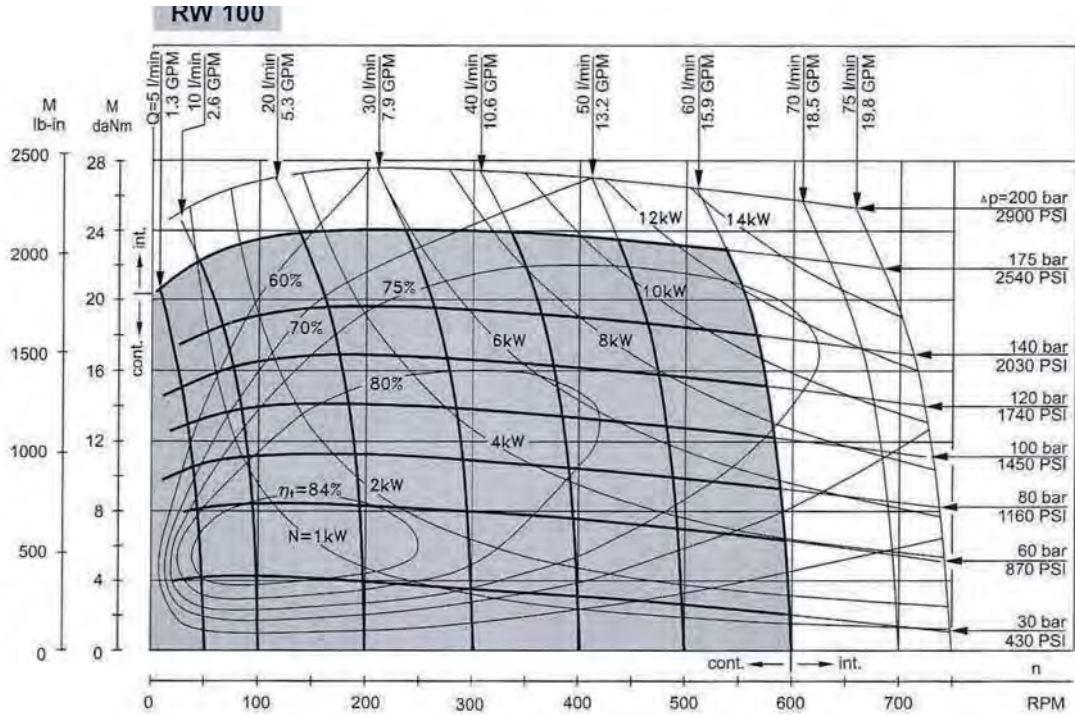
Functiediagrammen



The function diagrams data is for average performance of randomly selected motors at back pressure 5+10 bar [72.5+145 PSI] and oil with viscosity of 32 mm²/s [150 SUS] at 50°C [122°F].

RW Orbitmotor

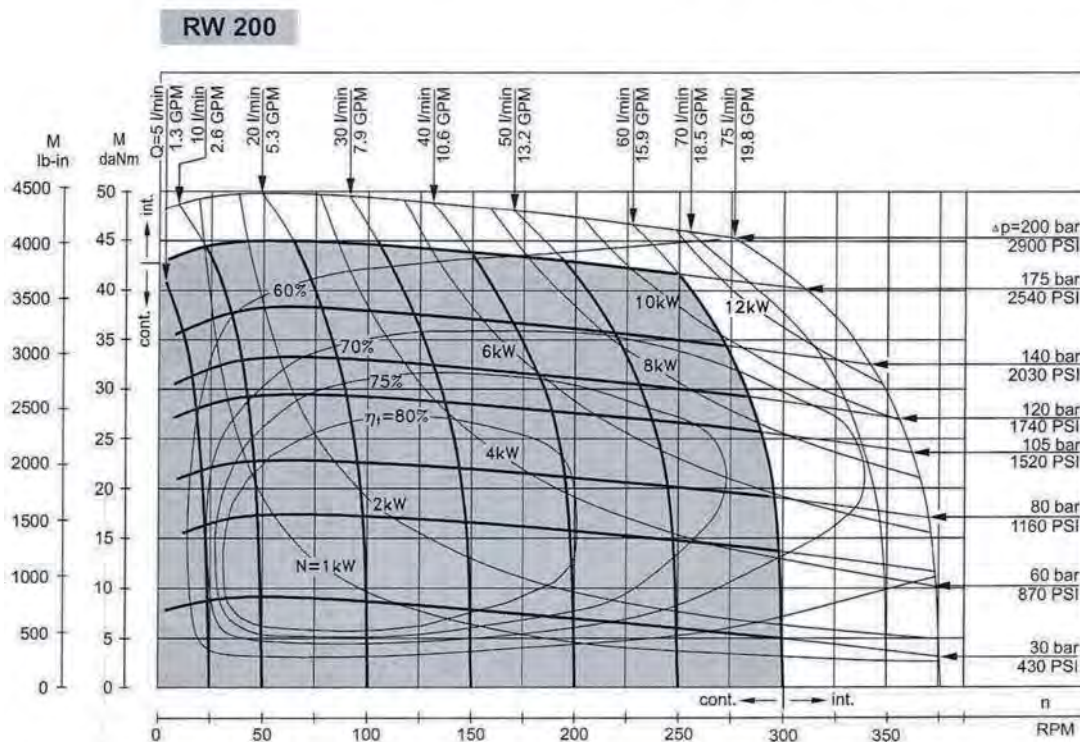
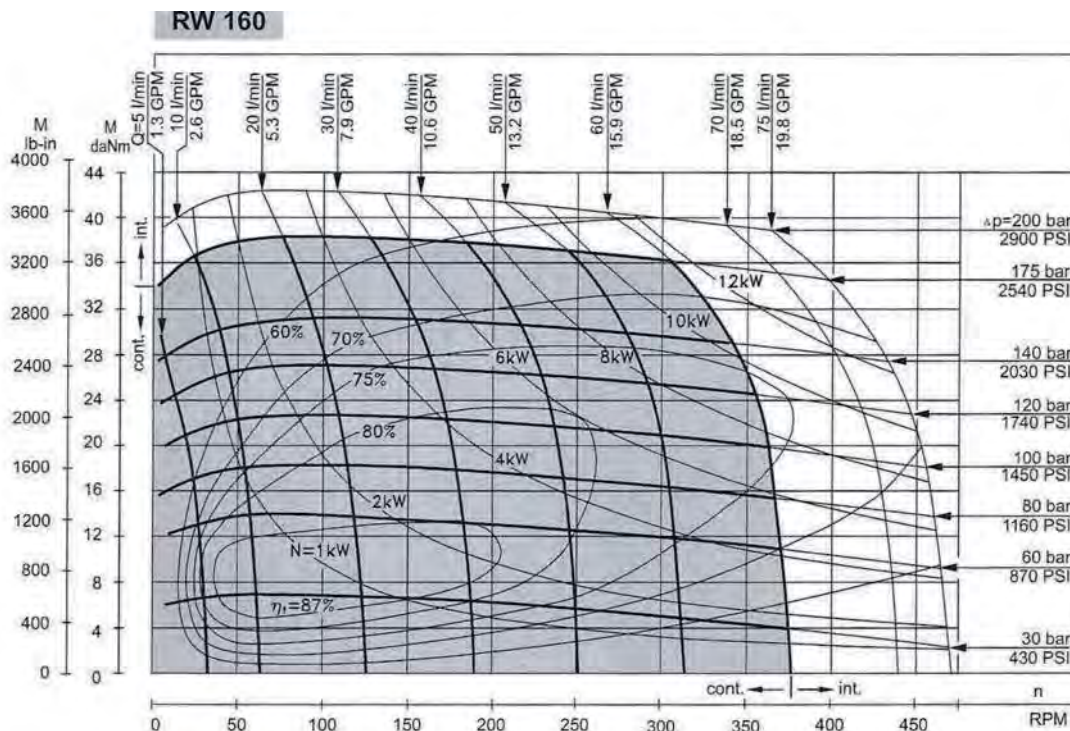
Functiediagrammen



The function diagrams data is for average performance of randomly selected motors at back pressure 5+10 bar [72.5+145 PSI] and oil with viscosity of 32 mm²/s [150 SUS] at 50°C [122°F].

RW Orbitmotor

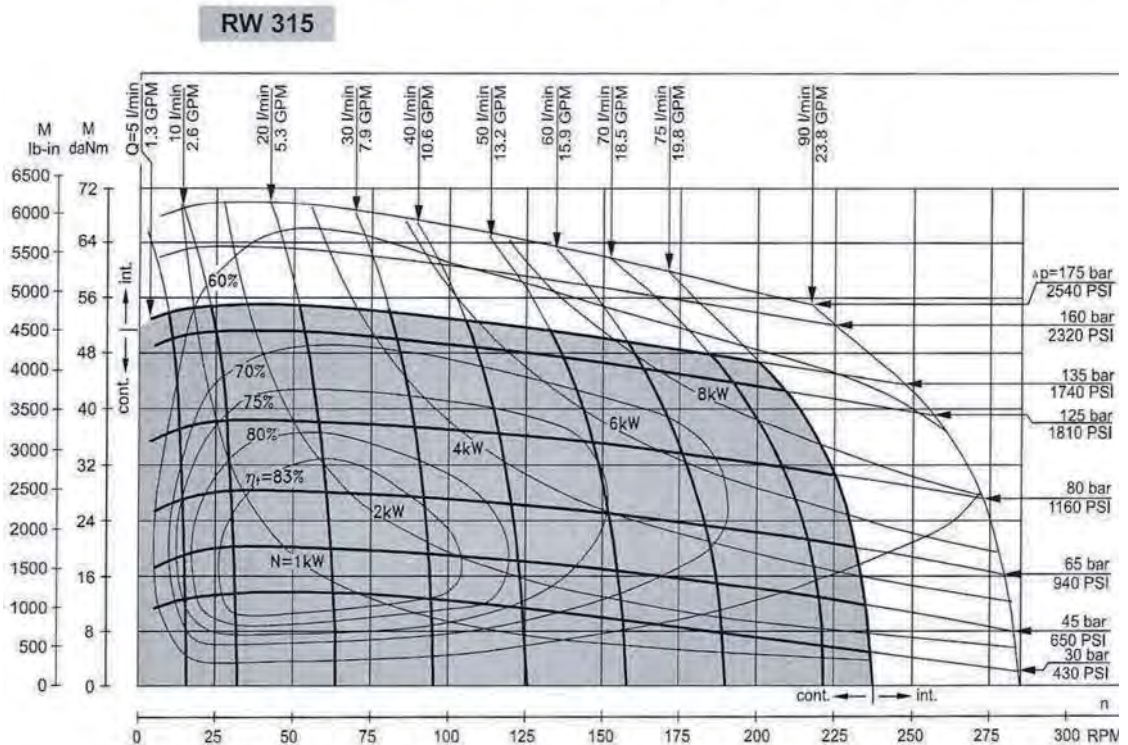
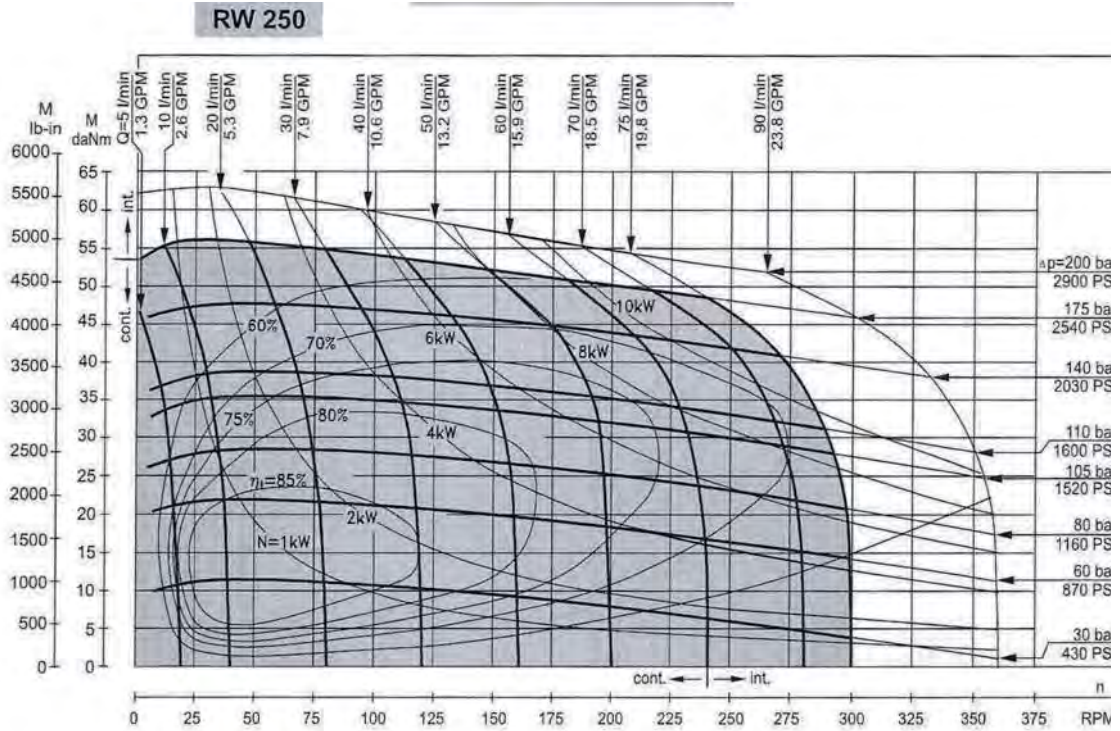
Funciediagrammen



The function diagrams data is for average performance of randomly selected motors at back pressure 5 ± 10 bar [72.5 ± 145 PSI] and oil with viscosity of 32 mm²/s [150 SUS] at 50°C [122°F].

RW Orbitmotor

Functiediagrammen

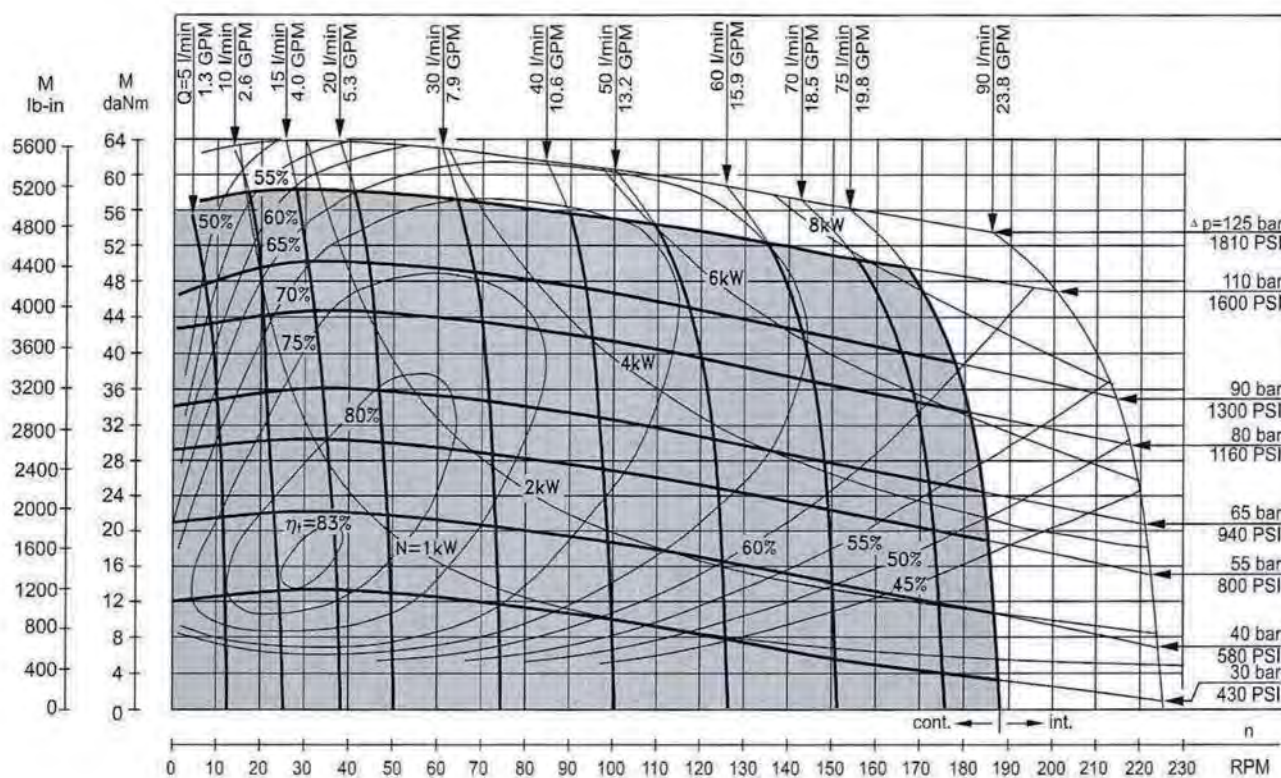


The function diagrams data is for average performance of randomly selected motors at back pressure 5±10 bar (72.5±145 PSI) and oil with viscosity of 32 mm²/s (150 SUS) at 50°C (122°F).

RW Orbitmotor

Funciedigram

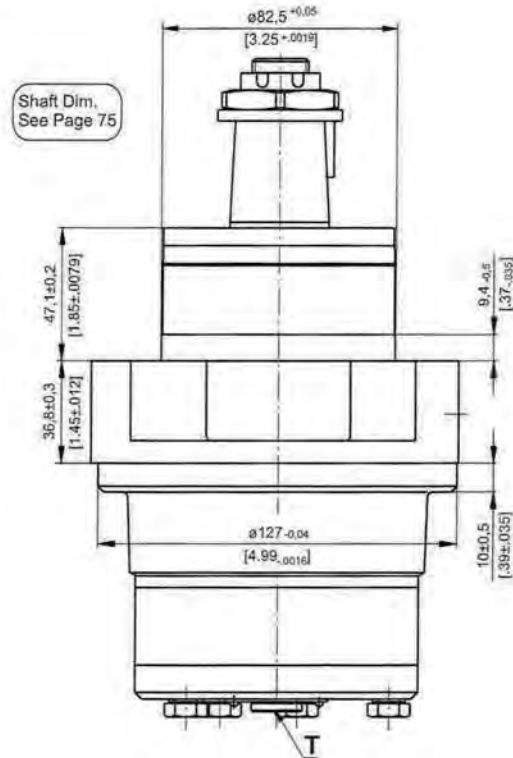
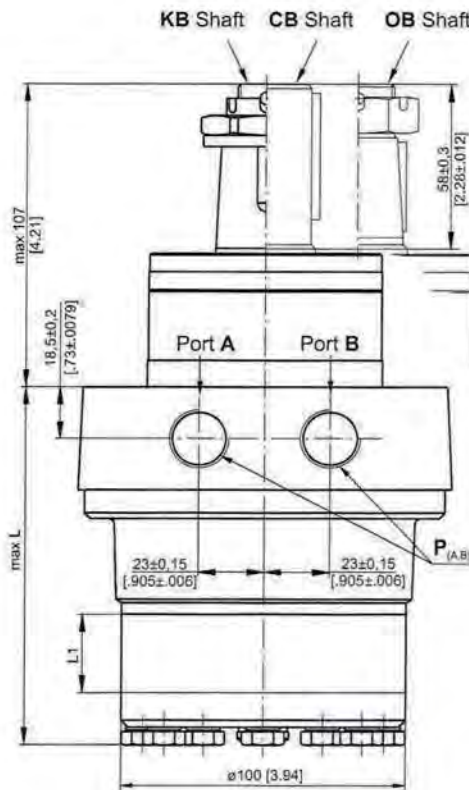
RW 400



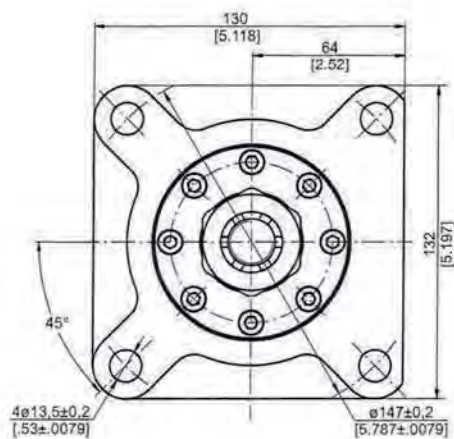
The function diagrams data is for average performance of randomly selected motors at back pressure 5+10 bar [72.5+145 PSI] and oil with viscosity of 32 mm²/s [150 SUS] at 50°C [122°F].

RW Orbitmotor

Afmetingen en uitvoeringen



Type	L, mm [in]	L1, mm [in]
RW 50	108,0 [4.25]	9,0 [.35]
RW 80	113,0 [4.45]	14,0 [.55]
RW 100	116,5 [4.59]	17,4 [.69]
RW 125	120,5 [4.74]	21,8 [.86]
RW 160	126,5 [4.98]	27,8 [1.09]
RW 200	133,5 [5.26]	34,8 [1.37]
RW 250	142,5 [5.61]	43,5 [1.71]
RW 315	153,5 [6.04]	54,8 [2.16]
RW 400	168,5 [6.63]	69,4 [2.73]



$P_{(A,B)}$: 2xG1/2 or 2xM22x1,5 - 17 mm [.67 in.] depth
T : G1/4 or M14x1,5 - 12 mm [.47 in.] depth (plugged)

Standard Rotation
 Viewed from Shaft End
 Port A Pressurized - CW
 Port B Pressurized - CCW

Reverse Rotation
 Viewed from Shaft End
 Port A Pressurized - CCW
 Port B Pressurized - CW

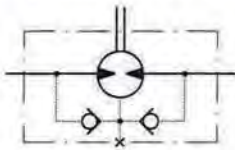


RW Orbitmotor

Maximaal toegestane druk as afdichting

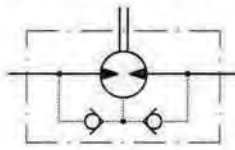
RW...; RW...UK motors with drain connection:

The shaft seal pressure equals the pressure in the drain line.



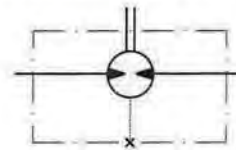
RW...1 motors without drain connection:

The shaft seal pressure never exceeds the pressure in the return line.

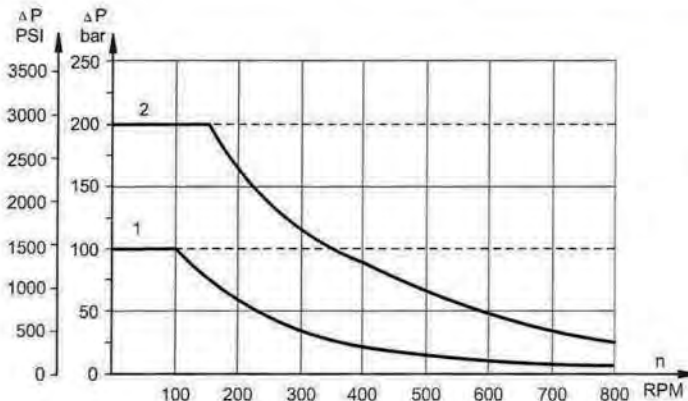


RW...U motors with high pressure seal and drain connection:

The shaft seal pressure equals the pressure in the drain line.



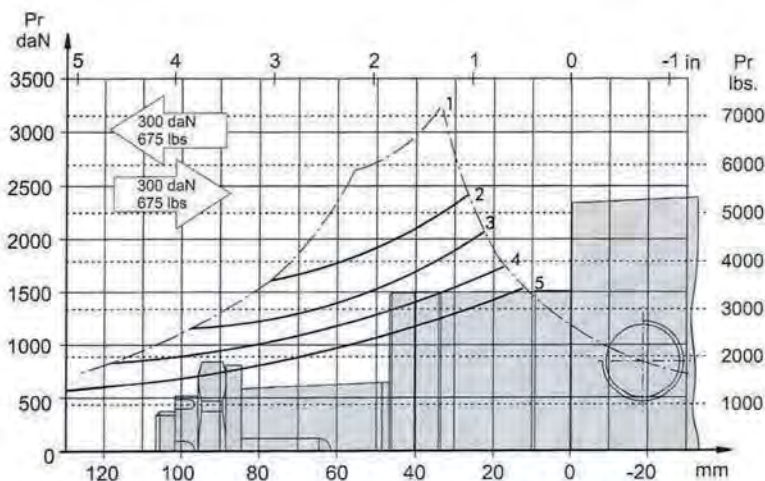
Max. return pressure without drain line or max. pressure in the drain line



1: Drawing for Standard Shaft Seal
 2: Drawing for High Pressure Seal ("U" Seal)
 — - continuous operations
 - - - - intermittent operations

PERMISSIBLE SHAFT LOADS

The curve applies to a B10 bearing life of 2000 hours.

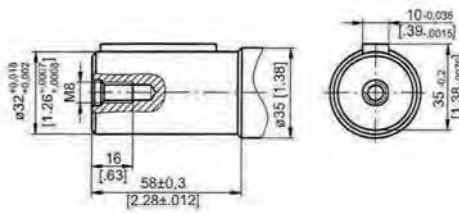


1. Permissible radial shaft load
 2. Drawing by n= 50 rpm
 3. Drawing by n=100 rpm
 4. Drawing by n=200 rpm
 5. Drawing by n=400 rpm

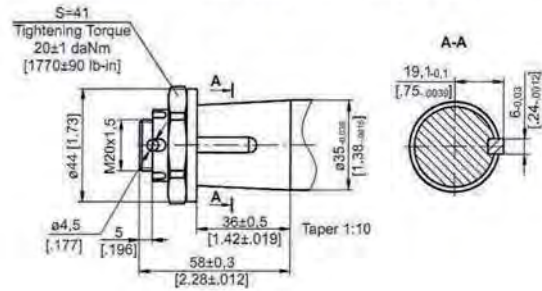
RW Orbitmotor

Mogelijke assen

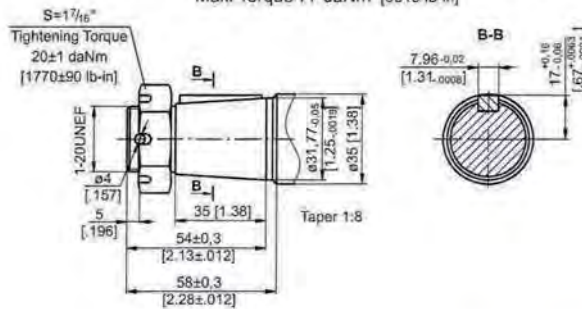
CB - $\phi 32$ straight, Parallel key A10x8x45 DIN 6885
 Max. Torque 77 daNm [6815 lb-in]



KB - tapered 1:10, Parallel key B6x6x20 DIN 6885
 Max. Torque 77 daNm [6815 lb-in]



OB - tapered 1:8 SAEJ 501, Parallel key $\frac{5}{16} \times \frac{5}{16} \times 1\frac{1}{4}$ " BS46
 Max. Torque 77 daNm [6815 lb-in]



ORDER CODE

1	2	3	4	5	6	7
R	W					

Pos.1 - Displacement code

50	- 51,5 cm ³ /rev [3.14 in ³ /rev]
80	- 80,3 cm ³ /rev [4.90 in ³ /rev]
100	- 99,8 cm ³ /rev [6.09 in ³ /rev]
125	- 125,7 cm ³ /rev [7.67 in ³ /rev]
160	- 159,6 cm ³ /rev [9.74 in ³ /rev]
200	- 199,8 cm ³ /rev [12.19 in ³ /rev]
250	- 250,1 cm ³ /rev [15.26 in ³ /rev]
315	- 315,7 cm ³ /rev [19.26 in ³ /rev]
400	- 397,0 cm ³ /rev [24.40 in ³ /rev]

Pos.2 - Shaft Extensions*

CB	- $\phi 32$ straight, Parallel key A10x8x45 DIN6885
KB	- $\phi 35$ tapered 1:10, Parallel key B6x6x20 DIN6888
HB	- $\phi 1\frac{1}{4}$ " tapered 1:8, Parallel key $\frac{5}{16} \times \frac{5}{16} \times 1\frac{1}{4}$ " BS46

Pos.3 - Shaft Seal Pressure

omit	- Standard shaft seal
U	- High pressure shaft seal without check valves
UK	- High pressure shaft seal with check valve

Pos.4 - Drain Port

omit	- with drain port
1	- without drain port

Pos.5 - Ports

omit	- BSPP (ISO 228)
M	- Metric (ISO 262)

Pos.6 - Special Features (see page 98)

Pos.7 - Design Series

omit	- Factory specified
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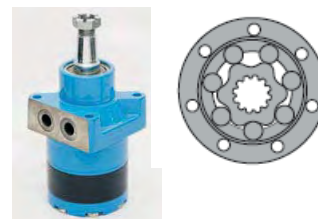
NOTE:

* The permissible output torque for shafts must not be exceeded!

The hydraulic motors are mangano-phosphatized as standard.

HW Orbitmotor

De hydraulische motor type HW wordt toegepast voor Conveyors, metaalbewerking machines etc.



De motor heeft de volgende mogelijkheden, roll-gorotor, wielflens en flensaansluiting, as recht, splines en taps, poorten bspp.

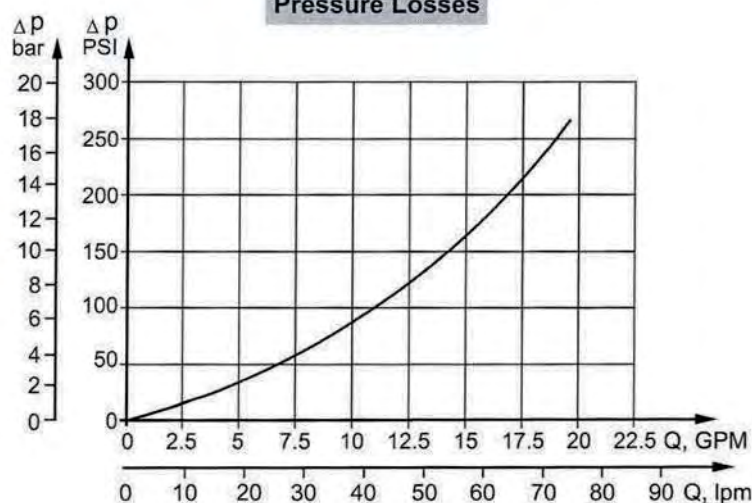
Algemene informatie

Max. Displacement, cm ³ /rev [in ³ /rev]	550 [33.55]
Max. Speed, [RPM]	497
Max. Torque, daNm [in-lb]	cont.: 96 [8500] int.: 105 [9293]
Max. Output, kW [HP]	23,1 [31]
Max. Pressure Drop, bar [PSI]	cont.: 205 [3000] int.: 225 [3260]
Max. Oil Flow, lpm [GPM]	115 [30.4]
Min. Speed, [RPM]	10
Pressure fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, °C [°F]	-40+140 [-40+284]
Optimal Viscosity range, mm ² /s [SUS]	20+75 [98+347]
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop bar [PSI]	Viscosity mm ² /s [SUS]	Oil flow in drain line lpm [GPM]
100 [1450]	20 [98]	2,5 [.660]
	35 [164]	1,8 [.476]
140 [2030]	20 [98]	3,5 [.925]
	35 [164]	2,8 [.740]

Pressure Losses



HW Orbitmotor

Algemene informatie

Type		HW 125	HW 160	HW 200	HW 235	HW 250	HW 300	HW 315
Displacement, cm³/rev [in³/rev]		126 [7.69]	157,8 [9.64]	201,3 [12.28]	235,3 [14.33]	252 [15.37]	300 [18.3]	314,9 [19.21]
Max. Speed, [RPM]	cont.	357	380	373	319	298	250	238
	int.*	476	475	497	425	397	333	318
Max. Torque daNm [in-lb]	cont.	35 [3098]	44 [3894]	55 [4868]	64,5 [5710]	69 [6107]	81 [7170]	85 [7523]
	int.*	38,5 [3408]	48 [4248]	60 [5310]	70 [6196]	75 [6638]	89 [7877]	93 [8230]
Max. Output, kW [HP]	cont.	16,2 [21.7]	17,6 [23.6]	18,6 [24.9]	18,2 [24.4]	16,8 [22.5]	16,5 [22]	16,4 [21.9]
	int.*	19,8 [26.6]	21,6 [29]	23,1 [31]	22,6 [30.3]	20,8 [27.9]	20,8 [27.9]	20,8 [27.9]
Max. Pressure	cont.	205 [2970]	205 [2970]	205 [2970]	205 [2970]	205 [2970]	205 [2970]	205 [2970]
Drop, bar [PSI]	int.*	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]
Max. Oil Flow lpm [GPM]	cont.	45 [12]	60 [16]	75 [20]	75 [20]	75 [20]	75 [20]	75 [20]
	int.*	60 [16]	75 [20]	100 [26.4]	100 [26.4]	100 [26.4]	100 [26.4]	100 [26.4]
Max. Inlet Pressure, bar [PSI]	cont.	210 [3050]	210 [3050]	210 [3050]	210 [3050]	210 [3050]	210 [3050]	210 [3050]
	int.*	250 [3625]	250 [3625]	250 [3625]	250 [3625]	250 [3625]	250 [3625]	250 [3625]
Max. Starting Pressure with Unloaded Shaft, bar [PSI]		10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]
Min. Starting Torque daNm [in-lb]	at max. press. drop cont.	28,7 [2540]	36 [3186]	45,1 [3991]	52,8 [4673]	56,5 [5000]	66,4 [5877]	69,7 [6169]
	at max. press. drop int.*	31,5 [2788]	39,3 [3478]	49,2 [4355]	57,4 [5080]	61,5 [5443]	72,9 [6452]	76,2 [6744]
Min. Speed**, [RPM]		10	10	10	10	10	10	10
Weight, avg. kg [lb]	HW	14,3 [31.5]	14,6 [32.2]	15,1 [33.3]	15,5 [34.2]	15,7 [34.6]	16,1 [35.5]	16,3 [35.9]
	HWF	12,8 [28.2]	13,1 [28.9]	13,6 [30]	14,0 [30.9]	14,2 [31.3]	14,6 [32.2]	14,8 [32.6]
	HWS	14 [30.9]	14,3 [31.5]	14,8 [32.6]	15,2 [33.5]	15,4 [34]	15,8 [34.8]	16 [35.3]

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting: max. 1% per minuut.

*** Voor toerentallen van 20ltr./min of minder neem contact op met onze medewerkers

- Tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen.
- Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering 25 micron of beter.
- Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN 51524) of HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals synthetische olieën, dient er overlegt te worden.
- Aanbevolen minerale viscositeit is 13mm² bij 50° C.
- Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.

De levensduur van de motoren kan men verhogen als men de aandrijfjas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

HW Orbitmotor

Algemene informatie

Type	HW 350	HW 370	HW 400	HW 470	HW 500	HW 535	HW 550
Displacement, cm³/rev [in³/rev]	347,8 [21.21]	369,2 [22.51]	396,8 [24.2]	470,6 [28.71]	502,4 [30.65]	535 [32.7]	550 [33.55]
Max. Speed, [RPM]	cont. 216 int.* 288	203 271	189 252	159 244	149 229	140 215	136 209
Max. Torque daNm [in-lb]	cont. 94 [8320] int.* 102 [9028]	96 [8497] 105 [9293]	96 [8497] 98 [8674]	92 [8143] 101 [8939]	91 [8054] 101 [8939]	90 [7966] 104 [9205]	89 [7877] 105 [9293]
Max. Output, kW [HP]	cont. 16,5 [22] int.* 20,8 [27.9]	13,2 [17.7] 19,2 [25.7]	12,5 [16.8] 18,5 [24.8]	10,6 [14.2] 17,4 [23.3]	10,8 [14.5] 17,8 [23.9]	9,4 [12.6] 16,4 [22]	9 [12] 15,8 [21.2]
Max. Pressure Drop, bar [PSI]	cont. 205 [2970] int.* 225 [3260]	205 [2970] 225 [3260]	185 [2680] 190 [2760]	150 [2180] 165 [2390]	140 [2030] 155 [2250]	130 [1885] 150 [2180]	125 [1815] 145 [2105]
Max. Oil Flow lpm [GPM]	cont. 75 [20] int.* 100 [26.4]	75 [20] 100 [26.4]	75 [20] 100 [26.4]	75 [20] 115 [30.4]	75 [20] 115 [30.4]	75 [20] 115 [30.4]	75 [20] 115 [30.4]
Max. Inlet Pressure, bar [PSI]	cont. 210 [3050] int.* 250 [3625]	210 [3050] 250 [3625]	210 [3050] 250 [3625]	210 [3050] 250 [3625]	210 [3050] 250 [3625]	210 [3050] 250 [3625]	210 [3050] 250 [3625]
Max. Starting Pressure with Unloaded Shaft, bar [PSI]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]	10 [145]
Min. Starting Torque daNm [in-lb]	at max. press. drop cont. 77 [6815] at max. press. drop int.* 83,6 [7400]	79,5 [7036] 86 [7612]	78,7 [6966] 80,3 [7107]	75,4 [6674] 82,8 [7328]	74,6 [6603] 82,8 [7328]	73,8 [6532] 85,2 [7540]	72,9 [6452] 84,4 [7470]
Min. Speed**, [RPM]	8	8	8	8	8	5	5
Weight, avg. kg [lb]	HW 16,7 [36.8] HWF 15,2 [33.5] HWS 16,4 [36.2]	16,9 [37.3] 15,4 [34] 16,6 [36.6]	17,3 [38.1] 15,8 [34.8] 17 [37.5]	18,1 [39.9] 16,6 [36.6] 17,8 [39.2]	18,4 [40.6] 16,9 [37.3] 18,1 [39.9]	18,8 [41.5] 17,3 [38.1] 18,5 [40.8]	18,9 [41.7] 17,4 [38.3] 18,6 [41]

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting: max. 1% per minuut.

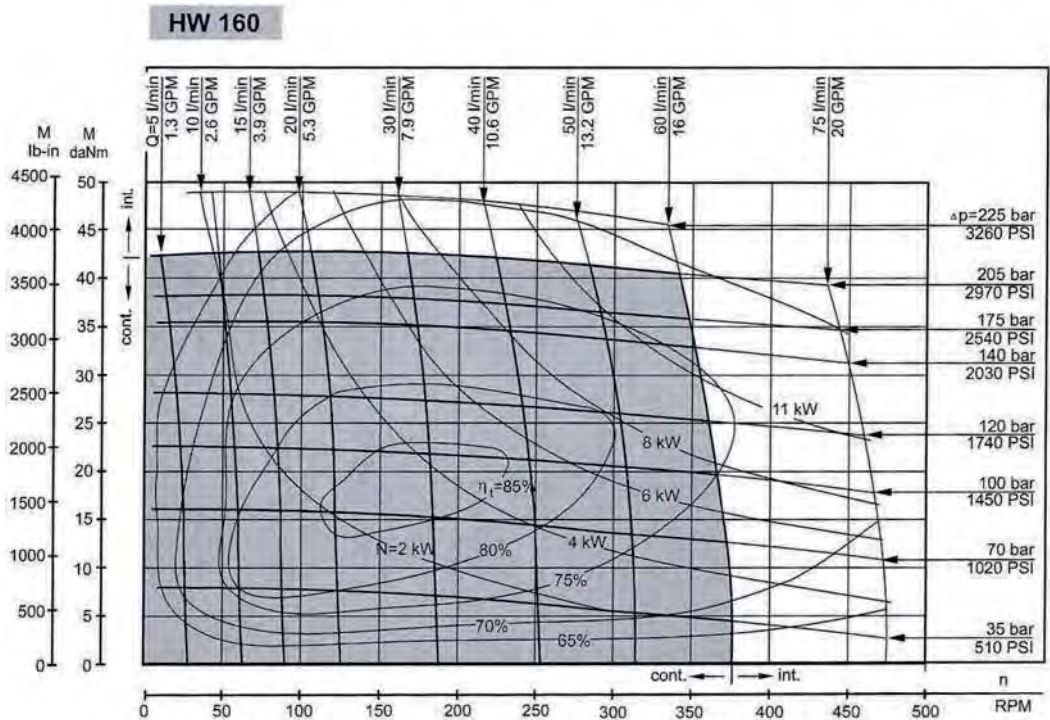
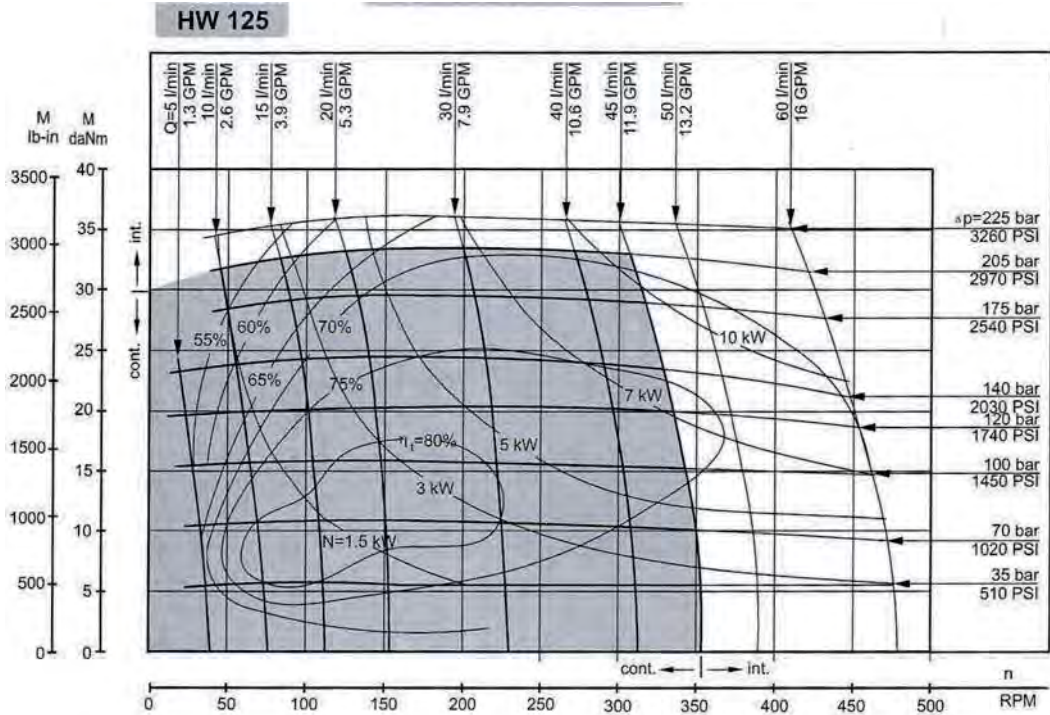
*** Voor toerentallen van 20ltr./min of minder neem contact op met onze medewerkers

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- Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering 25 micron of beter.
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- Aanbevolen minerale viscositeit is 13mm² bij 50° C.
- Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.

De levensduur van de motoren kan men verhogen als men de aandrijfjas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

HW Orbitmotor

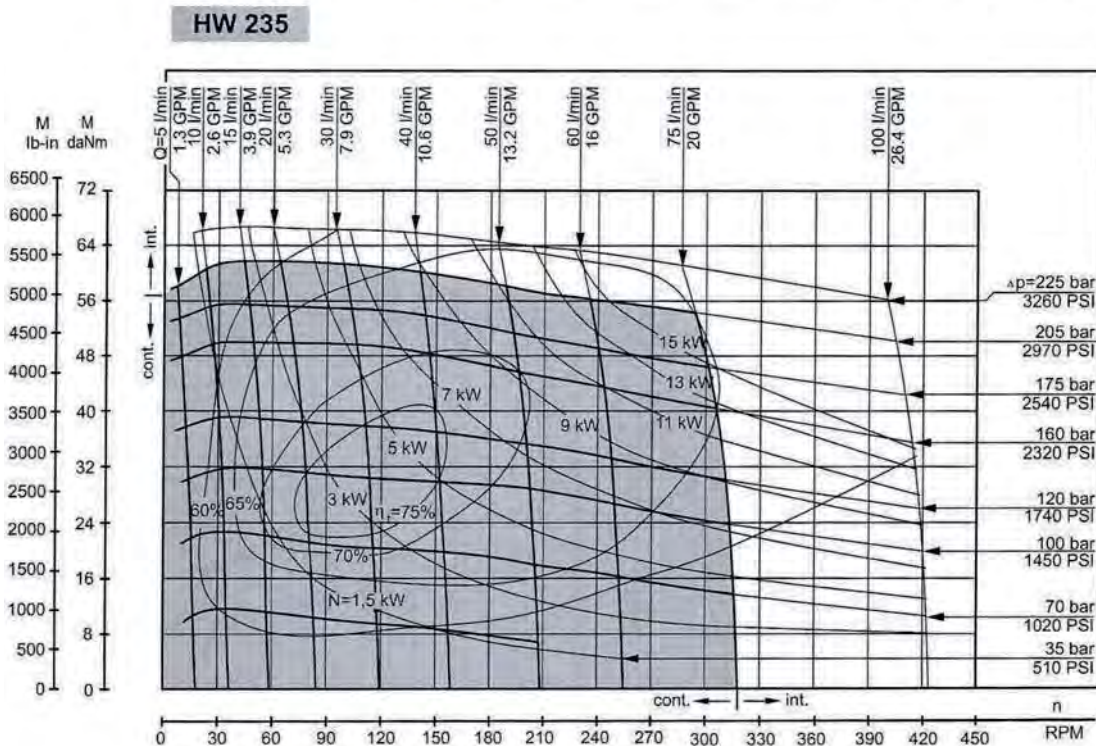
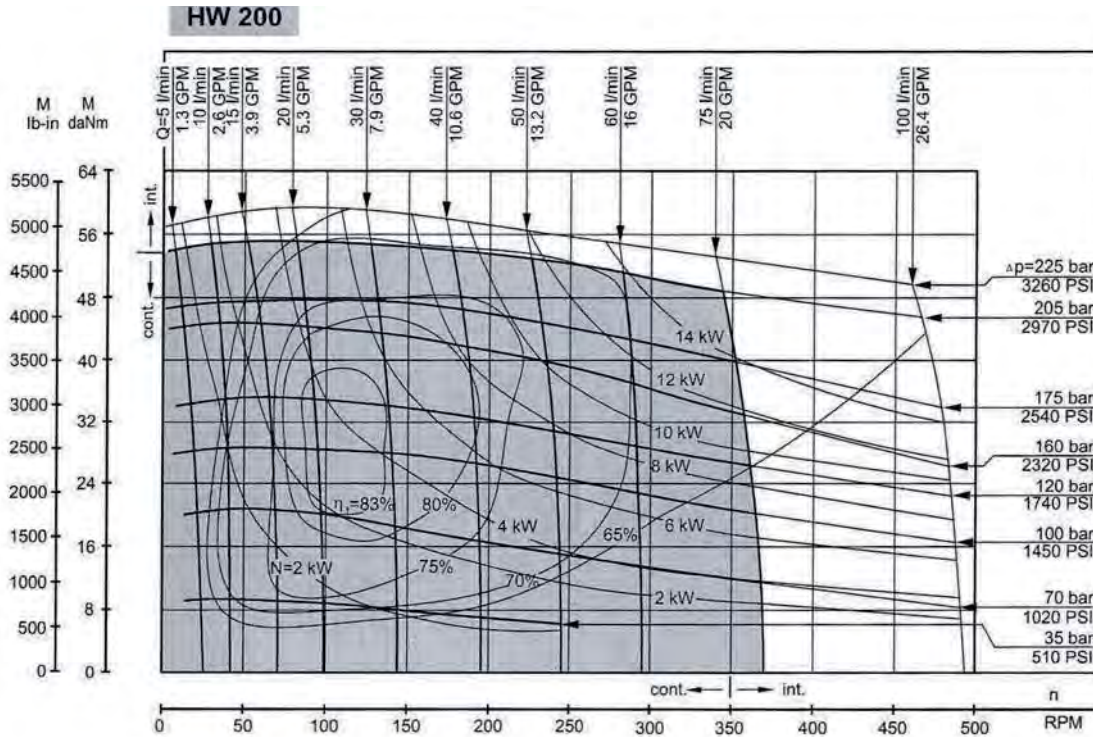
Functiediagram



The function diagrams data is for average performance of randomly selected motors at back pressure 5+10 bar [72.5+145 PSI] and oil with viscosity of 32 mm²/s [150 SUS] at 50°C [122°F].

HW Orbitmotor

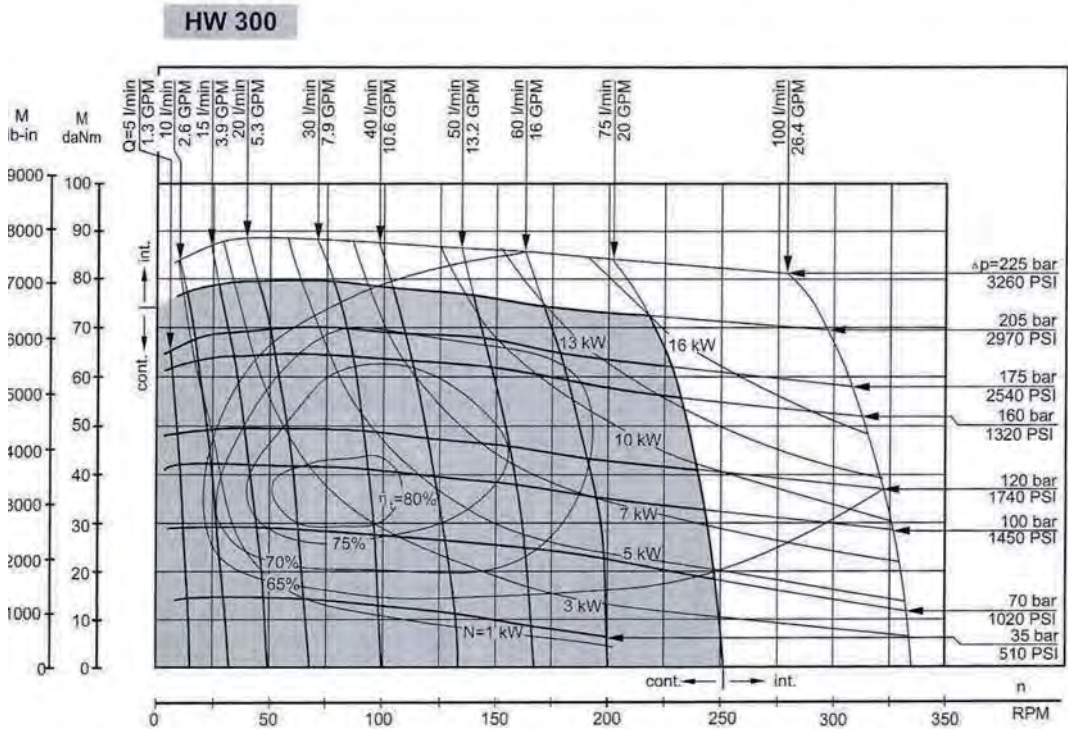
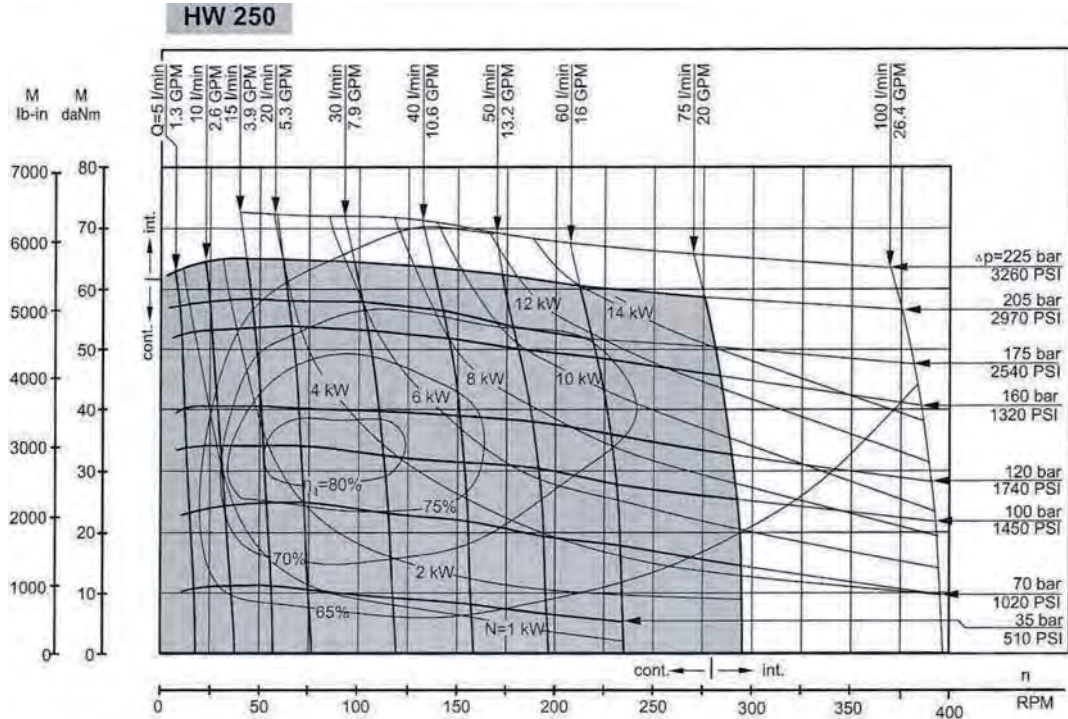
Funciediagrammen



The function diagrams data is for average performance of randomly selected motors at back pressure 5+10 bar [72.5+145 PSI] and oil with viscosity of 32 mm²/s [150 SUS] at 50°C [122°F].

HW Orbitmotor

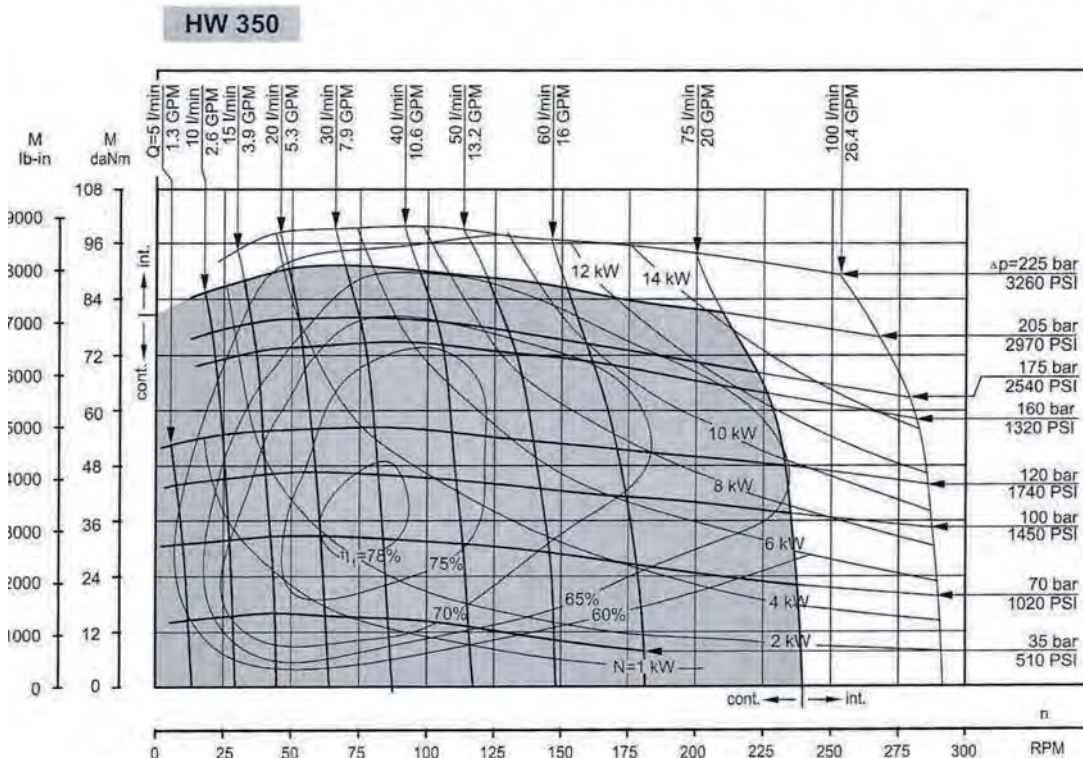
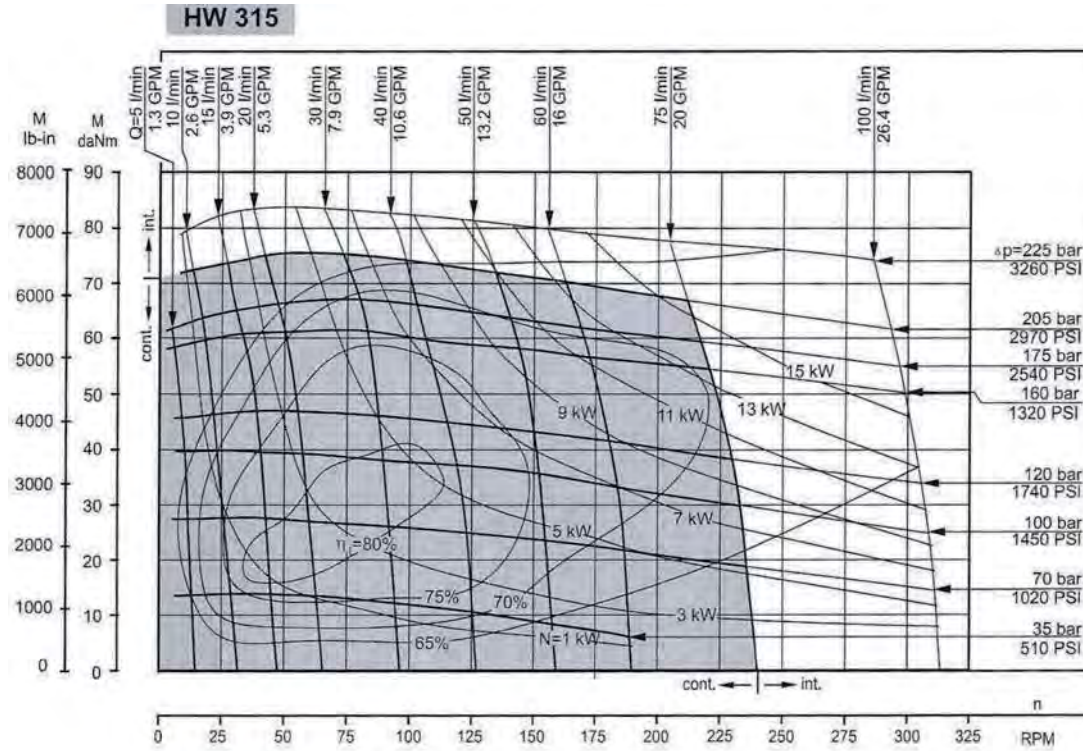
Functiediagrammen



The function diagrams data is for average performance of randomly selected motors at back pressure 5+10 bar [72.5+145 PSI] and oil with viscosity of 32 mm²/s [150 SUS] at 50°C [122°F].

HW Orbitmotor

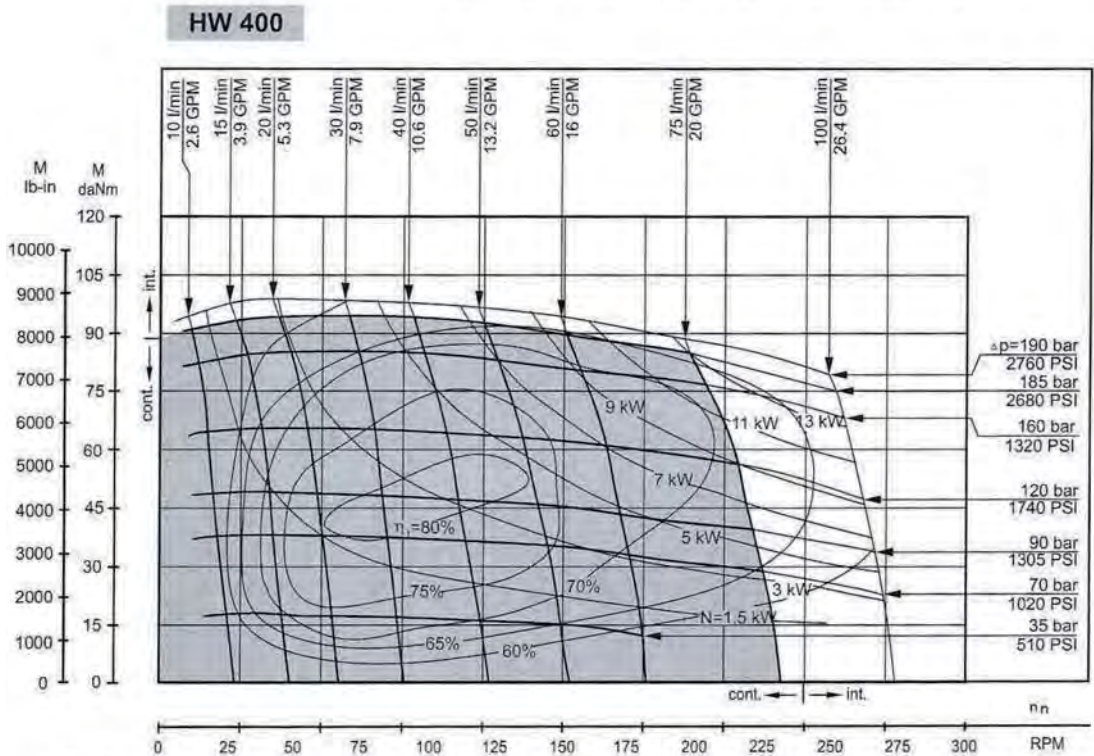
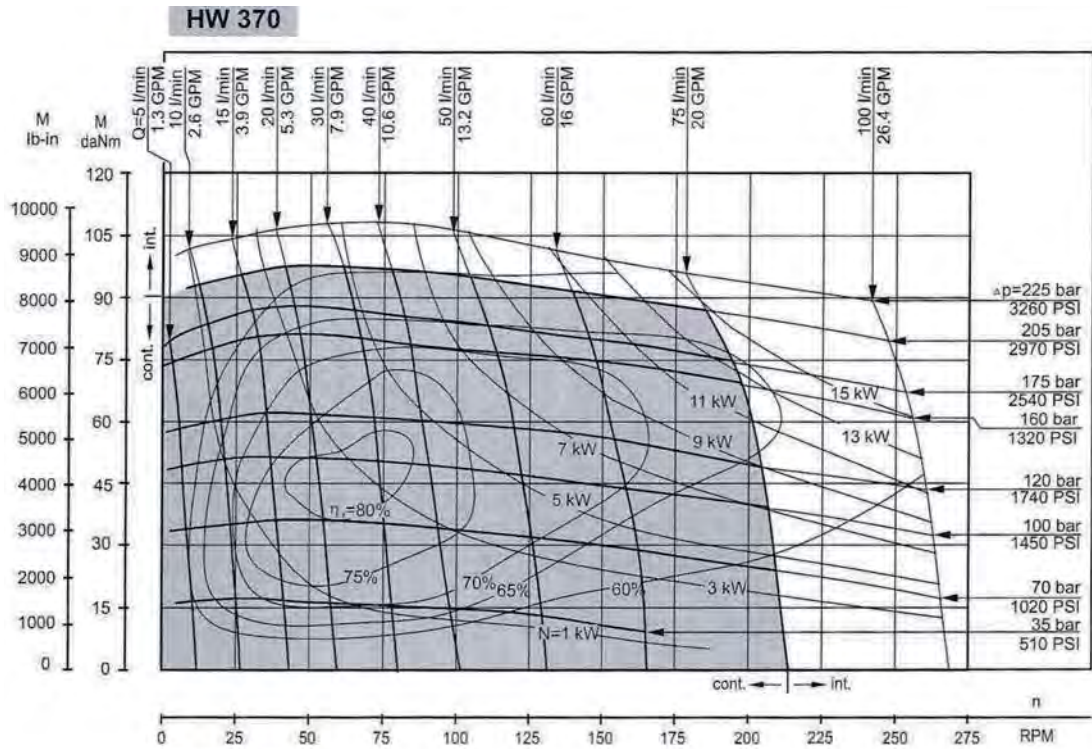
Funciediagrammen



The function diagrams data is for average performance of randomly selected motors at back pressure 5+10 bar [72.5+145 PSI] and oil with viscosity of 32 mm²/s [150 SUS] at 50°C [122°F].

HW Orbitmotor

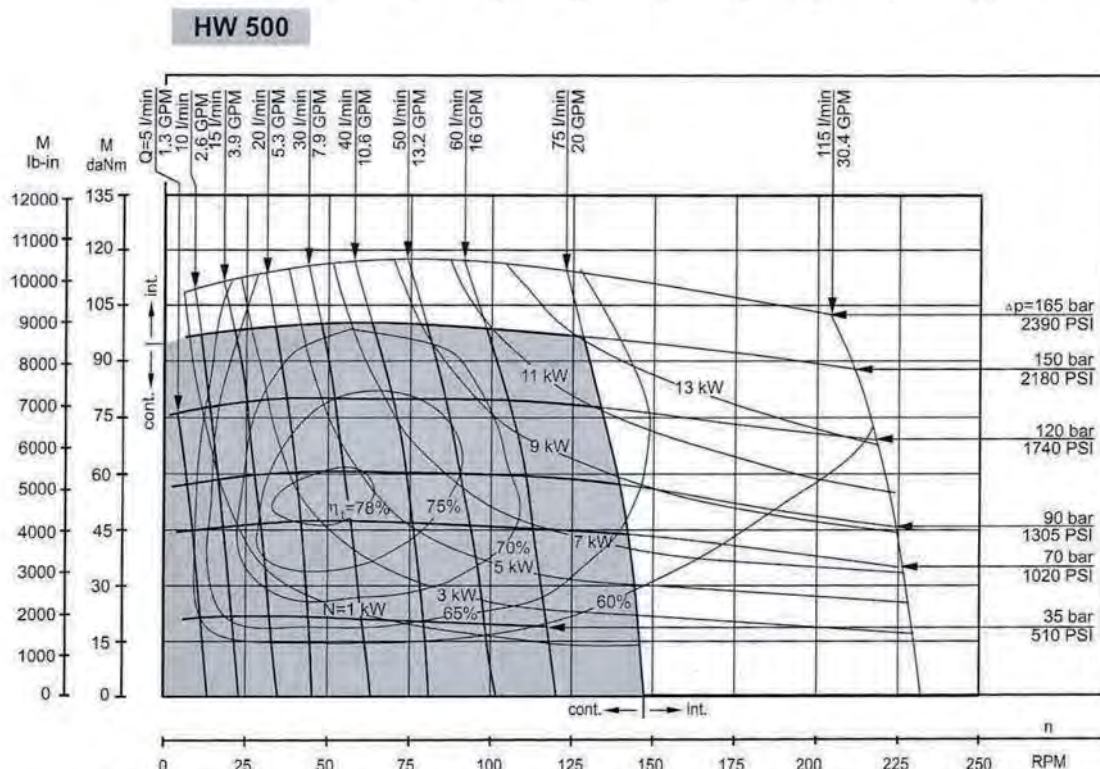
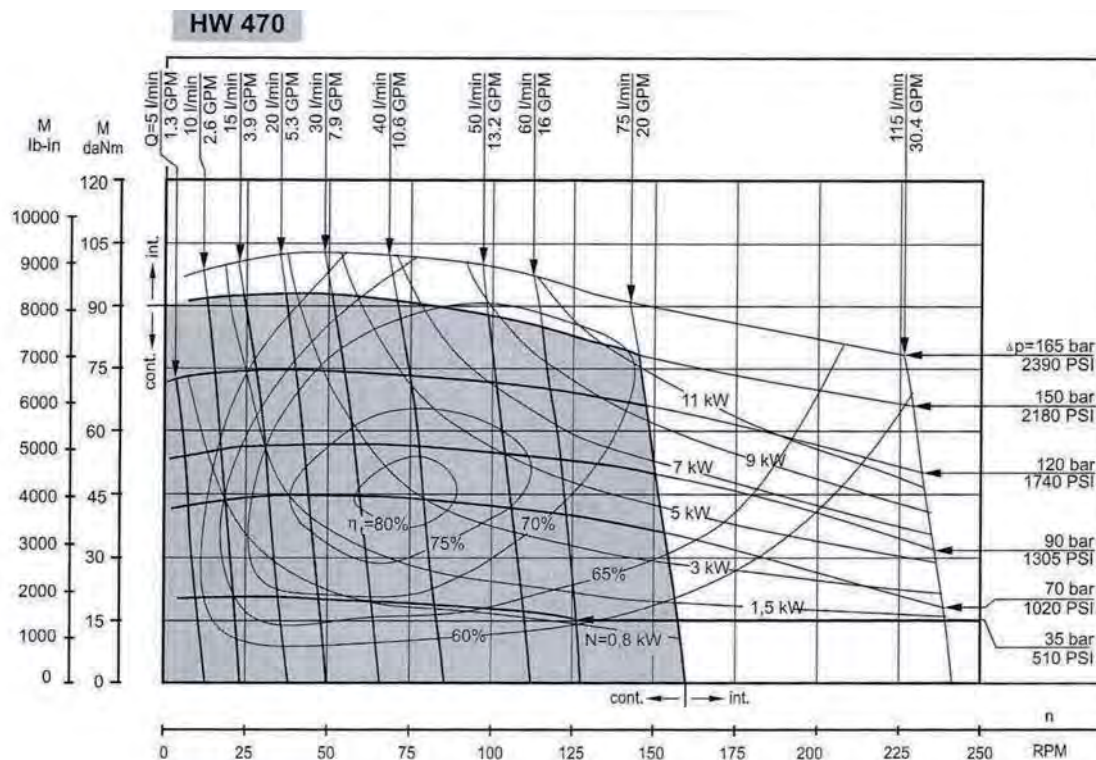
Functiediagrammen



The function diagrams data is for average performance of randomly selected motors at back pressure 5+10 bar [72.5+145 PSI] and oil with viscosity of 32 mm²/s [150 SUS] at 50°C [122°F].

HW Orbitmotor

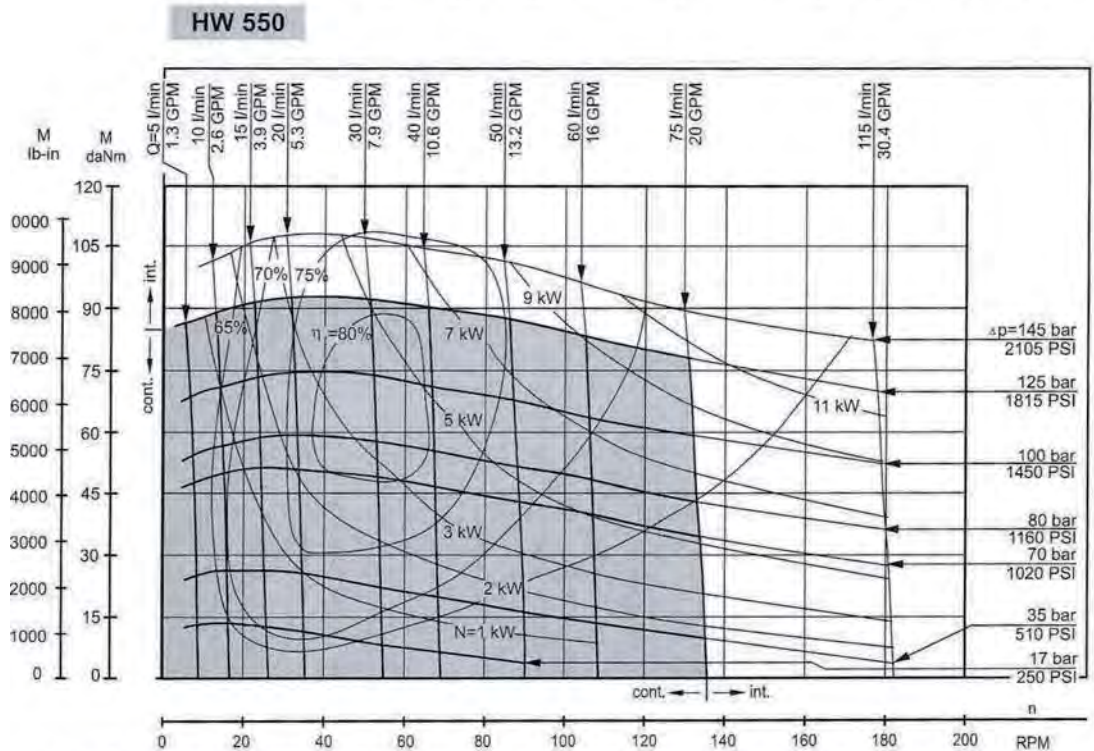
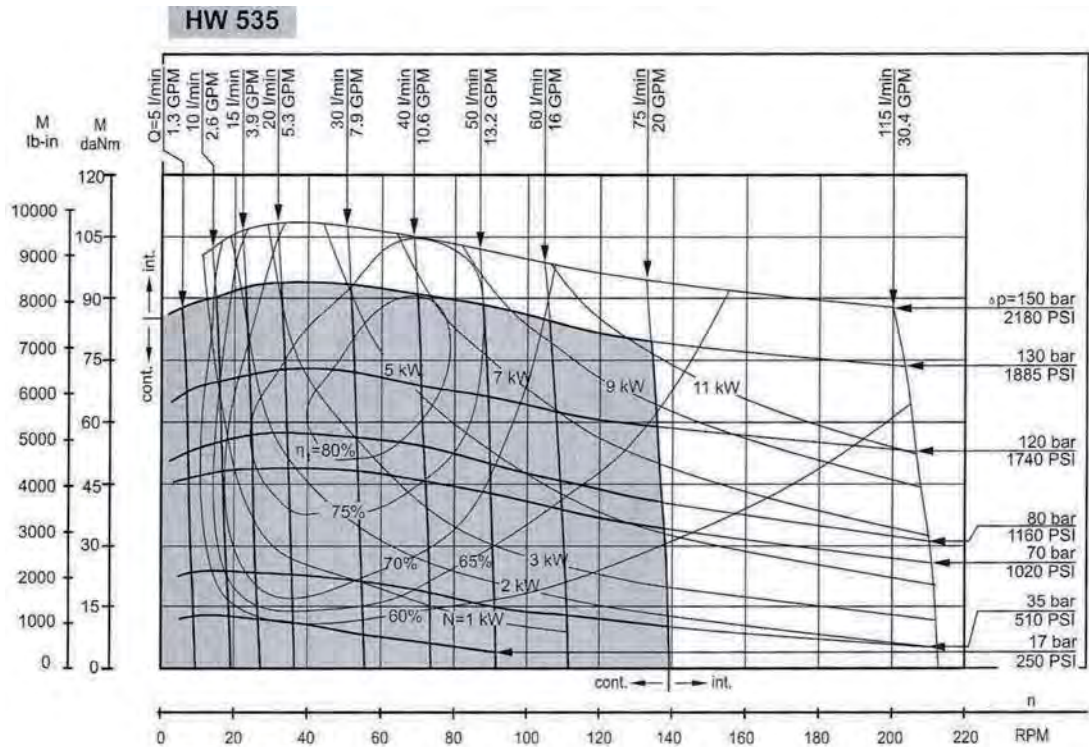
Funciediagrammen



The function diagrams data is for average performance of randomly selected motors at back pressure 5+10 bar [72.5+145 PSI] and oil with viscosity of 32 mm²/s [150 SUS] at 50°C [122°F].

HW Orbitmotor

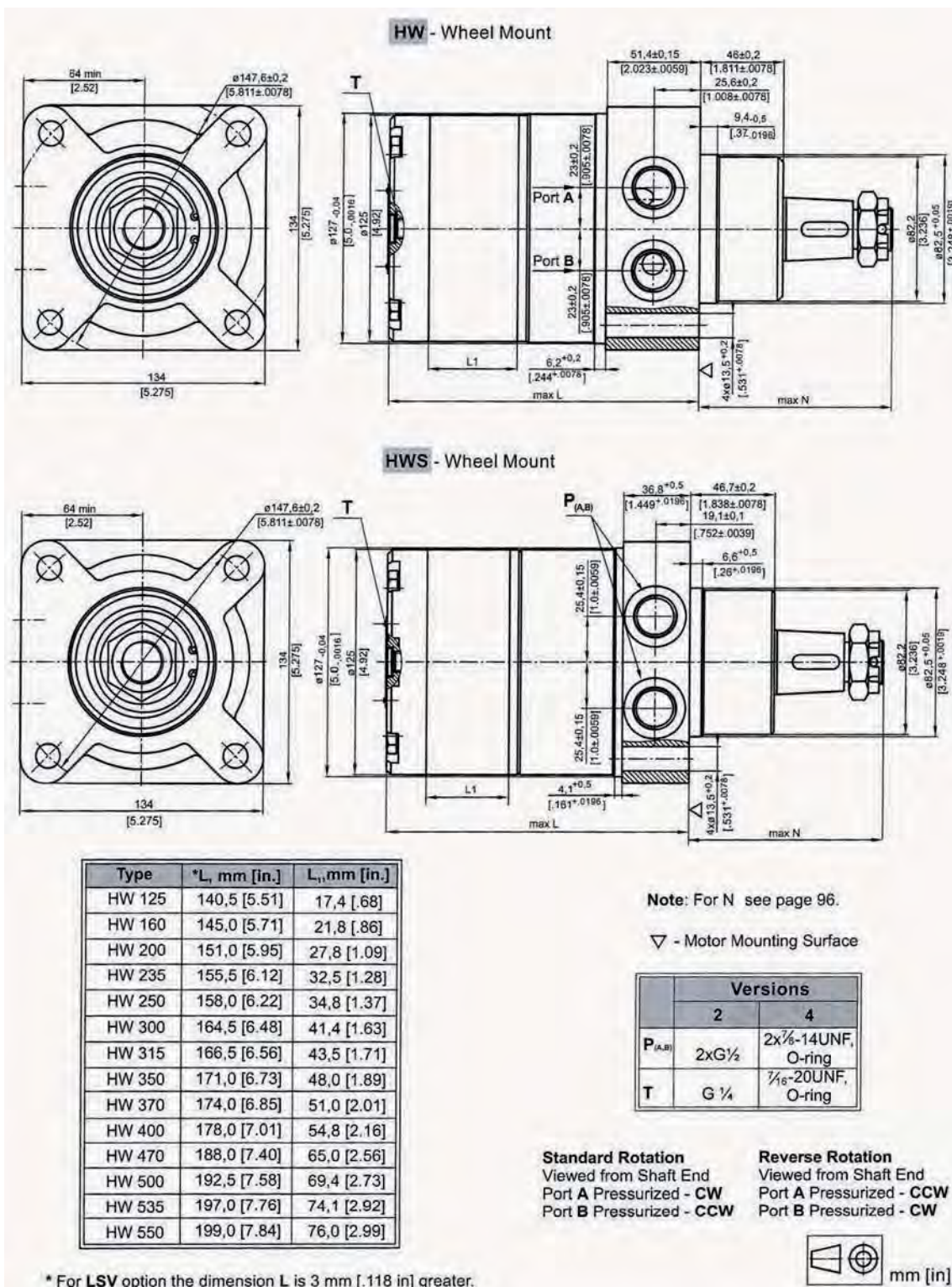
Functiediagrammen



The function diagrams data is for average performance of randomly selected motors at back pressure 5+10 bar [72.5+145 PSI] and oil with viscosity of 32 mm²/s [150 SUS] at 50°C [122°F].

HW Orbitmotor

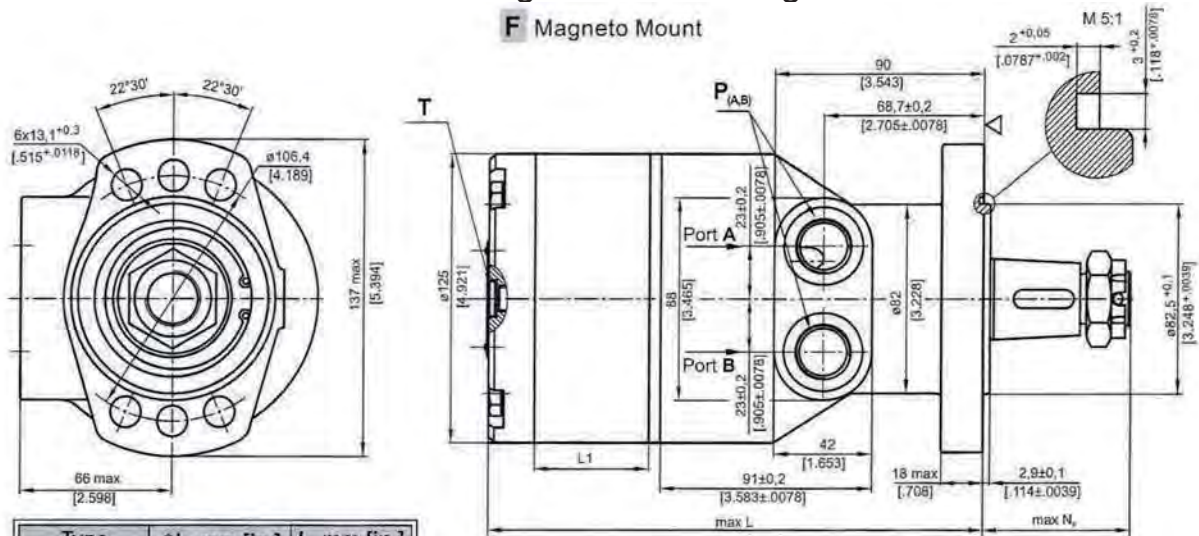
Afmetingen en uitvoeringen



* For LSV option the dimension L is 3 mm [1.18 in] greater.

HW Orbitmotor

Afmetingen en uitvoeringen



Type	*L, mm [in.]	L ₁ , mm [in.]
HWF 125	184,0 [7.24]	17,4 [.68]
HWF 160	188,5 [7.42]	21,8 [.86]
HWF 200	194,5 [7.66]	27,8 [1.09]
HWF 235	199,0 [7.84]	32,5 [1.28]
HWF 250	201,5 [7.93]	34,8 [1.37]
HWF 300	208,0 [8.20]	41,4 [1.63]
HWF 315	210,0 [8.27]	43,5 [1.71]
HWF 350	214,5 [8.45]	48,0 [1.89]
HWF 370	217,5 [8.56]	51,0 [2.01]
HWF 400	221,5 [8.72]	54,8 [2.16]
HWF 470	231,5 [9.11]	65,0 [2.56]
HWF 500	236,0 [9.29]	69,4 [2.73]
HWF 535	240,5 [9.47]	74,1 [2.92]
HWF 550	242,5 [9.55]	76,0 [2.99]

Note: For N_F see page 96.

▽ - Motor Mounting Surface

	Versions	
	2	4
P _(A,B)	2xG ½	2x ½-14UNF, O-ring
T	G ¼	¾-20UNF, O-ring

Standard Rotation
Viewed from Shaft End
Port A Pressurized - CW
Port B Pressurized - CCW

Reverse Rotation
Viewed from Shaft End
Port A Pressurized - CCW
Port B Pressurized - CW

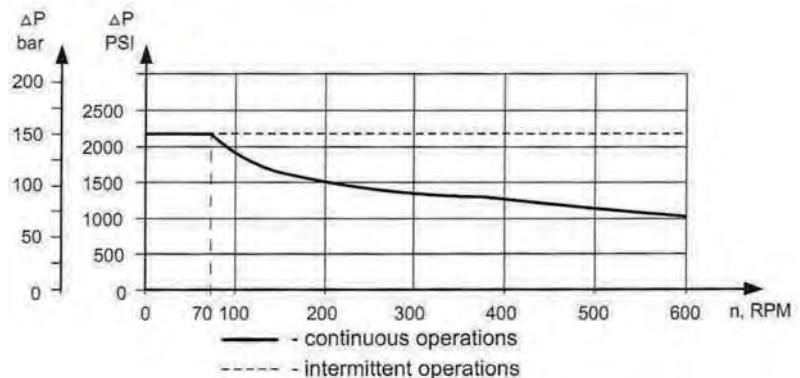
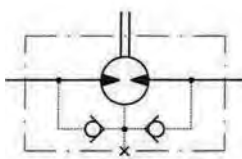


* For LSV option the dimension L is 3 mm [.118 in] greater.

Maximaal toegestane druk op as afdichting

HW... motors with drain connection:

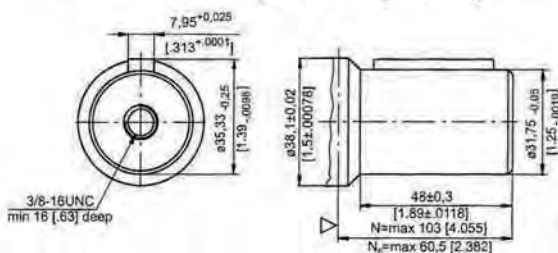
The shaft seal pressure equals the pressure in the drain line.



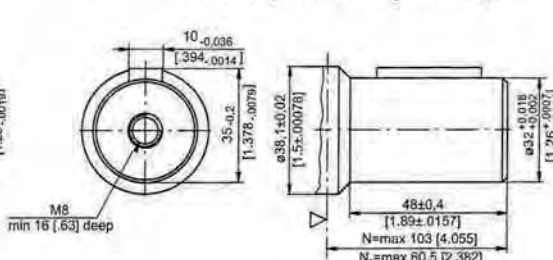
HW Orbitmotor

Mogelijke assen

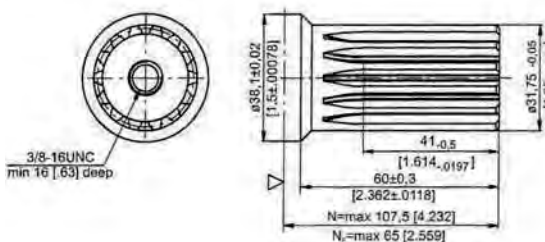
K - 1 1/4" straight, Parallel key 5/16"x5/16"x1 1/2" BS46
 Max. Torque 77 daNm [6815 in-lb]



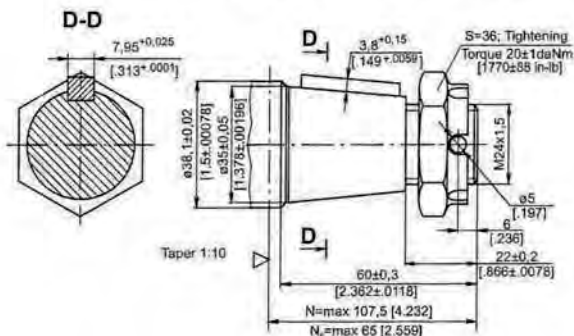
M - ø32 straight, Parallel key A10x8x32 DIN 6885
 Max. Torque 77 daNm [6815 in-lb]



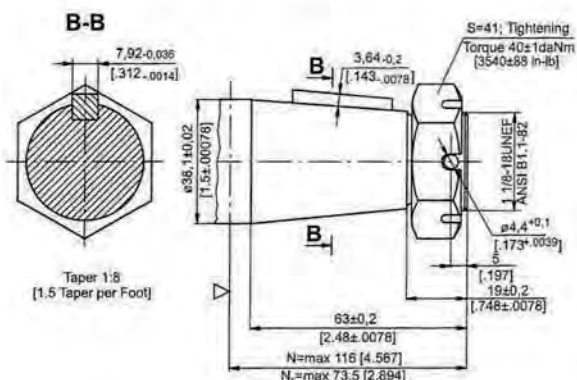
L - ø 1 1/4" splined 14T, DP12/24 ANSI B92.1-1976 Norm
 Max. Torque 77 daNm [6815 in-lb]



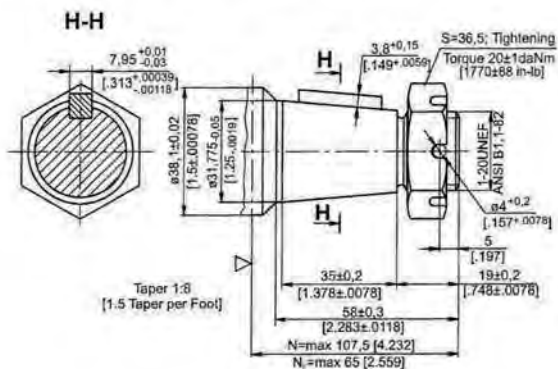
KB - ø35 tapered 1:10, Parallel key 5/16"x5/16"x1 1/4" BS46
 Max. Torque 95 daNm [8410 in-lb]



T - 1 1/2" tapered 1:8, Parallel key 5/16"x5/16"x1 1/4" BS46
 Max. Torque 120 daNm [10620 in-lb]



R - 1 1/2" tapered 1:8, Parallel key 5/16"x5/16"x1 1/4" BS46
 Max. Torque 77 daNm [6815 in-lb]

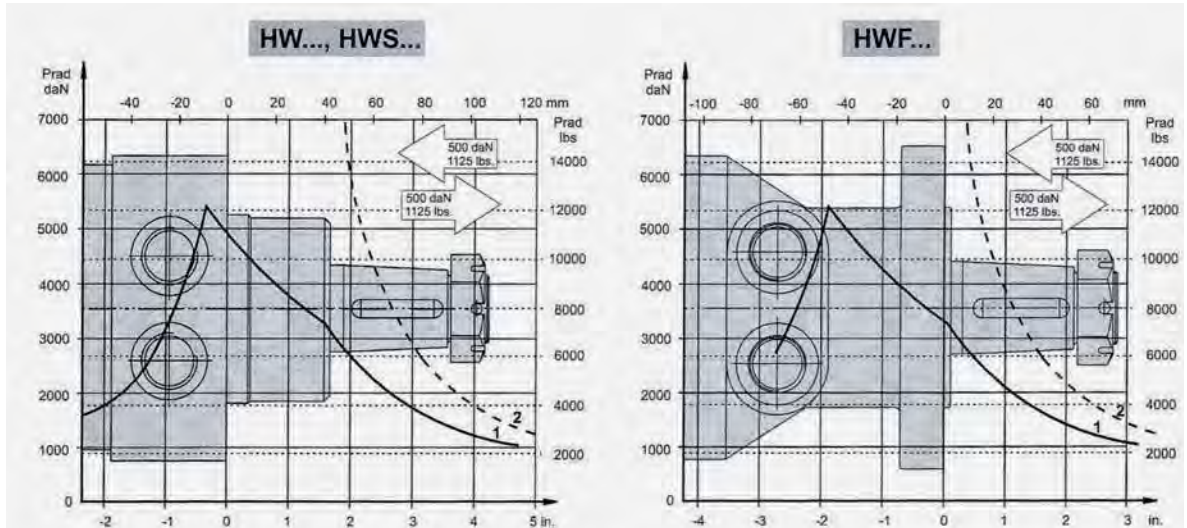


▽ - Motor Mounting Surface
 N - for standart and S flange
 N_f - for F flange



HW Orbitmotor

Toegestane as belasting



- 1 - Bearing curve: The curve applies to a B10 bearing life of 2000 hours at 100 RPM.
 2 - Shaft curve: The curve represents Max. permissible radial shaft load with safety factor 3:1.

ORDER CODE

1	2	3	4	5	6
HW					

Pos.1 - Mounting Flange

- omit - Wheel mount, four holes
F - Oval mount, six holes
S - Wheel mount, four holes

Pos.2 - Displacement code

125	- 126,0 cm ³ /rev [7.69 in ³ /rev]
160	- 158,0 cm ³ /rev [9.64 in ³ /rev]
200	- 201,3 cm ³ /rev [12.28 in ³ /rev]
235	- 235,0 cm ³ /rev [14.33 in ³ /rev]
250	- 252,0 cm ³ /rev [15.37 in ³ /rev]
300	- 300,0 cm ³ /rev [18.30 in ³ /rev]
315	- 314,9 cm ³ /rev [19.21 in ³ /rev]
350	- 347,8 cm ³ /rev [21.21 in ³ /rev]
370	- 369,0 cm ³ /rev [22.51 in ³ /rev]
400	- 396,8 cm ³ /rev [24.20 in ³ /rev]
470	- 470,6 cm ³ /rev [28.71 in ³ /rev]
500	- 502,4 cm ³ /rev [30.65 in ³ /rev]
535	- 536,0 cm ³ /rev [32.70 in ³ /rev]
550	- 550,0 cm ³ /rev [33.55 in ³ /rev]

Pos.3 - Shaft Extensions*

- K** - 1¼"[31,75] straight, Parallel key 5/16"x5/16"x1½" BS46
KB - ø35 tapered 1:10, Parallel key 5/16"x5/16"x1¼" BS46
L - 1¼"[31,75] splined 14T, ANSI B92.1-1976
M - ø32 straight, Parallel key A10x8x32 DIN 6885
R - 1¼"[31,75] Tapered 1:8, Parallel key 5/16"x5/16"x1" BS46
T - 1½"[38,1] Tapered 1:8, Parallel key 5/16"x5/16"x1¼" BS46

Pos.4 - Ports

- 2** - BSPP (ISO 228)
4 - SAE (ANSI B1.1-1982)

Pos.5 - Special Features [see page 98]

Pos.6 - Design Series

- omit - Factory specified

NOTE: * The permissible output torque for shafts must not be exceeded!

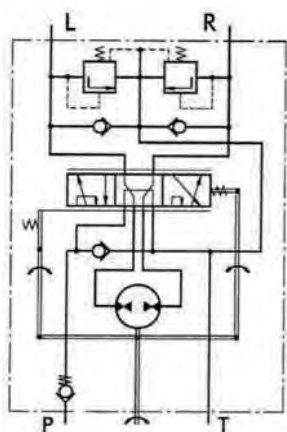
The hydraulic motors are mangano-phosphatized as standard.

XY Orbitrol

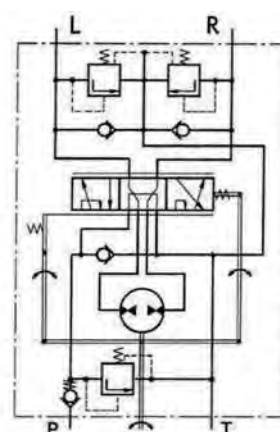
De M+S orbitrols worden gebruikt voor machines met een snelheid tot 60km zoals bouwmachines, heftrucks, roomachines etc.

De XY orbitrol heeft inwendig een axiaal verplaatsende zoekklep en een metende pomp in één huis. De oliestroom naar de stuurcilinders wordt geleverd door een afgescheiden pomp die aangestuurd wordt door de metende pomp.

De XY orbitrol is uitgerust met een terugslag ventiel en er is een mogelijkheid voor een overdrukventiel



Open center – Load reaction
 Versie 1-XY...-0/1



Open center – Load reaction
 Versie 1-XY...-...1

Technische informatie

Parameters	Type			
	XY 85.../1	XY 120.../1	XY 145.../1	
Displacement	cm ³ /rev [in ³ /rev]	84 [5.13]	120 [7.32]	144 [8.79]
Rated Flow*	lpm [GPM]	9 [2.4]	12 [3.2]	15 [4.0]
Rated Pressure	bar [PSI]	150 [2175]		
Relief Valve Pressure Settings**	bar [PSI]	80 [1160]	100 [1450]	125 [1810]
Shock Valves Pressure Settings***	bar [PSI]	200 [2900]		
Max. Cont. Pressure in Line T	bar [PSI]	20 [290]		
Max. Torque at Servoamplifing	Nm [lb - in]	3,5 [31]		
Max. Torque w/o Servoamplifing	Nm [lb - in]	120 [1065]		
Weight	kg [lb]	6,4 [14.1]	6,6 [14.6]	6,8 [15.0]
Dimension A	mm [in]	136,3 [5.37]	141.5 [5.57]	144.5 [5.69]

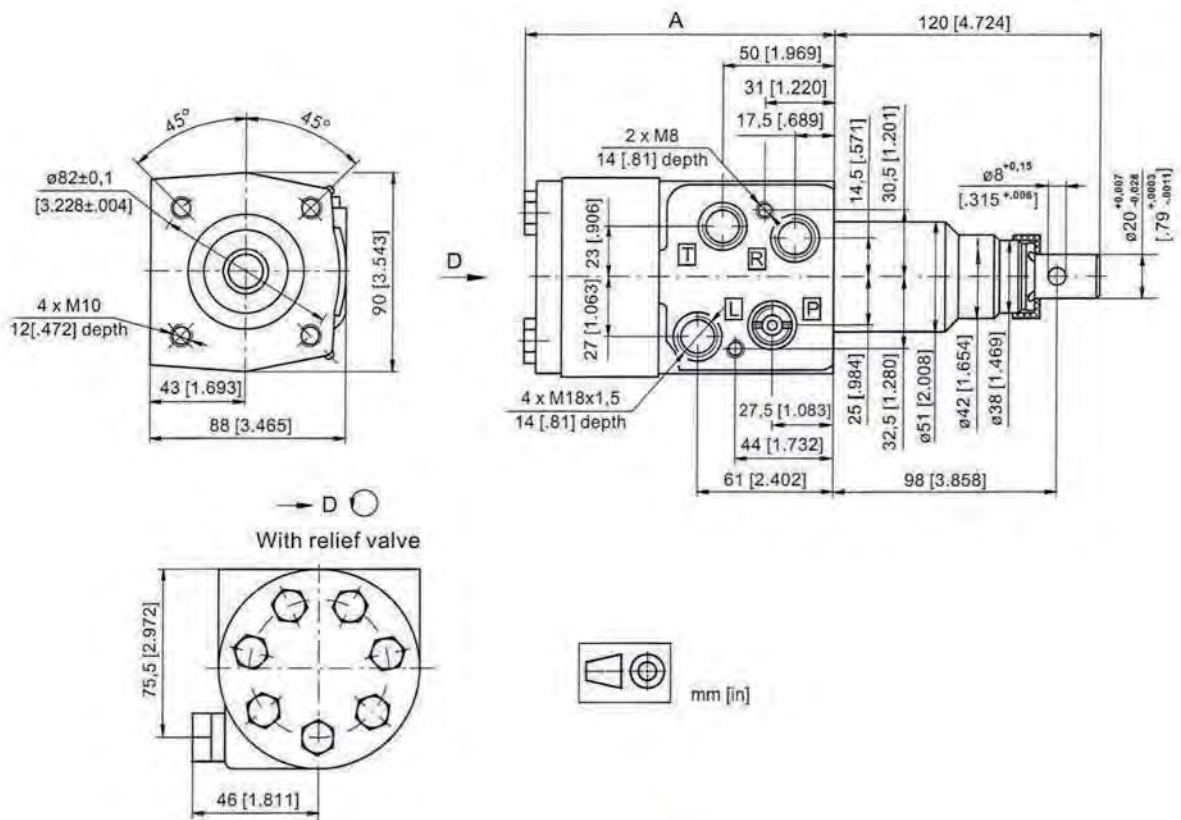
* Rated Flow at 100 RPM.

** Pressure Settings are at Rated Flow (as in the table) and viscosity 21 mm²/s [105 SUS] at 50° C [122°F].

***Pressure Settings are at flow rate of 4 lpm [1.06 GPM] and viscosity 21 mm²/s [105 SUS] at 50° C [122°F].

XY Orbitrol

Afmetingen en uitvoeringen



ORDER CODE

1	2	3	4	5
XY	-	/	1	

Pos.1 - Displacement code

85	-	84,0 [5.13]	cm ³ /rev [in ³ /rev]
120	-	120,0 [7.32]	cm ³ /rev [in ³ /rev]
145	-	144,0 [8.79]	cm ³ /rev [in ³ /rev]

Pos.2 - Relief Valve Pressure Settings

8	-	80 [1160]	bar [PSI]
10	-	100 [1450]	bar [PSI]
12,5	-	125 [1810]	bar [PSI]
15	-	150 [2175]	bar [PSI]
0	-	without Relief Valve	

Pos.3 - Versions

1	-	Version 1 "Open Center - Load Reaction"
---	---	---

Pos.4 - Option (Paint)*

omit	-	No Paint
P	-	Painted
PC	-	Corrosion Protected Paint

Pos.5 - Design Series

omit	-	Factory specified
------	---	-------------------

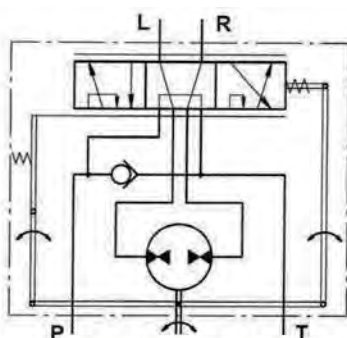
NOTES:

* Colour at customer's request.

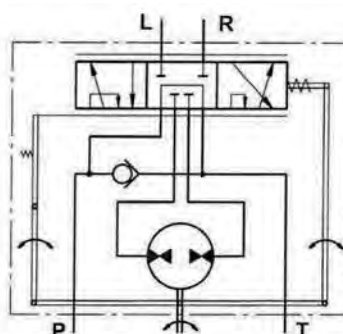
The steering units are manganese-phosphatized as standard.

HKU.../ 3, 4 Orbitrol

De nieuw ontwikkelde HKU orbitrol, met radiale verplaatsingen, bevat twee draaiende zoekkleppen die de metende pomp aanzetten.



"Open Center - Load Reaction"
Version 3 - HKU.../3



"Open Center - Non Load Reaction"
Version 4 - HKU.../4

Technische informatie

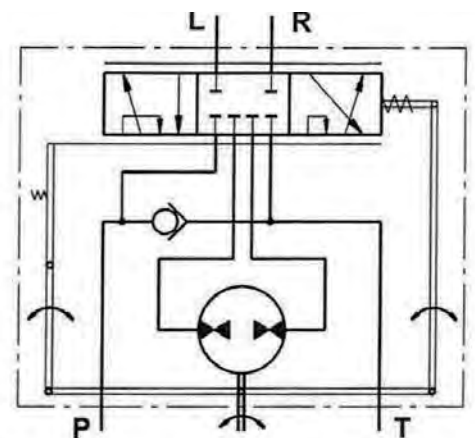
Parameters	Type																
	HKU 40/3	HKU 50/3	HKU 63/3	HKU 80/3	HKU 100/3	HKU 125/3	HKU 160/3	HKU 200/3	HKU 250/3	HKU 320/3	HKU 400/3						
	HKU 40/4	HKU 50/4	HKU 63/4	HKU 80/4	HKU 100/4	HKU 125/4	HKU 160/4	HKU 200/4	HKU 250/4	HKU 320/4	HKU 400/4	HKU 500/4	HKU 630/4	HKU 800/4	HKU 1000/4		
Displacement	cm ³ /rev [in ³ /rev]	39,6 [2.42]	49,5 [3.0]	65,6 [4.0]	79,2 [4.83]	99,0 [6.04]	7,56 [123,8]	9,67 [158,4]	198 [12,1]	247,5 [15,1]	316,8 [19,3]	396 [24,2]	495 [30,2]	623,6 [38,05]	793 [48,4]	990 [60,4]	
Rated Flow*	lpm [GPM]	4 [1.1]	5 [1.3]	6 [1.6]	8 [2.1]	10 [2.6]	13 [3.4]	16 [4.2]	20 [5.3]	25 [6.6]	32 [8.4]	40 [10.6]	50 [13.2]	63 [16.6]	70 [18.5]		
Rated Pressure	bar [PSI]	140 [2030]				170 [2465]						140 [2030]		100 [1450]			
Max. Cont. Pressure in Line T	bar [PSI]																
- standard		25 [363]															
- high pressure (H option)		40 [580]															
Max. Torque at Servoamplifing	Nm [lb - in]	3,0 [26]										3,0 [26]					
-with standard springs		3,0 [26]															
-with soft springs (LT option)		1,8 [16]															
Max. Torque w/o Servoamplifing	Nm [lb - in]	120 [1065]															
Weight	kg [lb]	5,3 [11.7]	5,4 [11.9]	5,5 [12.2]	5,6 [12.4]	5,7 [12.6]	5,8 [12.8]	6,0 [13.2]	6,3 [13.9]	6,5 [14.3]	7,0 [15.4]	7,4 [16.3]	8,0 [17.6]	8,7 [19.2]	9,6 [21.2]	10,6 [23.4]	
Dimension A	mm [in]	5.15 [130,8]	5.20 [132,2]	5.27 [133,9]	5.36 [136,2]	5.47 [138,8]	5.60 [142,2]	5.78 [146,8]	5.99 [152,2]	6.25 [158,8]	6.62 [168,2]	7.04 [178,8]	7.56 [192]	8.24 [209,3]	9.14 [232,2]	10.18 [258,6]	

* Inlet flow providing maximum speed of rotation:
 - 100 RPM - from HKU40 to HKU630;
 - 87 RPM - for HKU800;
 - 70 RPM - for HKU1000.

HKU.../7 Orbitrol



De HKU.../7 is een orbitrol "closed center – non load reaction", gemaakt voor integratie in systemen met een ingebouwde accumulator, ter voorkoming van teveel energieverlies.



"Closed Center - Non Load Reaction"
Version 7 - HKU.../7

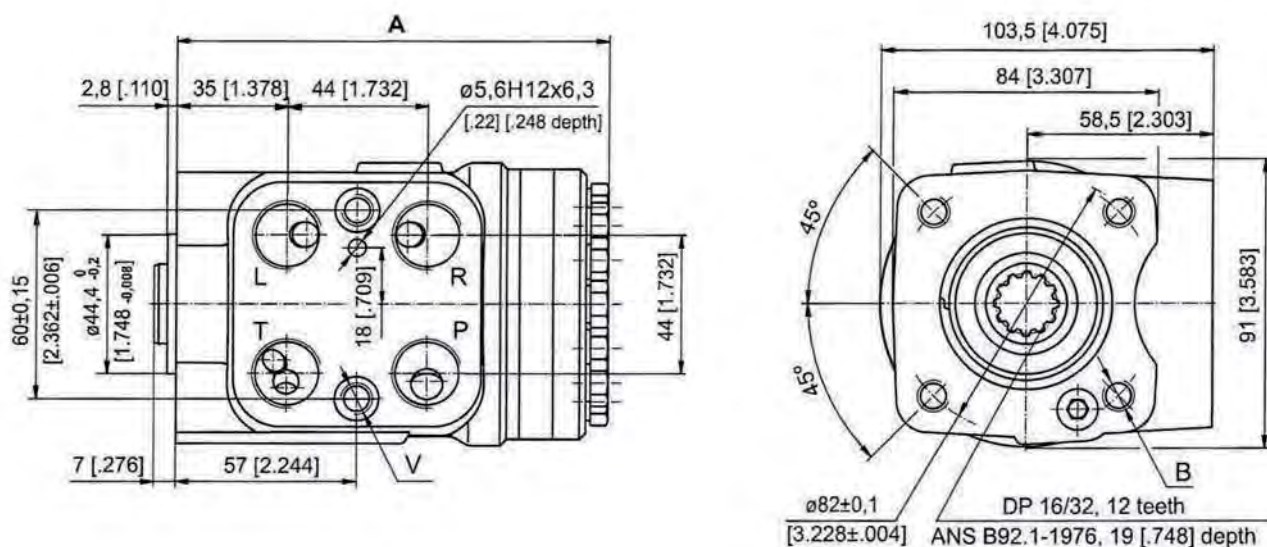
Algemene informatie

Parameters	Type														
	HKU 40/7	HKU 50/7	HKU 63/7	HKU 80/7	HKU 100/7	HKU 125/7	HKU 160/7	HKU 200/7	HKU 250/7	HKU 320/7	HKU 400/7	HKU 500/7	HKU 630/7	HKU 800/7	
Displacement cm ³ /rev [in ³ /rev]	39,6 [2.42]	49,5 [3.0]	65,6 [4.0]	79,2 [4.83]	99,0 [6.04]	123,8 [7.56]	158,4 [9.67]	198 [12.1]	247,5 [15.1]	316,8 [19.3]	396 [24.2]	495 [30.2]	623,6 [38.05]	793 [48.4]	
Rated Flow* lpm [GPM]	4 [1.1]	5 [1.3]	6 [1.6]	8 [2.1]	10 [2.6]	13 [3.4]	16 [4.2]	20 [5.3]	25 [6.6]	32 [8.4]	40 [10.6]	50 [13.2]	63 [16.6]	80 [21.1]	
Rated Pressure bar [PSI]	1810 [125]	2030 [140]	2540 [175]												
Max. Cont. Pressure in Line T bar [PSI]															
- standard															25 [363]
- high pressure (H option)	40 [580]														
Max. Torque at Servoamplifying Nm [in - lb]															
-with standard springs															3,0 [26]
-with soft springs (LT option)	1,8 [16]														
Max. Torque w/o Servoamplifying Nm [in - lb]	120 [1065]														
Weight kg [lb]	5,3 [11.7]	5,4 [11.9]	5,5 [12.2]	5,6 [12.4]	5,7 [12.6]	5,8 [12.8]	6,0 [13.2]	6,3 [13.9]	6,5 [14.3]	7,0 [15.4]	7,4 [16.3]	8,0 [17.6]	8,7 [19.2]	9,6 [21.2]	
Dimension A mm [in]	130,8 [5.15]	132,2 [5.20]	133,9 [5.27]	136,2 [5.36]	138,8 [5.47]	142,2 [5.60]	146,8 [5.78]	152,2 [5.99]	158,8 [6.25]	168,2 [6.62]	178,8 [7.04]	192 [7.56]	209,3 [8.24]	232,2 [9.14]	

* Inlet flow providing maximum speed of rotation:
 - 100 RPM - from HKU40 to HKU630;
 - 87 RPM - for HKU800.

HKU.../3, 4, 7 Orbitrol

Afmetingen en uitvoeringen



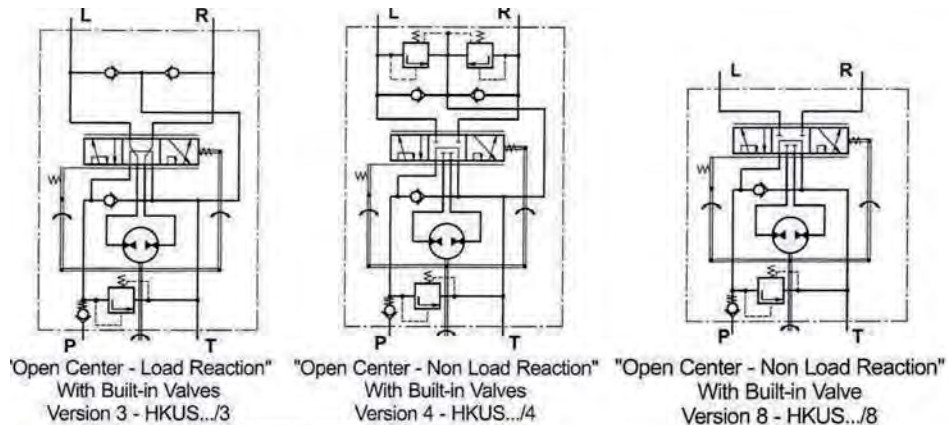
Code	Ports - P, T, R, L Thread	Column Mounting Thread - B	Valve Mounting Thread - V
-	G1/2 17 [.67] depth	4 x M10 18 [.71] depth	2 x M10x1 16 [.63] depth
M	M22x1,5 17 [.67] depth	4 x M10 18 [.71] depth	2 x M10x1 16 [.63] depth
A	3/4 - 16 UNF O-ring 17 [.67] depth	4 x 3/8 - 16 UNC 15,7 [.62] depth	2 x 3/8 - 24 UNF 14,2 [.56] depth
BA*	9/16 - 18 UNF O-ring 17 [.67] depth	4 x 3/8 - 16 UNC 15,7 [.62] depth	2 x 3/8 - 24 UNF 14,2 [.56] depth

* These threads are for displacements from HKU40 to HKU200 only.

HKUS.../3, 4, 8 Orbitrol



De HKUS orbitrols zijn gebaseerd op de HKU maar met ingebouwde terugslagkleppen en overdruk. M+S heeft een compacte orbitrol ontwikkeld waarbij geen extra componenten nodig zijn.



Algemene informatie

Parameters	Type												
	HKUS 40/3,4,8	HKUS 50/3,4,8	HKUS 63/3,4,8	HKUS 80/3,4,8	HKUS 100/3,4,8	HKUS 125/3,4,8	HKUS 160/3,4,8	HKUS 200/3,4,8	HKUS 250/3,4,8	HKUS 320/3,4,8	HKUS 400/3,4,8	HKUS 500/3,4,8	
Displacement	cm ³ /rev [in ³ /rev]	39,6 [2.42]	49,5 [3.0]	65,6 [4.0]	79,2 [4.83]	99,0 [6.04]	123,8 [7.56]	158,4 [9.67]	198 [12.1]	247,5 [15.1]	316,8 [19.3]	396 [24.2]	495 [30.2]
Rated Flow*	lpm [GPM]	4 [1.1]	5 [1.3]	6 [1.6]	8 [2.1]	10 [2.6]	13 [3.4]	16 [4.2]	20 [5.3]	25 [6.6]	32 [8.4]	40 [10.6]	50 [13.2]
Rated Pressure	bar [PSI]	140 [2030]			170 [2465]								
Relief Valve Pressure	bar [PSI]	80 [1160]			100 [1450]	125 [1810]	150 [2175]	170 [2465]					
Shock Valves Pressure	bar [PSI]	140 [2030]			160 [2320]	180 [2610]	200 [2900]	220 [3190]					
Max. Cont. Pressure in Line T	bar [PSI]	- standard 25 [363] (50 [725] by HKUS.../8) - high pressure (H option) 40 [580]											
Max. Torque at Servoamplifing	Nm [lb - in]	3,0 [26]						3,0 [26]					
-with standard springs		3,0 [26]						3,0 [26]					
-with soft springs (LT option)		1,8 [16]						-					
Max. Torque w/o Servoamplifing	Nm [lb - in]	120 [1065]											
Weight	kg [lb]	5,3 [11.7]	5,4 [11.9]	5,5 [12.2]	5,6 [12.4]	5,7 [12.6]	5,8 [12.8]	6,0 [13.2]	6,3 [13.9]	6,5 [14.3]	7,0 [15.4]	7,4 [16.3]	8,0 [17.6]
Dimension A	mm [in]	130,8 [5.15]	132,2 [5.20]	133,9 [5.27]	136,2 [5.36]	138,8 [5.47]	142,2 [5.60]	146,8 [5.78]	152,2 [5.99]	158,8 [6.25]	168,2 [6.62]	178,8 [7.04]	192 [7.56]

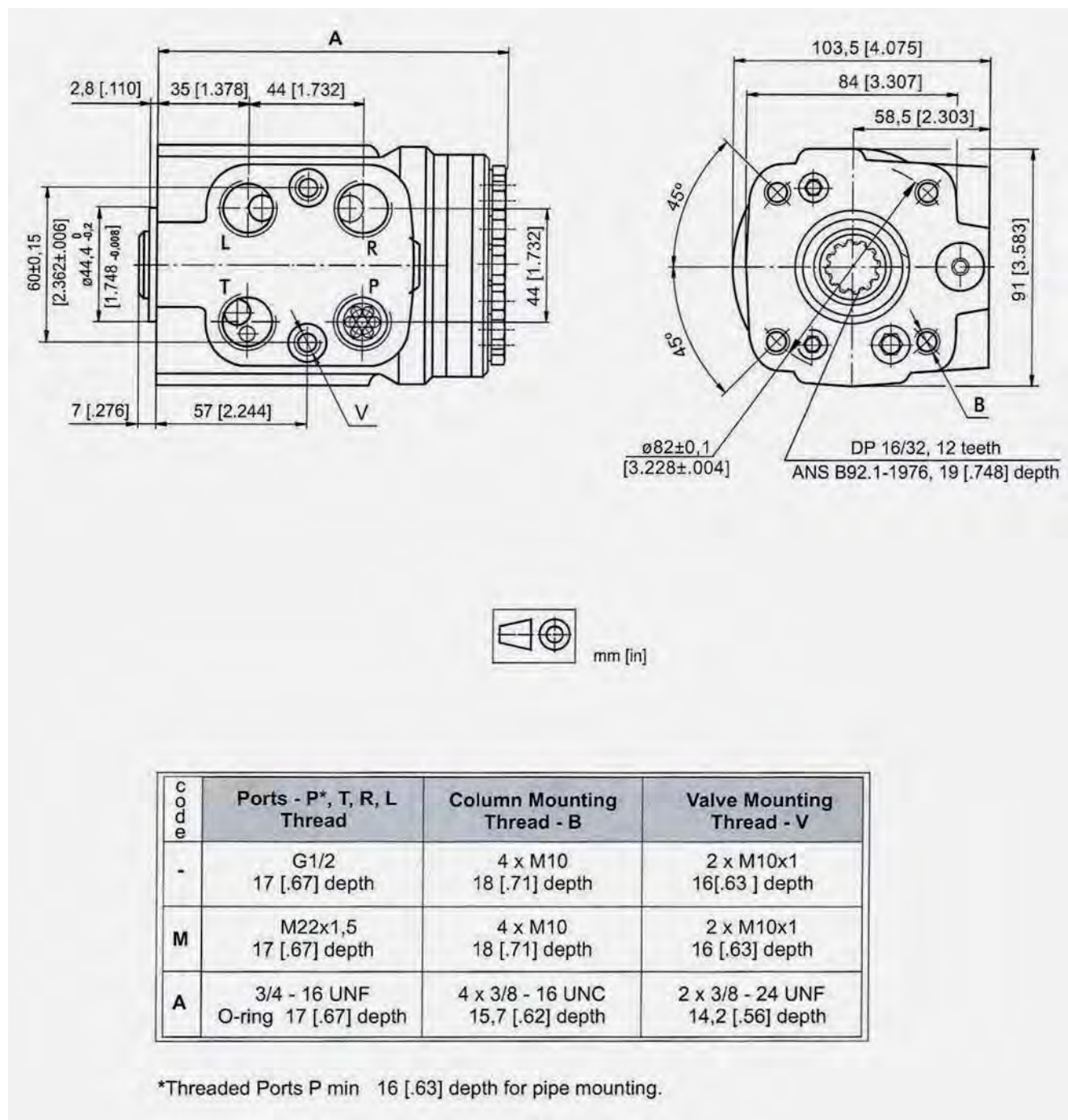
* Rated Flow at 100 RPM.

** Pressure Settings are at Rated Flow (as in the table) and viscosity 21 mm²/s [105 SUS] at 50° C [122°F].

***Pressure Settings are at flow rate of 2 lpm [.53 GPM] and viscosity 21 mm²/s [105 SUS] at 50° C [122°F].

HKUS.../3, 4, 8 Orbitrol

Afmetingen en uitvoeringen



HKU, HKUS Orbitrol

Bestelgegevens

	1	2	3	4	5	6	7	8
HKU	/	-						

Pos.1 - Displacement code (see Specification Data)

40	-	39,6	[2.42]	cm ³ /rev	[in ³ /rev]
50	-	49,5	[3.00]	cm ³ /rev	[in ³ /rev]
63	-	65,6	[4.00]	cm ³ /rev	[in ³ /rev]
80	-	79,2	[4.83]	cm ³ /rev	[in ³ /rev]
100	-	99,0	[6.04]	cm ³ /rev	[in ³ /rev]
125	-	123,8	[7.56]	cm ³ /rev	[in ³ /rev]
160	-	158,4	[9.67]	cm ³ /rev	[in ³ /rev]
200	-	198,0	[12.10]	cm ³ /rev	[in ³ /rev]
250	-	247,5	[15.10]	cm ³ /rev	[in ³ /rev]
320	-	316,8	[19.30]	cm ³ /rev	[in ³ /rev]
400	-	396,0	[24.20]	cm ³ /rev	[in ³ /rev]
500	-	495,0	[30.20]	cm ³ /rev	[in ³ /rev]
630	-	623,6	[38.05]	cm ³ /rev	[in ³ /rev]
800	-	793,0	[48.40]	cm ³ /rev	[in ³ /rev]
1000	-	990,0	[60.40]	cm ³ /rev	[in ³ /rev]

Pos.2 - Versions

3	-	Version 3 "Open Center - Load Reaction"
4	-	Version 4 "Open Center - Non Load Reaction"
7	-	Version 7 "Closed Center - Non Load Reaction"

Pos.3 - Ports

omit	-	BSPP (ISO 228)
M	-	Metric (ISO 262)
A	-	SAE (ANSI B 1.1 - 1982)
BA*	-	SAE (ANSI B 1.1 - 1982)

Pos.4 - Max. Cont. Pressure in line T

omit	-	Standard
H	-	High pressure

Pos.5 - Input torque

omit	-	Standard
LT*	-	Low

Pos.6 - Noise level

omit	-	Standard
LN**	-	Low

Pos.7 - Option (Paint)***

omit	-	No Paint
P	-	Painted Low Gloss Color
PC	-	Corrosion Protected Paint

Pos.8 - Design Series

omit	-	Factory specified
------	---	-------------------

Notes: * Available only for displacement from 40 to 200.
 ** Available only for versions 3 and 4 with displacements from 40 to 200.
 *** Colour at customer's request.

The steering units are mangano-phosphatized as standard.

ORDER CODE

	1	2	3	4	5	6	7	8	9
HKUS	/	-	-						

Pos.1 - Displacement code (see Specification Data)

40	-	39,6	[2.42]	cm ³ /rev	[in ³ /rev]
50	-	49,5	[3.00]	cm ³ /rev	[in ³ /rev]
63	-	65,6	[4.00]	cm ³ /rev	[in ³ /rev]
80	-	79,2	[4.83]	cm ³ /rev	[in ³ /rev]
100	-	99,0	[6.04]	cm ³ /rev	[in ³ /rev]
125	-	123,8	[7.56]	cm ³ /rev	[in ³ /rev]
160	-	158,4	[9.67]	cm ³ /rev	[in ³ /rev]
200	-	198,0	[12.10]	cm ³ /rev	[in ³ /rev]
250	-	247,5	[15.10]	cm ³ /rev	[in ³ /rev]
320	-	316,8	[19.30]	cm ³ /rev	[in ³ /rev]
400	-	396,0	[24.20]	cm ³ /rev	[in ³ /rev]
500	-	495,0	[30.20]	cm ³ /rev	[in ³ /rev]

Pos.2 - Versions

3	-	Version 3 "Open Center - Load Reaction"
4	-	Version 4 "Open Center - Non Load Reaction"
8	-	Version 8 "Open Center - Non Load Reaction"

Pos.3 - Relief Valve Pressure Settings, bar

80, 100, 125, 150, 170

Pos.4 - Ports

omit	-	BSPP (ISO 228)
A	-	SAE (ANSI B 1.1 - 1982)
M	-	Metric (ISO 262)

Pos.5 - Max. Cont. Pressure in line T

omit	-	Standard
H	-	High pressure

Pos.6 - Input torque

omit	-	Standard
LT*	-	Low

Pos.7 - Noise level

omit	-	Standard
LN*	-	Low

Pos.8 - Option (Paint)**

omit	-	No Paint
P	-	Painted Low Gloss Color
PC	-	Corrosion Protected Paint

Pos.9 - Design Series

omit	-	Factory specified
------	---	-------------------

Version	Manual Steering Check Valve	Relief Valve	Inlet Check Valve	Cylinder Relief Valve	Anti-Cavitation Valve
3	*	*	*		*
4	*	*	*	*	*
8	*	*	*		

Notes: * Available only for displacement from 40 to 200.
 ** Colour at customer's request.

The steering units are mangano-phosphatized as standard.

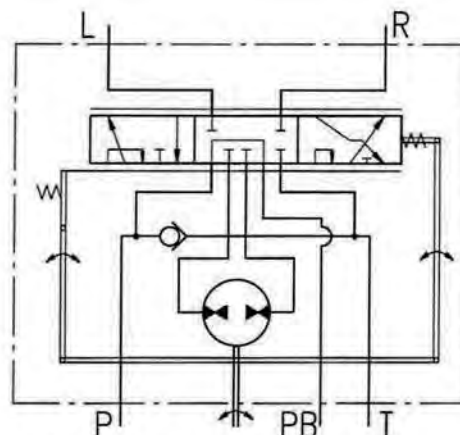
HKU.../4PB

Orbitrol



De orbitrol is geschikt voor gemiddelde en grote machines. De HKU.../4pb werkt als een standaard orbitrol, maar met uitwendige poorten voor het bedienen van andere functies op de machine. Als het stuurwiel niet wordt gedraaid, loopt de olie

via poort PB terug in het systeem. Als het stuurwiel wordt gedraaid zal een gedeelte van de olie gebruikt worden voor het sturen. Het is daarom niet aan te bevelen om de orbitrol te gebruiken in functies die tegelijk met het sturen bediend worden.



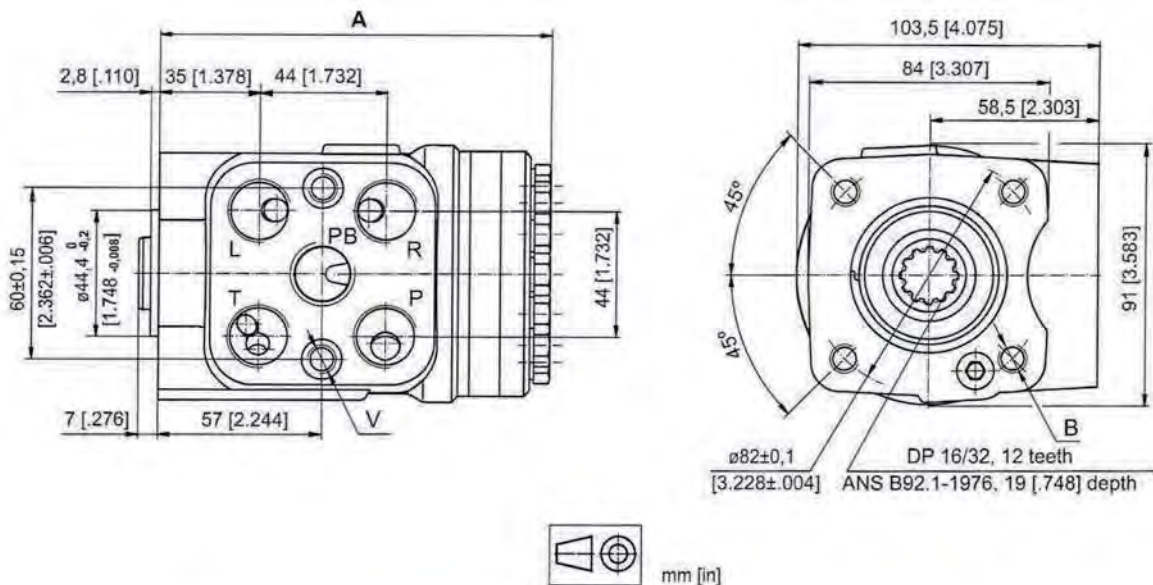
"Open Center - Non Load Reaction"
 HKU.../4PB - Power Beyond

Algemene informatie

Parameters	Type						
	HKU 40/4PB	HKU 50/4PB	HKU 63/4PB	HKU 80/4PB	HKU 100/4PB	HKU 125/4PB	
Displacement	cm ³ /rev [In ³ /rev]	39,6 [2.42]	49,5 [3.0]	65,6 [4.0]	79,2 [4.83]	99,0 [6.04]	123,8 [7.56]
Rated Flow-5 Port (Power Beyond)	lpm [GPM]	15 [3.96]					
Rated Pressure	bar [PSI]	125 [1813]					
Max. Pressure in line PB,	bar [PSI]	125 [1813]					
Max. Cont. Pressure in Line T - P _T	bar [PSI]	10 [145]					
Max. Torque at Servoamplifing	Nm [lb - in]	2,8 (by PT max) [25]					
Max. Torque w/o Servoamplifing	Nm [lb - in]	135 [1195]					
Weight	kg [lb]	5,3 [11.7]	5,4 [11.9]	5,5 [12.2]	5,6 [12.4]	5,7 [12.6]	5,8 [12.8]
Dimension A	mm [in]	130,8 [5.15]	132,2 [5.20]	133,9 [5.27]	136,2 [5.36]	138,8 [5.47]	142,2 [5.60]

HKU.../4PB Orbitrol

Afmetingen en uitvoeringen



Code	Ports - P, T, R, L, PB Thread	Column Mounting Thread - B	Valve Mounting Thread - V
-	G3/8 17 [.67] depth	4 x M10 18 [.71] depth	2 x M10x1 16 [.63] depth
A	9/16 - 18 UNF O-ring 17 [.67] depth	4x 3/8 - 16 UNC 15.7 [.62] depth	2 x 3/8 - 24 UNF 14.2 [.56] depth

ORDER CODE for HKU.../4PB

1	2	3	4	5
HKU	/	4PB	-	

Pos.1 - Displacement code (see Specification Data)

40	-	39,6 [2.42]	cm ³ /rev [in ³ /rev]
50	-	49,5 [3.00]	cm ³ /rev [in ³ /rev]
63	-	65,6 [4.00]	cm ³ /rev [in ³ /rev]
80	-	79,2 [4.83]	cm ³ /rev [in ³ /rev]
100	-	99,0 [6.04]	cm ³ /rev [in ³ /rev]
125	-	123,8 [7.56]	cm ³ /rev [in ³ /rev]

Pos.2 - Versions

4PB	-	Version 4 "Open Center - Non Load Reaction" with 5 ports (Power Beyond)
-----	---	---

Pos.3 - Ports

omit	-	BSPP (ISO 228)
A	-	SAE (ANSI B 1.1 - 1982)

Pos.4 - Option (Paint)*

omit	-	No Paint
P	-	Painted Low Gloss Color
PC	-	Corrosion Protected Paint

Pos.5 - Design Series

omit	-	Factory specified
------	---	-------------------

NOTES:

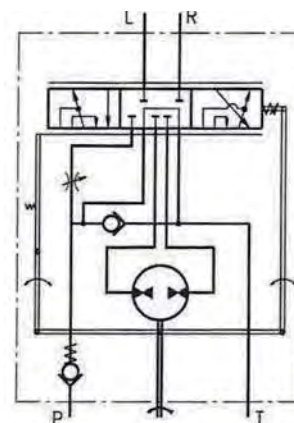
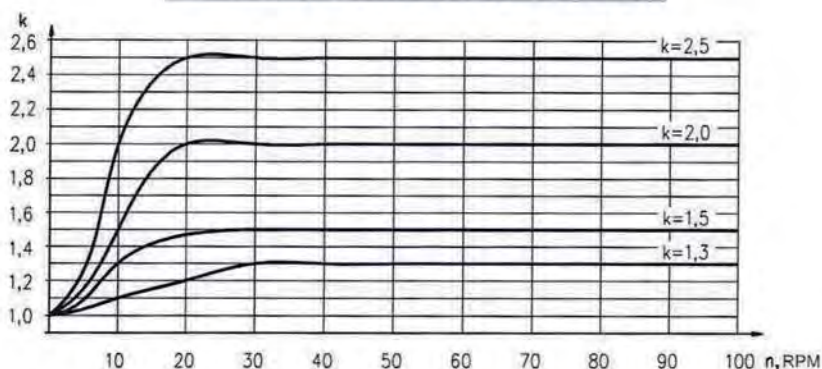
* Colour at customer's request.

The steering units are mangano-phosphatized as standard.

HKUQ.../.../4 Orbitrol



VARIABLE AMPLIFYING FACTOR



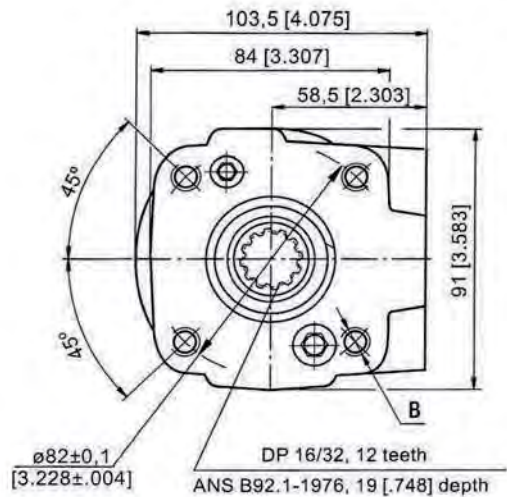
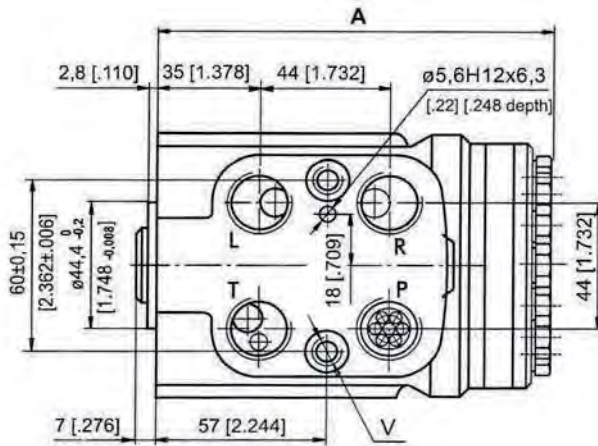
"Open Center - Non Load Reaction"
HKUQ.../4

SPECIFICATION DATA

Parameters	Type																			
	HKUQ 80/.../4				HKUQ 100/.../4				HKUQ 125/.../4				HKUQ 160/.../4				HKUQ 200/.../4			
Displacement - without servo-amplifying (in emergency mode) cm^3/rev	79,2 [4.83]				99,0 [6.04]				123,8 [7.56]				158,4 [9.67]				198 [12.08]			
- with servo-amplifying $[\text{in}^3]$	100	125	160	200	125	160	200	250	160	200	250	320	200	250	320	400	250	320	400	500
	[6.10]	[7.62]	[9.76]	[12.2]	[7.62]	[9.76]	[12.2]	[15.25]	[9.76]	[12.2]	[15.25]	[19.52]	[12.2]	[15.25]	[19.52]	[24.4]	[15.25]	[19.52]	[24.4]	[30.5]
Rated Flow* l/min	10	12,5	16	20	12,5	16	20	25	16	20	25	32	20	25	32	40	25	32	40	50
	[2.64]	[3.30]	[4.22]	[5.28]	[3.30]	[4.22]	[5.28]	[6.60]	[4.22]	[5.28]	[6.60]	[8.45]	[5.28]	[6.60]	[8.45]	[10.57]	[6.60]	[8.45]	[10.57]	[13.24]
Amplifying Factor (at shaft revolution over 20 min ⁻¹)	1,3	1,5	2,0	2,5	1,3	1,5	2,0	2,5	1,3	1,5	2,0	2,5	1,3	1,5	2,0	2,5	1,3	1,5	2,0	2,5
Rated Pressure bar [PSI]	170 [2465]																			
Max. Cont. Pressure in Line T bar [PSI]	25 [363]																			
Max. Torque at Servoamplifying Nm [lb - in]	3 [26]																			
Max. Torque w/o Servoamplifying Nm [lb - in]	120 [1065]																			
Weight, avg. kg [lb]	5,6 [12.4]				5,7 [12.6]				5,8 [12.8]				6,0 [13.2]				6,3 [13.9]			
Dimension A mm [in]	136,2 [5.36]				138,8 [5.47]				142,2 [5.60]				146,8 [5.78]				152,2 [5.99]			

HKUQ.../.../4
 Orbitrol

Afmetingen en uitvoeringen



Code	Ports - P*, T, R, L Thread	Column Mounting Thread - B	Valve Mounting Thread - V
-	G1/2 17 [.67] depth	4 x M10 18 [.71] depth	2 x M10x1 16 [.63] depth
M	M22x1,5 17 [.67] depth	4 x M10 18 [.71] depth	2 x M10x1 16 [.63] depth
A	3/4 - 16 UNF O-ring 17 [.67] depth	4 x 3/8 - 16 UNC 15,7 [.62] depth	2 x 3/8 - 24 UNF 14,2 [.56] depth

*Threaded Ports P min 16 [.63] depth for pipe mounting.



ORDER CODE for HKUQ...



Pos.1 - Displacement code

80	-	79,2	[4.83]	cm ³ /rev	[in ³ /rev]
100	-	99,0	[6.04]	cm ³ /rev	[in ³ /rev]
125	-	123,8	[7.56]	cm ³ /rev	[in ³ /rev]
160	-	158,4	[9.67]	cm ³ /rev	[in ³ /rev]
200	-	198,0	[12.10]	cm ³ /rev	[in ³ /rev]

Pos.3 - Versions

4	-	Version 4 "Open Center - Non Load Reaction"
---	---	---

Pos.2 - Displacement with amplifying factor 1,3; 1,5; 2,0 or 2,5

80	100	125	160	200
----	-----	-----	-----	-----

Pos.4 - Ports

omit	-	BSPP (ISO 228)
A	-	SAE (ANSI B 1.1 - 1982)
M	-	Metric (ISO 262)

100	■	■	■	■	■
125	■	■	■	■	■
160	■	■	■	■	■
200	■	■	■	■	■
250	■	■	■	■	■
320	■	■	■	■	■
400	■	■	■	■	■
500	■	■	■	■	■

■ k=1,3
 ■ k=1,5
 ■ k=2,0
 ■ k=2,5

Pos.5 - Option (Paint)**

omit	-	No Paint
P	-	Painted Low Gloss Color
PC	-	Corrosion Protected Paint

Pos.6 - Design Series

omit	-	Factory specified
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NOTES:

- * Exemplary designation of steering unit with displacement 200 cm³ and amplifying factor 2,5: HKUQ 200/500/4
- ** Colour at customer's request.

The steering units are mangano-phosphatized as standard.

HKU(S).../5(D)(T)(TU)

Orbitrol



Deze serie orbitrols is een uitbreiding op de range “closed center – non reaction and load Sensing outlet” (statische en dynamische verbinding met de prioriteitsklep) De range is ontwikkeld in twee versies; modulair en leidingmontage en daarvoor zijn twee versies overdruk (tracing) kleppen ontwikkeld: PRD... en PRT...

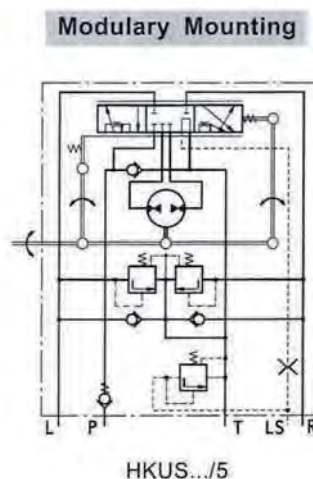
HKU.../5 is ontwikkeld om zo weinig mogelijk energie te gebruiken in verschillende hydraulische systemen zoals een heftruck,

landbouwmachines en constructie machines.

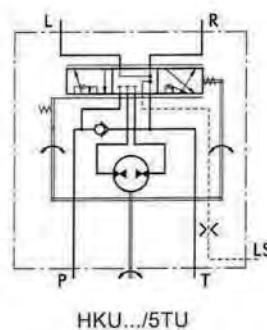
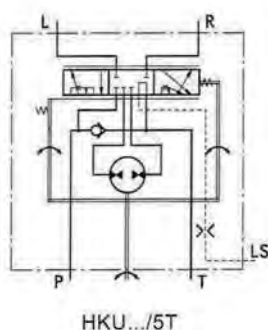
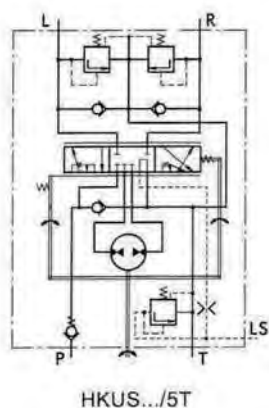
De HKU.../5TU is een orbitrol waarbij de poorten R en L in neutrale positie zijn verbonden met de retourleiding T. Dit draagt bij voor het snel verlagen van de restdruk in R en L dat normaal “locked” als het stuurwiel is teruggebracht in de neutrale positie. Deze orbitrol sturen niet direct de stuurcilinders aan, maar zijn aangesloten op het hydraulische systeem om flow amplificers te bekrachtigen.

HKUS.../5D(DT).. is een nieuwe generatie orbitrol waarbij de dynamische flow naar de LS leiding een snelle en gelijkmatige controle tijdens het begin van het sturen mogelijk maakt. De algemene kenmerken zijn; Lage torque van het stuurwiel 0.5÷2.0 Nm (4.5÷18 lb-in) in normale werkcondities; hoge stuursnelheid, alleen begrenst door de werkdruk en flow van de toevoerpomp; constante olieflow in LS leiding in neutrale positie 0.45÷0.9 lpm. De eenheid werkt in een systeem met een dynamisch prioriteitsventiel en is geschikt om de energievraag van de machine te verlagen.

M+S produceert ook de orbitrol HKUS.../5E(5TE). Dit is een orbitrol met een EL poort, zodat een elektrisch hydraulisch relay, gemonteerd in de poort, het hydraulische systeem kan aansturen.



Leiding montage



HKUS.../5 Orbitrol

Algemene informatie

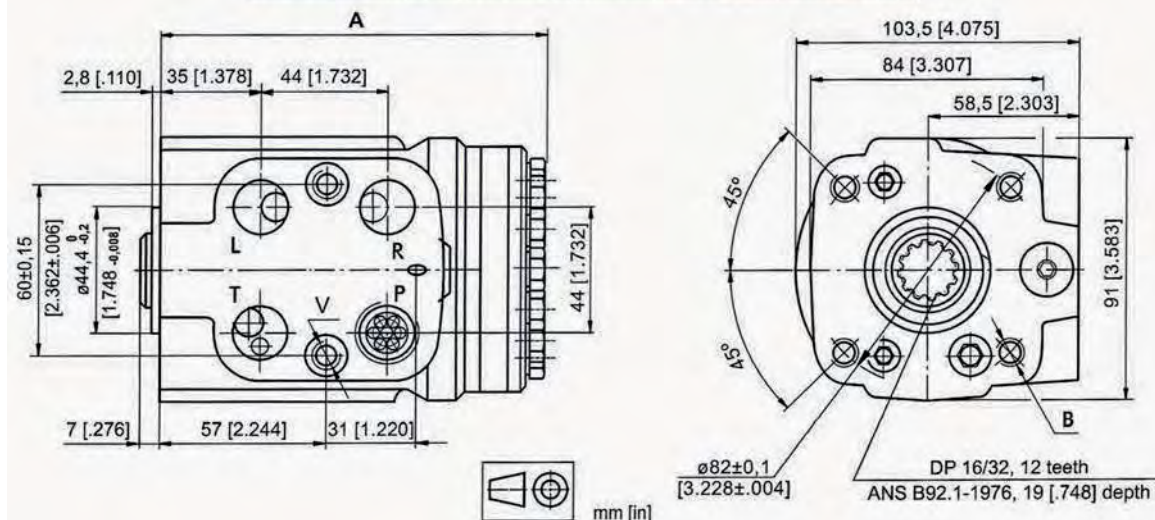
Parameters	Type													
	HKU 40/5T	HKU 50/5T	HKU 63/5T	HKU 80/5T	HKU 100/5T	HKU 125/5T	HKU 160/5T	HKU 200/5T	HKU 250/5T	HKU 320/5T	HKU 400/5T	HKU 500/5T	HKU 630/5T	
Displacement	cm ³ /rev	39,6	49,5	65,6	79,2	99,0	123,8	158,4	198	247,5	316,8	396	495	623,6
	[in ³ /rev]	[2.42]	[3.0]	[4.0]	[4.83]	[6.04]	[7.56]	[9.67]	[12.1]	[15.1]	[19.3]	[24.2]	[30.2]	[38.05]
Rated Flow*	lpm	4	5	6	8	10	13	16	20	25	32	40	50	63
	[GPM]	[1.1]	[1.3]	[1.6]	[2.1]	[2.6]	[3.4]	[4.2]	[5.3]	[6.6]	[8.4]	[10.6]	[13.2]	[16.6]
Rated Pressure	bar	125	150	175										
	[PSI]	[1810]	[2175]	[2540]										
LS-Valve Pressure Settings**	bar [PSI]				80	100	125	150	175					
Shock Valves Pressure Settings***	bar [PSI]				140	160	180	200	240					
Max. Cont. Pressure in Line T	bar [PSI]													
- standard		20 [290]												
- high pressure (H option)		40 [580]												
Max. Torque at Servoamplifying	Nm [lb-in]													
-with standard springs		3,0 [26]						3,0 [26]						
-with soft springs (LT option)		1,8 [16]						-						
Max. Torque w/o Servoamplifying	Nm [lb-in]	120												
		[1065]												
Weight	kg	5,3	5,4	5,5	5,6	5,7	5,8	6,0	6,3	6,5	7,0	7,4	8,0	8,7
	[lb]	[11.7]	[11.9]	[12.2]	[12.4]	[12.6]	[12.8]	[13.2]	[13.9]	[14.3]	[15.4]	[16.3]	[17.6]	[19.2]
Dimension A	mm	130,8	132,2	133,9	136,2	138,8	142,2	146,8	152,2	158,8	168,2	178,8	192	209,3
	[in]	[5.15]	[5.20]	[5.27]	[5.36]	[5.47]	[5.60]	[5.78]	[5.99]	[6.25]	[6.62]	[7.04]	[7.56]	[8.24]

* Rated Flow at 100 RPM.

** Pressure Settings are at flow rate of 25 lpm [6.6 GPM] and viscosity 21 mm²/s [105 SUS] at 50° C [122°F], supplied through priority valve.

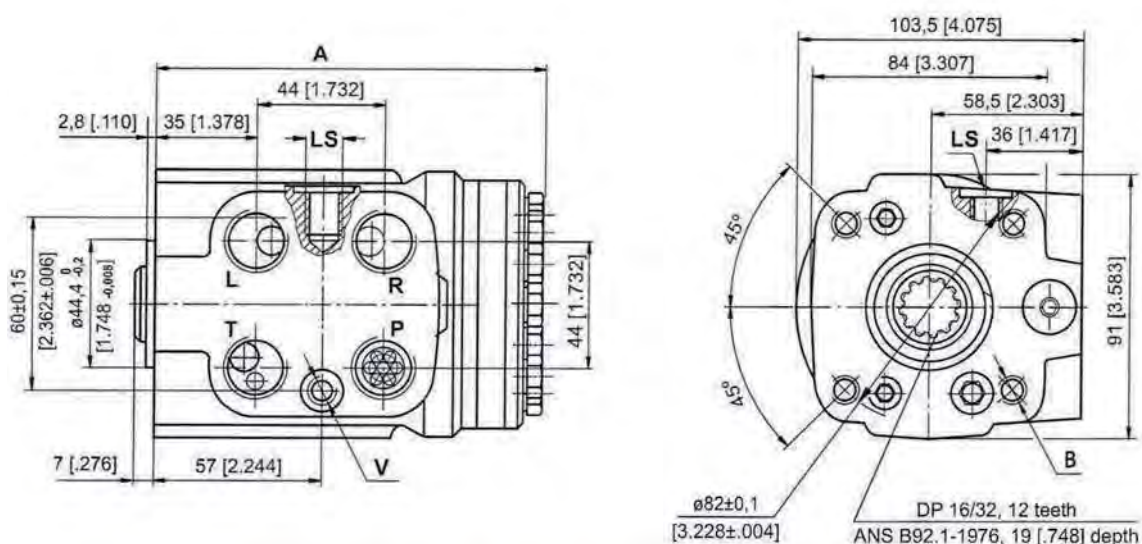
***Pressure Settings are at flow rate of 2 lpm [.53 GPM] and viscosity 21 mm²/s [105 SUS] at 50° C [122°F].

DIMENSIONS AND MOUNTING DATA - HKUS.../5(D)

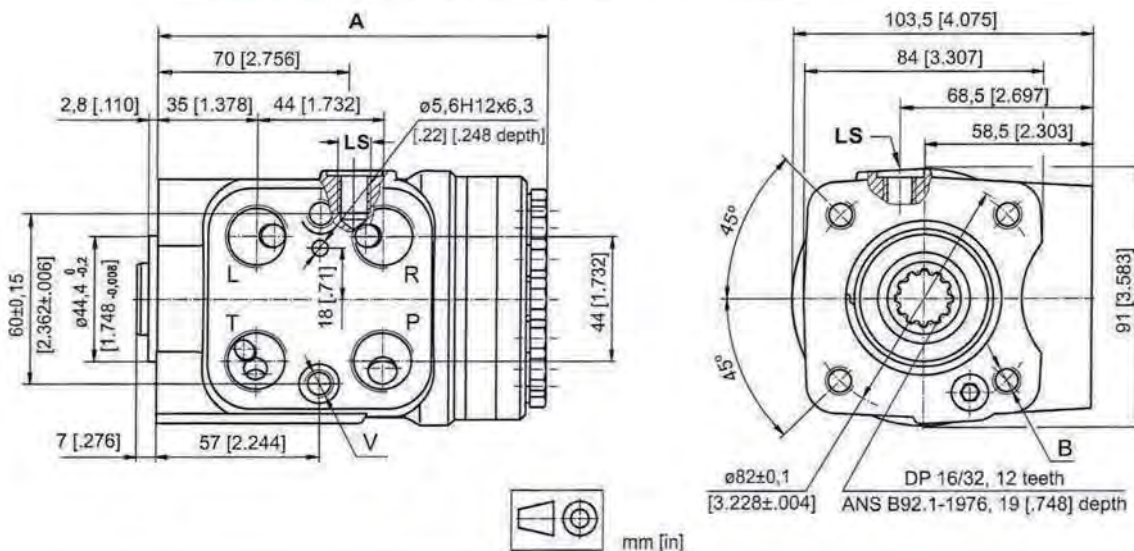


HKU(S).../5T Orbitrol

Afmetingen en uitvoeringen



DIMENSIONS AND MOUNTING DATA - HKU.../5T(TU)



Code	Ports - P*, T, R, L Thread	Column Mounting Thread - B	Valve Mounting Thread - V	LS - Port
-	G1/2 17 [67] depth	4 x M10 18 [71] depth	2 x M10x1 16 [63] depth	G1/4 14 [55] depth
M	M22x1,5 17 [67] depth	4 x M10 18 [71] depth	2 x M10x1 16 [63] depth	G1/4 14 [55] depth
A	3/4 - 16 UNF O-ring 17 [67] depth	4 x 3/8 - 16 UNC 15,7 [62] depth	2 x 3/8 - 24 UNF 14,2 [56] depth	7/16 - 20 UNF O-ring 12,7 [50] depth

*Threaded Ports P min 16 [63] depth for pipe mounting.

HKUS.../5...

Orbitrol

Bestelgegevens

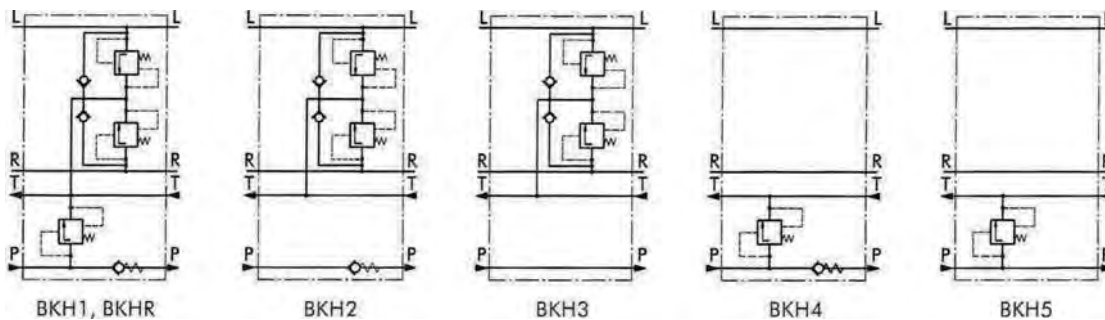
1	2	3	4	5	6	7	8	9	10	11	
HKUS	/	5			-	-					
Pos.1 - Displacement code (see Specification Data)					Pos.6 - LS - Valve Pressure Settings, bar						
40	-	39,6	[2.42]	cm ³ /rev [in ³ /rev]	80	100	125	150	175		
50	-	49,5	[3.00]	cm ³ /rev [in ³ /rev]	Pos.7 - Ports						
63	-	65,6	[4.00]	cm ³ /rev [in ³ /rev]	omit - BSPP (ISO 228)						
80	-	79,2	[4.83]	cm ³ /rev [in ³ /rev]	M - Metric (ISO 262)						
100	-	99,0	[6.04]	cm ³ /rev [in ³ /rev]	A - SAE (ANSI B 1.1 - 1982)						
125	-	123,8	[7.56]	cm ³ /rev [in ³ /rev]	Pos.8 - Max. Cont. Pressure in line T						
160	-	158,4	[9.67]	cm ³ /rev [in ³ /rev]	omit - Standard						
200	-	198,0	[12.10]	cm ³ /rev [in ³ /rev]	H - High pressure						
250	-	247,5	[15.10]	cm ³ /rev [in ³ /rev]	Pos.9 - Input torque						
320	-	316,8	[19.30]	cm ³ /rev [in ³ /rev]	omit - Standard						
400	-	396,0	[24.20]	cm ³ /rev [in ³ /rev]	LT* - Low						
Pos.2 - Versions					Pos.10 - Option (Paint)**						
5	- Version 5 "Closed Center - Non Reaction and Load Sensing Outlet"				omit - No Paint						
Pos.3 - Signal Type					P - Painted Low Gloss Color						
omit - Static Load Signal					PC - Corrosion Protected Paint						
D - Dynamic Load Signal					Pos.11 - Design Series						
Pos.4 - Priority Valve Connection					omit - Factory specified						
omit - Modular Mounting					Notes:						
T - Pipe Mounting					* Available only for displacement from 40 to 200.						
					** Colour at customer's request.						
					The steering units are mangano-phosphatized as standard.						

ORDER CODE for HKU.../5T...

1	2	3	4	5	6	7	8	
HKU	/	5	T	-				
Pos.1 - Displacement code (see Specification Data)				Pos.4 - Ports				
40	-	39,6	[2.42]	cm ³ /rev [in ³ /rev]	omit - BSPP (ISO 228)			
50	-	49,5	[3.00]	cm ³ /rev [in ³ /rev]	A - SAE (ANSI B 1.1 - 1982)			
63	-	65,6	[4.00]	cm ³ /rev [in ³ /rev]	M - Metric (ISO 262)			
80	-	79,2	[4.83]	cm ³ /rev [in ³ /rev]	Pos.5 - Max. Cont. Pressure in line T			
100	-	99,0	[6.04]	cm ³ /rev [in ³ /rev]	omit - Standard			
125	-	123,8	[7.56]	cm ³ /rev [in ³ /rev]	H - High pressure			
160	-	158,4	[9.67]	cm ³ /rev [in ³ /rev]	Pos.6 - Input torque			
200	-	198,0	[12.10]	cm ³ /rev [in ³ /rev]	omit - Standard			
250	-	247,5	[15.10]	cm ³ /rev [in ³ /rev]	LT* - Low			
320	-	316,8	[19.30]	cm ³ /rev [in ³ /rev]	Pos.7 - Option (Paint)**			
400	-	396,0	[24.20]	cm ³ /rev [in ³ /rev]	omit - No Paint			
500	-	495,0	[30.20]	cm ³ /rev [in ³ /rev]	P - Painted Low Gloss Color			
630	-	623,6	[38.05]	cm ³ /rev [in ³ /rev]	PC - Corrosion Protected Paint			
Pos.2 - Versions				Pos.8 - Design Series				
5	- Version 5 "Closed Center - Non Reaction and Load Sensing Outlet"			omit - Factory specified				
Pos.3 - Priority Valve Connection				Notes:				
T - Pipe Mounting (only)				* Available only for displacement from 40 to 200.				
TU - Pipe Mounting (ports R and L in neutral position are connected to the drain line T)				** Colour at customer's request.				
				The steering units are mangano-phosphatized as standard.				

BKH... Stuurklep

De BKH kleppen zijn ontwikkeld om de componenten in een hydraulisch circuit te beschermen: pomp, orbitrol en cylinders – voor overbelasting, implosie en stoten. Sommige voordelen zijn; makkelijk te integreren in een hydraulisch systeem, makkelijk te monteren op een orbitrol en het is snel en gemakkelijk om slangen te monteren. Afhankelijk van het ontwerp en de ingebouwde kleppen kan de BKH gemonteerd worden in 6 types: BKH1 ... BKH5 en BKHR. De BKH5 is speciaal ontwikkeld voor de XY. De maximale flow is gelijk aan de range van de XY en HKU maar nooit meer dan 80 l/min. De druk instelling van de ontlastklep en het prioriteitsventiel zijn weergegeven in de tabel.



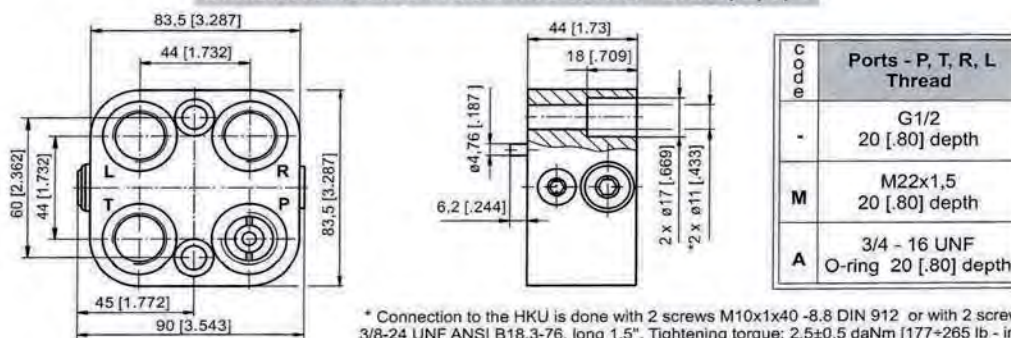
Algemene informatie

Parameters	Type										
	BKH1, BKHR		BKH2	BKH3	BKH4, BKH5						
Rated Flow	lpm		80								
	[GPM]		[21.1]								
Rated Pressure	bar		160								
	[PSI]		[2320]								
Relief Valve Pressure Settings*	bar	80	100	125	150	-	-	80	100	125	150
	[PSI]	[1160]	[1450]	[1810]	[2175]			[1160]	[1450]	[1810]	[2175]
Shock Valves Pressure Settings**	bar	140	160	180	200	200	240	-	-	-	-
	[PSI]	[2030]	[2320]	[2610]	[2900]	[2900]	[3480]				
Weight	kg	1,8		2,3		1,8		1,8			
	[lb]	[4.0]		[5.1]		[4.0]		[4.0]			

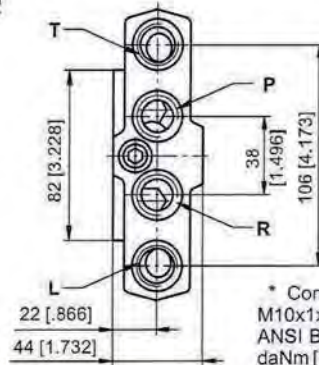
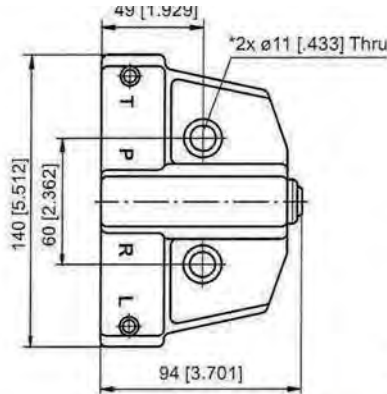
* Pressure Settings are at flow rate of 30 lpm [7.92 GPM] and viscosity 21 mm²/s [105 SUS] at 50° C [122°F].

** Pressure Settings are at flow rate of 2 lpm [.53 GPM] and viscosity 21 mm²/s [105 SUS] at 50° C [122°F].

DIMENSIONS AND MOUNTING DATA - BKH1, 2, 3, 4



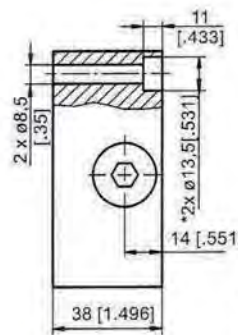
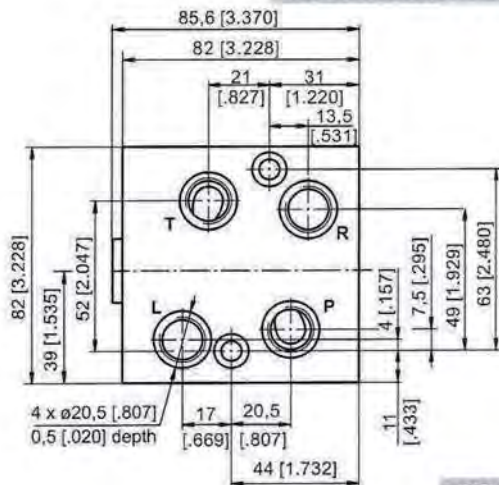
BKH1...5,R Orbitrol



C	Ports - P, T, R, L
Code	Thread
M	M18x1,5 22 [.87] depth
A	3/4 - 16 UNF O-ring 22 [.87] depth

* Connection to the HKU is done with 2 screws M10x1x40 -8.8 DIN 912 or with 2 screws 3/8-24 UNF ANSI B18.3-76, long 1.5". Tightening torque: 2,5±0,5 daNm [177+265 lb-in].

DIMENSIONS AND MOUNTING DATA - BKH5



C	Ports - P, T, R, L
Code	Thread
M	M16x1,5 14 [.55] depth

* Connection to the XY is done with 2 screws M8x1x40 -8.8 DIN 912. Tightening torque: 2,5±0,5 daNm [177+265 lb-in].

ORDER CODE

1	2	3	4	5
BKH	-	-		

Pos.1 - Versions*

R	1	2	3	4	with built-in valves:
•	•		•		- Input relief valve on line "P"
•	•	•			- Input check (non-return) valve on line "P"
•	•	•	•		- Shock valves on lines "R" and "L"
•	•	•	•		- Anti-cavitation valves on lines "R" and "L"

Pos.2 - Relief Valve Pressure Settings, bar**

80	100	125	150
----	-----	-----	-----

Pos.3 - Ports***

omit	- BSPP (ISO 228)
A	- SAE (ANSI B 1.1 - 1982)
M	- Metric (ISO 262)

Pos.4 - Option (Paint)****

omit	- No Paint
P	- Painted Low Gloss Color
PC	- Corrosion Protected Paint

Pos.5 - Design Series

omit	- Factory specified
------	---------------------

Notes: * Versions R, 1, 2, 3, 4 -for HKU; 5 - for XY.
 ** That does not concern version 2 and 3.
 *** For Port size see drawings on page 19 and 20.
 **** Colour at customer's request.

The valve blocks are mangano-phosphatized as standard.

PR Prioriteitsventiel



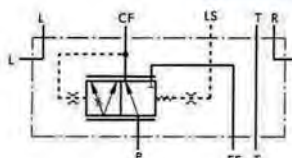
The Priority Valves distribute and trace the hydraulic flow from the supply pump of the hydraulic system to the hydraulic components which control and run the vehicle.

The Priority Valves are used only with the HKUS.../5(D)(T) hydrostatic steering units. When connected, the steering unit and the priority valve represent sophisticated hydraulic tracing system that controls the flow in both main pipelines of the hydraulic system (the working and control one) at any time of its operation.

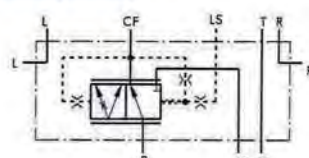
As a static signal, the "LS" signal must be used in systems with circuit stability. The connection between the PRT, PRTA priority valves and the HKUS.../5T steering units has to be as short as possible, but should not exceed 1,5 m [4.92 ft] (for iron pipe with 4 mm [.157 in.] internal diameter). When a rubber hose is used this length have to be even shorter.

Priority valves with dynamic signal work in a system with dynamic hydrostatic steering units type HKUS.../5D (5DT).

Modular Mounting

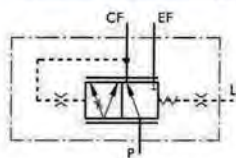


Static signal
PRD 40,80/...

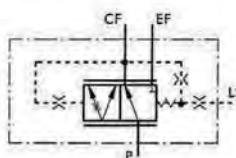


Dynamic signal
PRDD 40,80/...

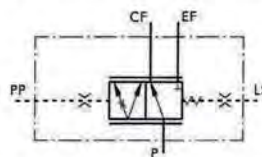
Pipe Mounting



Static signal
PRT 40,80,120/..., PRTA 40,80/...

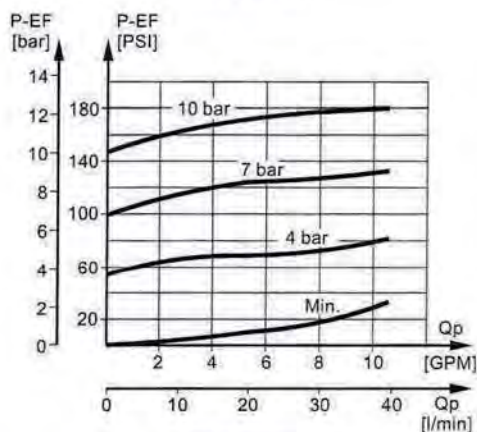


Dynamic signal
PRTD 40,80,120/..., PRTAD 40,80/...

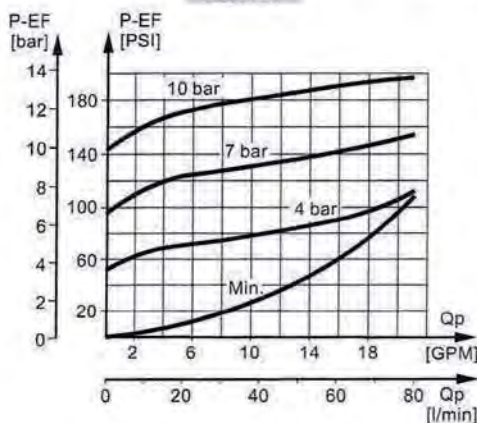


Static signal with External Port
PRTE120/...

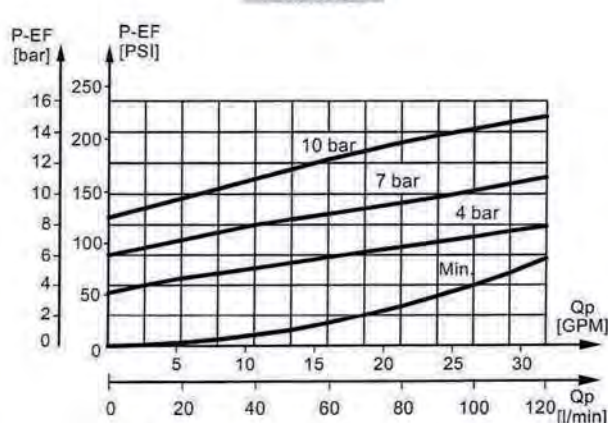
PR...40



PR...80



PRT...120

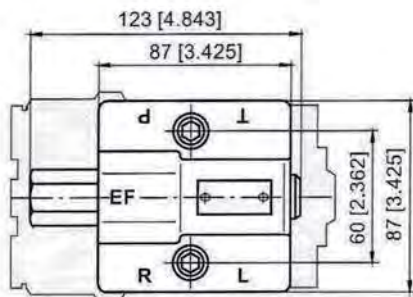
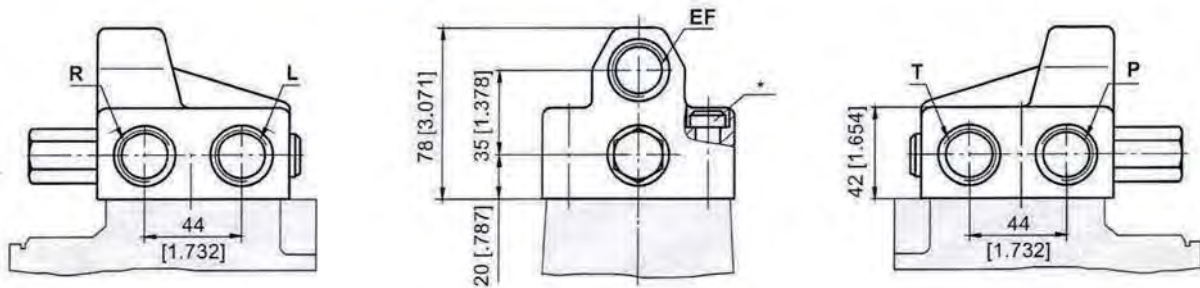


PR Prioriteitsventiel

Parameters		Type								
		PRD(D), PRT(D)			PRTA(D)			PRT(D)(E)		
Rated Flow	lpm	40			80			120		
	[GPM]	[10.6]			[21.1]			[31.7]		
Control Spring Pressure	bar	4	7	10	4	7	10	4	7	10
	[PSI]	[58]	[101.5]	[145]	[58]	[101.5]	[145]	[58]	[101.5]	[145]
Max. Pressures in Oil Ports:		250								
bar [PSI]	P, EF	[3625]								
	CF	210								
	R, L	280			[4061]					
	LS	210								
	PP							210		
	T	20			[290]					
Weight	kg	2.25			1.3			2.1		
	[lb]	[4.96]			[2.87]			[4.6]		

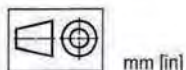
P - pump, EF - excess flow, CF - control flow (first priority oil flow),
 L - left, R - right, LS - load sensing, T - tank, PP - pilot pressure (L,R and T - for PRD(D) only).

DIMENSIONS AND MOUNTING DATA - PRD(D) 40, 80/...



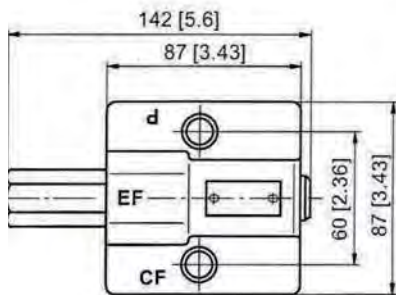
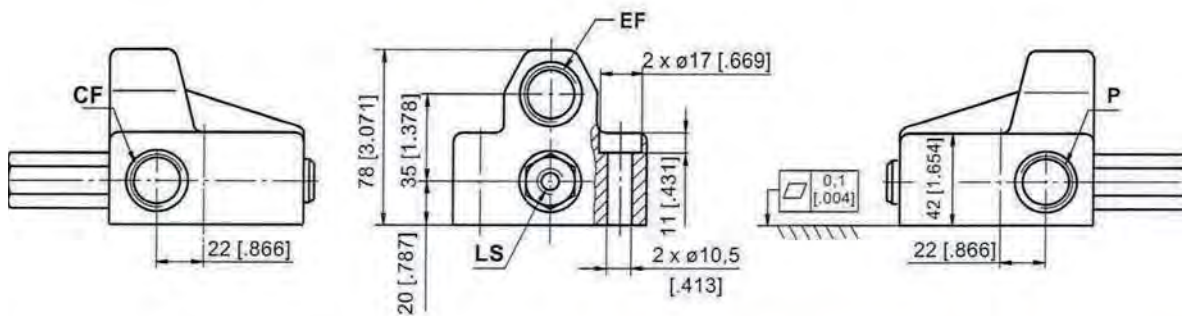
Code	Ports - P, EF Thread	Ports - T, R, L Thread
-	G1/2 18 [.71] depth	G3/8 18 [.71] depth
M	M22x1,5 18 [.71] depth	M18x1,5 18 [.71] depth
A	7/8 - 14 UNF O-ring 18 [.71] depth	3/4 - 16 UNF O-ring 18 [.71] depth

* Connection to the HKUS.../5(D)... is done with 2 screws M10x1x45 -10.9 DIN 912 or with 2 screws 3/8-24 UNF ANSI B18.3-76, 1.75" long.
 Tightening torque: 4,5±0,5 daNm [360 ± 440 lb-in].



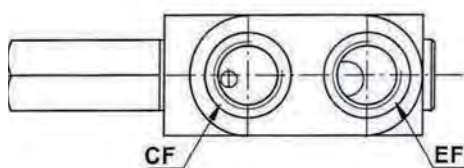
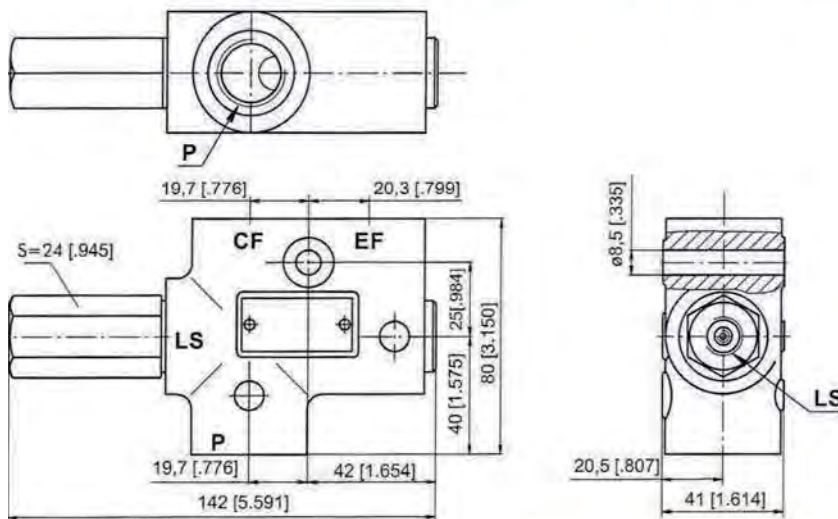
PR Prioriteitsventiel

DIMENSIONS AND MOUNTING DATA - PRT(D) 40, 80/...



code	Ports - P, EF Thread	Port - CF Thread	LS - Port
-	G1/2 18 mm [0.71] depth	G1/2 18 mm [0.71] depth	G1/4 14 mm [0.55] depth
M	M 22x1,5 18 mm [0.71] depth	M 22x1,5 18 mm [0.71] depth	G1/4 14 mm [0.55] depth
A	7/8 - 14 UNF O-ring 18 [0.71] depth	3/4 - 16 UNF O-ring 18 [0.71] depth	7/16 - 20 UNF O-ring 12,7 [0.50] depth

DIMENSIONS AND MOUNTING DATA - PRTA(D) 40, 80/...

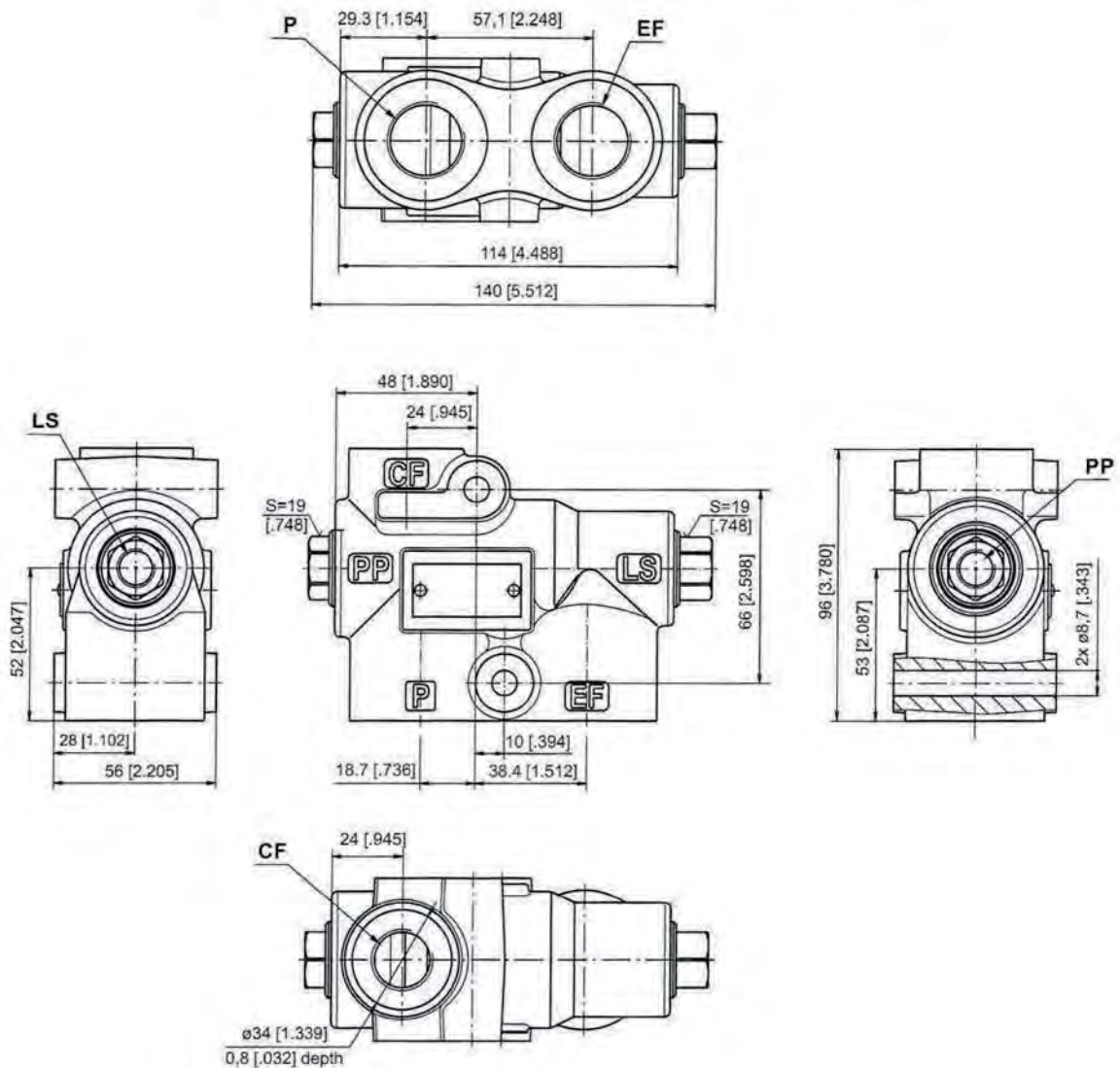


code	Ports - P, EF Thread	Port - CF Thread	LS - Port
-	G1/2 18 mm [0.71] depth	G1/2 18 mm [0.71] depth	G1/4 14 mm [0.55] depth
M	M 22x1,5 18 mm [0.71] depth	M 22x1,5 18 mm [0.71] depth	G1/4 14 mm [0.55] depth
A	7/8 - 14 UNF O-ring 18 [0.71] depth	3/4 - 16 UNF O-ring 18 [0.71] depth	7/16 - 20 UNF O-ring 12,7 [0.50] depth



PR Prioriteitsventiel

DIMENSIONS AND MOUNTING DATA - PRT...120/...



Code	Ports - P, EF Thread	Port - CF Thread	LS, PP - Ports
-	G3/4 20,5 [0.81] depth	G1/2 18,5 [0.73] depth	G1/4 12,5 [0.49] depth
M	M27x2 20,5 [0.81] depth	M18x1,5 18,5 [0.73] depth	M12x1,5 12,5 [0.49] depth
A	1 1/16 - 12 UN O-ring 20,5 [0.81] depth	3/4 - 16 UNF O-ring 18,5 [0.73] depth	7/16 - 20 UNF O-ring 12,5 [0.49] depth



PRT...160/...

Prioriteitsventiel voor alleen HKU(S).../5T...



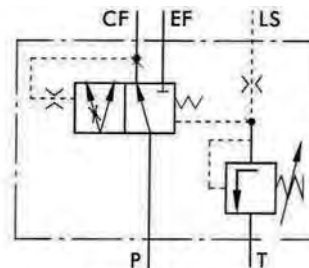
The Priority Valves PRT... 160 have built-in a pilot pressure relief valve, who protects the steering unit against excess pressure. The pilot pressure relief valve operates with the Shuttle of the Priority valve to limit the maximum steering pressure P-T measured across the steering units ports.

SPECIFICATION DATA

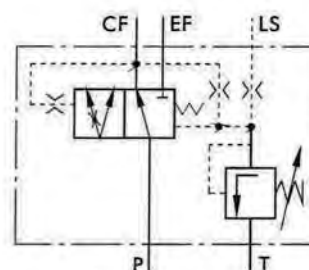
Parameters		Type		
		PRT(D), PRTE		
Rated Flow	lpm [GPM]	160 [42.3]		
Control Spring Pressure:	bar [PSI]	4 [58]	7 [101.5]	10 [145]
Max. Pressures in Oil Ports:		350 [5076]		
bar [PSI]	P, EF	210 [3045]		
	CF	210 [3045]		
	LS	210 [3045]		
	PP	210 [3045]		
	T	15 [217]		
Standart Relief Valve Pressure Settings		175 [2540]		
Weight	kg [lb]	4,4 [9.70]		

* - Adjusted valve pressure from 80 bar [1160 PSI] till 210 bar [3045 PSI] upon customer request.

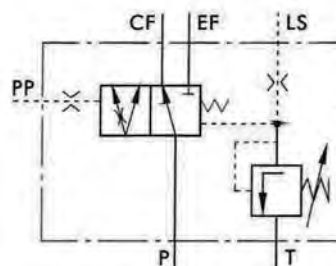
P - pump, EF - excess flow, CF - control flow (first priority oil flow), LS - load sensing, T - tank, PP - pilot pressure



Static signal
PRT 160/...

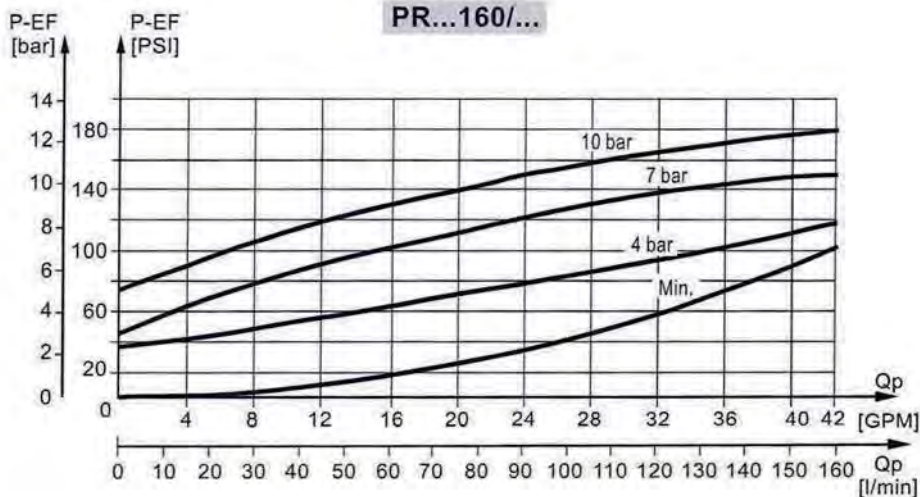


Dynamic signal
PRTD 160/...



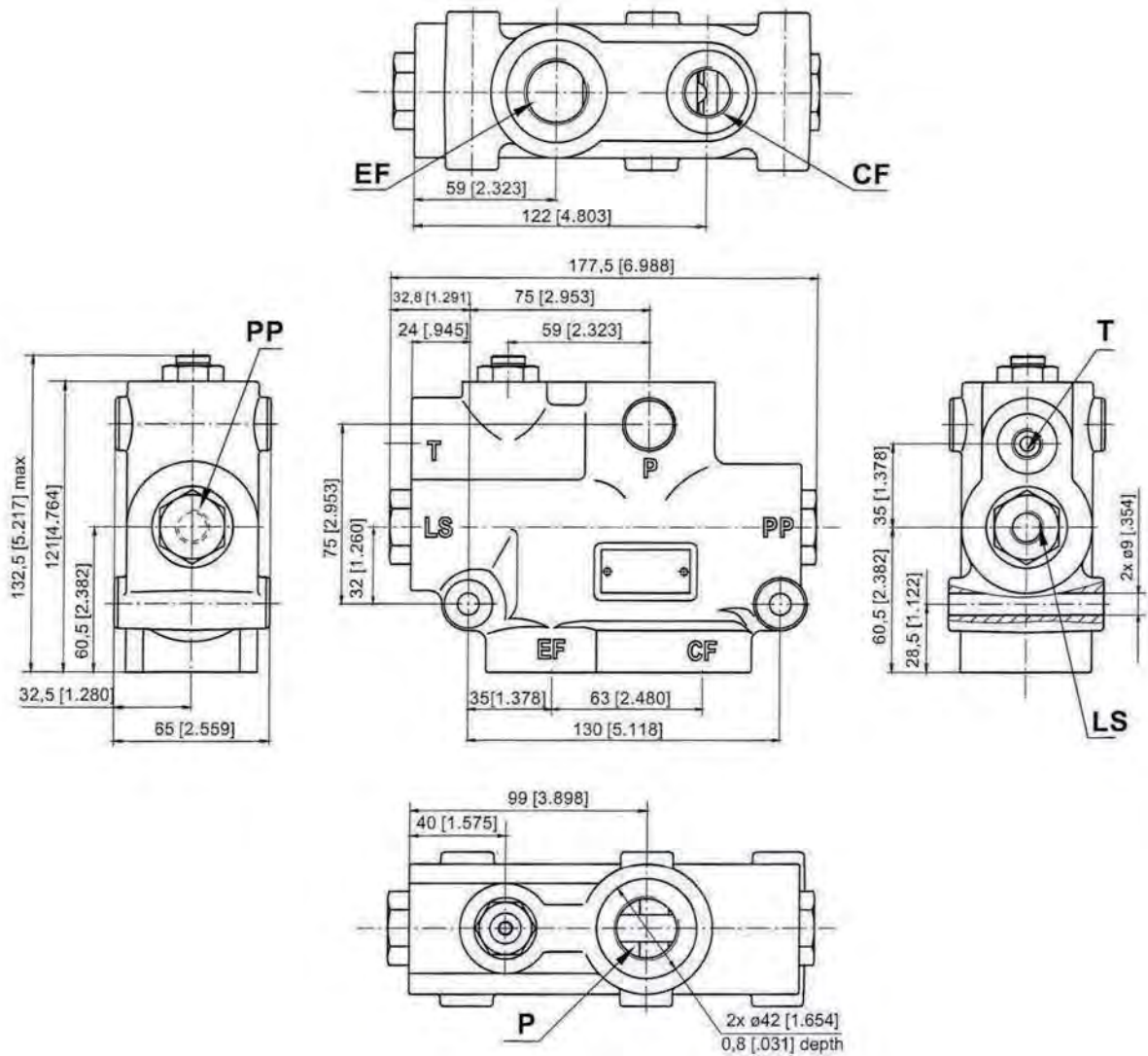
Static signal with External Pilot
PRTE 160/...

PR...160/...



PRT(D)(E)160/... Prioriteitsventiel

DIMENSIONS AND MOUNTING DATA - PRT(D)(E)160/...



code	Ports - P, EF Thread	Port - CF Thread	LS, PP, T - Ports
-	G3/4 20,5 [.81] depth	G1/2 18,5 [.73] depth	G1/4 12,5 [.49] depth
M	M27x2 20,5 [.81] depth	M18x1,5 18,5 [.73] depth	M12x1,5 12,5 [.49] depth
A	1 1/16 - 12 UN O-ring 20,5 [.81] depth	3/4 - 16 UNF O-ring 18,5 [.73] depth	7/16 - 20 UNF O-ring 12,5 [.49] depth



PR Prioriteitsventiel

Bestelgegevens

	1	2	3	4	5	6	7
PR			/	-			

Pos.1 - Mounting

- D** - Modularly Mounting
- T** - Pipe Mounting (Model 1)
- TA** - Pipe Mounting (Model 2)

Pos.2 - Signal Type

- omit - with Static signal
- D** - with Dynamic signal
- E*** - with Static signal and External Pilot

Pos.3 - Rated Flow, l/min

40	80	120**	160**
----	----	-------	-------

Pos.4 - Control Spring Pressure, bar

4	7	10
---	---	----

Pos.5 - Ports

- omit - BSPP (ISO 228)
- M** - Metric (ISO 262)
- A** - SAE (ANSI B 1.1 - 1982)

Pos.6 - Option [Paint]***

- omit - No Paint
- P** - Painted Low Gloss Color
- PC** - Corrosion Protected Paint

Pos.7 - Design Series

- omit - Factory specified

Notes: * For PRT 120/... and PRT 160/... only
 ** For PRT only
 *** Colour at customer's request.

The priority valves are mangano-phosphatized as standard.

UVM versterker



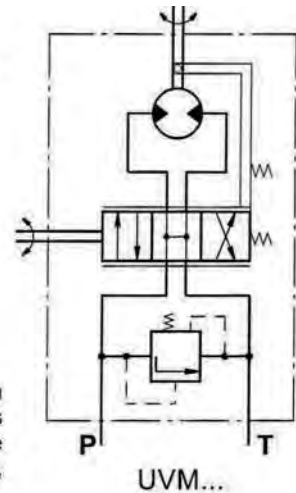
The M+S Hydraulic UVM Torque Amplifiers amplify the applied torque to the control shaft and thus ease the running of various transport vehicles such as:

- agricultural and wood working machines;
- road rollers and road cleaning machines;
- fork-lift trucks and construction machinery;

The totally transferred power in terms of output torque is up to 1,1 kW [1.47 HP].

The UVM torque amplifiers with their simple design, consisted of a pump and an amplifier, ensure 40 times higher output torque than the applied one. The amplifying is achieved as follows; by rotating the input shaft to the left or right the spool and the bushing are displaced, and the hydraulic flow enters the system turning the gerotor set, which transfers the already amplified torque to the output shaft.

One advantage of the UVM torque amplifier is that it allows manual steering in cases of engine (pump) failure.



SPECIFICATION DATA

Parameters		Type	
		UVM 100	UVM 160
Displacement	cm ³ /rev [in ³ /rev]	99,0 [6.04]	158,4 [9.67]
Rated Flow*	lpm [GPM]	10 [2.6]	16 [4.2]
Rated Pressure**	bar [PSI]	70 [1015]	70 [1015]
Input Torque	daNm [lb-in]	0,35...0,5 [31...44]	0,35...0,5 [31...44]
Max. Input Torque	daNm [lb-in]	20 [178]	20 [178]
Torque Output at 70 bar [1015 PSI]	daNm [lb-in]	80 [708]	120 [1062]
Pressure Drop between P and T at Rated Flow	bar [PSI]	1... 2 [14.5...29]	1,6...2,5 [23.2...36.3]
Max. Speed of Rotation at Rated Flow and Pressure	RPM	100	100
Max. Continuous Pressure in Line T	bar [PSI]	20 [290]	20 [290]
Weight	kg [lb]	5,8 [12.8]	6,2 [13.7]

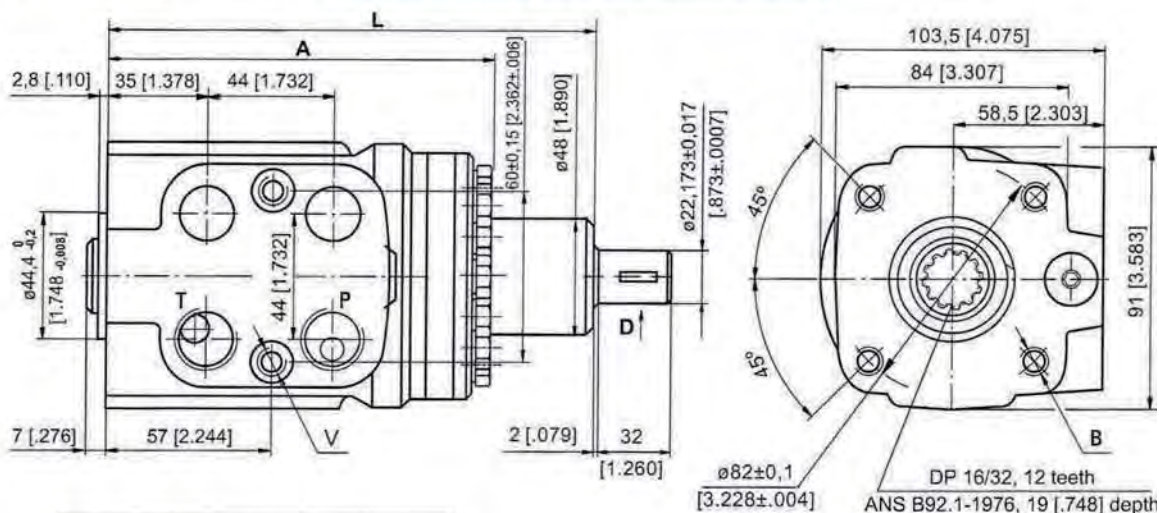
* Rated Flow at 100 RPM

** Pressure Settings are at Rated Flow (as in the table) and viscosity 21 mm²/s [105 SUS] at 50° C [122° F].

UVM

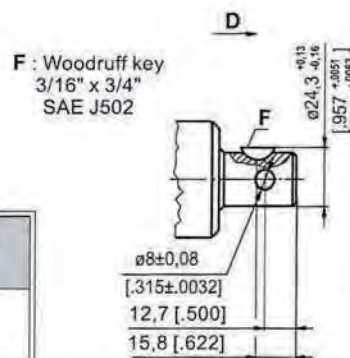


DIMENSIONS AND MOUNTING DATA

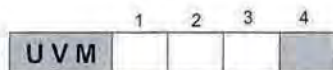


Dimensions	Type	
	UVM 100	UVM 160
A	mm 143,3 [5.64]	mm 151,3 [5.96]
L	mm 181,2 [7.13]	mm 189,2 [7.45]

Code	Ports - P, T Thread	Column Mounting Thread - B	Port Mounting Thread - V
-	G1/2 17 [.67] depth	4 x M10 18 [.71] depth	2 x M10x1 16 [.63] depth
M	M22x1,5 17 [.67] depth	4 x M10 18 [.71] depth	2 x M10x1 16 [.63] depth
A	3/4 - 16 UNF O-ring 17 [.67] depth	4 x 3/8 - 16 UNC 15,7 [.62] depth	2 x 3/8 - 24 UNF 14,2 [.56] depth



ORDER CODE



Pos.1 - Displacement code

100	- 99,0 [6.04] cm ³ /rev [in ³ /rev]
160	- 158,4 [9.67] cm ³ /rev [in ³ /rev]

Pos.2 - Ports

omit	- BSPP (ISO 228)
M	- Metric (ISO 262)
A	- SAE (ANSI B 1.1 - 1982)

Notes: * Colour at customer's request.

The steering units are manganophosphatized as standard.

Pos.3 - Option (Paint)*

omit	- No Paint
P	- Painted Low Gloss Color
PC	- Corrosion Protected Paint

Pos.4 - Design Series

omit	- Factory specified
------	---------------------

KK... Stuurstang

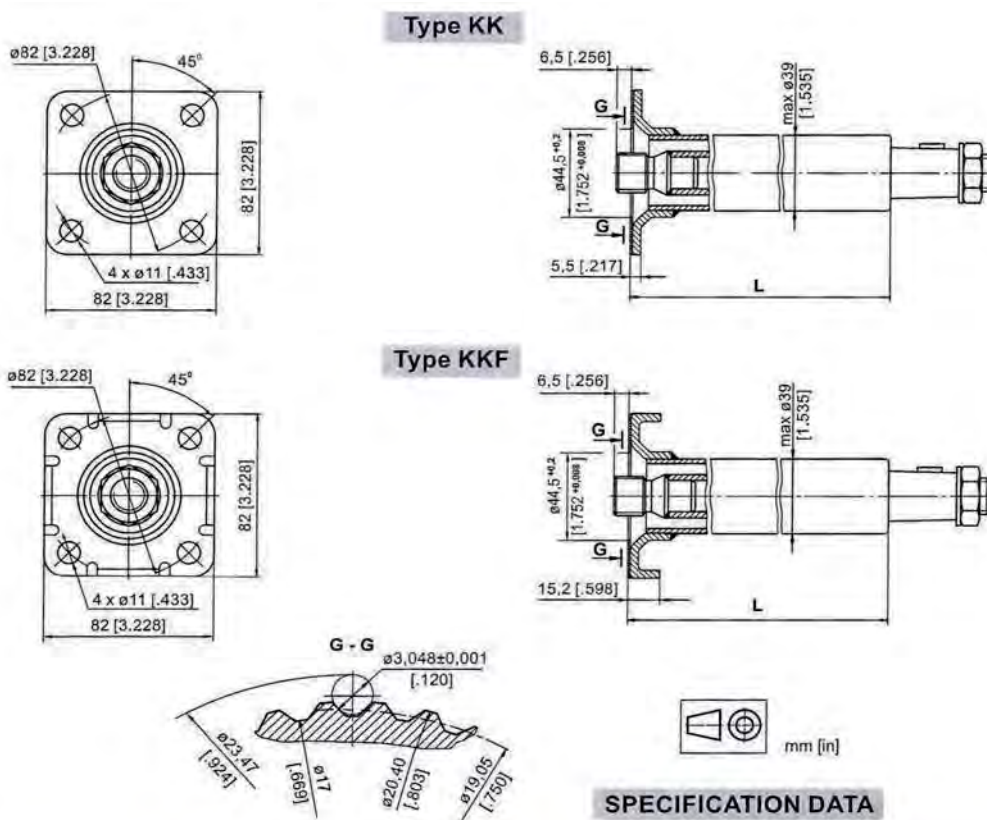


De KK stuurstang verplaatst de torque van het stuurwiel naar de HKU, HKUS of andere stureenheid van dezelfde klasse. De KK stuurstang bevat een pijp waarin de controle as is gecentreerd.; De maximaal toegestane belasting op de stuurkolom is;

Max. torque applied to the steering wheel 24 daNm [2124 lb-in]
 Max. bending moment 20 daNm [1770 lb-in]
 Max. axial load 100 daN [225 lbs]

The steering column must be additionally supported when the length L exceeds 150 mm [5.91 in].

Afmetingen en montage data



SPECIFICATION DATA

Involute Spline Data		
Modul	m	1.5875
Number of Teeth	z	12
Pressure Angle	α	30°
Diametral Pitch	DP	16/32

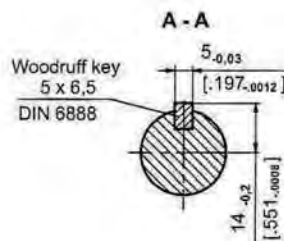
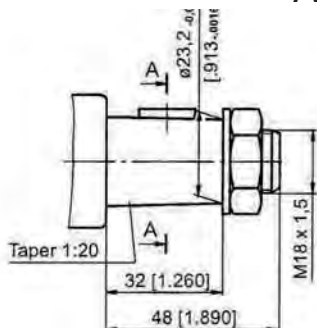
Parameters	Type					
	KK 75	KK 150	KK 390	KK 441	KK 750	
L	mm [in]	78 [3.07]	168,2 [6.62]	393 [15.47]	441 [17.36]	777,8 [30.62]
Weight	kg [lb]	0,75 [1.65]	1,1 [2.43]	1,9 [4.19]	5,05 [11.13]	3,3 [7.28]

Note: The length L depends on the transport vehicle construction. For more information regarding other lengths and shaft versions, please refer to M+S Hydraulic.

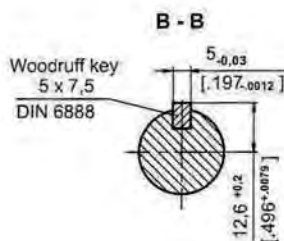
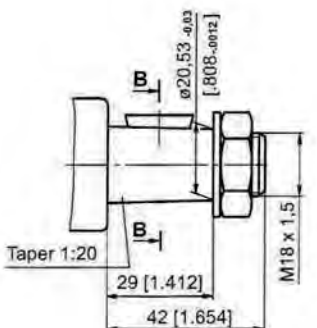
KK

As versies

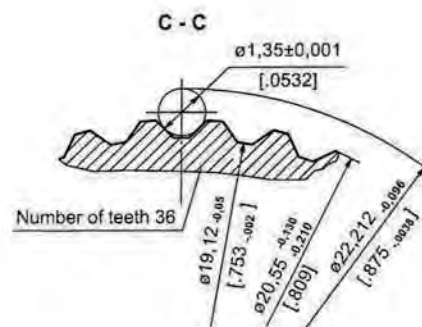
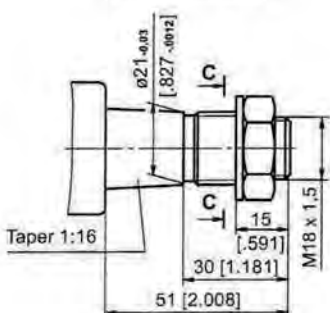
TYPE I



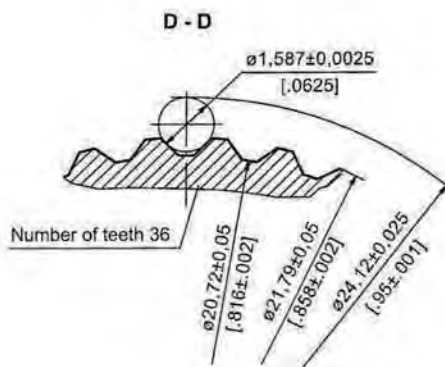
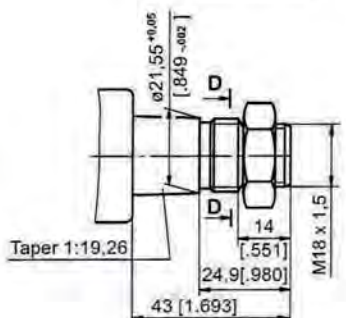
TYPE II



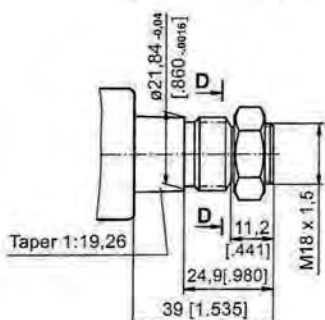
TYPE III



TYPE IV



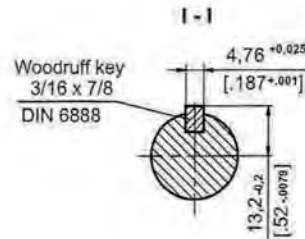
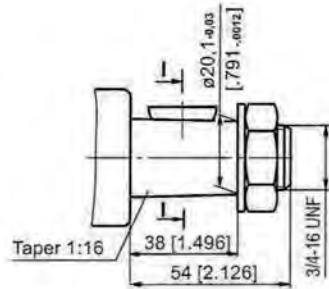
TYPE V



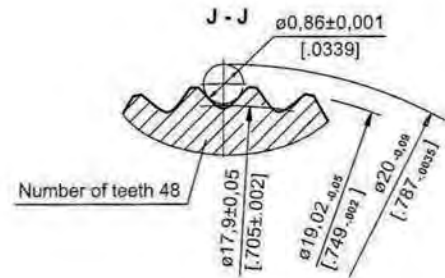
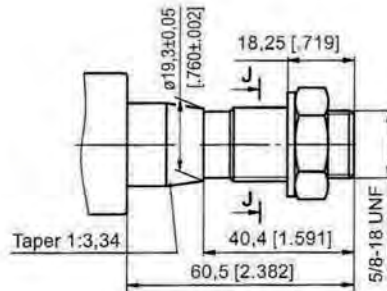
KK

As versies

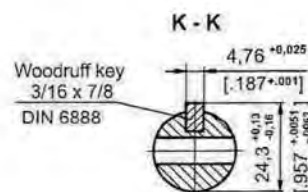
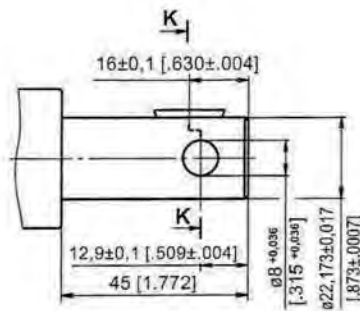
TYPE VI



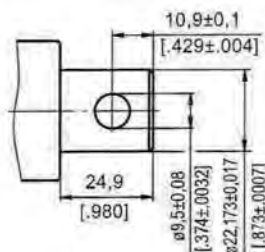
TYPE VII



TYPE VIII



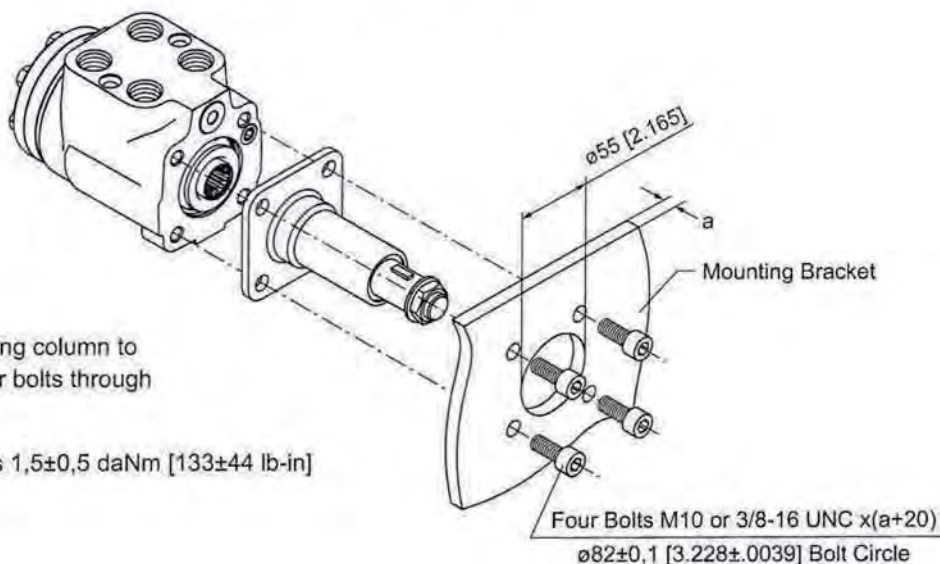
TYPE IX



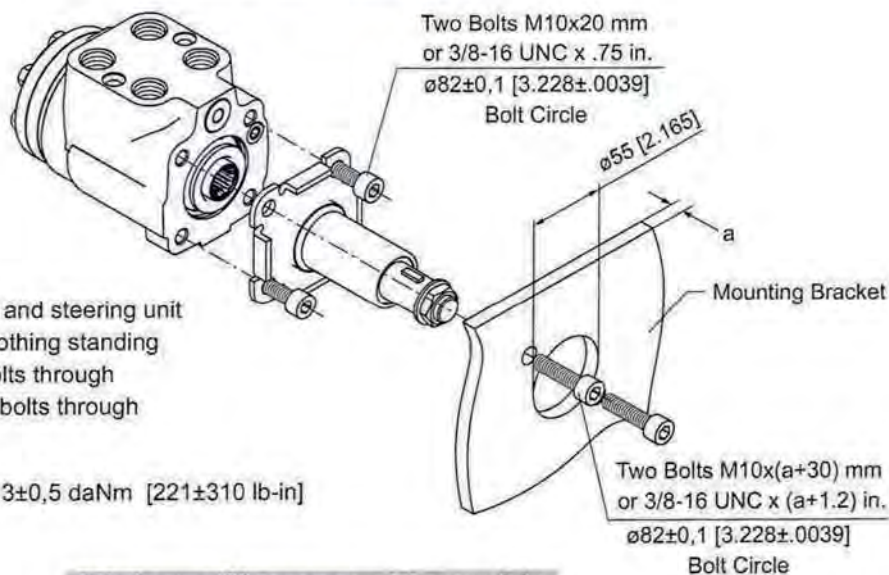
KK

Montagevoorschriften

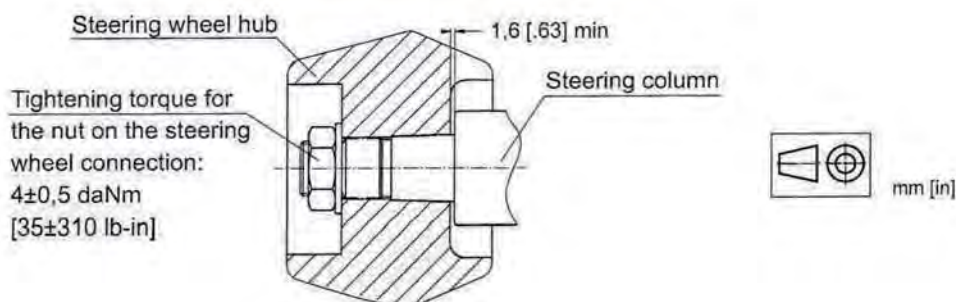
For column type KK



For column type KKF



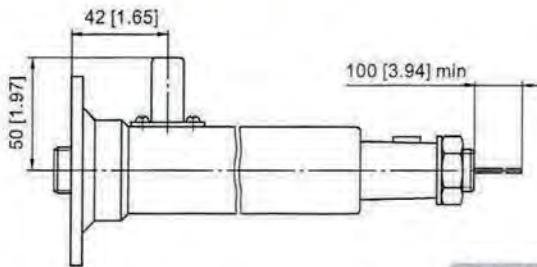
Minimum Clearance at Assembly



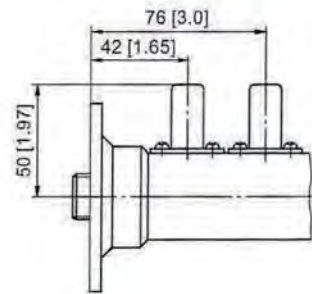
KK

Geluids signaal aansluiting

E Option



EE Option



ORDER CODE

1	2	3	4	5	6
KK					

Pos.1 - Mounting Flange

- omit - Flange without Tabs
- F** - Flange with Tabs

Pos.2 - Length, mm (acc. to table)

Pos.3 - Shaft Extensions

I, II, III, IV, V, VI, VII, VIII, IX

Pos.4 - Signal Connection (Option)

- omit - without electric signal connection
- E** - with one electric signal connection
- EE*** - with two electric signal connection

Pos.5 - Option (Paint)**

- omit - No Paint
- P** - Painted Low Gloss Color
- PC** - Corrosion Protected Paint

Pos.6 - Design Series

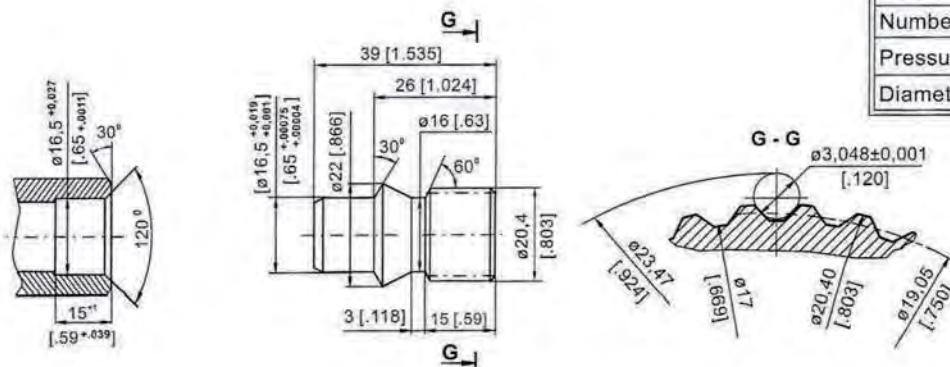
- omit - Factory specified

Notes: * For steering column's length 150 mm [L>5.9 in] only.
 ** Colour at customer's request.

The steering columns are yellow galvanized as standard.

Shaft End Part

Order No: 46415 001 00



Involute Spline Data	
Modul	m 1.5875
Number of Teeth	z 12
Pressure Angle	α 30°
Diametral Pitch	DP 16/32



Orbitrol algemeen

GENERAL APPLICATION AND SPECIFICATION INFORMATION

APPLICATION

(SIZING AND STEERING SYSTEM DESIGN PROCESS)

STEP ONE:

Calculate approximate kingpin torque (M_L).

$$M_L = G \cdot \mu \cdot \sqrt{\frac{B^2}{8} + \ell^2}$$

Note: Double M_L if steered wheels are powered.

M_L = Kingpin torque in daNm [lb-in].

G = Vehicle weight on steered axle daN [lbs] (use maximum estimated overload weight).

μ = Coefficient of friction (use Chart № 1, dimensionless) determined by ℓ/B (see Diagram № 1).

B = Nominal width of tyre print, m [in] (see Diagram № 1).

ℓ = Kingpin offset. The distance between tyre centerline intersection at ground and kingpins centerline intersection at ground in, m [in] (see Diagram № 1).

Chart № 1

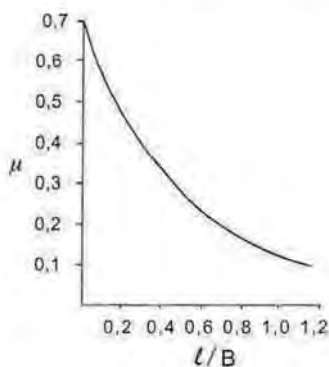


Diagram № 1

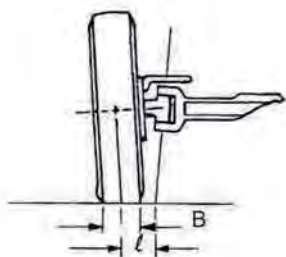
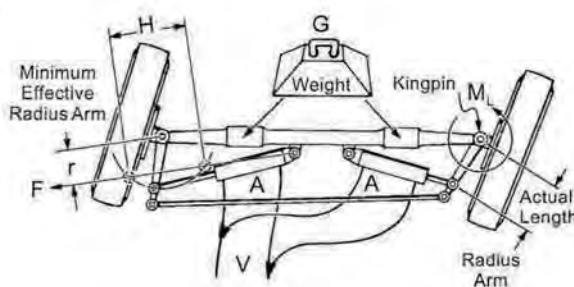


Diagram № 2



STEP TWO:

Calculate approximate cylinder; force-area-stroke-volume.

FORCE

$$F = \frac{M_L}{r}$$

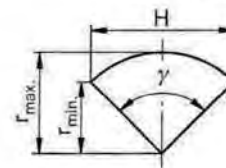
F = Force required daN [lbs] to steer axle.

M_L = Kingpin torque in daNm [lb-in] from step one. Double M_L if steered wheels are powered.

r = Effective radius Arm mm [in] is the minimum distance from the centerline of the cylinders minimum and maximum stroke points parallel to the kingpin center pivot. This is not the physical length of the radius Arm (see Diagram № 2 and Chart № 2).

Chart № 2

$$r_{\min.} = r_{\max.} \cdot \cos \frac{\gamma}{2}$$



STROKE

H = Stroke, cm [in].

Calculate stroke of cylinder using Diagram № 2 and Chart № 2 as shavt.

$$H = 2 r_{\max.} \cdot \sin \frac{\gamma}{2}$$

AREA

$$A = \frac{F}{\Delta P}$$

A = Cylinder area for axle cylinder set, cm^2 [in²].

F = Force required from step two force formula, daN [lbs].

ΔP = Hydraulic pressure bar [PSI] use following percentage of relief valve setting by amount of load on steered axle. Severe load 25% - medium load 55% - no load 75%.

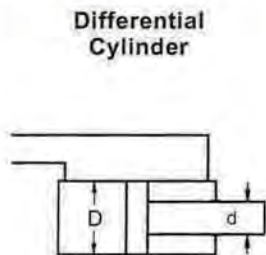
Orbitrol algemeen

DIAMETER

After the cylinder set area is determined, the cylinder diameter can be calculated.

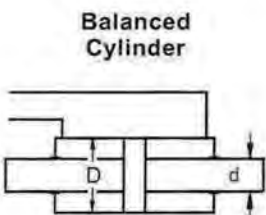
D = Inside diameter of cylinder, cm [in].
 d = Rod diameter of cylinder, cm [in].

Choose type of cylinder arrangement and formula shown for that type.



$$D = \sqrt{\frac{4A}{\pi} + d^2}$$

Note: $\left(\frac{d}{D}\right)^2 \leq 0,15$



$$D = \sqrt{\frac{4A}{\pi} + d^2}$$

VOLUME $V = H \cdot A$

V = Volume. The total amount of oil required to move the cylinder rod(s) through the entire stroke, cm³ [in³].

H = Stroke, cm [in].

A = Area, cm² [in²].

Note: For differential cylinders it is important to calculate average cylinder volume for step three using below formula.

$$V_{avg.} = H \cdot \frac{\pi}{4} (2 \cdot D^2 - d^2)$$

STEP THREE:

Selecting displacement of hydrostatic steering unit.

At this point determine number of steering wheel revolutions desired for your application to steer the wheels from one side to the other (lock to lock). Depending on the type of vehicle and its use, this will vary from 3 to 5 turns.

DISPLACEMENT $V_D = \frac{V}{n}$

V_D = Displacement, cm³/rev [in³/rev].

V = Volume of oil, cm³ [in³].

n = Steering wheel turns lock to lock.

After completing the above displacement calculation, choose the closest standard hydrostatic steering unit in displacement size that incorporates circuitry you require.

Recalculate the number of steering wheel turns using the displacement of selected standard hydrostatic steering unit outlined above. Use the formula shown below.

$$n = \frac{V}{V_D}$$

V = Volume of oil, cm³ [in³].

n = Steering wheel turns lock to lock.

Note: For differential cylinders applications the cylinder volume will be different for left and right turns - this means the value n (steering wheel turns lock to lock) will vary when turning to the left or right.

STEP FOUR:

Calculate approximate minimum and maximum steering circuit flow requirements.

$$Q = \frac{V_D \cdot N}{\text{Unit Conversion for Imperial or [1000] Metric}}$$

Q = Steering circuit flow, lpm [GPM].

V_D = Unit displacement, cm³/rev [in³/rev]

N = Steering wheel input speed, RPM.

Recommended steering speed is 50 to 100 RPM.

Many variables are involved in sizing the pump. We suggest that the manufacturer test and evaluate for desired performance.

GENERAL INFORMATION

FLUID DATA:

To insure maximum performance and life of the Hydrostatic steering units, use premium quality hydraulic oils. Fluids with effective quantities of anti-wear agents or additives are highly recommended. If using synthetic fluids consult the factory for alternative seal materials.

- Viscosity**

Viscosity at normal operating temperature should be approx. 20 mm²/s [100 SUS]. Viscosity range 10 - 300 mm²/s [60 - 1500 SUS].

- Temperature**

Normal operating temperature range from +30°C [+85°F] to +60°C [140°F].

Minimum operating temperature -40°C [-40°F].

Maximum operating temperature +80°C [+176°F].

Note: Extended periods of operation at temperature of 60°C and above will greatly reduce life of oil due to oxidation and shorten life of product.

Orbitrol algemeen

Filtration

The maximum degree of contamination per ISO 4406 or CETOP RP is:

- 20/17 open center units
- 19/16 closed center and load sensing
- 16/12 priority valves

Return line filtration of 25 μm nominal (40 - 50 μm absolute) or finer is recommended.

In extremely dusty conditions filtration of 10 μm absolute should be used.

START UP

All air must be purged from system before operating unit. It is extremely important that any external lines or units with load sensing or priority feature be completely bled. Lines going to and from cylinders as well as lines to and from pump be purged of all air. It is recommended that a 10-15 μm filter be used between pump and steering unit before start up.

MOUNTING UNITS

All hydrostatic steering units should be installed for ease of access. It is recommended that the steering unit be located outside the vehicle cabin.

It is important that no radial axial load be applied to the hydrostatic steering unit input shaft. Any or all radial and axial loads must be absorbed by the steering column or other operating device supplied by the vehicle manufacture. Ports on the steering cylinder(s) should face upward to prevent damage.

During installation of the hydrostatic steering unit, cleanliness is of the utmost importance. Pipe plugs should be left in place during mounting and only removed when hydraulic lines are to be connected.

CONVERSIONS

to convert inches and millimeters:

- 1 in = 25,4 mm
- 1 mm = .03973 in

to convert gallons per minutes and liters per minutes:

- 1 GPM = 3,785 lpm
- 1 lpm = .2642 GPM

to convert pounds per square inch and bar:

- 1 PSI = 0,0689 bar
- 1 bar = 14,51 PSI

to convert pounds-inch and newton-meters:

- 1 in - lb = 0,113 Nm
- 1 Nm = 8.85 lb - in

TORQUE TIGHTENING VALUES

Fluid connections

Fluid connection	Max. tightening torque daNm [lb - in]			
	metal edge	copper washer	aluminum washer	O - ring
G 1/4	4,0 [350]	3,5 [309]	3,5 [309]	
G 3/8	7,0 [620]	4,5 [398]	5,0 [442]	
G 1/2	10,0 [885]	5,5 [486]	8,0 [708]	
G 3/4	18,0 [1593]	9,0 [796]	13,0 [1150]	
M 10 x 1	4,0 [350]	2,0 [180]	3,0 [265]	
M 18 x 1,5	8,0 [708]	5,5 [486]	7,0 [620]	
M 22 x 1,5	10,0 [885]	6,5 [575]	8,0 [708]	
7/16 - 20 UNF				2,0 [180]
9/16 - 18 UNF				5,0 [442]
3/4 - 16 UNF				6,0 [531]
7/8 - 14 UNF				9,0 [796]
1 1/16 - 12 UN				12,0 [1062]

Mounting bolts

Mounting bolts	Tightening torque daNm [lb - in]
3/8 - 16 UNC	3,0 ± 0,5 [230 ± 310]
M 10 x 1	6,5 ± 0,5 [540 ± 620]
M 10	3,0 ± 0,5 [230 ± 310]

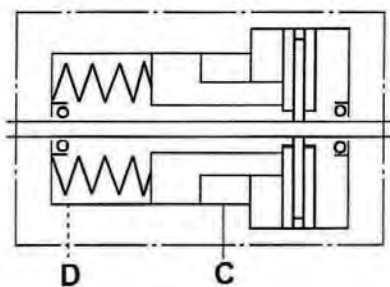
LB, LBS, LBV-WET Lamellenrem



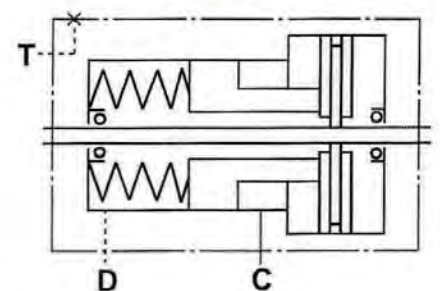
Algemene informatie

Fluid type	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, °C [°F]	-40÷140 [-40÷284]
Viscosity range, mm²/s	20÷75 [98÷347]
Filtration	ISO code 20/16 (nominal filtration of 25 micron)
Maintenance	Changed after the first 50-100 h, then after every 500-1500 h.

LB, LBS



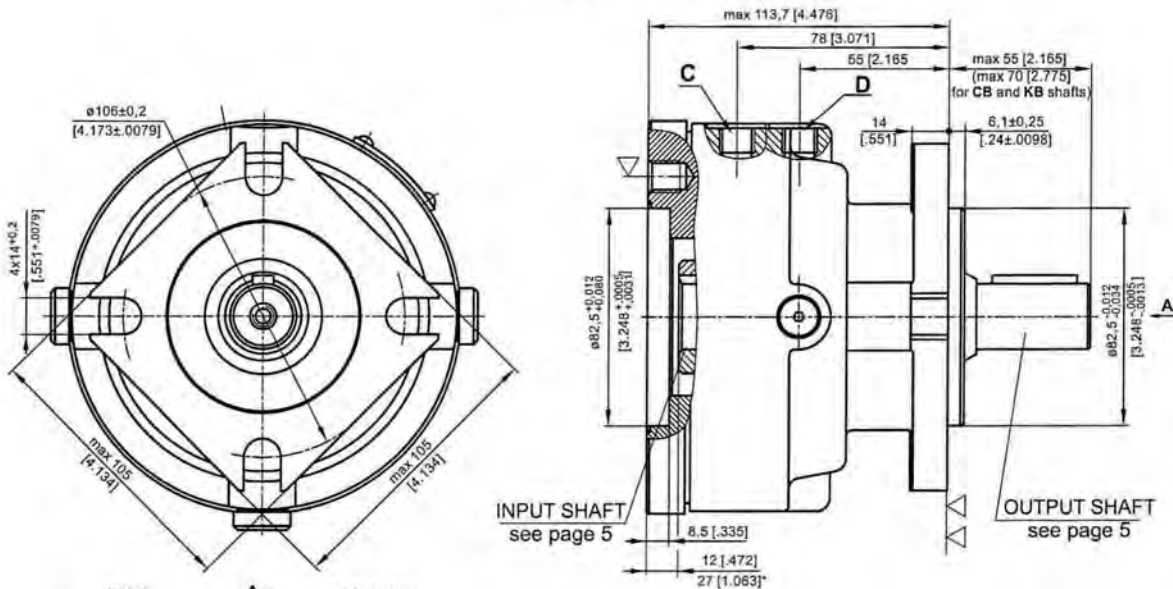
LBV



LB

Hydraulische rem geschikt voor de MP, MR en MS serie

TYPE LB/288



▽ - Place for attachment (tightening torque for screw M12x30 - 8.8 DIN 912 - 7 daNm [620 in-lb])

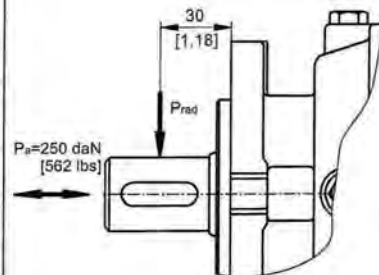
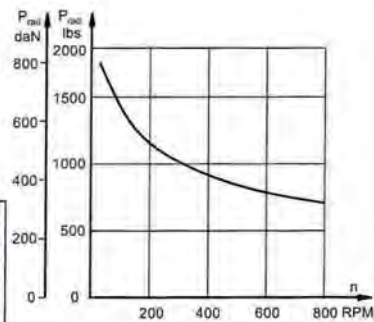
▽▽ - Place for attachment

C : Brake release Port - G $\frac{1}{4}$, 9 mm [.35 in] depth

D : Drainage tap - G $\frac{1}{4}$, 9 mm [.35 in] depth

* - For Input Shaft Hole Versions **SH** and **SB**.

LOAD CURVE



SPECIFICATION DATA

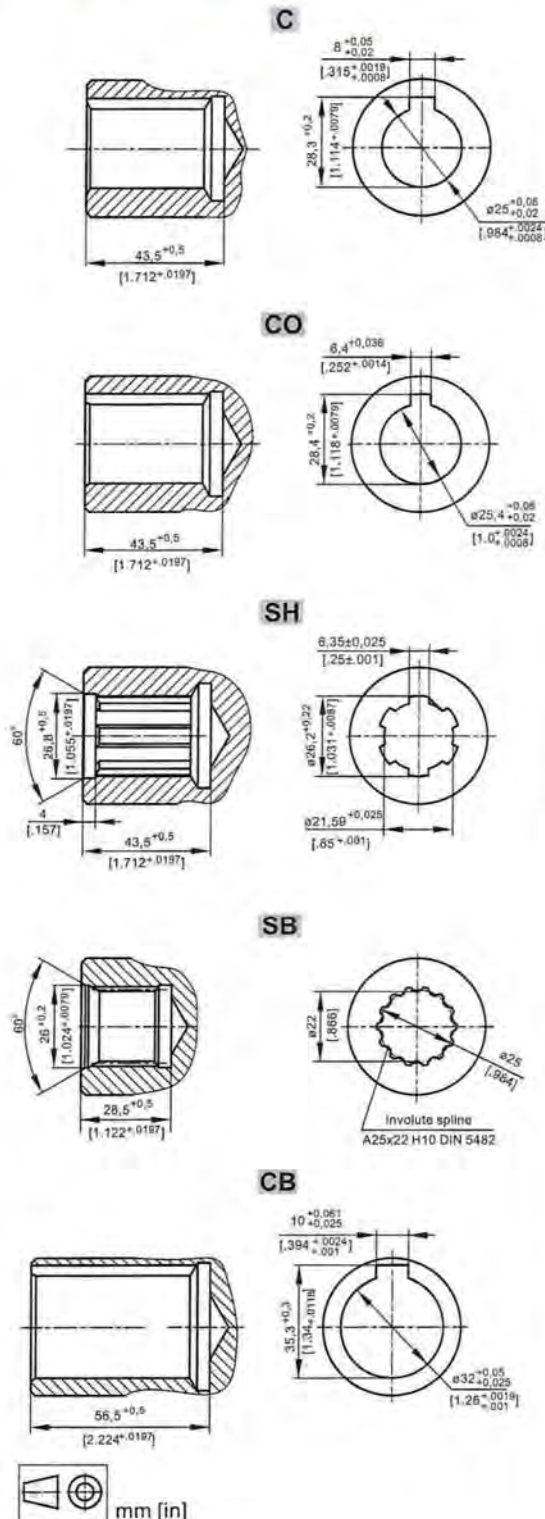
Description LB/288...	7	14	21	32	43	63
*Min. Static Torque, daNm [lb-in]	6-8 [531-708]	13-15 [1150-1327]	20-22 [1770-1947]	31-34 [2743-3009]	41-45 [3628-3982]	61-64 [5399-5665]
Opening Pressure min bar [PSI]	4-8 [58-116]	9-16 [130-232]	17-23 [247-334]			
	max 300 [4350]					
Min. oil quantity for brake releasing cm ³ [in ³]	7 - 8 [.427 - .488]					
Oil volume cm ³ [in ³]	50 - 120 [3.5 - 7.35]					
Max. Pressure in drain space bar [PSI]	0,5 [7.25]					
Weight kg [lb]	9 [19.8]					

*Static torque is obtained at working pressure - 0 bar [0 PSI].

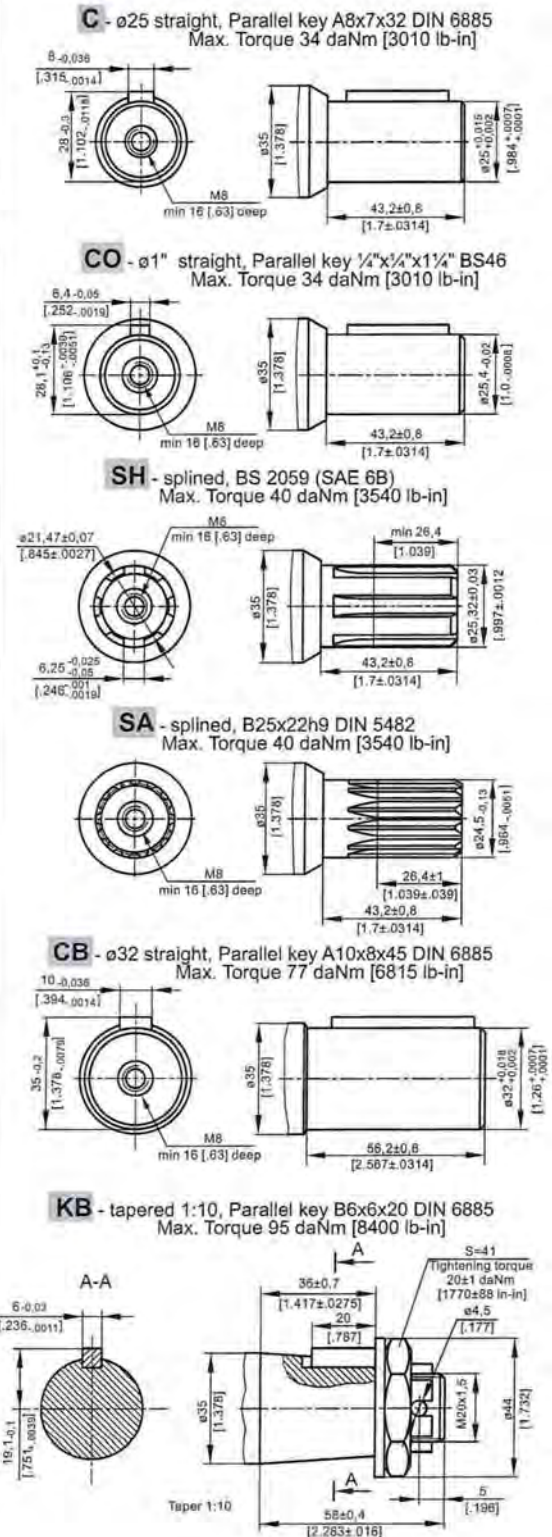
LB



INPUT SHAFT HOLES



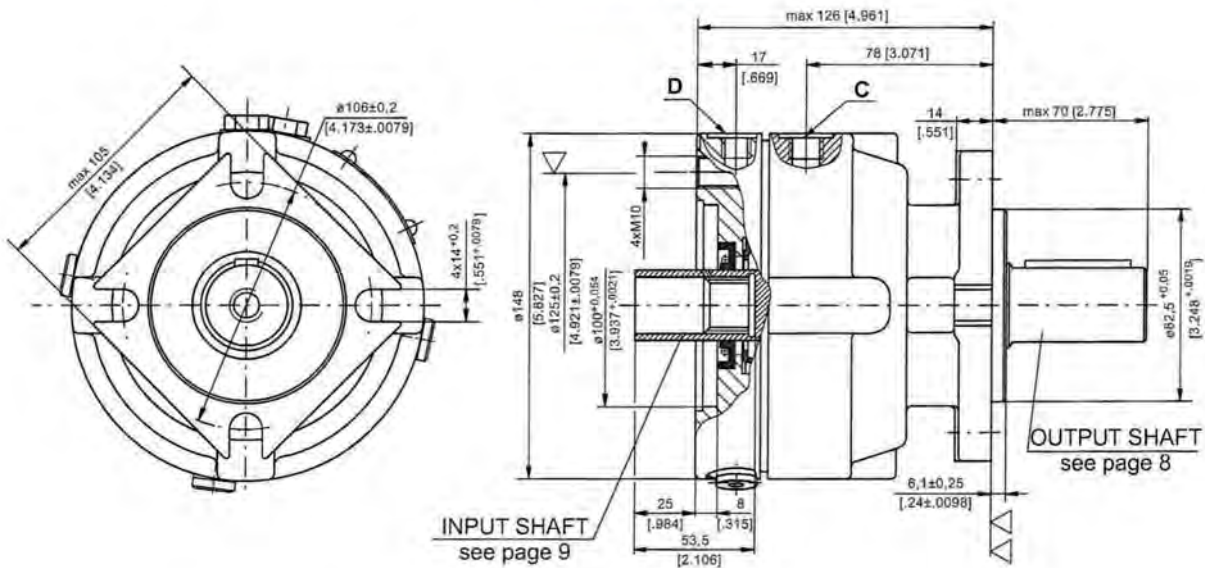
OUTPUT SHAFT EXTENSIONS



LBS, LBV

Hydraulische rem geschikt voor montage op de MSS en MSV motoren

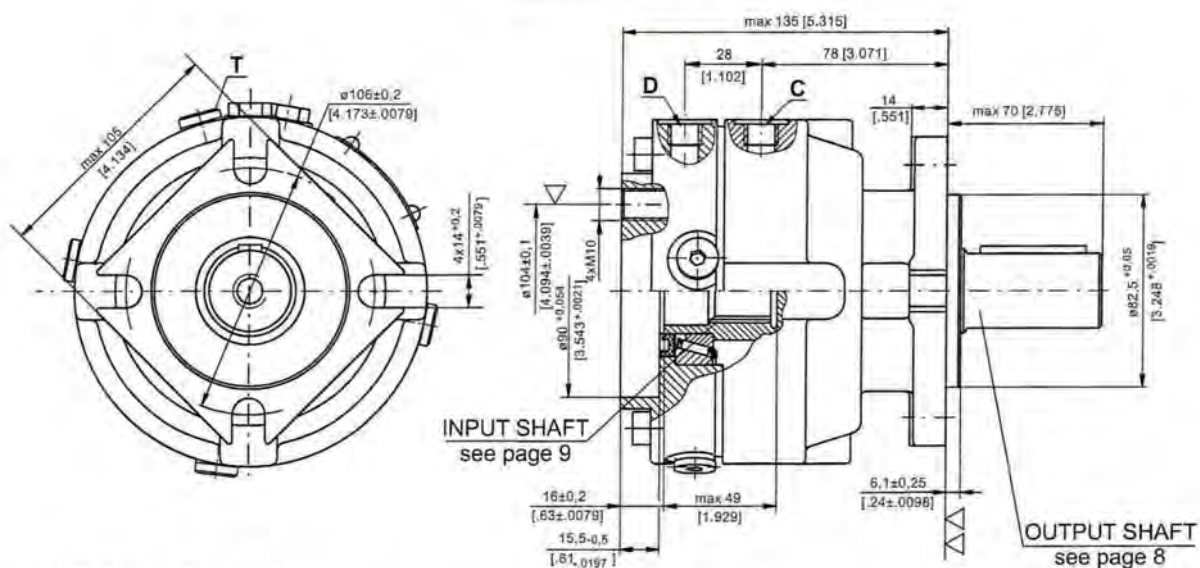
TYPE LBS/289



- ▽ - Place for attachment
(tightening torque for screw M10x35 - 8.8 DIN 912 - 5 daNm [440 lb-in])
- ▽▽ - Place for attachment



TYPE LBV/289



- ▽ - Place for attachment
(tightening torque for screw M10 - 8.8 DIN 912 - 5 daNm [440 lb-in])
- ▽▽ - Place for attachment

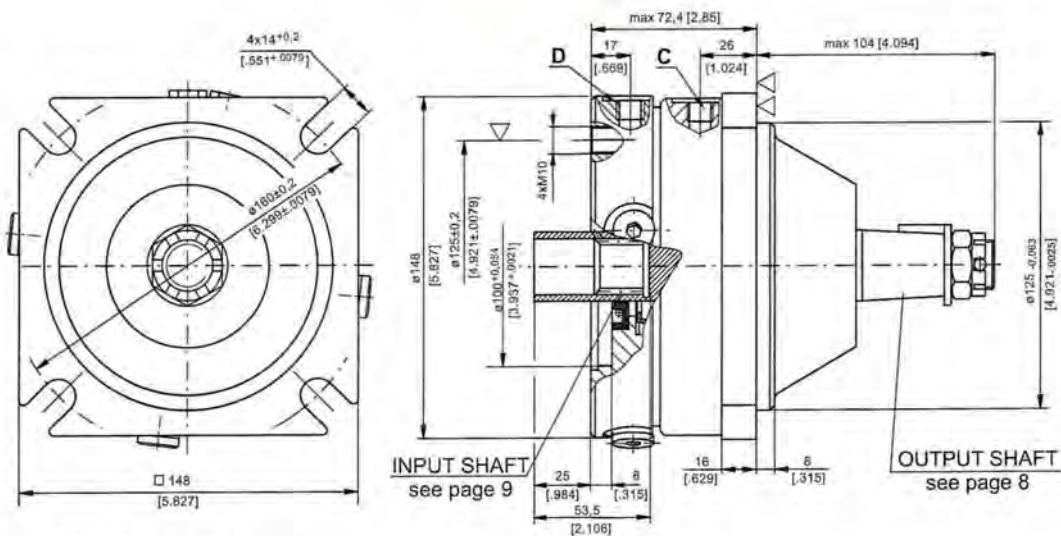
C : Brake release Port - G $\frac{1}{4}$, 9 mm [0.35 in] depth

D, T : Drainage tap - G $\frac{1}{4}$, 9 mm [0.35 in] depth

LBS, LBV

Hydraulische rem geschikt voor montage op de MSS en MSV motoren

TYPE LBS/290

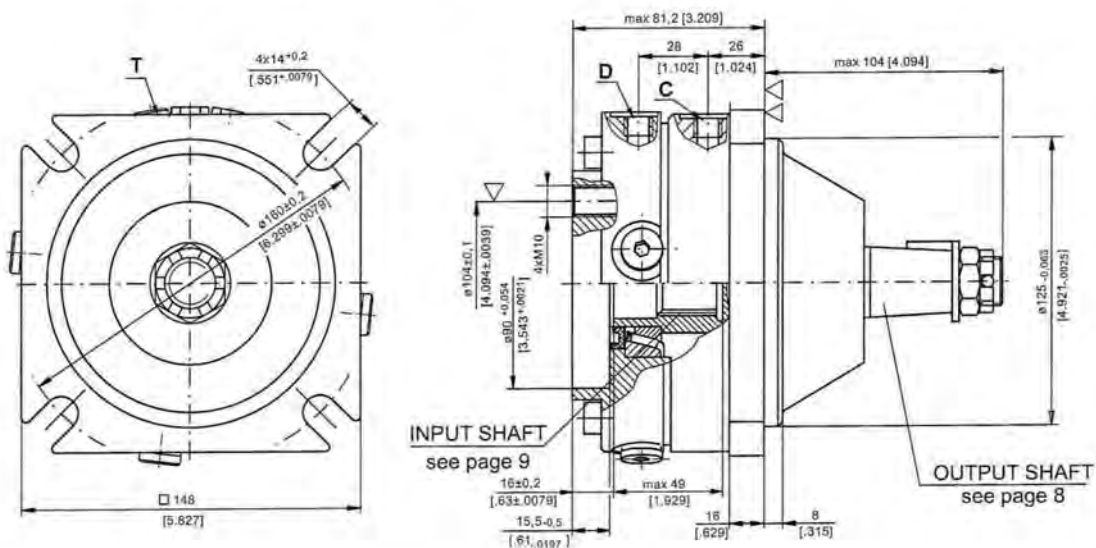


▽ - Place for attachment
(tightening torque for screw M10x35 - 8.8 DIN 912 - 5 daNm [440 lb-in])

▽▽ - Place for attachment



TYPE LBV/290



▽ - Place for attachment
(tightening torque for screw M10 - 8.8 DIN 912 - 5 daNm [440 lb-in])

▽▽ - Place for attachment

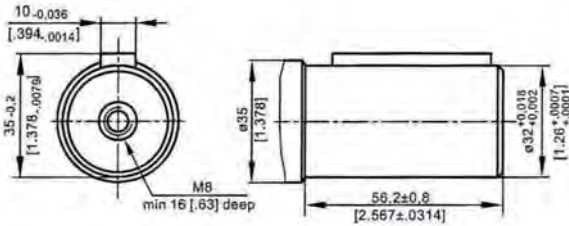
C : Brake release Port - G 1/4, 9 mm [0.35 in] depth

D, T: Drainage tap - G 1/4, 9 mm [0.35 in] depth

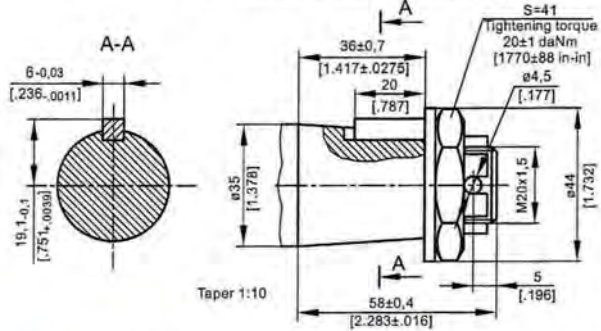
LBS, LBV

Maten uitgaande as

CB - $\phi 32$ straight, Parallel key A10x8x45 DIN 6885
 Max. Torque 77 daNm [6815 lb-in]



KB - tapered 1:10, Parallel key B6x6x20 DIN 6885
 Max. Torque 95 daNm [8400 lb-in]



SPECIFICATION DATA

Description	LBS/289(290) LBV/289(290)	21	32	43	63
*Min. Static Torque, daNm [lb-in]		20-22 [1770-1947]	31-34 [2743-3009]	41-45 [3628-3982]	61-64 [5399-5665]
Opening Pressure bar [PSI]	min	17-23 [247-334]			
	max	300 [4350]			
Min. oil quantity for brake releasing cm ³ [in ³]		7 - 8 [0.427 - 0.488]			
Oil volume cm ³ [in ³]		50 - 120 [3.05 - 7.35]			
Max. Pressure in drain space bar [PSI]		5 [72]			
Weight kg [lb]		9 [19.8]			

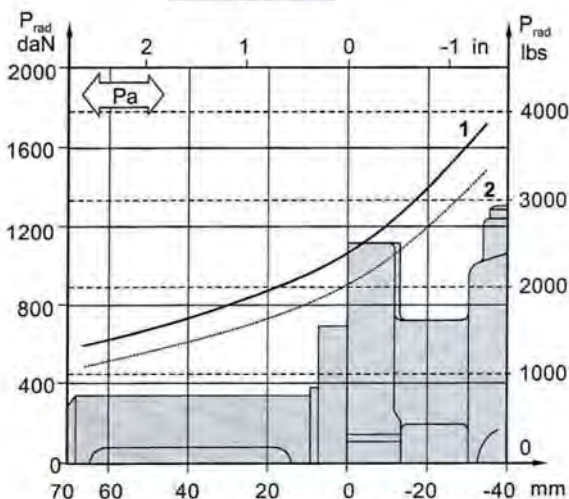
*Static torque is obtained at working pressure - 0 bar [0 PSI].

LOAD CURVE

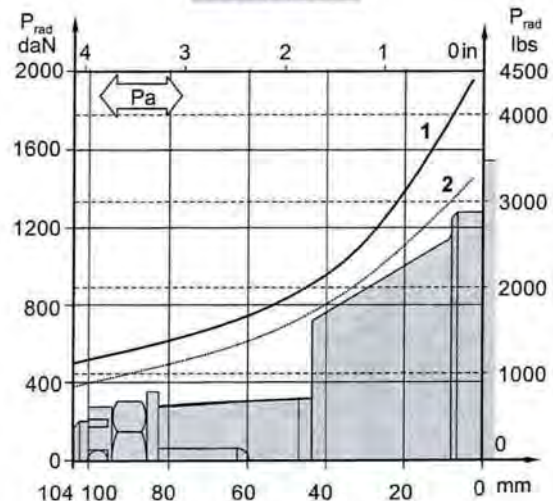
The curve applies to a B10 bearing life of 3000 hours at 200 RPM.

- 1: Pa < 350 daN [787 lbs]
- 2: Pa = 500 daN [1125 lbs]

LBS(V)/289



LBS(V)/290

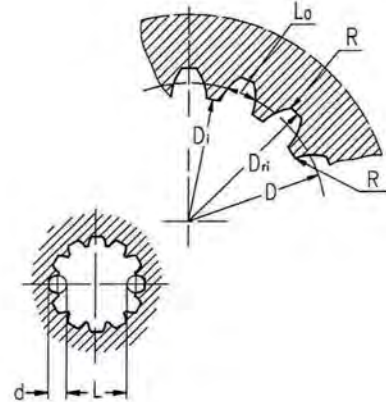


LBS, LBV

Gegevens interne splines voor aan te sluiten componenten

Standard ANS B92.1-1970, class 5
 [m=2.1166]

Fillet Root Side Fit	LBS(V)/289 LBS(V)/290		LBS(V)/314 LBS(V)/315	
	mm	inch	mm	inch
Number of Teeth z	12	12	16	16
Diametral Pitch DP	12/24	12/24	12/24	12/24
Pressure Angle	30°	30°	30°	30°
Pitch Dia. D	25,4	1	33,8656	1.3333
Major Dia. D _{ri}	28,0 ^{+0,1}	1.1 + 1.098	38,4 ^{+0,4}	1.5118±1.5275
Minor Dia. D _i	23,0 ^{-0,033}	.907 + .905	32,15 ^{-0,06}	1.2657±1.2673
Space Width [Circular]Lo	4,308±0,020	.1704 + .1688	4,516±0,037	1.763±.1791
Fillet Radius R	0,2	.008	0,5	.02
Max. Measurement between Pins L	17,62 ^{+0,15}	.699 + .694	26,9 ^{+0,10}	1.063±1.059
Pin Dia. d	4,835±0,001	.19039+.19031	4,835±0,001	.19026±.19034
Corrected	x.m ^{+0,8}	+.031	+1,0	+.039



ORDER CODE - LB/288

1	2	3	4	5
LB/288	-			

Pos.1 - Input Shaft Hole

C, CO, SH, CB, SB

CB - ø32 straight, Parallel key A10x8x45 DIN 6885

KB - ø35 tapered 1:10, Parallel key B6x6x20 DIN6885

Pos.2 - Static Torque code (See Specification data)

7, 14, 21, 32, 43, 63

Pos.4 - Option (Paint)**

omit - no Paint

P - Painted

PC - Corrosion Protected Paint

Pos.3 - Output Shaft Extensions*

C - ø25 straight, Parallel key A8x7x32 DIN 6885

CO - ø1" straight, Parallel key ¼"x¼"x1¼" BS46

SH - ø25,32 splined BS 2059 (SAE 6B)

SA - ø24,5 splined B25x22 DIN 5482

Pos.5 - Design Series

omit - Factory specified

ORDER CODE - LBS, LBV

1	2	3	4	5	6
LB	/	-			

Pos.1 - Type

S - Disc Brake for short motor S- MSS

V - Disc Brake for very short motor V- MSV

Pos.4 - Output Shaft Extensions*

CB - ø32 straight, Parallel key A10x8x45 DIN 6885

KB - ø35 tapered 1:10, Parallel key B6x6x20 DIN6885

Pos.2 - Design code

289 - for MSS and MSV Motors

290 - for MSS and MSV Motors (Wheel Mount)

Pos.5 - Option (Paint)**

omit - no Paint

P - Painted

PC - Corrosion Protected Paint

Pos.3 - Static Torque code (See Specification data)

21, 32, 43, 63

Pos.6 - Design Series

omit - Factory specified

NOTES:

* The permissible output torque for shafts must be not exceeded! For Max. Torque values see data on page 5 and 8.

** The color is by customer's request.

The Disc Brakes are mangano-phosphatized as standard.

ATTENTION:

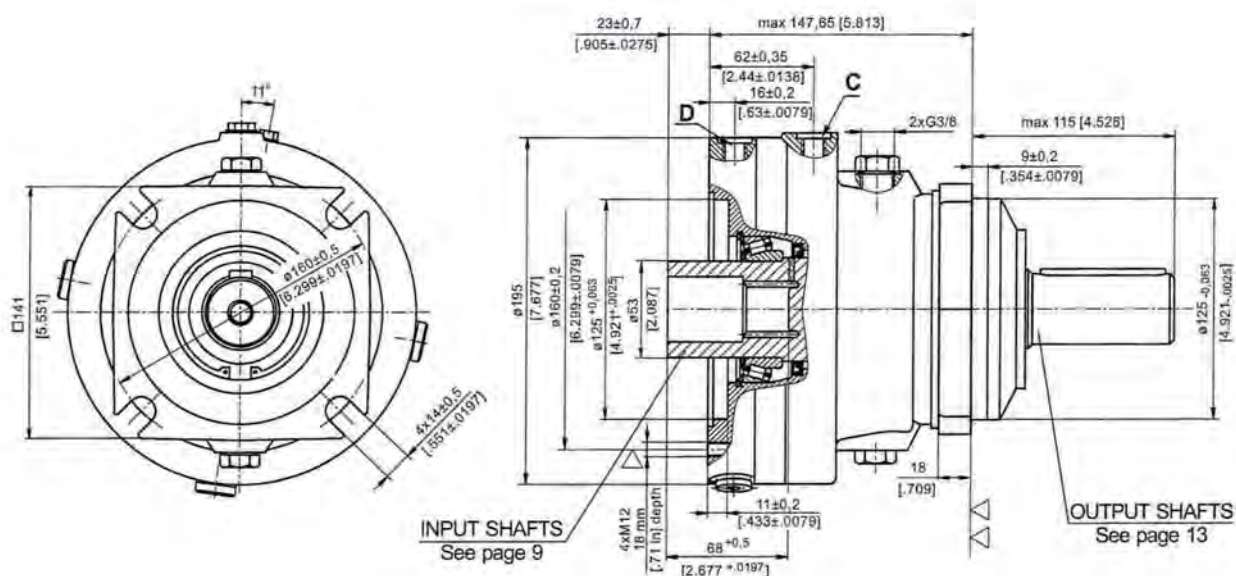
1. Hydraulic brake is delivered without oil (it is lubricated only).

2. In all brakes, friction discs and separators should be lubricated. Space is filled with 50 + 120 cm³ [3.05+7.32 in³] mineral oil HLP (DIN 51524) or HM (ISO 6743/4). For LB/288 fill oil after hydraulic motor assembly.

LBS, LBV

Hydraulische rem geschikt voor montage aan de MTS en MTV motoren

TYPE LBS/314



▽ - Place for attachment
(tightening torque for screw M12x30- 8.8 DIN 912,
7 daNm [620 lb-in])

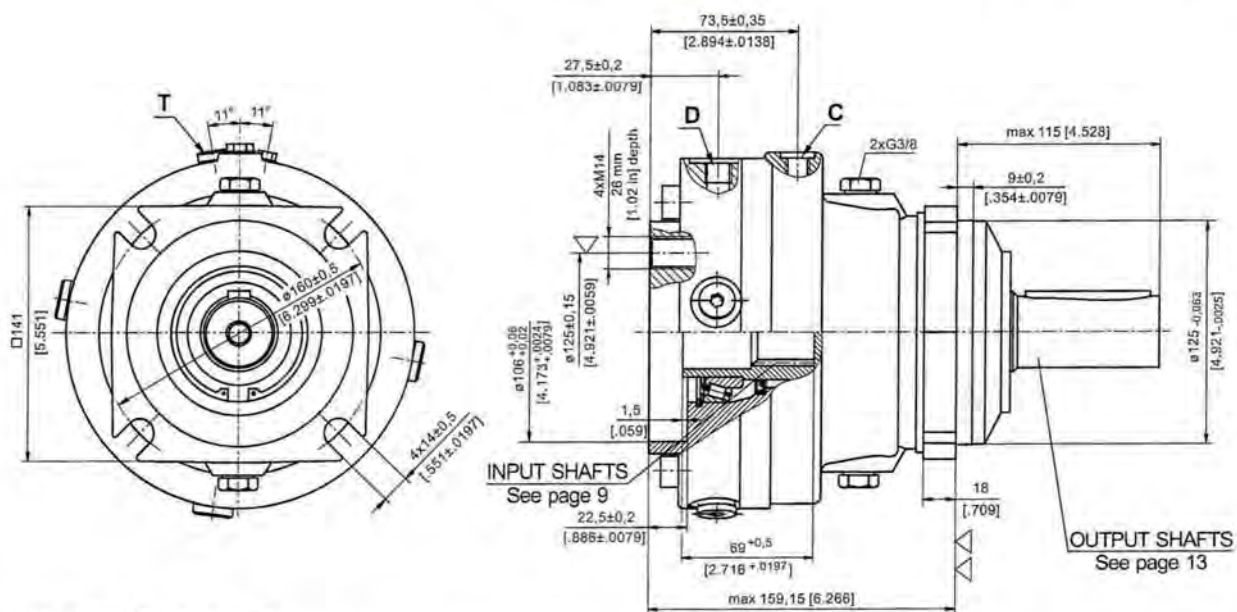
▽▽ - Place for attachment

C : Brake release Port - G $\frac{1}{4}$, 12 mm [.47 in] depth

D : Drainage tap - G $\frac{1}{4}$, 12 mm [.47 in] depth



TYPE LBV/314



▽ - Place for attachment
(tightening torque for screw M14 - 8.8 DIN 912,
11.5 daNm [1020 lb-in])

▽▽ - Place for attachment

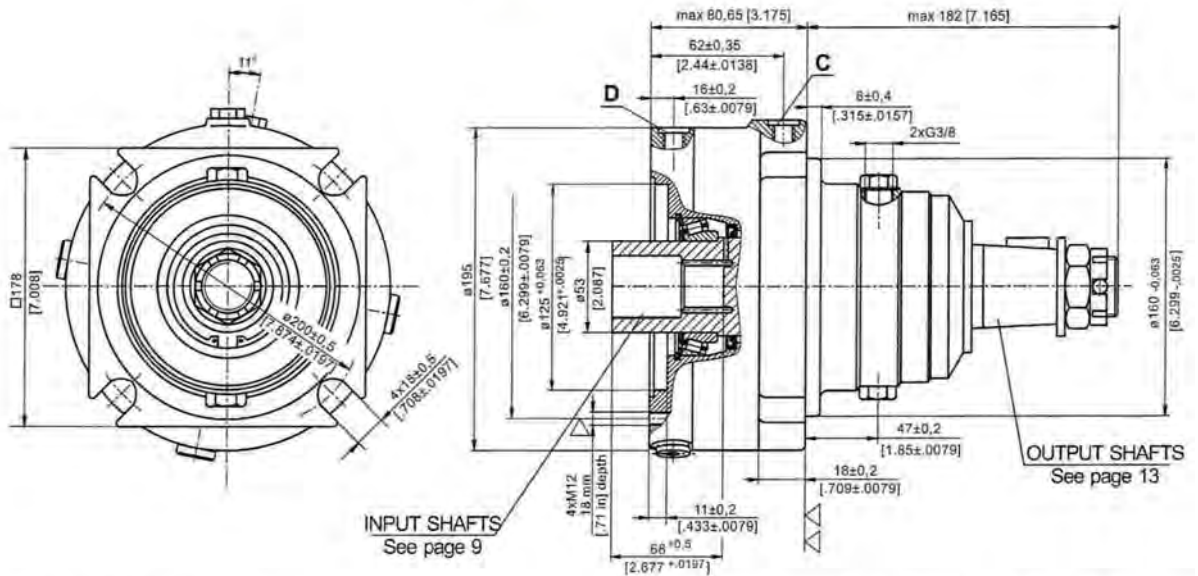
C : Brake release Port - G $\frac{1}{4}$, 12 mm [.47 in] depth

D, T : Drainage tap - G $\frac{1}{4}$, 12 mm [.47 in] depth

LBS, LBV

Hydraulische rem geschikt voor montage aan de MTS en MTV motoren

TYPE LBS/315



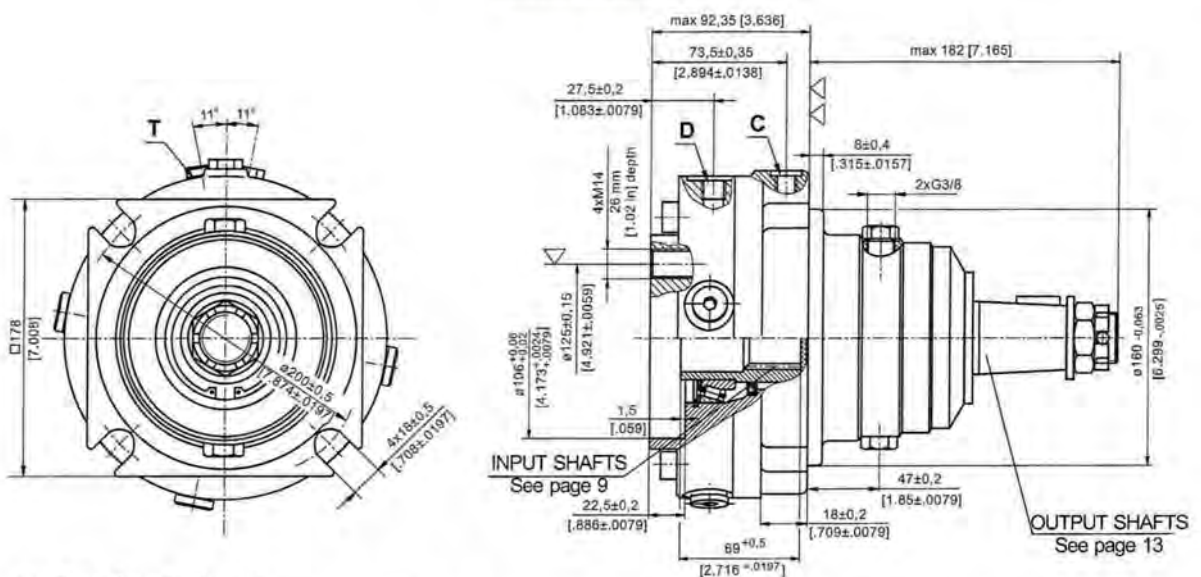
▽ - Place for attachment
(tightening torque for screw M12x30- 8.8 DIN 912,
7 daNm [620 lb-in])

▽▽ - Place for attachment

C : Brake release Port - G $\frac{1}{4}$, 12 mm [.47 in] depth
 D : Drainage tap - G $\frac{1}{4}$, 12 mm [.47 in] depth



TYPE LBV/315



▽ - Place for attachment
(tightening torque for screw M14 - 8.8 DIN 912,
11,5 daNm [1020 lb-in])

▽▽ - Place for attachment

C : Brake release Port - G $\frac{1}{4}$, 12 mm [.47 in] depth
 D,T : Drainage tap - G $\frac{1}{4}$, 12 mm [.47 in] depth

LBS, LBV

Specificaties

Description LBS/315,315	21	29	43	65	85	110	130
*Min. Static Torque, daNm [lb-in]	18-23 [1593-2036]	28-33 [2478-2921]	42-46 [3717-4071]	61-70 [5399-6196]	83-92 [7346-8143]	108-118 [9559-10444]	126-136 [11152-12037]
Opening Pressure min** bar [PSI]	4-5 [58-72]	6-7 [87-101]	9-10 [130-145]	13-15 [188-217]	18-20 [261-290]	23-25 [333-362]	27-29 [391-420]
	max 300 [4350]						
Min. oil quantity for brake releasing cm ³ [in ³]	8-9 [.488-.549]						
Oil volume cm ³ [in ³]	250						
Max. Pressure in drain space bar [PSI]	5 [72]						
Weight for .../314 kg [lb]	24 [52.9]						
	.../315 25 [55.1]						

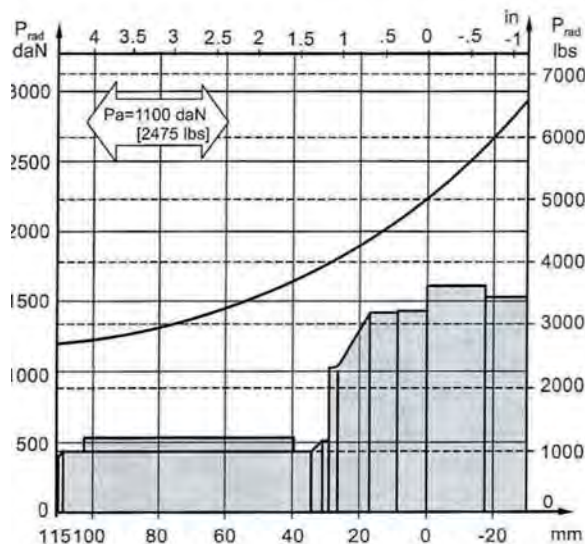
*Static torque is obtained at working pressure - 0 bar.

**The indicated value is a difference between the inlet pressure for driving of the brake and the drain pressure.

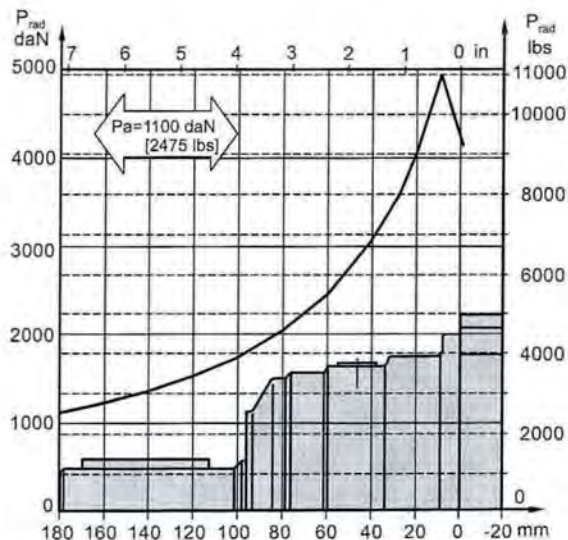
Brakes must always have a drain line

LOAD CURVE

LBS(V) ... /314

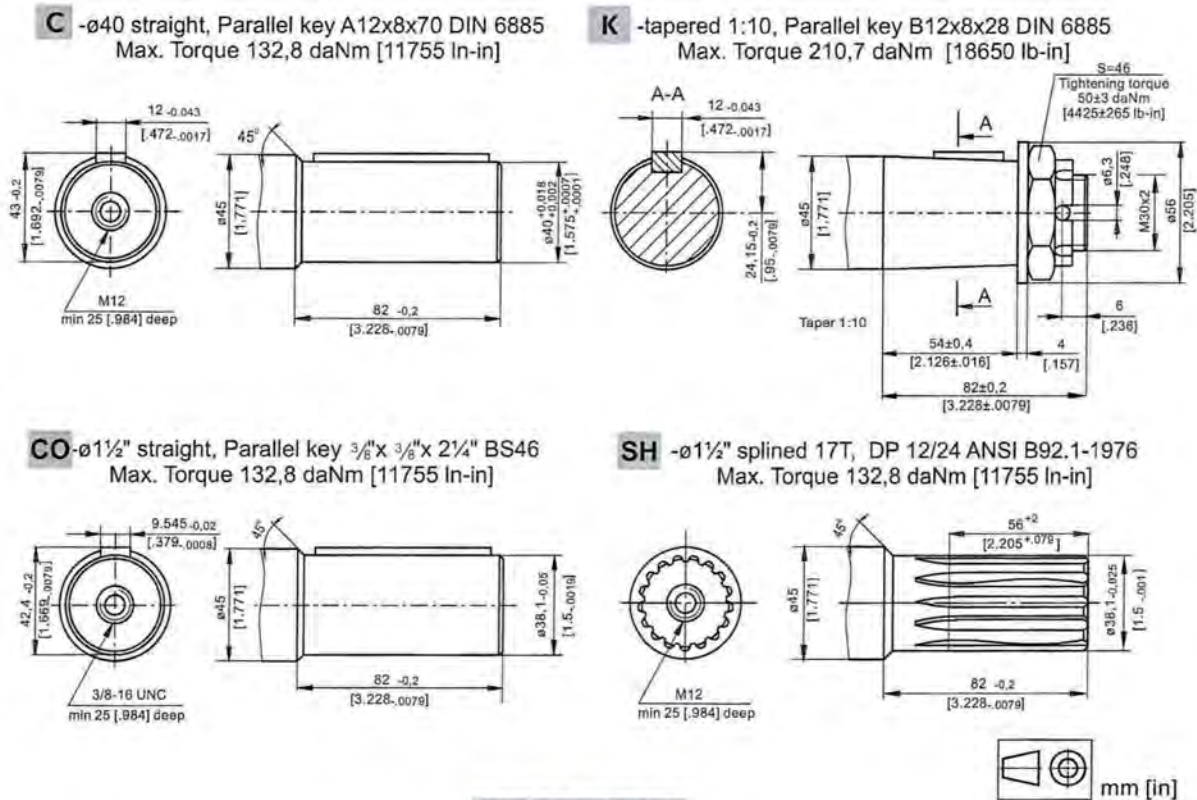


LBS(V) ... /315



LBS, LBV

Maten uitgaande as



ORDER CODE

1	2	3	4	5	6
LB	/	-			

- Pos. 1 - Type**
S - Disc Brake for short motor **S** - MTS
V - Disc Brake for very short motor **V** - MTV
- Pos. 2 - Design code**
314 - for MTS and MTV Motors.
315 - for MTS and MTV Motors (Wheel Mount)
- Pos. 3 - Static Torque code** (See Specification data)
21, 29, 43, 65, 85, 110, 130

- Pos. 4 - Output Shaft Extensions***
C - $\varnothing 40$ straight, Parallel key A12x8x70 DIN 6885
CO - $\varnothing 1\frac{1}{2}$ " straight, Parallel key $\frac{3}{8}$ "x $\frac{3}{8}$ "x $2\frac{1}{4}$ " BS46
SH - $\varnothing 1\frac{1}{2}$ " splined 17T, ANSI B92.1-1976
K - $\varnothing 45$ tapered 1:10, Parallel key B12x8x28 DIN6885
- Pos. 5 - Option (Paint)****
omit - no Paint
P - Painted
PC - Corrosion Protected Paint
- Pos. 6 - Design Series**
omit - Factory specified

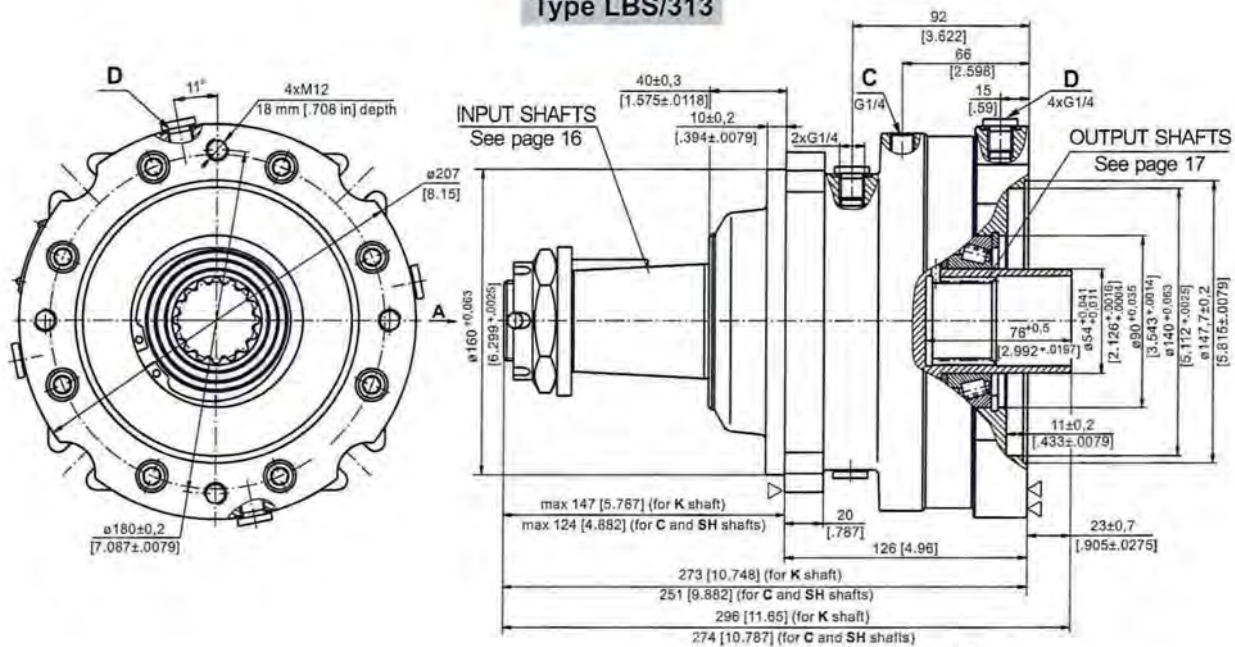
NOTES:
* The permissible output torque for shafts must be not exceeded!
** The color is by customer's request.
The Disc Brakes are mangano-phosphatized as standard.

ATTENTION:
1. Hydraulic brake is delivered without oil (it is lubricated only).
2. In all brakes, friction discs and separators should be lubricated. Space is filled with 150+300 cm³ [9.15+18.3 in³] mineral oil HLP (DIN 51524) or HM (ISO 6743/4).

LBS, LBV

Hydraulische rem geschikt voor montage aan de MVS motoren

Type LBS/313

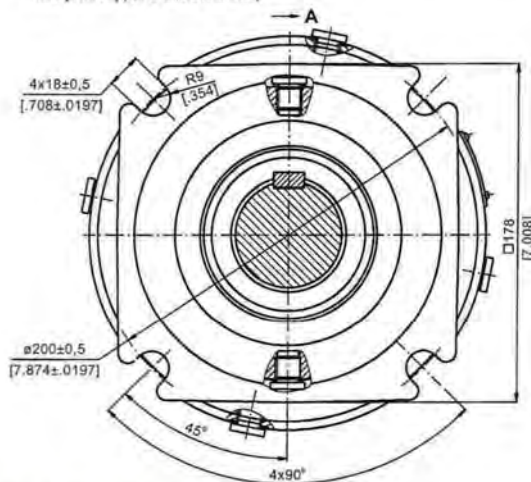


C : Brake release Port - G $\frac{1}{4}$, 12 mm [.47 in] depth

D : Drainage tap - G $\frac{1}{4}$, 12 mm [.47 in] depth

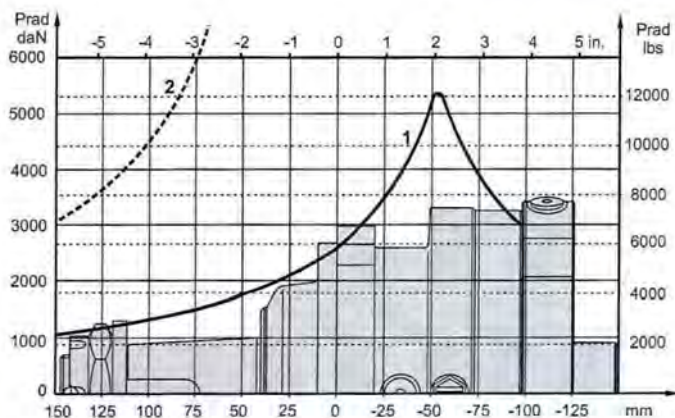
▽ - Place for attachment

▽▽ - Place for attachment
 (tightening torque for screw M12x35 - 8.8 DIN 912,
 7 daNm [620 lb-in])



mm [in]

PERMISSIBLE SHAFT LOADS

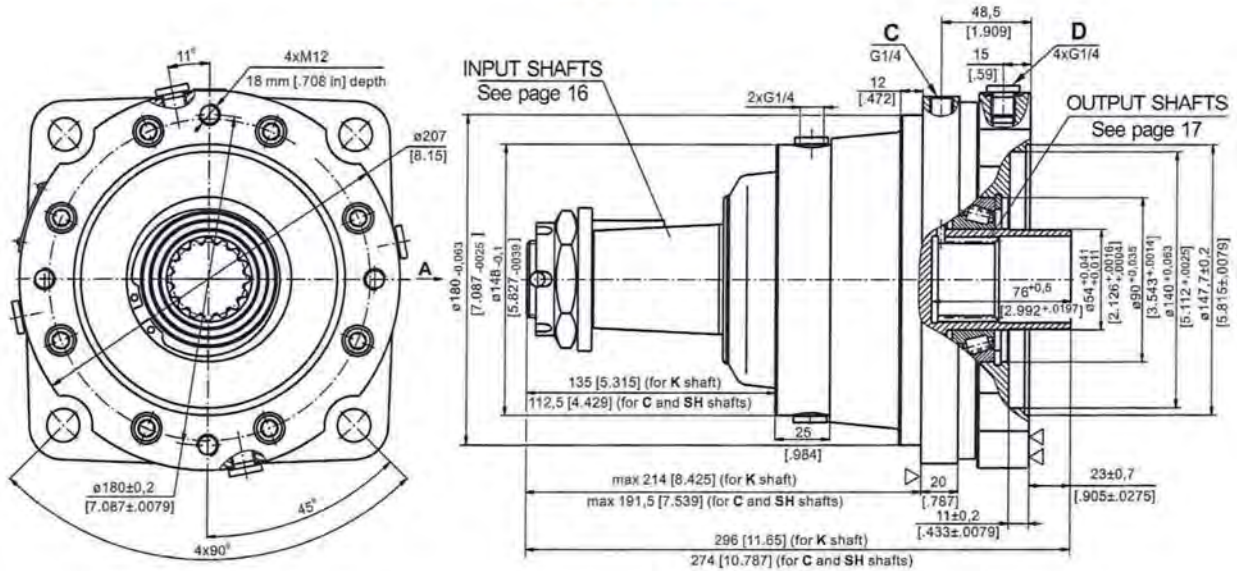


- 1 - Bearing curve: The curve applies to a B10 bearing life of 3000 hours at 200 RPM.
- 2 - Shaft curve: The curve represents Max. permissible radial shaft load with safety factor 3:1.

LBS, LBV

Hydraulische rem geschikt voor montage aan de MVS motoren

Type LBS/316

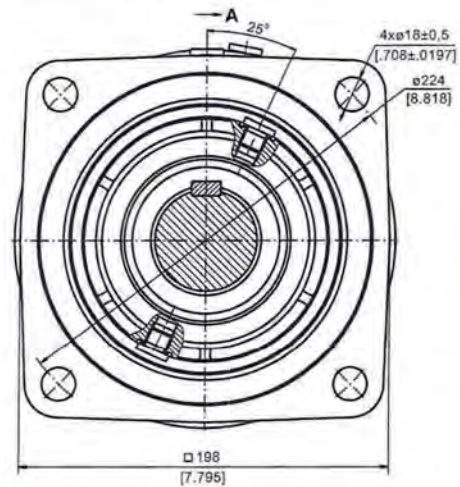


C : Brake release Port - G $\frac{1}{4}$, 12 mm [.47 in] depth

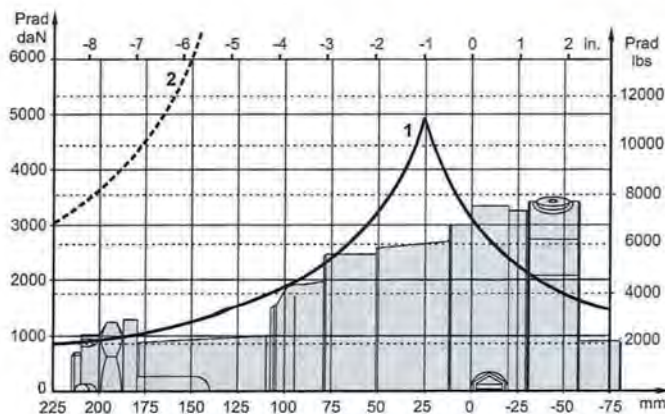
D : Drainage tap - G $\frac{1}{4}$, 12 mm [.47 in] depth

▽ - Place for attachment

▽▽ - Place for attachment
 (tightening torque for screw M12x35 - 8.8 DIN 912,
 7 daNm [620 lb-in])



PERMISSIBLE SHAFT LOADS



1 - Bearing curve: The curve applies to a B10 bearing life of 3000 hours at 200 RPM.
2 - Shaft curve: The curve represents Max. permissible radial shaft load with safety factor 3:1.

LBS, LBV

Specificaties

Description LBS/313,316	21	29	43	65	85	110	130
*Min. Static Torque, daNm [lb-in]	18-23 [1593-2036]	28-33 [2478-2921]	42-47 [3717-4160]	61-71 [5399-6285]	83-94 [7346-8320]	108-118 [9559-10444]	127-137 [11240-12125]
Opening Pressure bar [PSI]	min** 4-5 [58-72]	6-7 [87-101]	9-10 [130-145]	13-15 [188-217]	18-20 [261-290]	23-25 [333-362]	27-29 [391-420]
	max 300 [4350]						
Min. oil quantity for brake releasing cm ³ [in ³]	8 ÷ 9 [.488 ÷ .549]						
Oil volume cm ³ [in ³]	250 [15.25]						
Max. Pressure in drain space bar [PSI]	5 [72]						

*Static torque is obtained at working pressure - 0 bar.

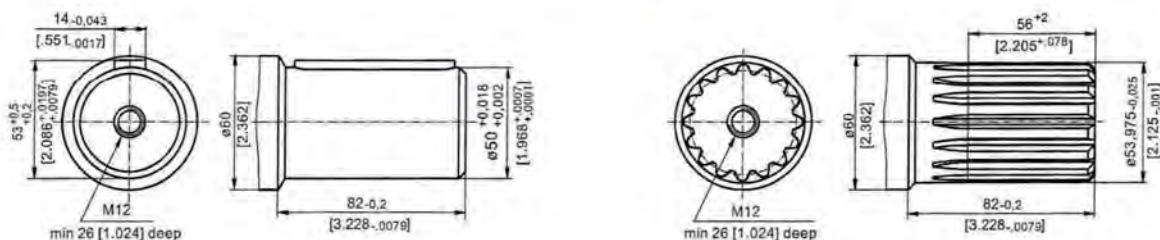
**The indicated value is a difference between the inlet pressure for driving of the brake and the drain pressure.

Brakes must always have a drain line

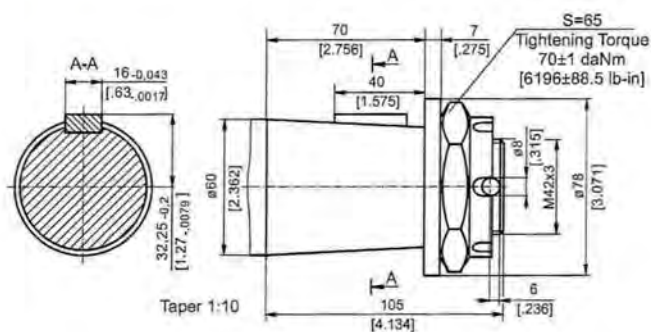
SHAFT EXTENSIONS

C - ø50 straight, Parallel key A14x9x70 DIN 6885

SH - ø2 1/8" splined, 16 DP 8/16 ANS B92.1-1976



K - tapered 1:10, Parallel key B16x10x32 DIN 6885

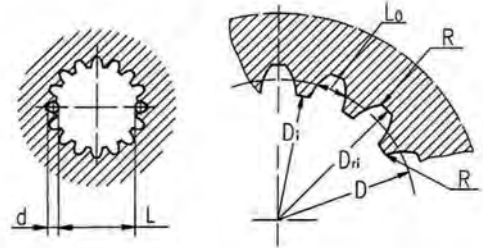


LBS, LBV

Interne splines voor het aan te sluiten component

Standard ANS B92.1-1970, class 5
 [m=2.54; corrected x.m=+1,0]

Fillet Root Side Fit		mm	inch
Number of Teeth	z	16	16
Diametral Pitch	DP	10/20	10/20
Pressure Angle		30°	30°
Pitch Dia.	D	40,640	1.6
Major Dia.	D _{ri}	45,2 ^{+0,4}	1.796+1.780
Minor Dia.	D _i	38,5 ^{+0,039}	1.5175+1.516
Space Width [Circular]	L _o	5,18±0,037	.2055+.2025
Fillet Radius	R	0,4	.015
Max. Measurement between Pins	L	32,47 ^{+0,15}	1.284+1.278
Pin Dia.	d	5,6±0,001	.22051+.22043



Hardening Specification:
 HV=750±50 on the surface.
 HV=560 at 0,7±0,2 mm [.035±.019in] case depth
 Material: 20 MoCr4 EN 10084 or better.

ORDER CODE

	1	2	3	4	5
LBS/		-			

Pos.1 - Designe code

- 313** - for MVS Motors
- 316** - for MVS Motors (Wheel mount)

Pos.2 - Static Torque code (See Specification data)

21, 29, 43, 65, 85, 110, 130

Pos.3 - Output Shaft Extensions*

- C** - ø50 straight, Parallel key A14x9x70 DIN6885
- SH** - ø2 1/8" splined, ANSI B92.1-1976
- K** - ø60 tapered 1:10, Parallel key B16x10x32 DIN6885

Pos.4 - Option (Paint)**

- omit - no Paint
- P** - Painted
- PC** - Corrosion Protected Paint

Pos.5 - Design Series

- omit - Factory specified

NOTES:

- * The permissible output torque for shafts must be not exceeded!
 - ** The color is by customer's request.
- The Disc Brakes are mangano-phosphatized as standard.

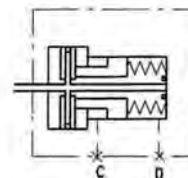
ATTENTION:

1. Hydraulic brake is delivered without oil (it is lubricated only).
2. In all brakes, friction discs and separators should be lubricated. Space is filled with 150 ± 300 cm³ [9.15 ± 18.3 in³] mineral oil HLP (DIN 51524) or HM (ISO 6743/4).

B...R-wet Rem

B...R brake is designed to be mounted to the wheels of low-speed agricultural and construction vehicles.

The advantage of these brakes is that despite the smallest possible dimensions they preserve long-term life of the bearings at high radial shaft load.



SPECIFICATION DATA

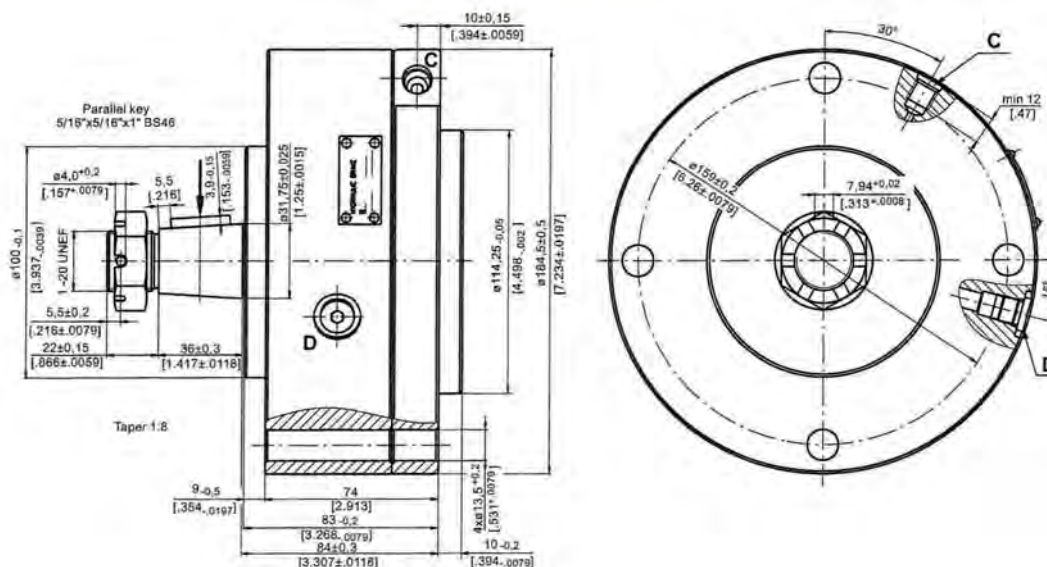
Type	B35R	B55R
Static Torque of Brake, daNm [lb-in]*	35 [3100]	55 [4870]
Initial Release Pressure, bar [PSI]	16 [232]	16 [232]
Full Release Pressure, bar [PSI]	19 [275]	19 [275]
Max. Operating Pressure, bar [PSI]	240 [3480]	240 [3480]
Max. Speed, RPM	90	90
Cont. Radial Shaft Load daN [lbs]**	500 [1125]	500 [1125]
Max. Radial Shaft Load daN [lbs]**	700 [1575]	900 [2030]

* At 0 bar [0 PSI] back pressure

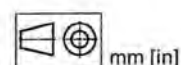
** At radial shaft load of 500 daN [1125 lbs], applied at center-line of the key and speed of rotation 90 RPM, the bearing life is 1000 hours.

*** The permissible values of radial shaft load may occur for max. 10% of every minute

DIMENSIONS AND MOUNTING DATA



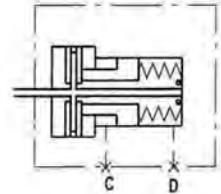
- C** : Brake Release Port -7/16-20 UNF
SAE J1926-1/ISO 11926-1
- D** : Drainage Tap - 7/16-20 UNF



B...T-wet Rem

B..T brake is designed to be mounted to the wheels of low-speed agricultural and construction vehicles.

The advantage of these brakes is that despite the smallest possible dimensions they preserve long-term life of the bearings at high radial shaft load.



SPECIFICATION DATA

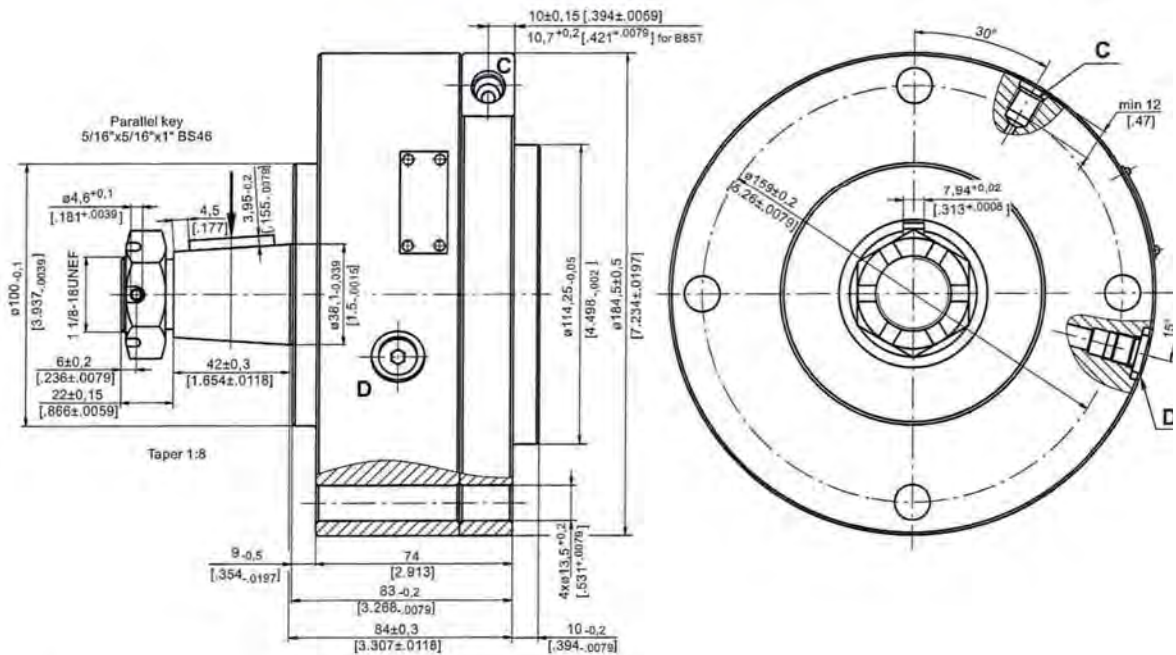
Type	B50T	B55T	B60T	B65T	B85T
Static Torque of Brake, daNm [lb-in]*	50 [4425]	55 [4870]	60 [5310]	65 [5750]	85 [7525]
Initial Release Pressure, bar [PSI]	16 [232]	16 [232]	16 [232]	17 [246]	18 [260]
Full Release Pressure, bar [PSI]	19 [275]	19 [275]	19 [275]	20 [290]	22 [320]
Max. Operating Pressure, bar [PSI]	240 [3480]	240 [3480]	240 [3480]	240 [3480]	240 [3480]
Max. Speed, RPM	60	60	60	60	60
Cont. Radial Shaft Load daN [lbs]**	1000 [2250]	1000 [2250]	1000 [2250]	1000 [2250]	1500 [3370]
Max. Radial Shaft Load daN [lbs]***	2150 [4830]	2150 [4830]	2150 [4830]	2150 [4830]	2250 [5060]

* At 0 bar [0 PSI] back pressure

** At radial shaft load of 1000 daN [2250 lbs], applied at center-line of the key and speed of rotation 60 RPM, the bearing life is 1000 hours.

*** The permissible values of radial shaft load may occur for max. 10% of every minute

DIMENSIONS AND MOUNTING DATA



C : Brake Release Port - 7/16-20 UNF
SAE J1926-1/ISO 11926-1

D : Drainage Tap - 7/16-20 UNF

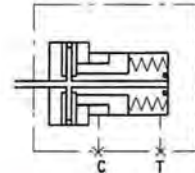


B130K...-wet

Rem

This brake is designed to be mounted to the wheels of low-speed agricultural and construction vehicles.

The advantage of these brakes is that despite the smallest possible dimensions they preserve long-term life of the bearings at high radial shaft load.

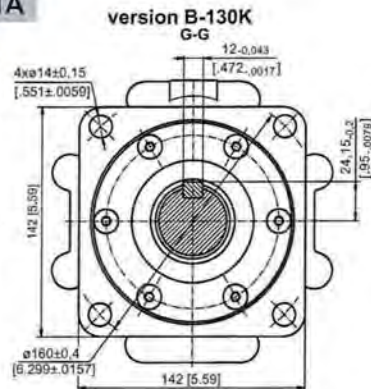
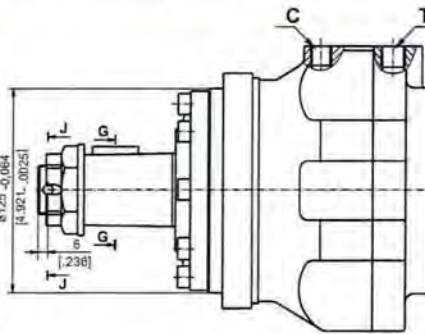
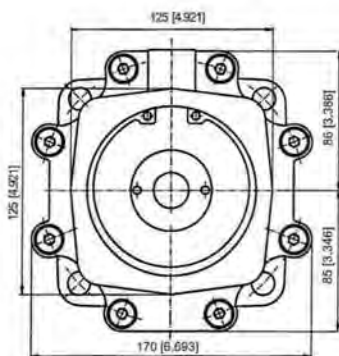


SPECIFICATION DATA

Type	B130K
Static Torque of Brake, daNm [lb-in]*	143 [12565]
Min. Brake Release Pressure, bar [PSI]	31-33 [119-478]
Max. Opening Pressure, bar [PSI]	280 [4060]
Max. Permissible Pressure in Drain Line, bar [PSI]	5 [72]
Weight, kg [lb]	18,5 [40.8]

* At 0 bar [0 PSI] back pressure

DIMENSIONS AND MOUNTING DATA



version B-130K



version B-130K-P



K -tapered 1:10,
Parallel key B12x8x28 DIN 6885
Max. Torque 210 daNm [18587 lb-in]

S=46

Tightening torque

50±3 daNm

[442±265 lb-in]

M30x2

ø56 [2.205]

4 [0.157]

54 [2.126]

82 [3.228]

max 115 [4.527]

126 [4.96]

104 [4.094]

60 [2.362]

12 [0.472]

18 [0.709]

ø45 [1.771]

- C** - Brake release port, G1/4,
12 mm [0.472 in] depth
- D** - Drainage tap, G3/8,
13 mm [0.512 in] depth

version B-130K

G-G

12 ±0.043 [0.472 ±0.0017]

4xø14±0.15 [0.551±0.0059]

142 [5.59]

ø160±0.4 [6.299±0.0157]

142 [5.59]

24.15±0.3 [0.95±0.0075]

126 [4.96]

104 [4.094]

60 [2.362]

12 [0.472]

18 [0.709]

ø45 [1.771]

max 115 [4.527]

126 [4.96]

104 [4.094]

60 [2.362]

12 [0.472]

18 [0.709]

ø45 [1.771]

max 115 [4.527]

126 [4.96]

104 [4.094]

60 [2.362]

12 [0.472]

18 [0.709]

ø45 [1.771]

max 115 [4.527]

126 [4.96]

104 [4.094]

60 [2.362]

12 [0.472]

18 [0.709]

ø45 [1.771]

max 115 [4.527]

126 [4.96]

104 [4.094]

60 [2.362]

12 [0.472]

18 [0.709]

ø45 [1.771]

max 115 [4.527]

126 [4.96]

104 [4.094]

60 [2.362]

12 [0.472]

18 [0.709]

ø45 [1.771]

max 115 [4.527]

126 [4.96]

104 [4.094]

60 [2.362]

12 [0.472]

18 [0.709]

ø45 [1.771]

max 115 [4.527]

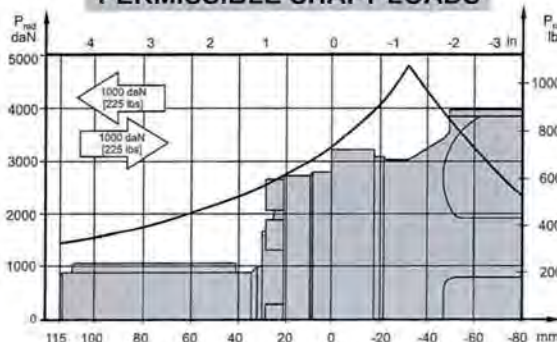
126 [4.96]

104 [4.094]

60 [2.362]

12 [0.472]

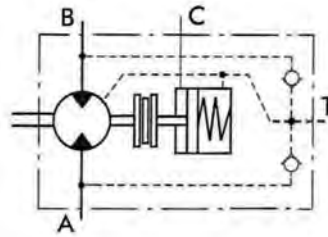
PERMISSIBLE SHAFT LOADS



The curve applies to a B10 bearing life of 3000 hours at 200 RPM.



B/MR Motor met rem



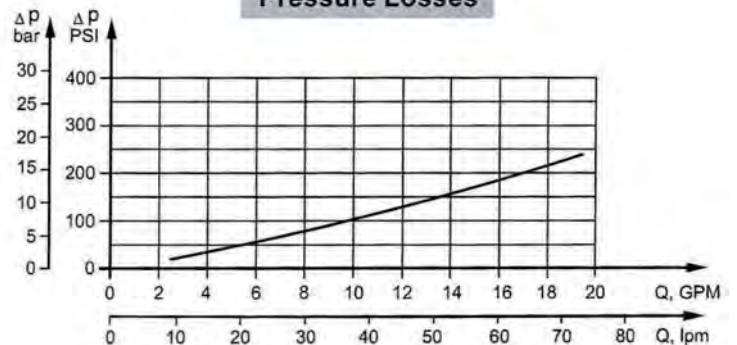
Algemene informatie

Max. Displacement, cm ³ /rev [in ³ /rev]	397 [24.4]
Max. Speed, [RPM]	600
Max. Torque, daNm [lb-in]	cont.: 61 [5400] int.: 57 [5045]
Max. Output, kW [HP]	14,5 [19.5]
Max. Pressure Drop, bar [PSI]	cont.: 175 [2540] int.: 200 [2900]
Max. Oil Flow, lpm [GPM]	75 [19.8]
Min. Speed, [RPM]	10
Permissible Shaft Loads, daN [lb-in]	P _a =200 [450]
Pressure fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, °C [°F]	-40+140 [-40+284]
Optimal Viscosity range, mm ² /s [SUS]	20+75 [98+347]
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop bar [PSI]	Viscosity mm ² /s [SUS]	Oil flow in drain line lpm [GPM]
100 [1450]	20 [98]	2,5 [.660]
	35 [164]	1,8 [.476]
140 [2030]	20 [98]	3,5 [.925]
	35 [164]	2,8 [.740]

Pressure Losses



B/MR

Motor met rem

Technische informatie

Type	B/MR 80	B/MR 100	B/MR 125	B/MR 160	B/MR 160 CB	B/MR 200	B/MR 200 CB	
Displacement, cm ³ /rev [in ³ /rev]	80,3 [4.90]	99,8 [6.09]	125,7 [7.67]	159,6 [9.74]		199,8 [12.19]		
Max. Speed, [RPM]	Cont.	500	500	475	375		300	
	Int.*	600	600	600	470		375	
Max. Torque daNm [in-lb]	Cont.	19,5[1725]	24[2125]	30[2655]	30[2655]	39[3450]	30[2655]	45[3980]
	Int.*	22[1947]	28[2480]	34[3010]	39[3450]	43[3805]	39[3450]	50[4425]
	Peak**	27[2390]	32[2832]	37[3275]	46[4070]	46[4070]	56[4960]	56[4955]
Max. Output kW [HP]	Cont.	8,4[11.2]	10,8[14.5]	12,5[16.8]	10 [13.5]	11,5[11.5]	7,8[10.5]	11[14.75]
	Int.*	9,6[12.9]	12[16.1]	14,5[19.5]	12,5[16.8]	14[18.8]	12,4[16.6]	13[17.4]
Max. Pressure Drop, bar [PSI]	Cont.	175[2540]	175[2540]	175[2540]	135[1960]	175[2540]	105[1523]	175[2540]
	Int.*	200[2900]	200[2900]	200[2900]	175[2540]	200[2900]	145[2103]	200[2900]
	Peak**	225[3263]	225[3263]	225[3263]	225[3263]	225[3263]	225[3263]	225[3263]
Max. Oil Flow l/min [GPM]	Cont.	40 [10.5]	50 [13.2]	60 [15.9]	60 [15.9]	60 [15.9]		
	Int.*	48 [12.7]	60 [15.9]	75 [19.8]	75 [19.8]	75 [19.8]		
Max. Inlet Pressure bar [PSI]	Cont.	175 [2540]						
	Int.*	200 [2900]						
	Peak**	225 [3260]						
Max. Starting Pressure bar [PSI]	10 [145]	10 [145]	9 [130]	7 [102]	5 [73]			
Min. Starting Torque, daNm[in-lb]	At max.press.drop Cont.	15 [1330]	20 [1770]	25 [2215]	24 [2124]	32 [2832]	26 [2301]	41 [3628]
	At max.press.drop Int.*	17 [1505]	23 [2035]	28 [2480]	32 [2832]	37 [3275]	33 [2920]	46 [4071]
Min. Speed***, [RPM]	10	10	10	10	10	10	10	
Static Torque of Brake, daNm [in-lb]	55 [4868]							
Min. Brake Release Pressure****, bar [PSI]	13 [190]							
Max. Opening Pressure, bar [PSI]	200 [2900]							
Weight, kg[lb]	11,0 [24.3]	11,2 [24.7]	11,4 [25.2]	11,6 [25.6]	11,7 [25.8]	12,2 [26.9]	12,3 [27.12]	

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting maximaal 1% per minuut

*** Voor toerentallen van 5 RPM of minder dan opgegeven, neem contact op met M+S of onze medewerkers.

1 tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen

2 Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering van 25 micron of beter.

3 Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN51524) of

HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals syntetische olieën dient er overleg te worden.

4 Aanbevolen minerale viscositeit is 13mm² bij 50C°.

5 Aanbevolen maximum olietemperatuur tijdens gebruik is 85 C°.

6 De levensduur van de motoren kan men verhogen als men de aandrijfjas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

B/MR

Motor met rem

Technische informatie

Type		B/MR 250	B/MR 250 CB	B/MR 315	B/MR 315 CB	B/MR 400	B/MR 400 CB
Displacement, cm ³ /rev [in ³ /rev]		250,1 [15.26]		315,7 [19.26]		397 [24.4]	
Max. Speed, [RPM]	Cont.	240		190		150	
	Int.*	300		240		190	
Max. Torque daNm [in-lb]	Cont.	30 [2655]	54 [4780]	30 [2655]	55 [4868]	30 [2655]	55 [4868]
	Int.*	39 [3450]	57 [5045]	42 [3717]	57 [5045]	43 [3805]	57 [5045]
	Peak**	60 [5310]	71 [6285]	61 [5400]	71 [6285]	60 [5310]	70 [6195]
Max. Output kW [HP]	Cont.	6,2 [8.3]	10 [13.4]	4,5 [6.1]	9 [12.1]	2,2 [2.9]	7 [9.4]
	Int.*	9,5 [12.7]	11 [14.7]	7,5 [10.1]	10 [13.4]	5,6 [7.5]	8,7 [11.7]
Max. Pressure Drop, bar [PSI]	Cont.	85 [1233]	175 [2538]	65 [942]	135 [1958]	45 [652]	105 [1523]
	Int.*	115 [1668]	185 [2683]	90 [1305]	145 [2103]	75 [1087]	115 [1668]
	Peak**	200 [2900]	225 [3263]	150 [2175]	180 [2610]	120 [1740]	140 [2030]
Max. Oil Flow l/min [GPM]	Cont.	60 [15.9]					
	Int.*	75 [19.8]					
Max. Inlet Pressure bar [PSI]	Cont.	175 [2540]					
	Int.*	200 [2900]					
	Peak**	225 [3260]					
Max. Starting Pressure bar [PSI]		5 [73]		5 [73]		5 [73]	
Min. Starting Torque, daNm[in-lb]	At max.press.drop Cont	24 [2125]	50 [4425]	26 [2300]	50 [4425]	24 [2125]	44 [3895]
	At max.press.drop Int.*	31 [2745]	51,5 [4560]	35 [3100]	51,8 [4585]	38 [3364]	50 [4425]
Min. Speed***, [RPM]		10	10	10	10	10	10
Static Torque of Brake, daNm [in-lb]		55 [4868]					
Min. Brake Release Pressure****, bar [PSI]		13 [190]					
Max. Opening Pressure, bar [PSI]		200 [2900]					
Weight, kg[lb]		12,6[27.8]	12,7 [28]	13,3[29.3]	13,4[29.5]	14 [30.9]	14,1[31.1]

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting maximaal 1% per minuut

*** Voor toerentallen van 5 RPM of minder dan opgegeven, neem contact op met M+S of onze medewerkers.

1 tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen

2 Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering van 25 micron of beter.

3 Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN51524) of

HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals syntetische olieën dient er overlegt te worden.

4 Aanbevolen minerale viscositeit is 13mm² bij 50C°.

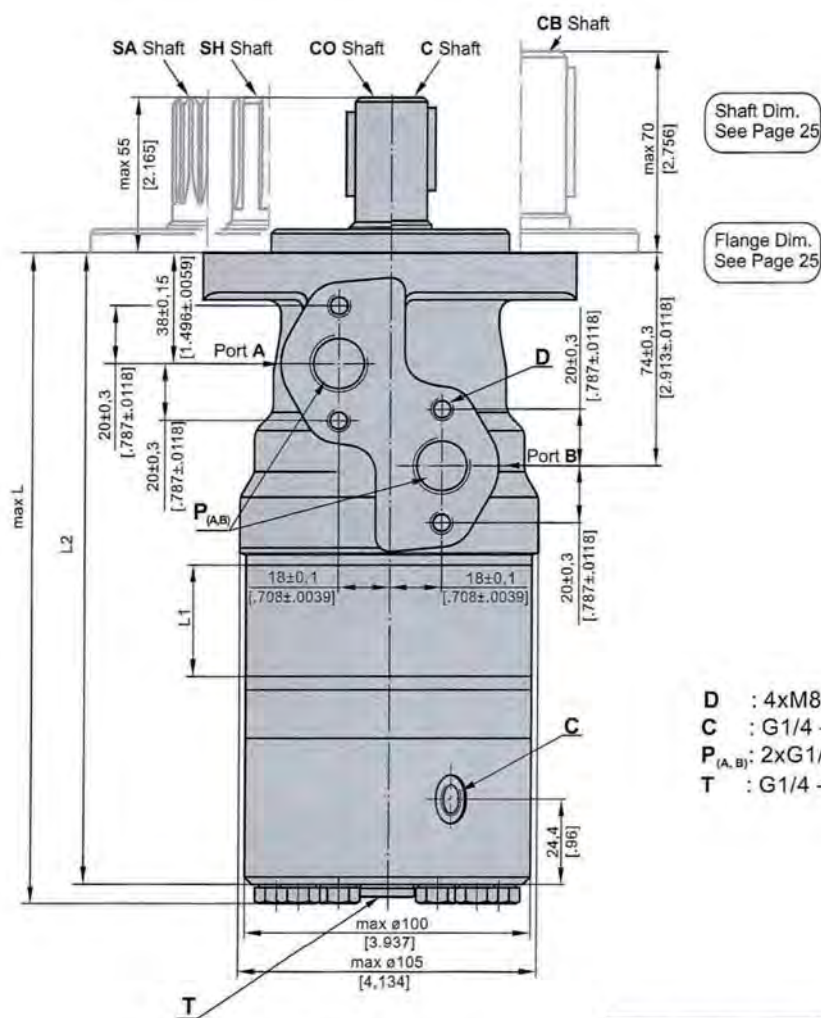
5 Aanbevolen maximum olietemperatuur tijdens gebruik is 85 C°.

6 De levensduur van de motoren kan men verhogen als men de aandrijfas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

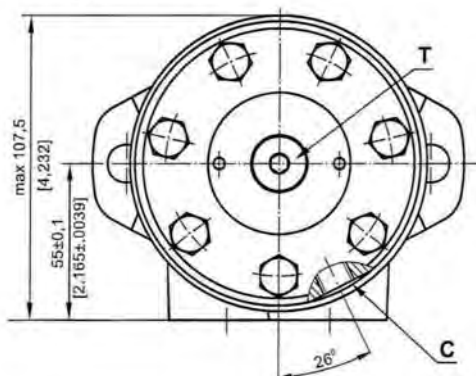
B/MR

Motor met rem

Afmetingen en uitvoeringen



- D : 4xM8 - 13 mm [.51 in] depth
- C : G1/4 - 12 [.47 in] mm depth
- P_(A,B): 2xG1/2 - 15 [.59 in] mm depth
- T : G1/4 - 10 mm [.393 in] depth



Type	L1, mm [in]	L2, mm [in]	L, mm [in]
B/MR 80	14,0 [.551]	205,5 [8.091]	213,5 [8.405]
B/MR 100	17,4 [.685]	209,0 [8.228]	217,0 [8.543]
B/MR 125	21,8 [.858]	213,5 [8.405]	221,5 [8.720]
B/MR 160	27,8 [1.095]	219,5 [8.642]	227,5 [8.957]
B/MR 200	34,8 [1.37]	226,5 [8.917]	234,5 [9.232]
B/MR 250	43,5 [1.713]	235,0 [9.252]	243,0 [9.567]
B/MR 315	54,8 [2.157]	246,5 [9.705]	254,5 [10.02]
B/MR 400	69,4 [2.732]	261,0 [10.275]	269,0 [10.59]



Standard Rotation
 Viewed from Shaft End
 Port A Pressurized - CW
 Port B Pressurized - CCW

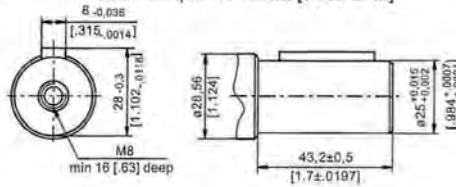
Reverse Rotation
 Viewed from Shaft End
 Port A Pressurized - CCW
 Port B Pressurized - CW

B/MR

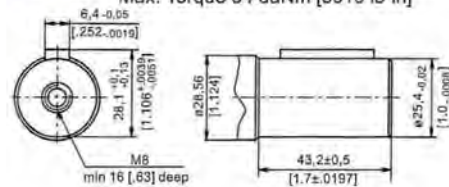
Motor met rem

As afmetingen

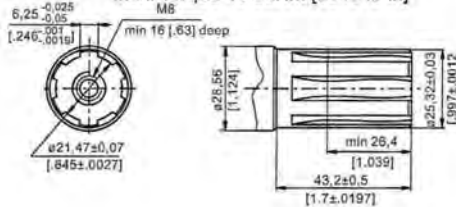
C - $\phi 25$ straight, Parallel key A8x7x32 DIN 6885
Max. Torque 34 daNm [3010 lb-in]



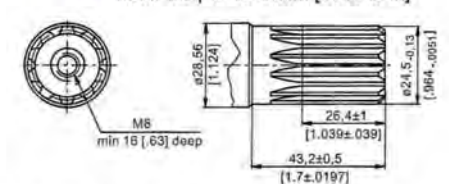
CO - $\phi 1"$ straight, Parallel key $\frac{1}{4} \times \frac{1}{4} \times 1 \frac{1}{4}"$ BS46
Max. Torque 34 daNm [3010 lb-in]



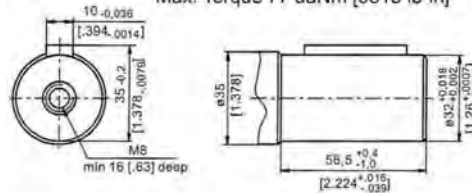
SH - splined, BS 2059 (SAE 6B)
Max. Torque 40 daNm [3540 lb-in]



SA - splined, B25x22h9 DIN 5482
Max. Torque 40 daNm [3540 lb-in]

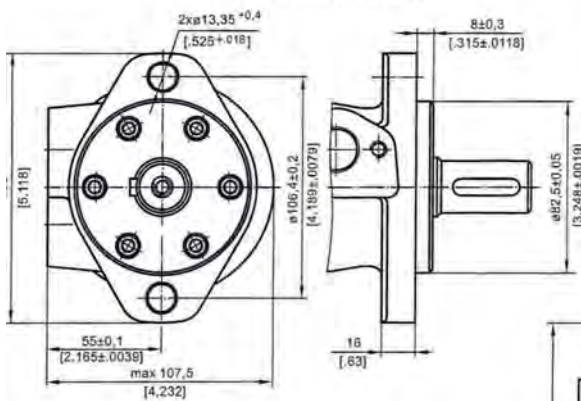


CB - $\phi 32$ straight, Parallel key A10x8x45 DIN 6885
Max. Torque 77 daNm [6815 lb-in]

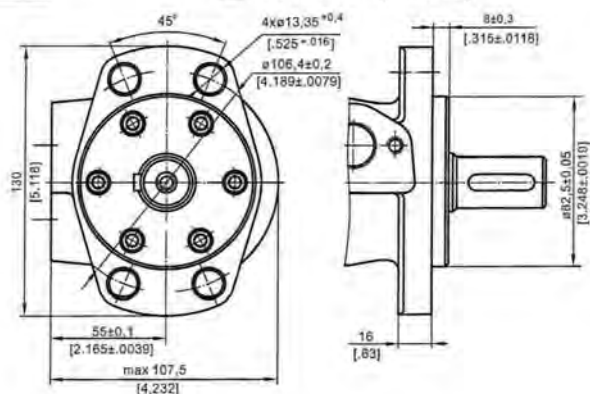


MOUNTING

Oval Mount (2 Holes)



F - Oval Mount (4 Holes)



B/MR

Motor met rem

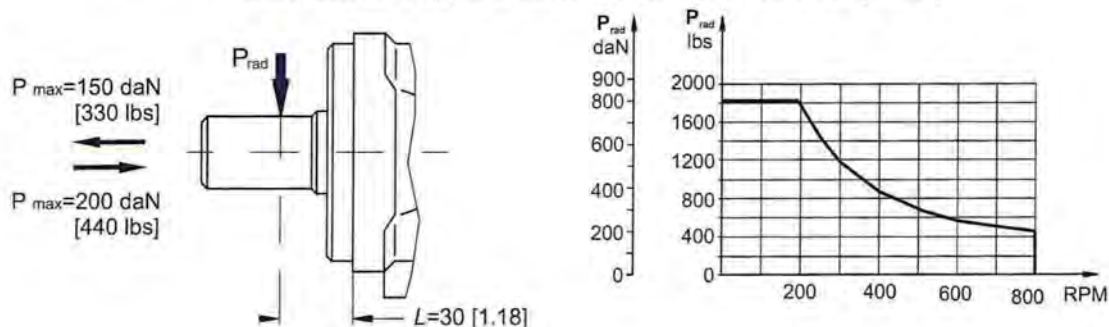
Toegestane asbelasting

The permissible radial shaft load P_{rad} depends on the speed n , RPM, distance L from the point of load to the mounting flange and shaft version.

Mounting Flange		
Shaft Version	cylindrical - C, CO splined - SH, SA	cylindrical - CB
Radial Shaft Load P_{rad} , in mm	$\frac{800}{n} \times \frac{25000}{95+L}$, daN*	$\frac{800}{n} \times \frac{18750}{95+L}$, daN*
Radial Shaft Load P_{rad} , in inch	$\frac{800}{RPM} \times \frac{2215}{3.74+L}$, lbs*	$\frac{800}{RPM} \times \frac{1660}{3.74+L}$, lbs*

* $n \leq 200$ RPM; max P_{rad} =800 daN [1800 lbs] $n \geq 200$ RPM; $L < 55$ mm [2.2 in]

Radial Shaft Load P_{rad} for C, CO Shaft Extensions by $L=30$ mm [1.18 in]



ORDER CODE

	1	2	3	4	5
B / MR					

Pos.1 - Mounting Flange

omit - Oval mount, two holes

F - Oval mount, four holes

Pos.2 - Displacement code

80	- 80,3 cm ³ /rev [4.90 in ³ /rev]
100	- 99,8 cm ³ /rev [6.09 in ³ /rev]
125	- 125,7 cm ³ /rev [7.67 in ³ /rev]
160	- 159,6 cm ³ /rev [9.74 in ³ /rev]
200	- 199,8 cm ³ /rev [12.19 in ³ /rev]
250	- 250,1 cm ³ /rev [15.26 in ³ /rev]
315	- 315,7 cm ³ /rev [19.26 in ³ /rev]
400	- 397,0 cm ³ /rev [24.40 in ³ /rev]

Pos.3 - Shaft Extensions*

C - ø25 straight, Parallel key A8x7x32 DIN6885

CO - ø1" straight, Parallel key ¼"x¼"x1¼" BS46

SH - ø25,32 splined BS 2059 (SAE 6B)

SA - ø24,5 splined B 25x22 DIN 5482

CB - ø32 straight, Parallel key A10x8x45 DIN 6885

Pos.4 - Special Features (see page 59)

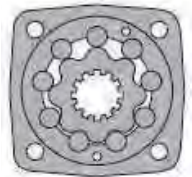
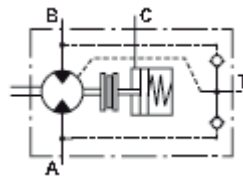
Pos.5 - Design Series

omit - Factory specified

NOTES:

- * The permissible output torque for shafts must be not exceeded!
The hydraulic motors are mangano phosphatized as standard.

MT/B Motor met rem



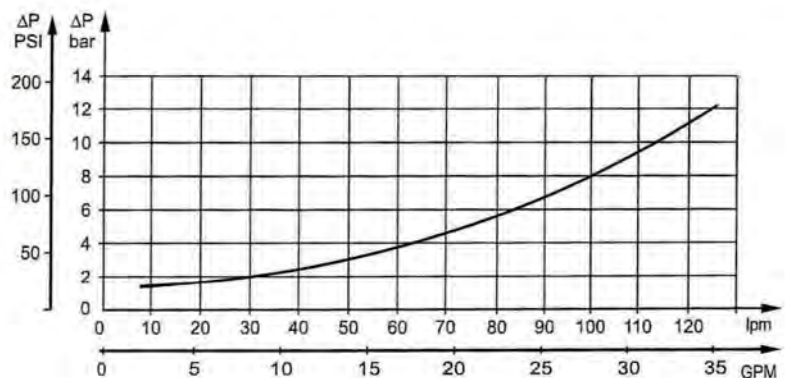
Algemene informatie

Max. Displacement, cm ³ /rev [in ³ /rev]	523,6 [31.95]
Max. Speed, [RPM]	780
Max. Torque, daNm [lb-in]	cont.: 122 [10780] int.: 137 [12125]
Max. Output, kW [HP]	40 [54]
Max. Pressure Drop, bar [PSI]	cont.: 200 [2900] int.: 240 [3450]
Max. Oil Flow, lpm [GPM]	150 [40]
Min. Speed, [RPM]	5
Permissible Shaft Loads, daN [lbs]	P _a =1000 [2248]
Pressure fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, °C [°F]	-40÷140 [-40÷284]
Optimal Viscosity range, mm ² /s [SUS]	20÷75 [98÷347]
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop bar [PSI]	Viscosity mm ² /s [SUS]	Oil flow in drain line lpm [GPM]
140 [2030]	20 [98]	2,5 [.66]
	35 [164]	1,5 [.39]
210 [3045]	20 [98]	5 [1.32]
	35 [164]	3 [.79]

Pressure Losses



MT/B

Motor met rem

Technische informatie

Type	MT/B 160	MT/B 200	MT/B 250	MT/B 315	MT/B 400	MT/B 500
Displacement, cm³/rev. [in³/rev.]	161,1 [9.83]	201,4 [12.29]	251,8 [15.36]	326,3 [19.90]	410,9 [25.06]	523,6 [31.95]
Max. Speed, [RPM]	Cont.	625	625	500	380	305
	Int.*	780	750	600	460	365
Max. Torque daNm [lb-in]	Cont.	47 [4160]	59 [5220]	73 [6460]	95 [8410]	108 [9560]
	Int.*	56 [4960]	71 [6285]	88 [7790]	114 [10090]	126 [11150]
Max. Output kW [HP]	Cont.	26,5 [36]	33,5 [45]	33,5 [45]	33,5 [45]	30 [40]
	Int.*	32 [43]	40 [54]	40 [54]	40 [54]	35 [45]
Max. Pressure Drop bar [PSI]	Cont.	200 [2900]	200 [2900]	200 [2900]	200 [2900]	180 [2600]
	Int.*	240 [3450]	240 [3450]	240 [3450]	240 [3450]	210 [3050]
Max. Oil Flow lpm [GPM]	Cont.	100 [26.5]	125 [33]	125 [33]	125 [33]	125 [33]
	Int.*	125 [33]	150 [40]	150 [40]	150 [40]	150 [40]
Max. Inlet Pressure bar [PSI]	Cont.	210 [3050]	210 [3050]	210 [3050]	210 [3050]	210 [3050]
	Int.*	250 [3600]	250 [3600]	250 [3600]	250 [3600]	250 [3600]
Max. Return Pressure with Drain Line, bar [PSI]	Cont.	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]
	Int.*	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]
Max. Starting Pressure with Unloaded Shaft, bar [PSI]	10 [150]	10 [150]	10 [150]	10 [150]	10 [150]	10 [150]
Min. Starting Torque daNm [lb-in]	At max. press. drop Cont.	34 [3010]	43 [3800]	53 [4690]	74 [6550]	84 [7435]
	At max. press. drop Int.*	41 [3630]	52 [4600]	63 [5580]	89 [7880]	97 [8585]
Min. Speed**, [RPM]	10	9	8	7	6	5
Static Torque of Brake, daNm [lb-in]	143 [12657]	143 [12657]	143 [12657]	143 [12657]	143 [12657]	143 [12657]
Min. Brake Release Pressure***, bar [PSI]	32-35	32-35	32-35	32-35	32-35	32-35
	[2832-3098]	[2832-3098]	[2832-3098]	[2832-3098]	[2832-3098]	[2832-3098]
Max. Opening Pressure, bar [PSI]	280 [24782]	280 [24782]	280 [24782]	280 [24782]	280 [24782]	280 [24782]
Max. Pressure in Drain Line, bar [PSI]	5 [443]	5 [443]	5 [443]	5 [443]	5 [443]	5 [443]
Weight, kg [lb]	27,5 [60.6]	28 [61.7]	28,5 [62.8]	29,5 [65]	30,5 [67.2]	31,5 [69.4]

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting maximaal 1% per minuut

*** Voor toerentallen van 5 RPM of minder dan opgegeven, neem contact op met M+S of onze medewerkers.

1 tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen

2 Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering van 25 micron of beter.

3 Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN51524) of

HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals syntetische olieën dient er overlegt te worden.

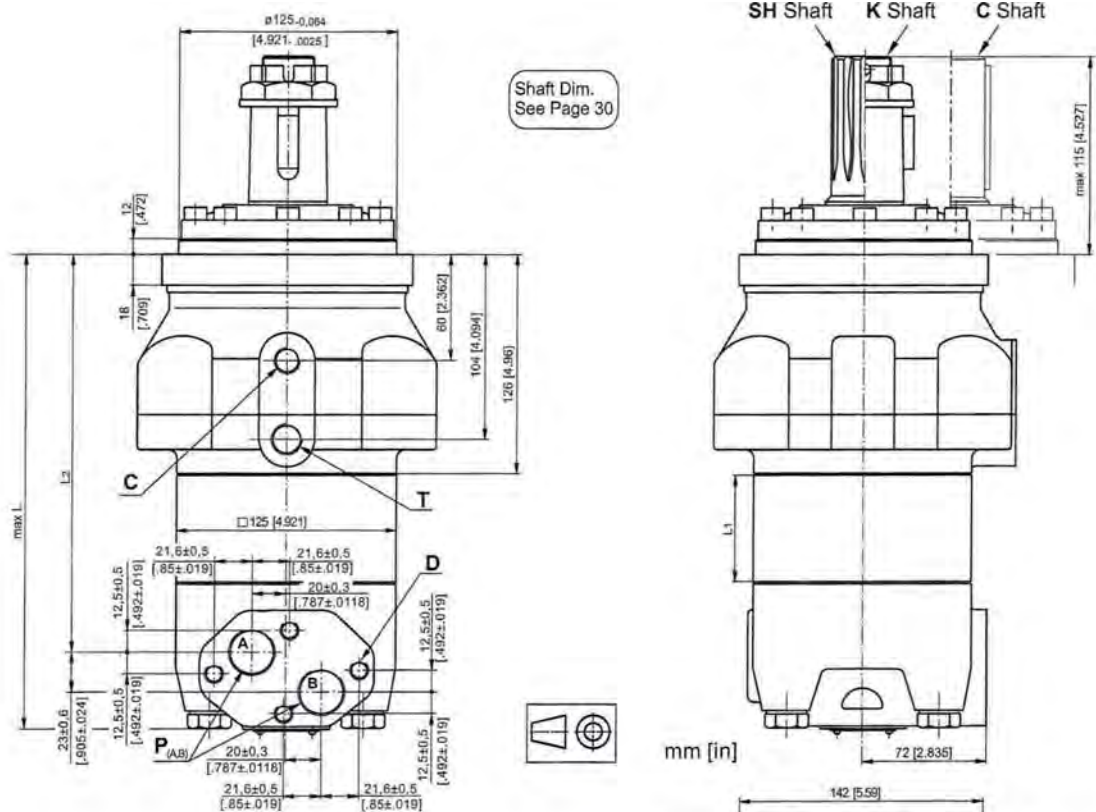
4 Aanbevolen minerale viscositeit is 13mm² bij 50°C.

5 Aanbevolen maximum olietemperatuur tijdens gebruik is 85 C°.

6 De levensduur van de motoren kan men verhogen als men de aandrijfas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

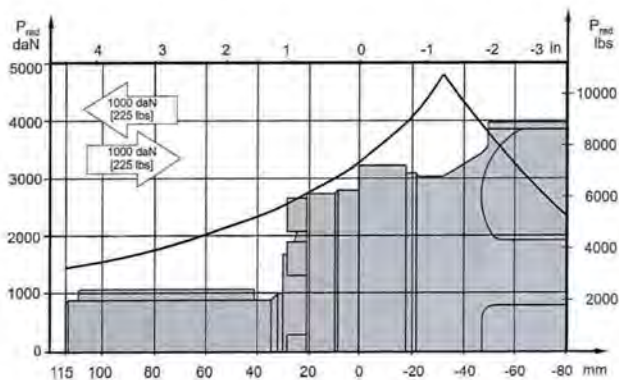
MT/B Motor met rem

Afmetingen en uitvoeringen

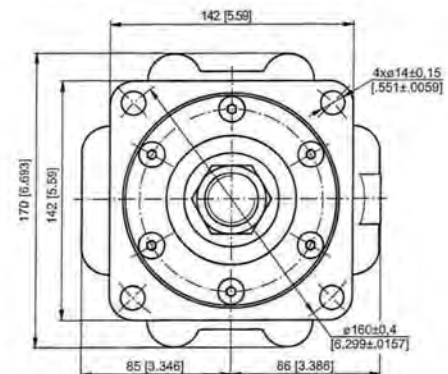


PERMISSIBLE SHAFT LOADS

The curve applies to a B10 bearing life of 3000 hours at 200 RPM.



Warning: Drain line should always be used.



- P_(A,B)** - 2xG3/4, 17 mm [.669] depth
- C** - Brake release port, G1/4, 12 mm [.472] depth
- T** - Drainage tap, G3/8, 13 mm [.512] depth
- D** - 2xM10, 10 mm [.394] depth

Type	*L ₁ ,mm [in]	L ₂ ,mm [in]	L,mm [in]
MT/B 160	16,5 [.65]	178 [7.01]	228 [8.98]
MT/B 200	21,5 [.85]	183 [7.21]	233 [9.17]
MT/B 250	27,8 [1.09]	189,3 [7.45]	239 [9.41]
MT/B 315	37,0 [1.46]	198,5 [7.81]	248 [9.76]
MT/B 400	47,5 [1.87]	209 [8.23]	259 [10.2]
MT/B 500	61,5 [2.42]	223 [8.78]	273 [10.8]

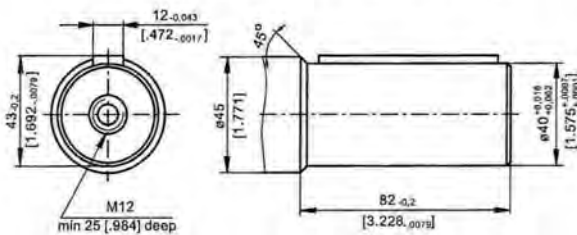
* The width of the geroler is 3,5 mm [.138 in] greater than L₁.

MT/B

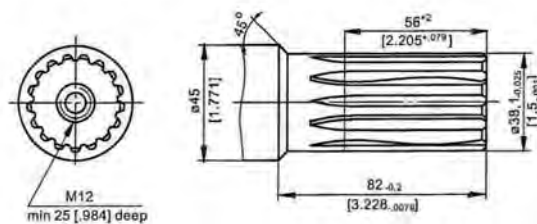
Motor met rem

Afmetingen as

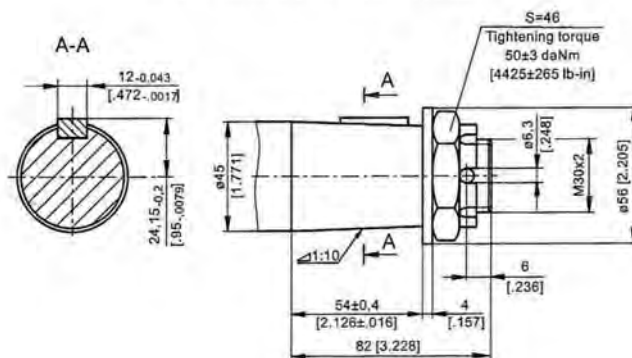
C - $\varnothing 40$ straight, Parallel key A12x8x70 DIN 6885
 Max. Torque 123 daNm [10886 lb-in]



SH - $\varnothing 1\frac{1}{2}$ " splined 17T, DP 12/24 ANSI B92.1-1976
 Max. Torque 123 daNm [10886 lb-in]



K - tapered 1:10, Parallel key B12x8x28 DIN 6885
 Max. Torque 210 daNm [18587 lb-in]



ORDER CODE

	1	2	3	4
MT/B				

Pos.1 - Displacement code

160	- 161,1 cm ³ /rev [9.83 in ³ /rev]
200	- 201,4 cm ³ /rev [12.29 in ³ /rev]
250	- 251,8 cm ³ /rev [15.36 in ³ /rev]
315	- 326,3 cm ³ /rev [19.9 in ³ /rev]
400	- 410,9 cm ³ /rev [25.06 in ³ /rev]
500	- 523,6 cm ³ /rev [31.95 in ³ /rev]

Pos.2 - Shaft Extensions**

C	- $\varnothing 40$ straight, Parallel key A12x8x70 DIN6885
SH	- $\varnothing 1\frac{1}{2}$ " splined 17 DP12/24 ANS B922.1-76
K	- $\varnothing 45$ tapered 1:10, Parallel key B12x8x28 DIN 6885

Pos.3 - Special Features (see page 59)

Pos.4 - Design Series

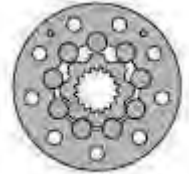
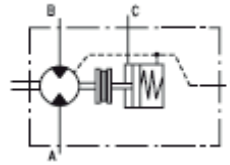
omit - Factory specified

NOTES:

* The permissible output torque for shafts must be not exceeded!

The hydraulic motors are mangano phosphatized as standard.

MTM/B Motor met rem



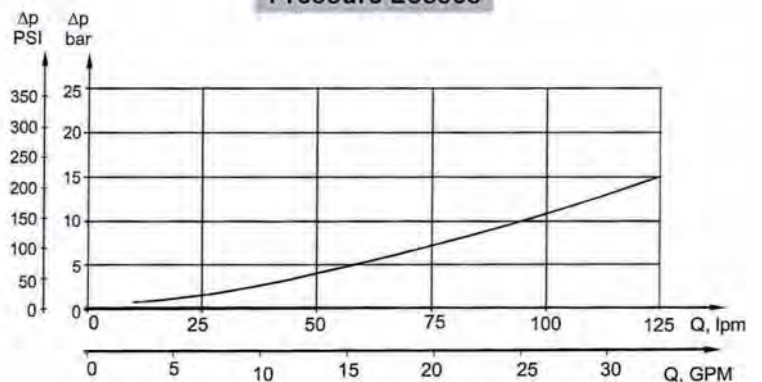
Algemene informatie

Max. Displacement, cm ³ /rev [in ³ /rev]	724,3 [44.2]
Max. Speed, [RPM]	750
Max. Torque, daNm [in-lb]	cont.: 175 [15490] int.: 215 [16030]
Max. Output, kW [HP]	70 [94]
Max. Pressure Drop, bar [PSI]	cont.: 250 [3600] int.: 350 [5080]
Max. Oil Flow, lpm [GPM]	150 [40]
Permissible Shaft Loads daN [lbs]	P _a =1000 [2250]
Pressure fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, °C [°F]	-40+140 [-40+284]
Optimal Viscosity range, mm ² /s [SUS]	20+75 [98+347]
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop bar [PSI]	Viscosity mm ² /s [SUS]	Oil flow in drain line lpm [GPM]
200 [2900]	20 [98]	2,5 [.660]
	35 [164]	1,5 [.400]
275 [3990]	20 [98]	4 [1.057]
	35 [164]	2,5 [.660]

Pressure Losses



MTM/B

Motor met rem

Technische informatie

Type	MTM/B 200	MTM/B 250	MTM/B 315	MTM/B 400	MTM/B 470	MTM/B 500	MTM/B 630	MTM 725
Displacement, cm ³ /rev [in ³ /rev]	201,4 [12.29]	251,8 [15.36]	326,3 [19.9]	410,9 [25.06]	475 [28.97]	494,9 [30.17]	631,2 [38.5]	724 [44.2]
Max. Speed, [RPM]	Cont. 625	500	380	305	260	250	196	170
	Int.* 750	600	460	365	315	300	235	215
Max. Torque, daNm [lb-in]	Cont. 72 [6375]	90 [7965]	116 [10265]	147 [13010]	171 [15135]	172 [15225]	175 [15490]	160 [14160]
	Int.* 102 [9030]	128 [11330]	163 [14425]	206 [18232]	215 [16030]	215 [16030]	215 [16030]	192 [17000]
	Peak** 115 [10180]	144 [12745]	186 [16460]	235 [20800]	240 [21240]	240 [21240]	255 [22570]	240 [21240]
Max. Output, kW [HP]	Cont. 41 [55]	41 [55]	41 [55]	41 [55]	41 [55]	37,5 [50]	29 [39]	26 [35]
	Int.* 65 [87]	70 [94]	70 [94]	70 [94]	55 [74]	51 [68]	45 [60]	40 [54]
Max. Pressure Drop, bar [PSI]	Cont. 250 [3600]	250 [3600]	250 [3600]	250 [3600]	250 [3600]	230 [3340]	185 [2680]	160 [2320]
	Int.* 350 [5080]	350 [5080]	350 [5080]	350 [5080]	315 [4570]	280 [4060]	225 [3260]	210 [3045]
	Peak** 400 [5800]	400 [5800]	400 [5800]	400 [5800]	350 [5080]	320 [4640]	270 [3985]	260 [3770]
Max. Oil Flow, lpm [GPM]	Cont. 125 [33]	125 [33]	125 [33]	125 [33]	125 [33]	125 [33]	125 [33]	125 [33]
	Int.* 150 [40]	150 [40]	150 [40]	150 [40]	150 [40]	150 [40]	150 [40]	150 [40]
Max. Starting Pressure with Unloaded Shaft, bar [PSI]	6 [87]	6 [87]	6 [87]	6 [87]	6 [87]	6 [87]	6 [87]	6 [87]
Min. Starting Torque, daNm [lb-in]	60 [5310]	75 [6640]	97 [8585]	122 [10800]	142 [12570]	143 [12655]	144 [12745]	148 [13100]
Static Torque of Brake, daNm [lb-in]	200 [17700]							
Min. Brake Release Pressure***, bar [PSI]	14 [203]							
Max. Opening Pressure, bar [PSI]	40 [580]							
Weight, kg [lb]	37,5 [82.7]	37,9 [83.6]	39,1 [86.2]	41,3 [91.1]	44,1 [97.2]	46,0 [101.4]	49,1 [108.2]	52,0 [114.6]

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting maximaal 1% per minuut

*** Voor toerentallen van 5 RPM of minder dan opgegeven, neem contact op met M+S of onze medewerkers.

1 tijdelijke hoge drukvallen en hoge oliestromen mogen niet gelijktijdig voorkomen

2 Filtering dient plaats te vinden volgens ISO vervuilingsgraad 20/16. Nominale filtering van 25 micron of beter.

3 Er wordt aanbevolen een hydraulische olie te gebruiken op basis van minerale olie type HPL (DIN51524) of

HM (ISO 6743/4) Voordat U alternatieve smeermiddelen gebruikt, zoals syntetische olieën dient er overlegt te worden.

4 Aanbevolen minerale viscositeit is 13mm² bij 50C°.

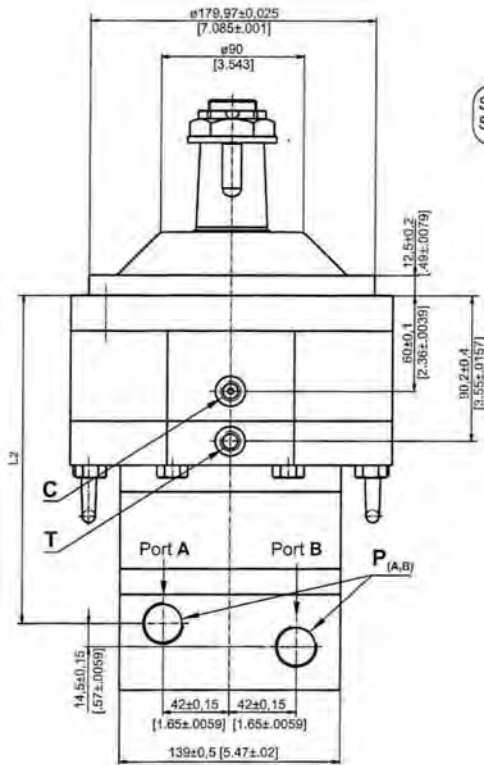
5 Aanbevolen maximum olietemperatuur tijdens gebruik is 85 C°.

6 De levensduur van de motoren kan men verhogen als men de aandrijfas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

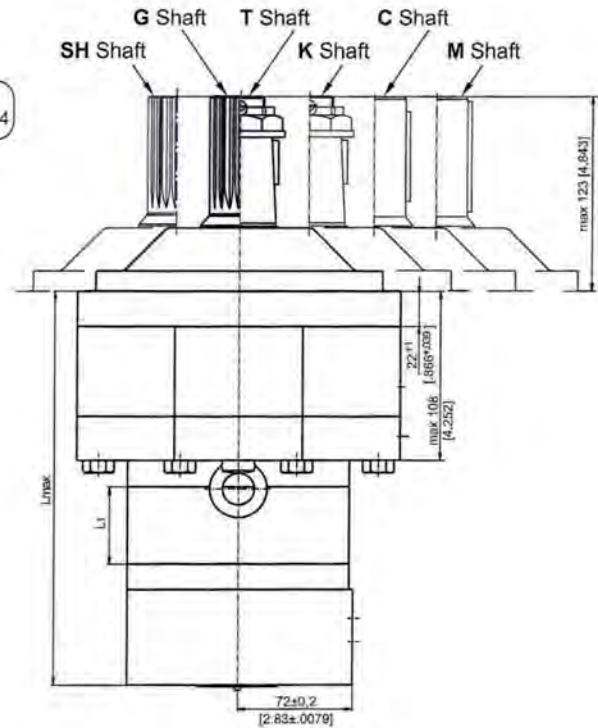
MTM/B

Motor met rem

Afmetingen en uitvoeringen

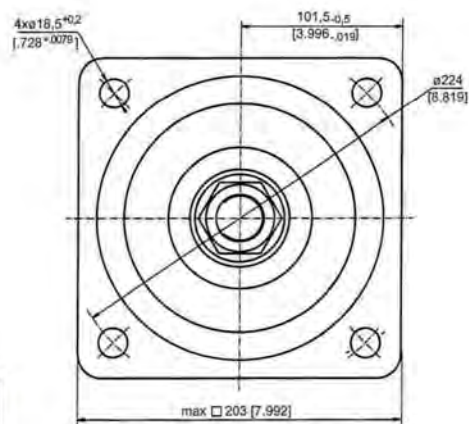


Shaft Dim.
See Page 34



Standard Rotation
Viewed from Shaft End
Port A Pressurized - CW
Port B Pressurized - CCW

Reverse Rotation
Viewed from Shaft End
Port A Pressurized - CCW
Port B Pressurized - CW



Type	L, mm [in]	L2, mm [in]	L1, mm [in]
MTM/B 200	226 [8.90]	184 [7.24]	25 [.98]
MTM/B 250	232,5 [9.15]	190 [7.48]	31,3 [1.23]
MTM/B 315	241,5 [9.51]	199,5 [7.85]	40,5 [1.59]
MTM/B 400	252 [9.92]	210 [8.27]	51 [2.01]
MTM/B 470	260 [10.24]	218 [8.58]	59 [2.32]
MTM/B 500	249 [9.80]	207 [8.15]	48 [1.89]
MTM/B 630	262 [10.32]	220 [8.66]	61 [2.40]
MTM/B 725	271 [10.67]	229 [9.02]	70 [2.76]

	Versions	
	2	4
P (A,B)	2xG $\frac{3}{4}$	2x1 $\frac{1}{16}$ -12UN
T	G $\frac{1}{4}$	$\frac{3}{16}$ -18 UNF
C	G $\frac{1}{4}$	$\frac{7}{16}$ -20 UNF

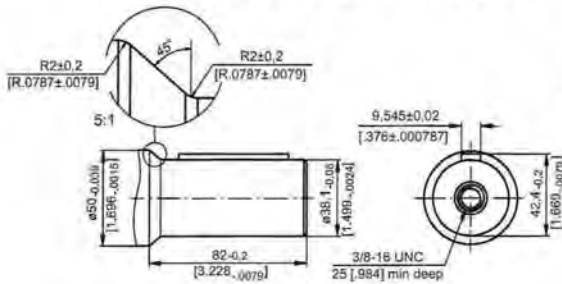
MTM/B

Motor met rem

Afmetingen as

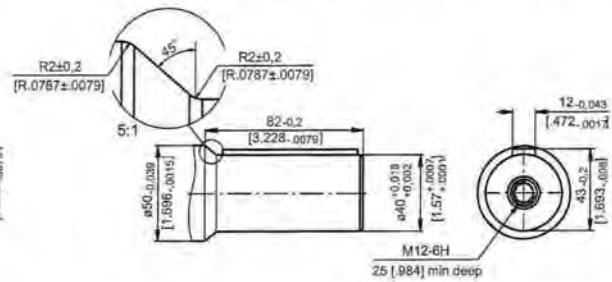
C

1½" [38,1] sraight, Parallel key ⅜"x ⅜"x 2¼" BS46
 Max. Torque 133 daNm [11750 lb-in]



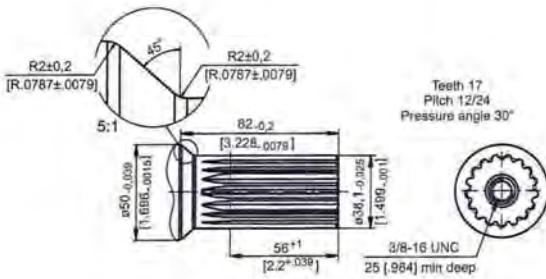
M

ø40 sraight, Parallel key A12x8x70
 Max. Torque 133 daNm [11750 lb-in]



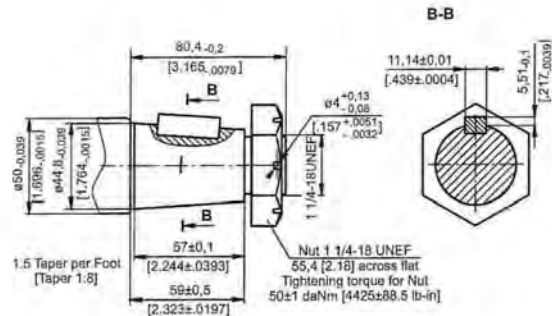
G

17T Splined, 1½" [38,1] ANS B92.1-1976
 Max. Torque 133 daNm [11750 lb-in]



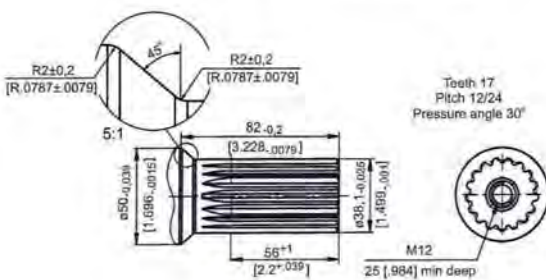
T

1 3/4" [44,5] SAE J501 Tapered 1:8
 Parallel key 7/16"x7/16"x 1¼" BS46
 Max. Torque 210 daNm [18650 lb-in]



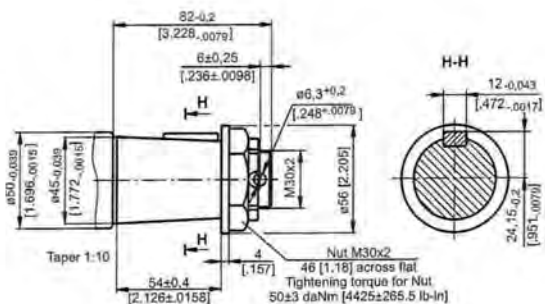
SH

17T Splined, 1½" [38,1] ANS B92.1-1976
 Max. Torque 133 daNm [11750 lb-in]



K

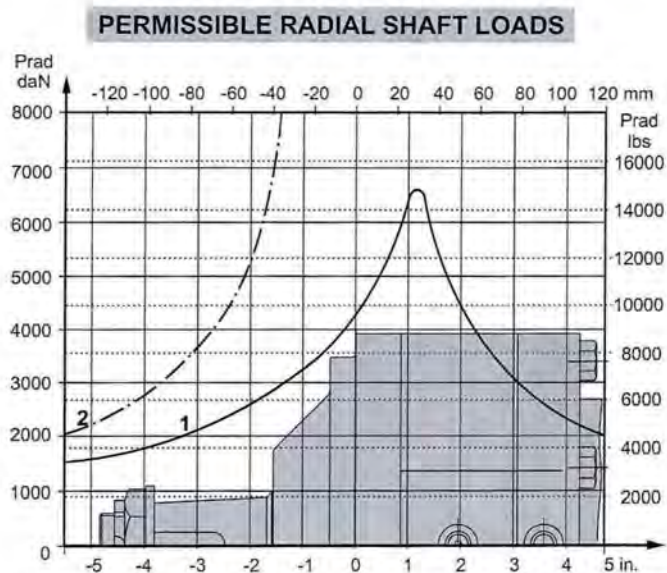
ø45 Tapered 1:10
 Parallel key 12x8x28 DIN 6885
 Max. Torque 211 daNm [18675 lb-in]



MTM/B

Motor met rem

Toegestane radiale as belasting



1 - Bearing curve: The curve applies to a B10 bearing life of 2000 hours at 100 RPM.

2 - Shaft curve: The curve represents Max. permissible radial shaft load with safety factor 2:1.

ORDER CODE

	1	2	3	4	5
MTM/B					

Pos.1 - Displacement code

200	- 201,4 cm ³ /rev [12.29 in ³ /rev]
250	- 251,8 cm ³ /rev [15.36 in ³ /rev]
315	- 326,3 cm ³ /rev [19.90 in ³ /rev]
400	- 410,9 cm ³ /rev [25.06 in ³ /rev]
470	- 475,0 cm ³ /rev [28.97 in ³ /rev]
500	- 523,6 cm ³ /rev [31.95 in ³ /rev]
630	- 631,2 cm ³ /rev [38.52 in ³ /rev]
725	- 724,3 cm ³ /rev [44.20 in ³ /rev]

Pos. 3 - Ports

2	- side ports, 2xG 3/4, G1/4, BSP thread, ISO 228
4	- side ports, 2x 1 1/16-12 UN, O-ring, 9/16-18 UNF, 7/16-20UNF

Pos. 4 - Special Features (see page 59)

Pos. 5 - Design Series

omit - Factory specified

Pos.2 - Shaft Extensions*

C	- 1½" [38,1] straight, Parallel key 3/8x3/8x2 1/4"
G	- 1½" [38,1] 17T Splined (3/8-16 UNC)
M	- 40 mm straight, Parallel key 12x8x70
T	- 1:8 Tapered, Parallel key 7/16x7/16x1 1/4"
SH	- 1½" [38,1] 17T Splined (M12)
K	- 1:10 Tapered, Parallel key 12x8x28

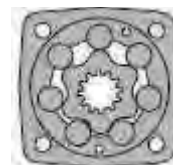
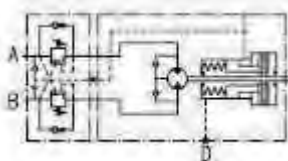
Notes: * The permissible output torque for shafts must be not exceeded!

** Color at customer's request.

The hydraulic motors are mangano phosphatized as standard.

SW500B350V

Motor met rem



Algemene informatie

SPECIFICATION DATA

Type	SW500B350V
Displacement, cm³/rev [in³/rev]	475,3 [29]
Max. Speed, RPM	16
Cont.	
Int.*	25
Max. Torque, daNm [in-lb]	82 [7260]
Cont.	
Int.*	95 [8420]
Max. Output, kW [HP]	0,9 [1.3]
Cont.	
Int.*	2,4 [3.3]
Max. Pressure Drop, bar [PSI]	125 [1800]
Cont.	
Int.*	145 [2100]
Max. Oil Flow, lpm [GPM]	8 [2]
Cont.	
Int.*	12 [3]
Max. Return Pressure without Drain Line or Max. Pressure in Drain Line, bar [PSI]	100 [1450]
Min. Starting Torque, daNm [in-lb]	72 [6400]
At max. press. drop Cont.	
At max. press. drop Int.*	75 [6650]
Min. Speed**, RPM	5
Static Torque for the Brake***, daNm [in-lb]	164 [14 515]
Release Pressure ±10%, bar [PSI]	25...28 [363...406]
initial	
full	31 [449.6]
Max. Steering Pressure, bar [PSI]	245 [3553]
Max. Pressure in Drain Space for the Brake, bar [PSI]	0,5 [7]
Pilot Ratio for the Valve	4,25:1

* Intermittent operation: the permissible values may occur for max. 10% of every minute.

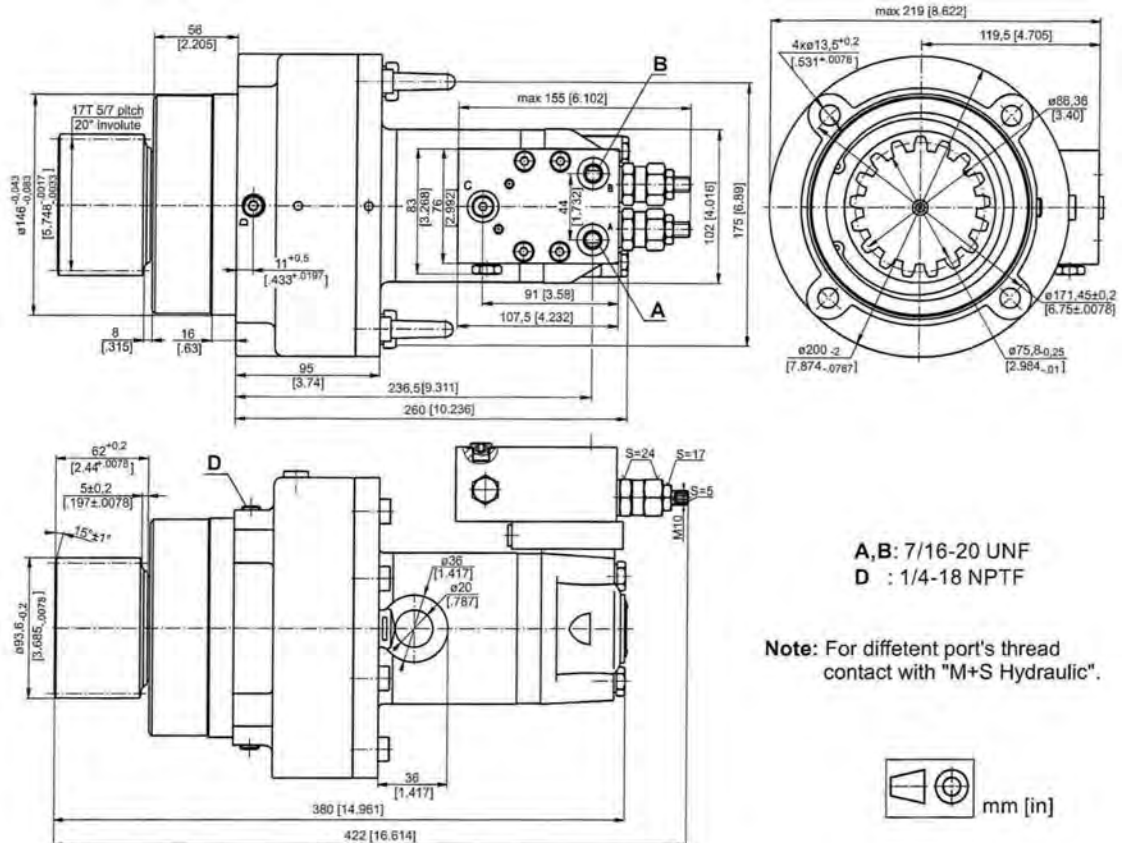
** For speeds of 5 RPM lower than given, consult factory or your regional manager.

*** Static torque is obtained at working pressure - 0 PSI [0 bar].

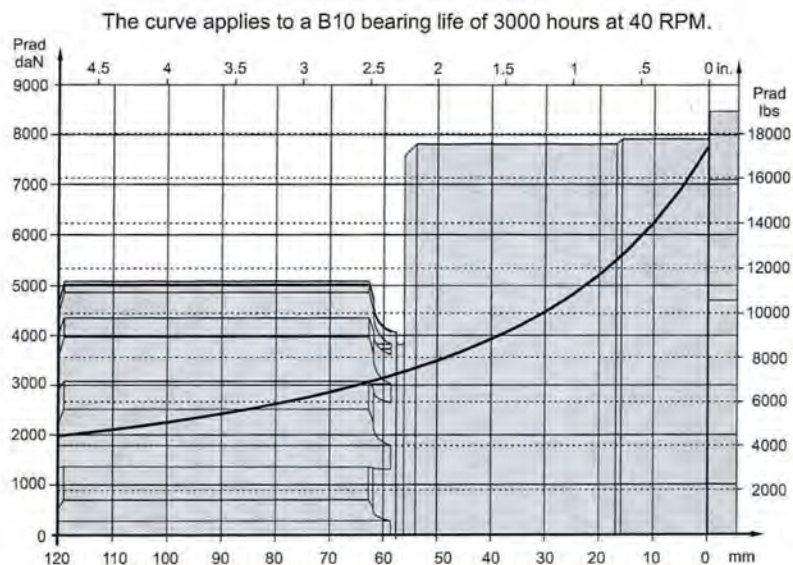
SW500B350V

Motor met rem

Afmetingen en uitvoeringen



PERMISSIBLE SHAFT LOADS

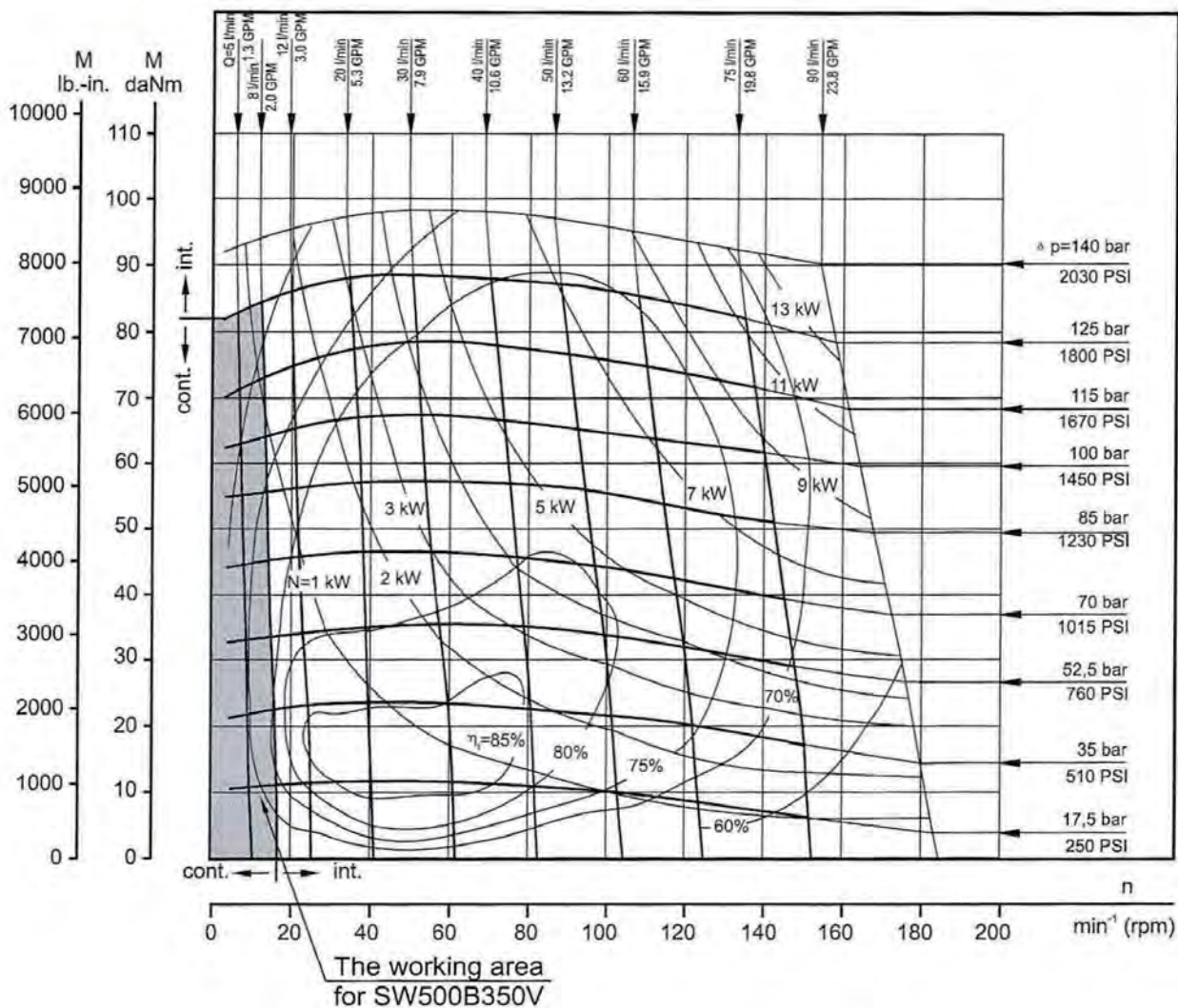


SW500B350V

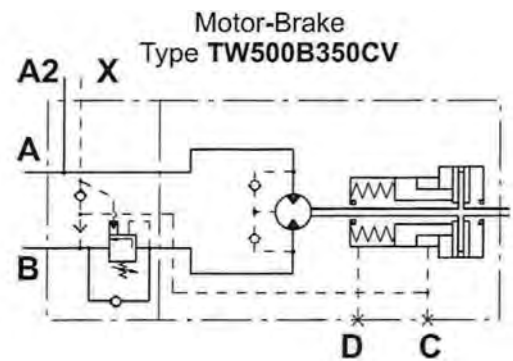
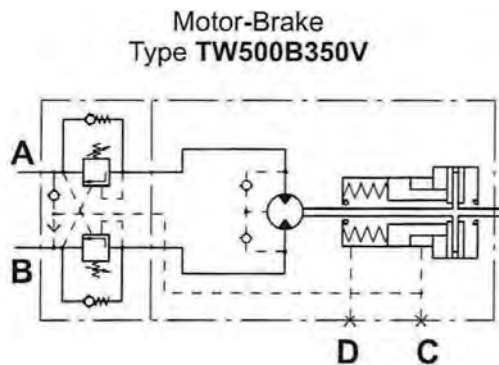
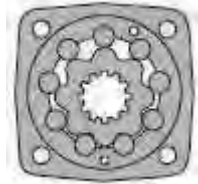
Motor met rem

Functiediagram

SW 500



TW500B350...V Motor met rem



Algemene informatie

Type	TW500B350...V	
Displacement, cm ³ /rev [in ³ /rev]	475 [29]	
Max. Speed, RPM	Cont.	40
	Int.*	60
Max. Torque, daNm [lb-in]	Cont.	114 [10 000]
	Int.*	135 [12 000]
Max. Output, kW [HP]	Cont.	4,1 [5.4]
	Int.*	7,0 [9.39]
Max. Pressure Drop, bar [PSI]	Cont.	170 [2500]
	Int.*	200 [2900]
Max. Oil Flow, lpm [GPM]	Cont.	20 [5.3]
	Int.*	35 [9.2]
Max. Return Pressure without Drain Line or Max. Pressure in Drain Line, bar [PSI]	75 [1088]	
Min. Starting Torque, daNm [in-lb]	At max. press. drop Cont.	95 [8400]
	At max. press. drop Int.*	112 [9940]
Min. Speed**, RPM	5	
Static Torque for the Brake***, daNm [lb-in]	164 [14515]	
Release Pressure ±10%, bar [PSI]	initial	22,5...27,5 [326...400]
	full	28...34 [406...493]
Max. Steering Pressure, bar [PSI]	245 [3553]	
Max. Pressure in Drain Space for the Brake, bar [PSI]	0,5 [7]	
Pilot Ratio for the Valve	4,25:1	

* Intermittent operation: the permissible values may occur for max. 10% of every minute.

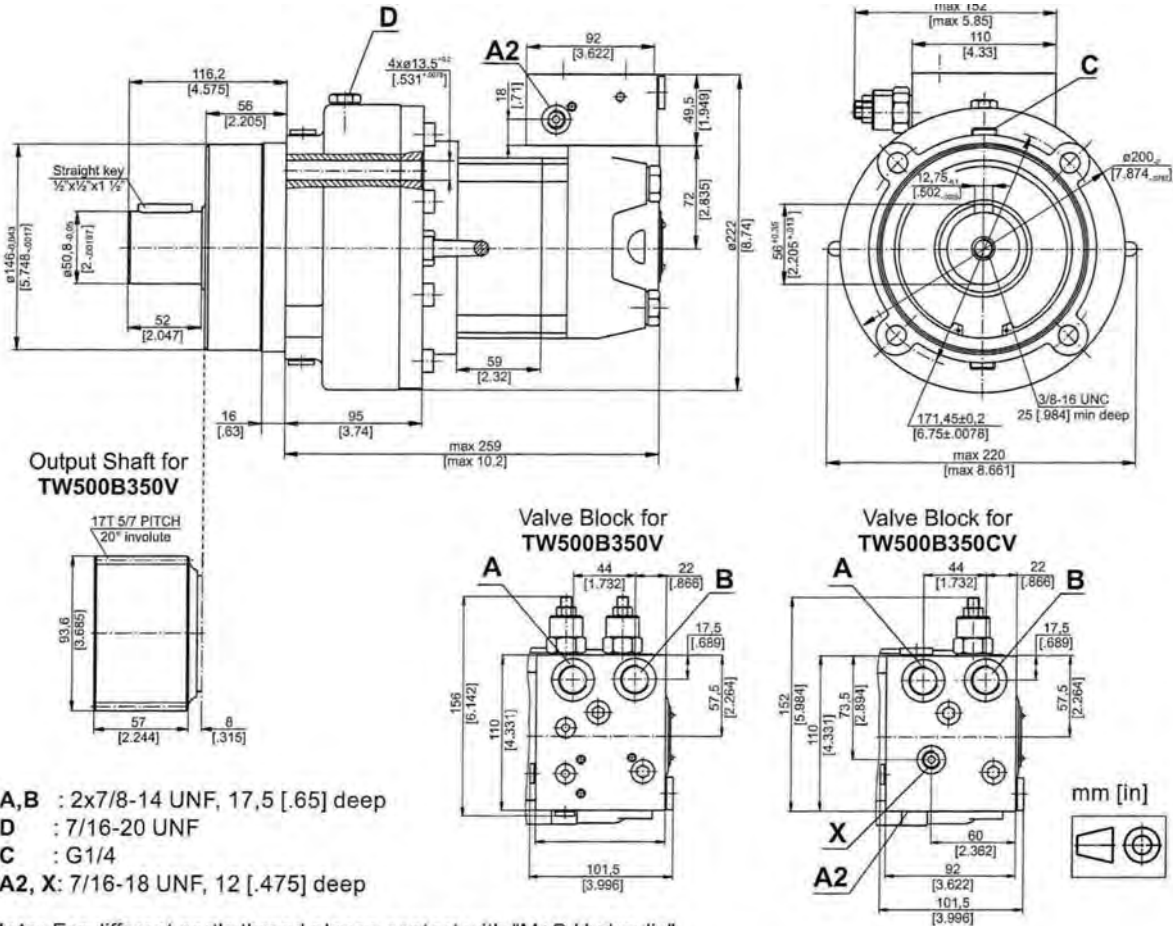
** For speeds of 5 RPM lower than given, consult factory or your regional manager.

*** Static torque is obtained at working pressure - 0 bar [0 PSI].

TW500B350...V

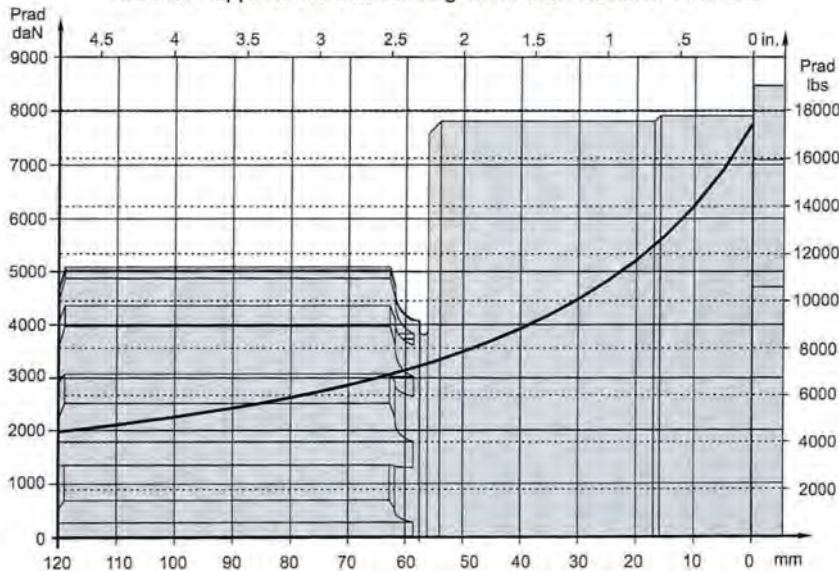
Motor met rem

Afmetingen en uitvoeringen



PERMISSIBLE SHAFT LOADS

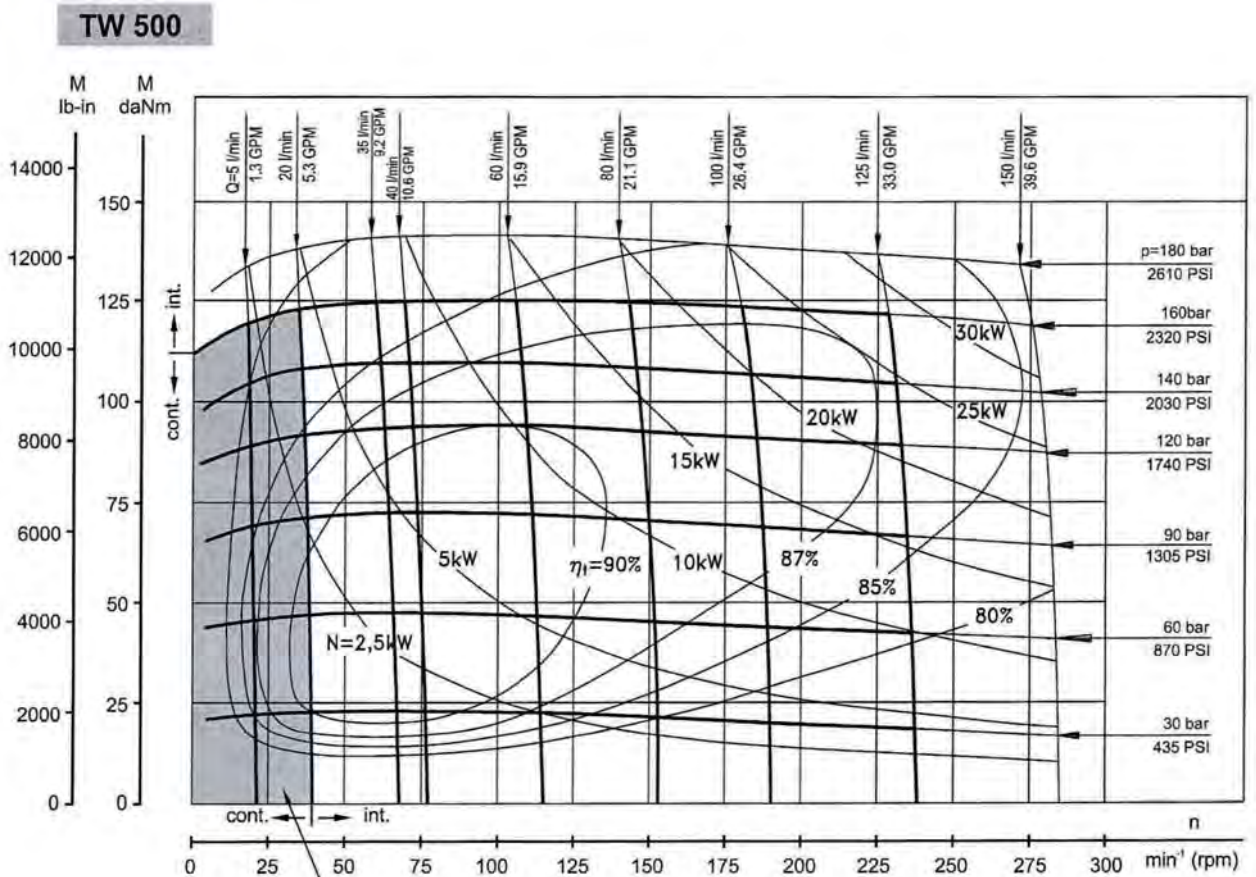
The curve applies to a B10 bearing life of 3000 hours at 40 RPM.



TW500B350...V

Motor met rem

Functiediagram



The working area
for TW500B350V

ORDER CODE

			1		2
TW	500	B	350		V

Pos.1 - Shaft Extension*

omit - 17T 5/7 pitch 20° involute

C - Straight key 1/2"x1/2"x1 1/2"

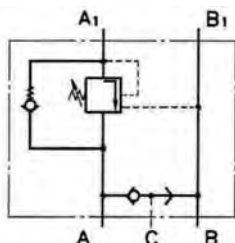
Pos.2 - Design Series

omit - Factory specified

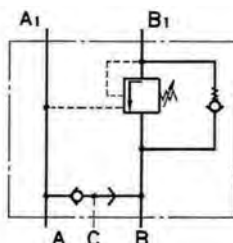
The hydraulic motor brakes are mangano-phosphatized as standard.

KPB...

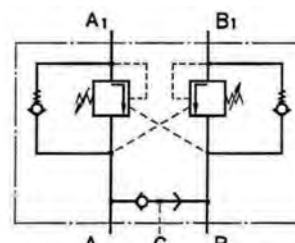
Balanceerklep met rem aansturing



Single Overcenter Valves with Brake Control type KPBR ... AE



Single Overcenter Valves with Brake Control type KPBS ... BE



Dual Overcenter Valves with Brake Control type KPBT ... D

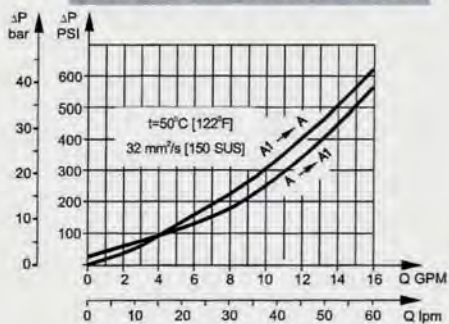
Algemene informatie

Parameters	Type									
	KPBR...E	KPBS...E	KPBW...E	KPBR...D	KPBS...D	KPBW...D	KPBT...E	KPBT...D	KPBV...E	KPBV...D
Flow Rate, l/min [GPM]	60 [15.85]						100 [26.4]		200 [52.8]	
Rated Pressure*, bar [PSI]	60+280 [870+4060]						70+250 [1015+3625]			
Pilot Ratio	4,25:1									
Weight, kg [lb]	3,020	2,900	3,350	3,060	2,920	3,400	5,400	5,800	9,200	9,750
	[6.658]	[6.393]	[7.385]	[6.746]	[6.437]	[7.496]	[11.905]	[12.787]	[20.283]	[21.495]

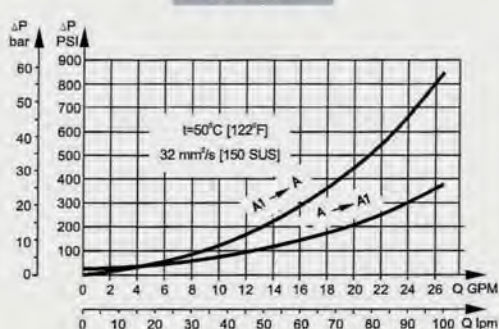
*Pressure Settings are at flow rate of 5 lpm [1.3 GPM] and viscosity 32 mm²/s [150 SUS] at 50 °C [122° F].

PRESSURE LOSSES

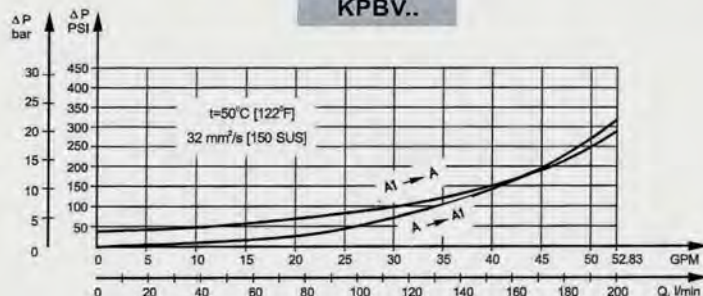
KPBR..., KPBS... and KPBW...



KPBT..



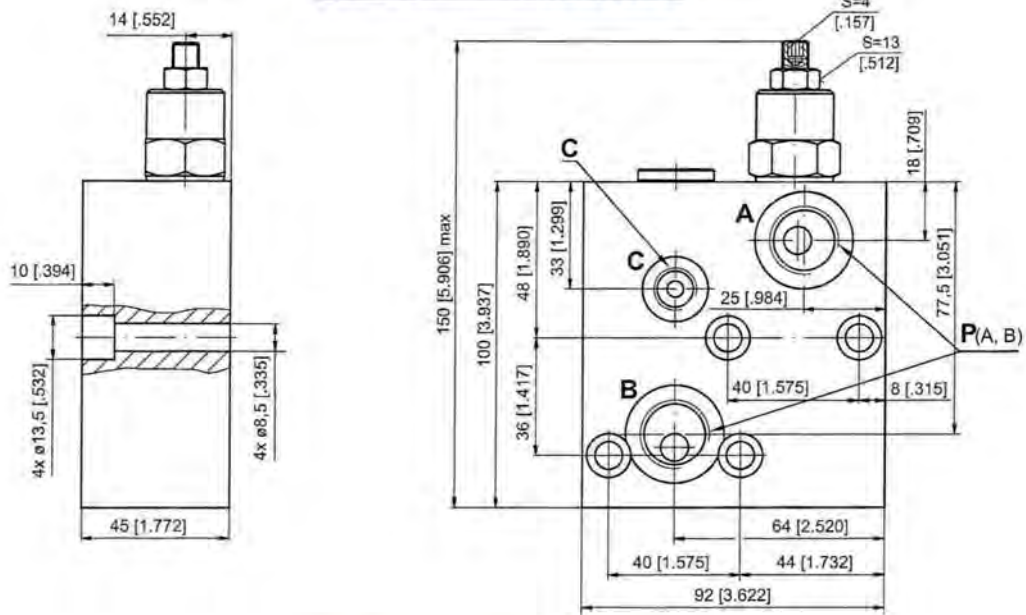
KPBV..



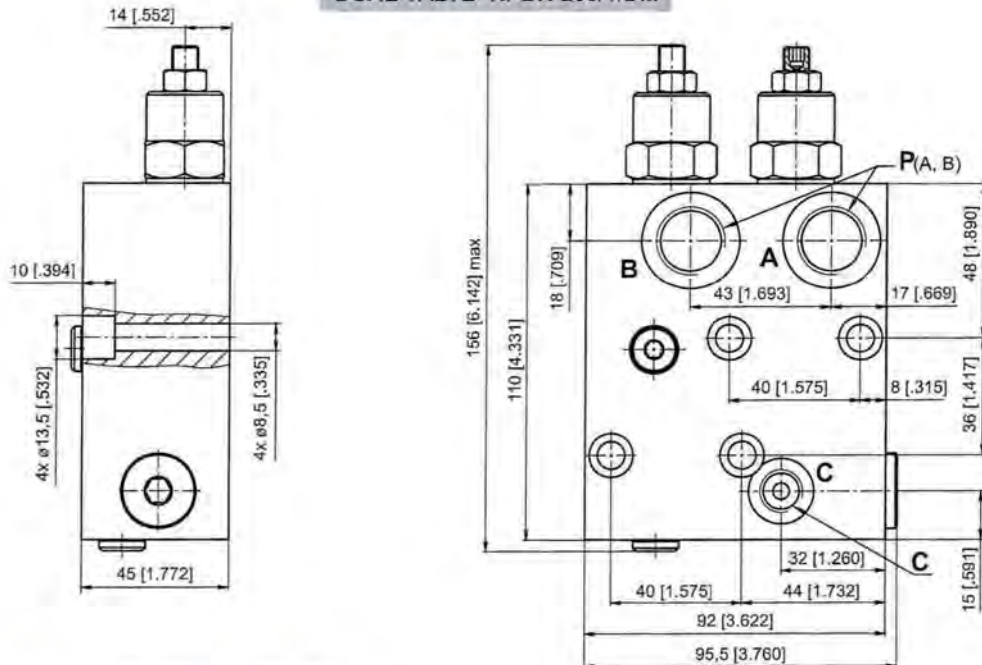
KPBR

Klep voor MP, MR, MH

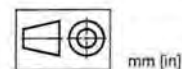
SINGLE VALVE KPBR-250/1/E...



DUAL VALVE KPBR-250/1/D...



	Thread Ports - P _(A,B)	Thread Port - C
-	G1/2 16 [63] depth	G1/4 12 [47] depth
M	M22x1,5 16 [63] depth	M14x1,5 12 [47] depth
A	7/8 - 14 UNF O-ring 16 [63] depth	7/16 - 20 UNF O-ring 12,7 [50] depth

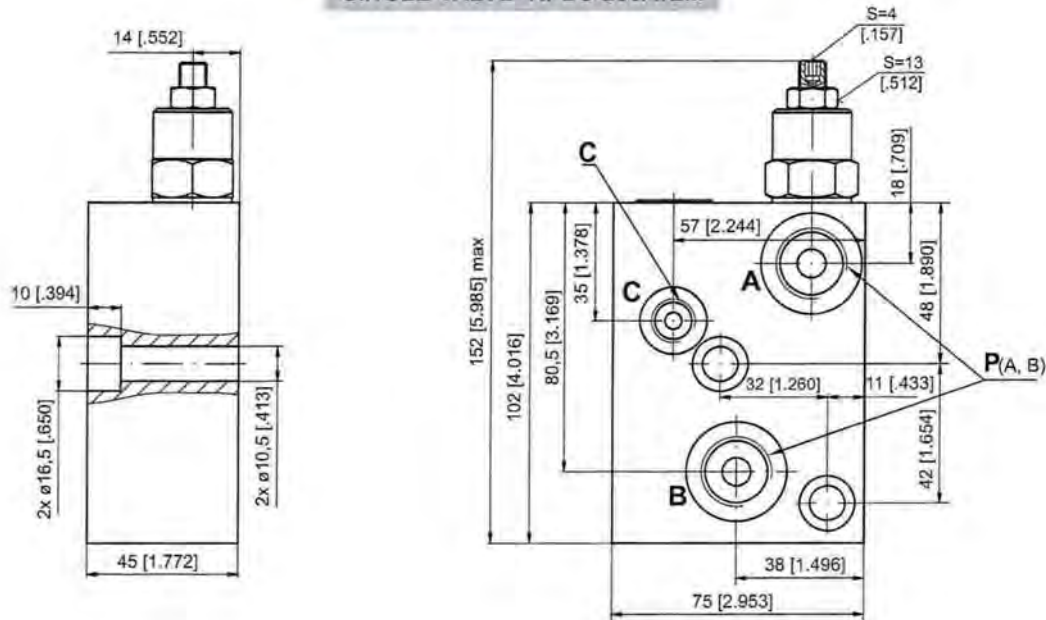


Note : KPBR Blocks are installed directly on MP, MR and MH Motors with four screws M8x45 - 8.8 DIN 912 or 5/16-18 UNC, 1.75 long ANSI B 18.3 . Tightening torque 1,8 daNm [160 lb-in].

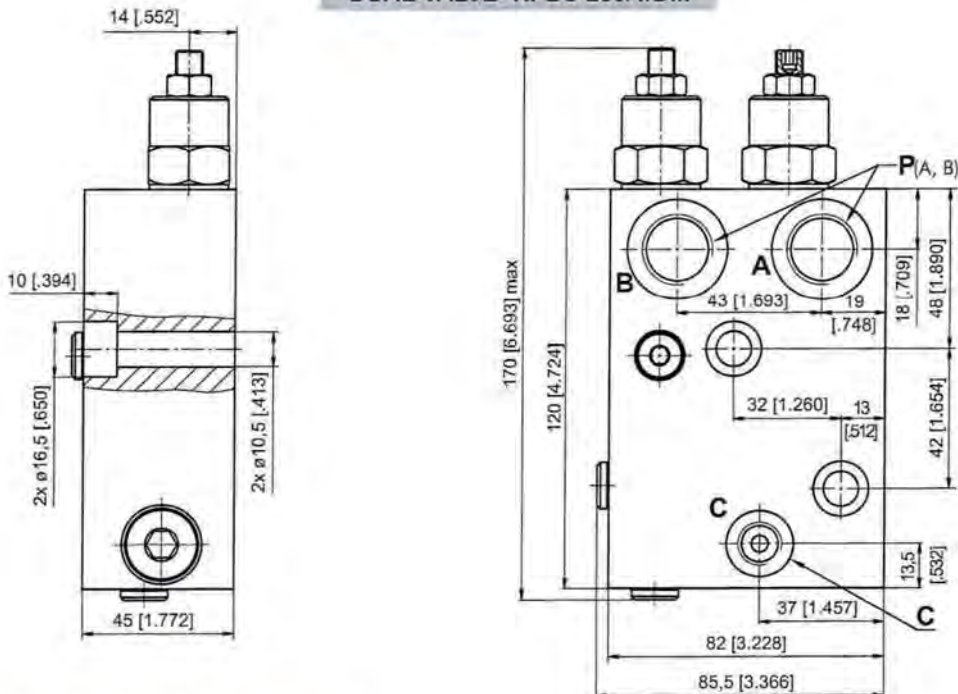
KPBS

Klep voor MS

SINGLE VALVE KPBS-250/1/E...



DUAL VALVE KPBS-250/1/D...



	Thread Ports - P _(A,B)	Thread Port - C
-	G1/2 16 [.63] depth	G1/4 12 [.47] depth
M	M22x1,5 16 [.63] depth	M14x1,5 12 [.47] depth
A	7/8 - 14 UNF O-ring 16 [.63] depth	7/16 - 20 UNF O-ring 12,7 [.50] depth

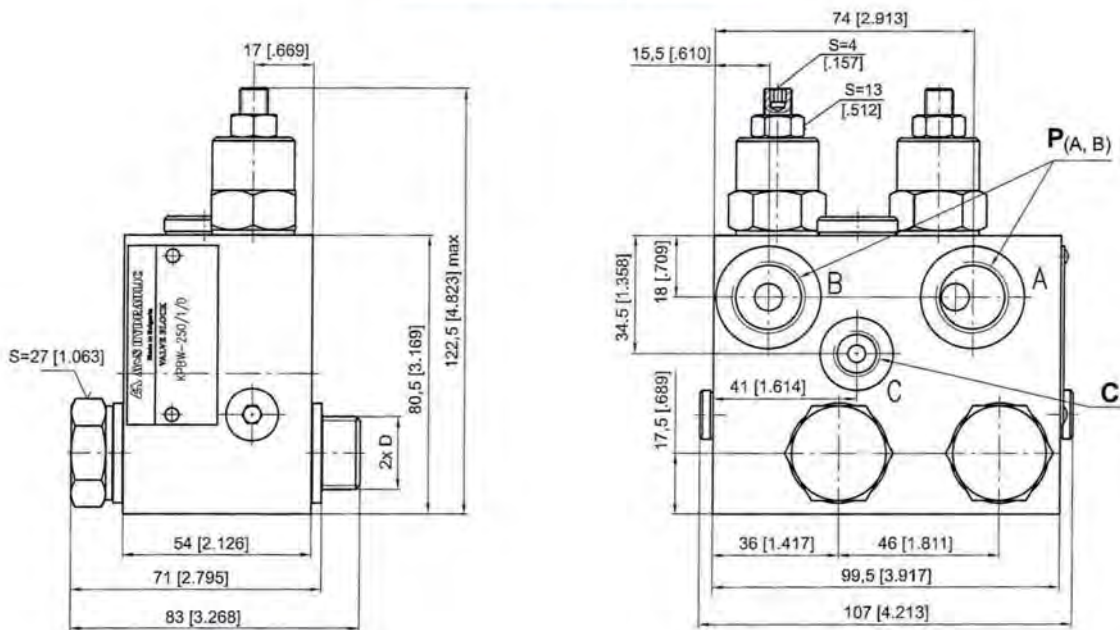


Note : KPBS Blocks are installed directly on MS Motors with two screws M10x45 - 8.8 DIN 912 or 3/8-16UNC, 1.75 long ANSI B 18.3. Tightening torque 3,5 daNm [310 lb-in].

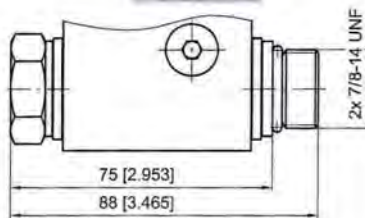
KPBW

Klep voor RW en HW

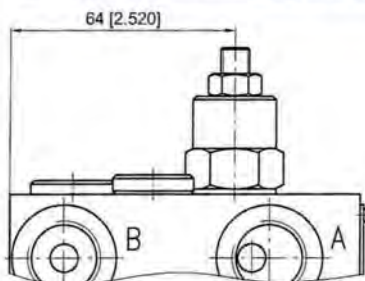
DUAL VALVE KPBW-250/1/D...



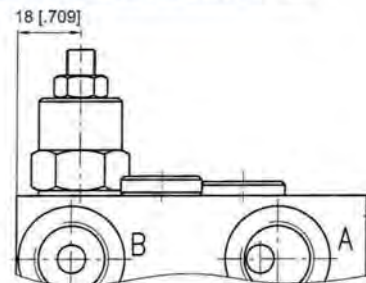
KPBW-...A



SINGLE VALVE KPBW-250/1/AE...



SINGLE VALVE KPBW-250/1/BE...



	Thread Ports - P _(A,B)	Thread Port - C	Thread Ports - D
-	G1/2 16 [.63] depth	G1/4 12 [.47] depth	G1/2 12 [.47] length
M	M22x1,5 16 [.63] depth	M14x1,5 12 [.47] depth	M22x1,5 12 [.47] length
A	7/8 - 14 UNF O-ring 16 [.63] depth	7/16 - 20 UNF O-ring 12,7 [.50] depth	7/8 - 14 UNF O-ring 13 [.51] length

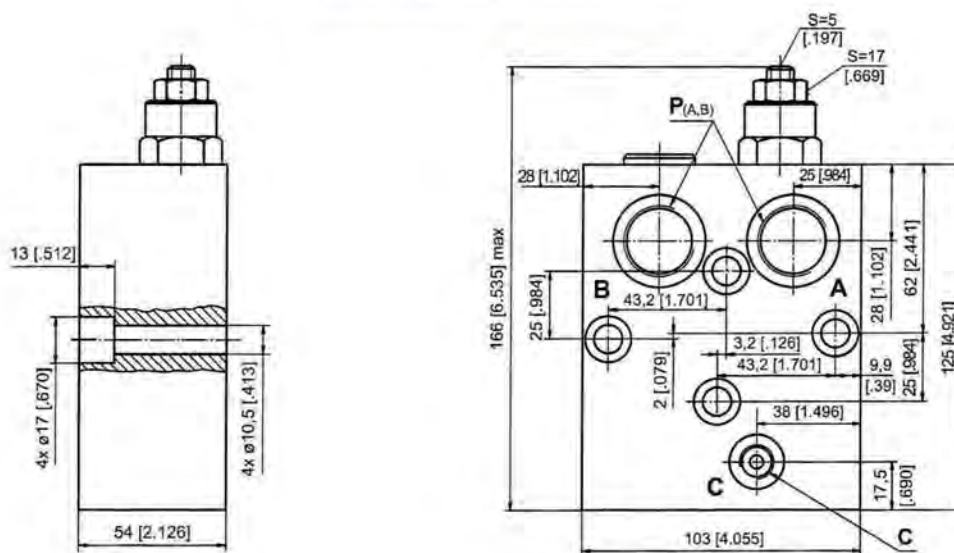


Note : KPBW Blocks assembly to RW or HW motors is done with two screws (thread D) included in the valve set. Tightening torque 8 daNm [710 lb-in].

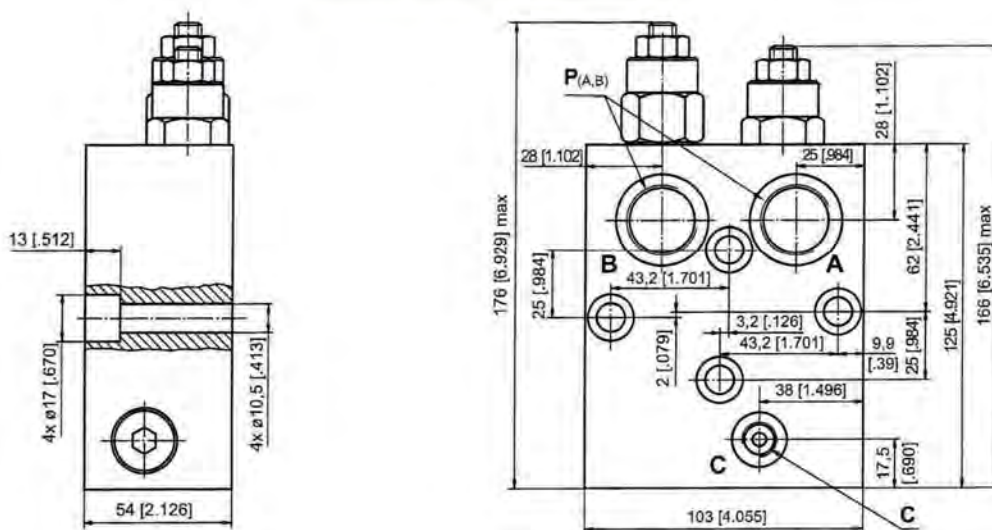
KPBT

Klep voor MT

SINGLE VALVE KPBT-250/1/E...



DUAL VALVE KPBT-250/1/D...



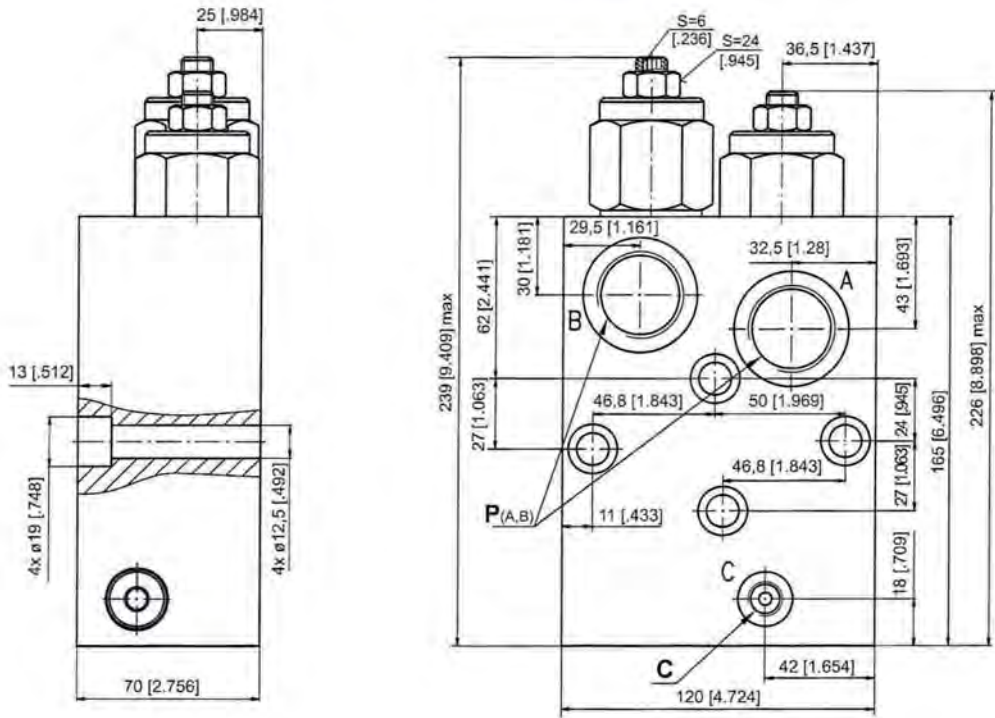
	Thread Ports - P _(A,B)	Thread Port - C
-	G3/4 17 [.87] depth	G1/4 14 [.55] depth
M	M27x2 17 [.87] depth	M14x1,5 14 [.55] depth
A	1 1/16-12 UN O-ring 17 [.67] depth	7/16 - 20 UNF O-ring 12,7 [.50] depth



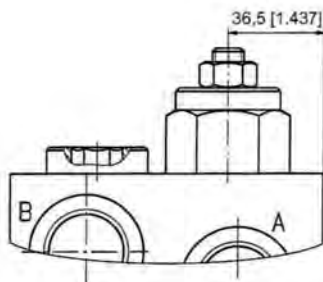
Note : KPBT Blocks are installed directly on MT Motors with four screws M10x50 - 8.8 DIN 912. Tightening torque 3,5 daNm [310 lb-in].

KPBV Klep voor MV

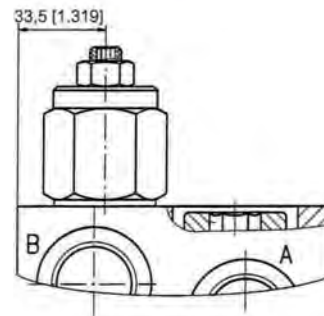
DUAL VALVE KPBV-250/1/D...



SINGLE VALVE KPBV-250/1/AE...



SINGLE VALVE KPBV-250/1/BE...



	Thread Ports - P _(A,B)	Thread Port - C
-	G 1 20 [0.79] depth	G1/4 14 [0.55] depth
M	M33x2 20 [0.79] depth	M14x1.5 14 [0.55] depth
A	1 5/16 - 12 UN O-ring 20 [0.79] depth	7/16 - 20 UNF O-ring 12.7 [0.50] depth



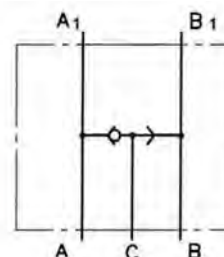
Note : KPBV Blocks are installed directly on MV Motors with four screws M12x70 - 8.8 DIN 912. Tightening torque 6,5 daNm [575 lb-in].

KPW Wisselklep



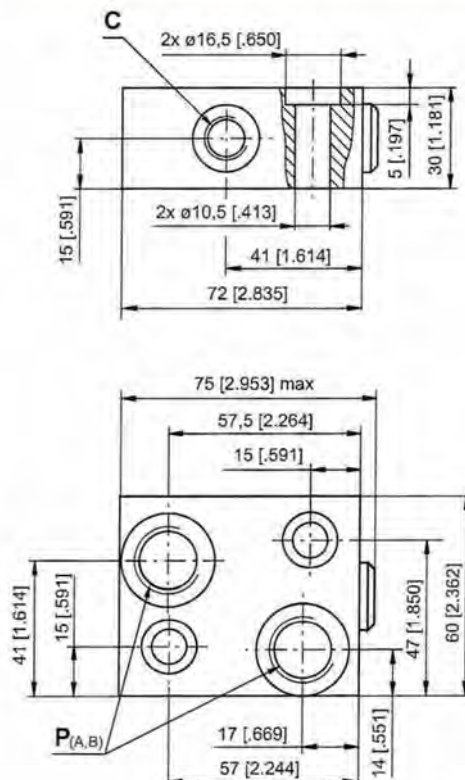
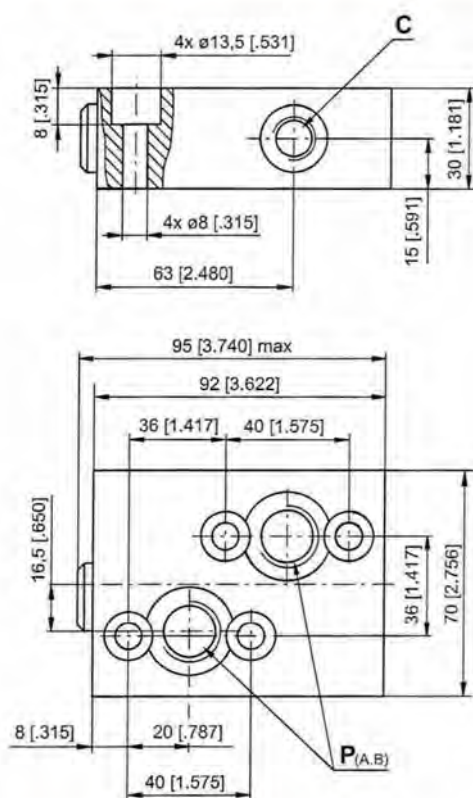
SPECIFICATION DATA

Parameters	Type	
	KPWR	KPWS
Flow Rate , l/min [GPM]	60	[15.85]
Rated Pressure , bar [PSI]	250	[3625]
Weight , kg	0,850	0,670
	[lb]	[1.874]



VALVE FOR MP, MR, MH HYDRAULIC MOTORS KPWR

VALVE FOR MS HYDRAULIC MOTORS KPWS



	Thread Ports - P _(A,B)	Thread Port - C
-	G1/2 17 [.67] depth	G1/4 14 [.55] depth
M	M22x1,5 17 [.67] depth	M14x1,5 14 [.55] depth
A	7/8 - 14 UNF O-ring 17 [.67] depth	7/16 - 20 UNF O-ring 12,7 [.50] depth



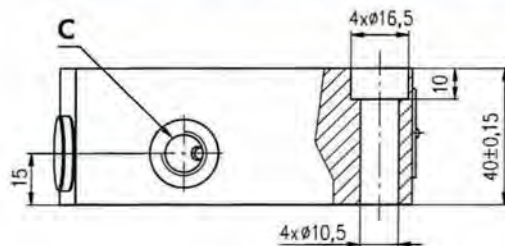
Note : KPWR Blocks are installed directly on MP, MR and MH Motors with four screws M8x35 - 8.8 DIN 912 or 5/16-18UNC, 1.5 long ANSI B 18.3 . Tightening torque 1,8 daNm [160 lb-in].
 KPWS Blocks are installed directly on MS Motors with two screws M10x35 - 8.8 DIN 912 or 3/8-16UNC, 1.5 long ANSI B 18.3 . Tightening torque 3,5 daNm [336 lb-in].

KPW Wisselklep

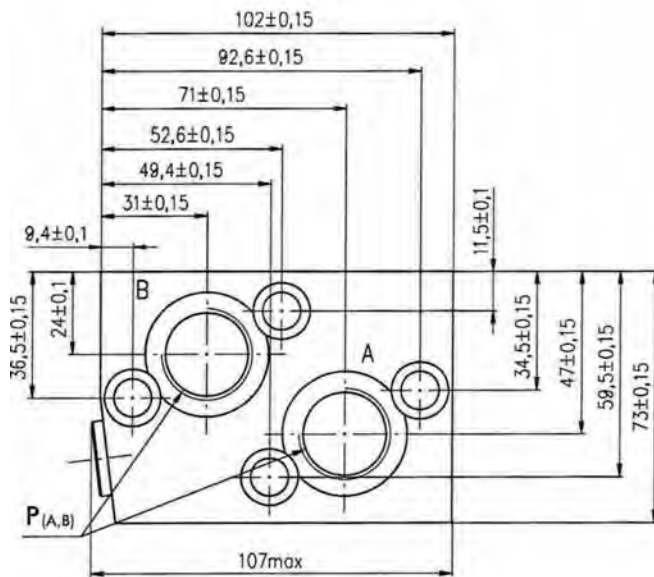
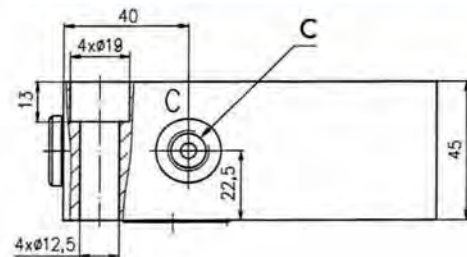
SPECIFICATION DATA

Parameters	Type	
	KPWT	KPWV
Flow Rate , l/min	100	200
Rated Pressure , bar	250	
Weight , kg	1,800	3,150

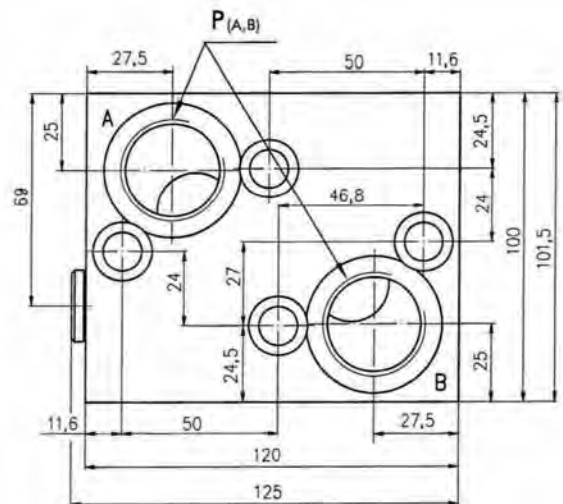
VALVE FOR MT HYDRAULIC MOTORS
KPWT



VALVE FOR MV HYDRAULIC MOTORS
KPWV



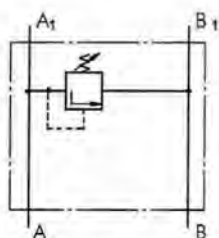
$P_{(A,B)}$: G3/4 (M27x2), 17 mm depth
C : G1/4 (M14x1,5), 14 mm depth



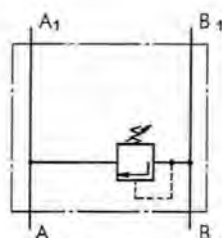
$P_{(A,B)}$: G1-A (M33x2), 20 mm depth
C : G1/4 (M14x1,5), 14 mm depth

Note : KPWT Blocks are installed directly on MT Motors with four screws M10x40 - 8.8 DIN 912.
 Tightening torque $3,5^{+0,3}$ daNm.
 KPWV Blocks are installed directly on MV Motors with four screws M12x45 - 8.8 DIN 912.
 Tightening torque $6,5^{+0,5}$ daNm.

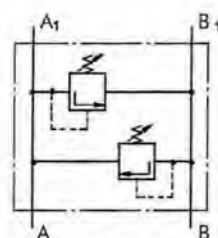
KP Overdrukventiel



Single Crossover
Relief Valve
type KPE ...



Single Crossover
Relief Valve
type KPE ...



Dual Crossover
Relief Valve
type KPD ...

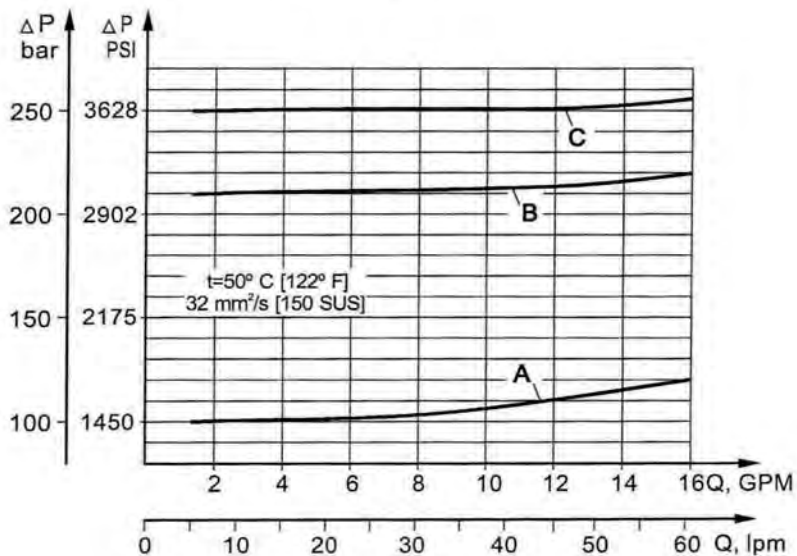
Algemene informatie

Parameters	Type			
	KPER	KPDR	KPES	KPDS
Flow Rate , lpm [GPM]	60 [15.85]			
Pressure Range* , bar [PSI]	30 ÷ 100; [435+1450]	50 ÷ 210; [725+3050]	80 ÷ 300 [1160+4350]	
Weight , kg [lb]	1,55 [3.42]		1,50 [3.31]	

*Pressure Settings are at flow rate of 5 lpm [1.32 GPM]
and viscosity 32 mm²/s [150 SUS] (50 °C [122° F]).

Rated Pressure

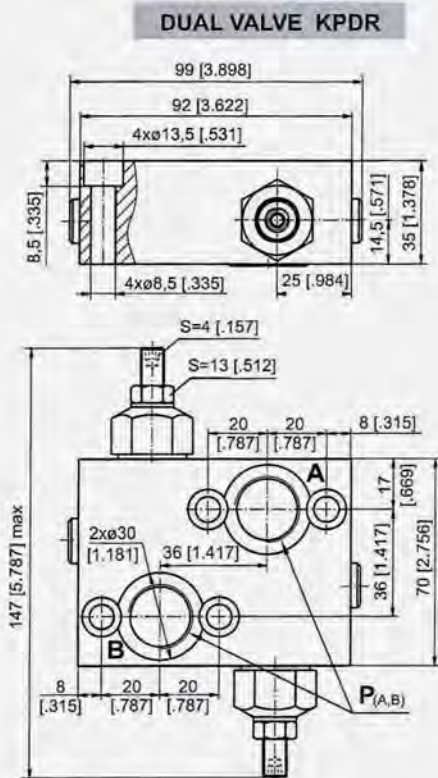
- A → 100 bar [1450 PSI]
- B → 210 bar [3050 PSI]
- C → 250 bar [3625 PSI]



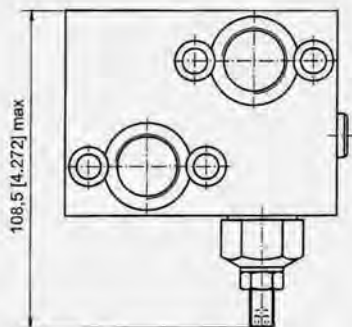
KP

Overdrukventiel

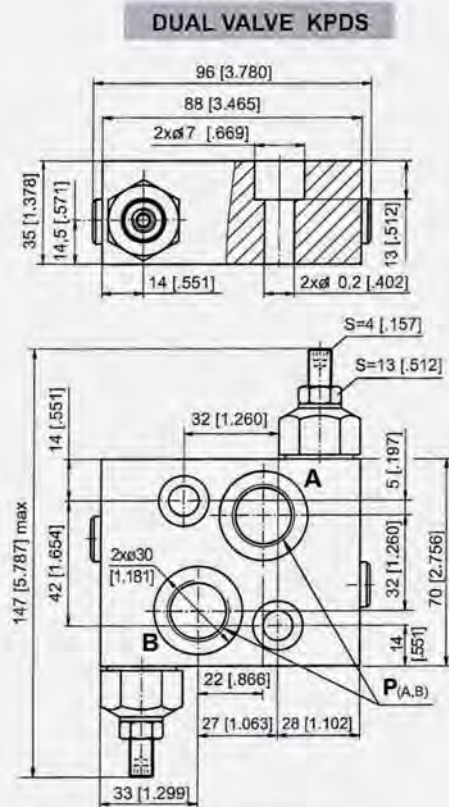
Klep voor MP, MR, MH



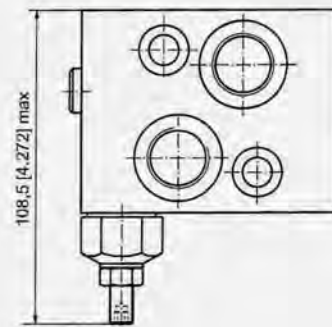
SINGLE VALVE KPER



Klep voor MS



SINGLE VALVE KPES



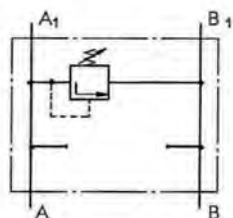
Thread Ports - P _(A,B)	
-	G1/2 20 [7.9] depth
M	M22x1,5 20 [7.9] depth
A	7/8 - 14 UNF O-ring 20 [7.9] depth

Note : KPDR and KPER Blocks are installed directly on MP, MR and MH Motors with four screws M8x35 - 8.8 DIN 912 or 5/16-18 UNC, 1.5 long ANSI B 18.3 . Tightening torque 1,8 daNm [160 lb-in].

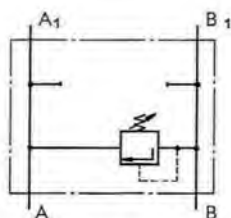
KPDS and KPES Blocks are installed directly on MS Motors with two screws M10x35 - 8.8 DIN 912 or 3/8-16 UNC, 1.5 long ANSI B 18.3 . Tightening torque 3,5 daNm [310 lb-in].

KP Overdrukventiel

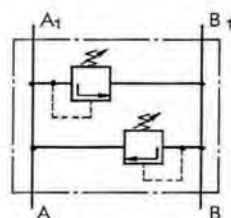
Kleppen voor RW en HW motoren



Single Crossover
Relief Valve
type KPEAW ...



Single Crossover
Relief Valve
type KPEBW ...



Dual Crossover
Relief Valve
type KPDW ...

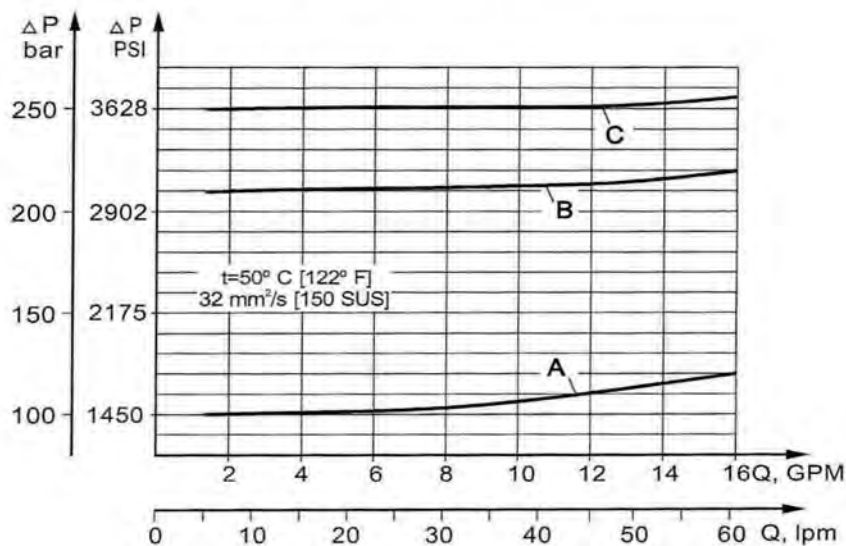
SPECIFICATION DATA

Parameters	Type	
	KPE...W	KPDW
Flow Rate , lpm [GPM]	60 [15.85]	
Pressure Range* , bar [PSI]	5 ÷ 40; [75+580];	30 ÷ 100; [435+1450]; 80 ÷ 250 [1160+3625]
Weight , kg [lb]	1,80 [3.97]	2,90 [6.39]

*Pressure Settings are at flow rate of 5 lpm [1.32 GPM]
and viscosity 32 mm²/s [150 SUS] (50 °C [122° F]).

Rated Pressure

- A → 100 bar [1450 PSI]
- B → 210 bar [3050 PSI]
- C → 250 bar [3625 PSI]

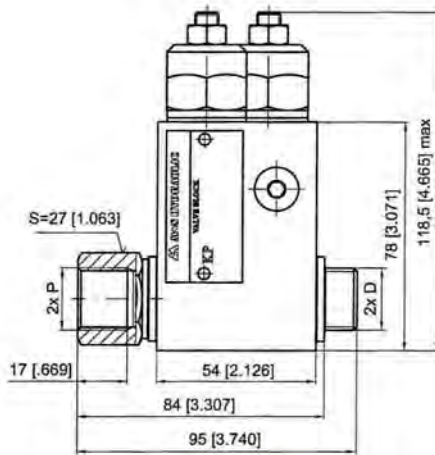


KP

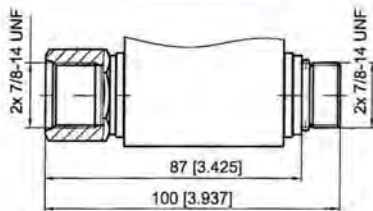
Overdrukventiel

Kleppen voor RW en HW motoren

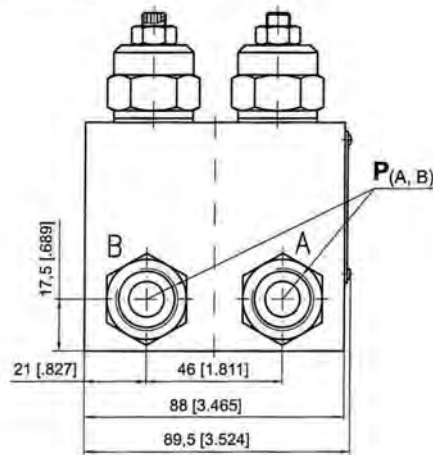
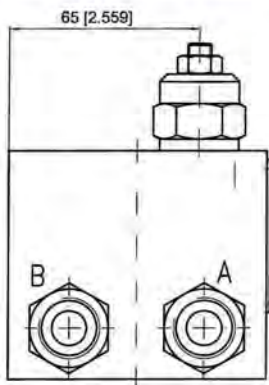
DUAL VALVE KPDW...



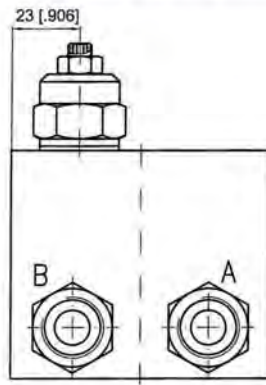
KPDW...A



SINGLE VALVE KPEAW...



SINGLE VALVE KPEBW...

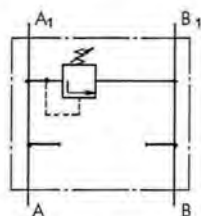


	Thread Ports - P _(A,B)	Thread Ports - D
-	G1/2 16 [.63] depth	G1/2 12 [.47] length
M	M22x1,5 16 [.63] depth	M22x1,5 12 [.47] length
A	7/8 - 14 UNF O-ring 16 [.63] depth	7/8 - 14 UNF O-ring 13 [.51] length

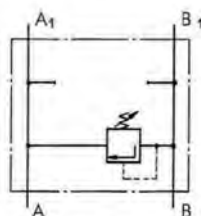
Note : KPDW and KPE..W Blocks assembly to RW or HW motors is done with two screws (thread D) included in the valve set. Tightening torque 8 daNm [710 lb-in].

KP Overdrukventiel

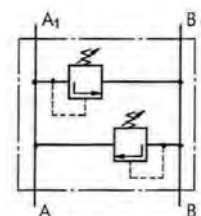
Kleppen voor MT motoren



Single Crossover
Relief Valve
type KPEAT ...



Single Crossover
Relief Valve
type KPEBT ...



Dual Crossover
Relief Valve
type KPDT ...

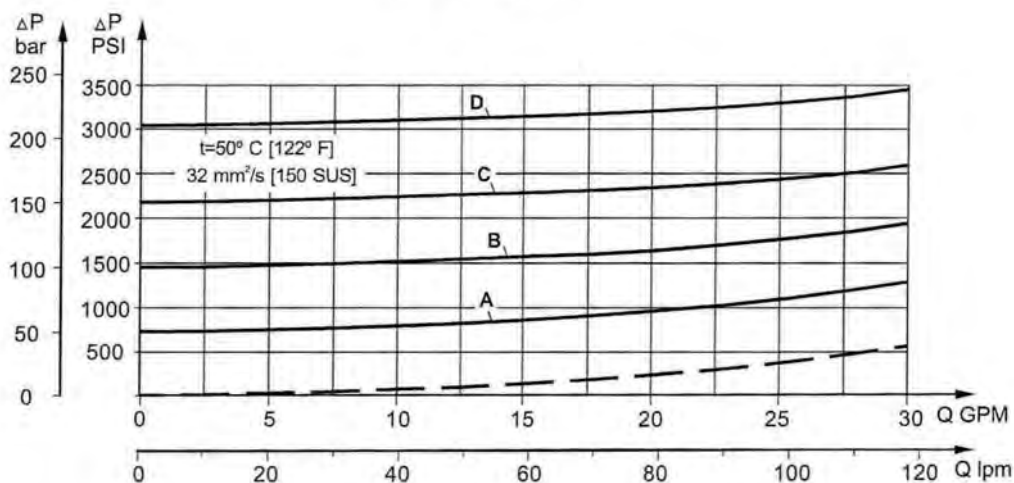
SPECIFICATION DATA

Parameters	Type	
	KPE...T	KPDT
Flow Rate, lpm [GPM]	120 [32]	
Pressure Range*, bar [PSI]	80+210 [1160+3050]	
Weight, kg [lb]	5,10 [11.24]	5,54 [12.21]

*Pressure Settings are at flow rate of 5 lpm [1.32 GPM] and viscosity 32 mm²/s [150 SUS] (50 °C [122° F]).

Rated Pressure

- A → 50 bar [725 PSI]
- B → 100 bar [1450 PSI]
- C → 150 bar [2175 PSI]
- D → 210 bar [3045 PSI]

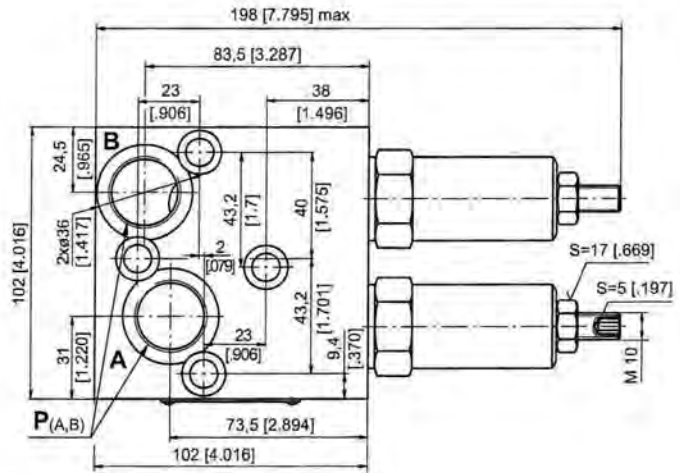
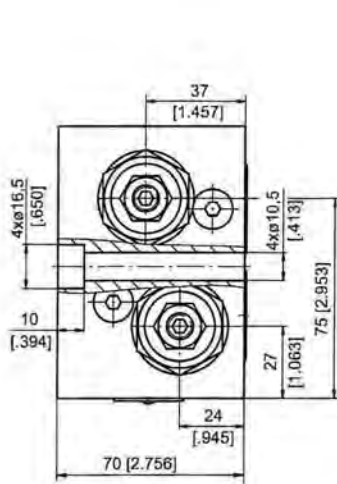


KP

Overdrukventiel

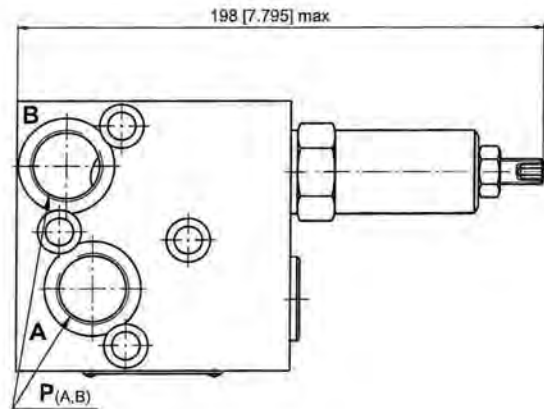
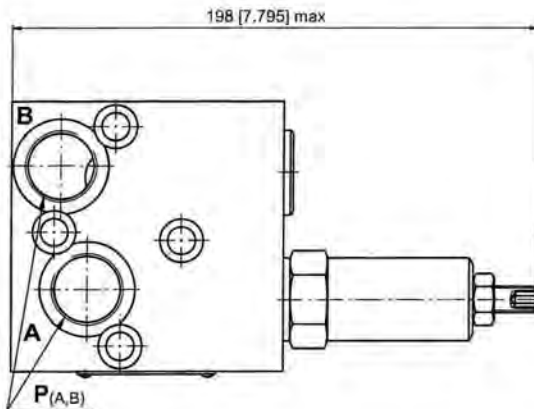
Kleppen voor MT motoren

DUAL VALVE KPDT...



SINGLE VALVE KPEAT...

SINGLE VALVE KPEBT...

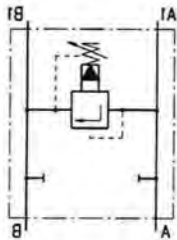


	Thread Ports - P _(A,B)
-	G3/4 20 [.79] depth
M	M27x2 20 [.79] depth
A	1 1/4"-12 UN O-ring 20 [.79] depth

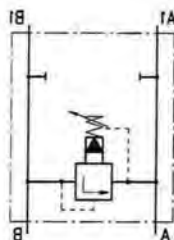
Note : KPDT and KPE...T Blocks are installed directly on MT Motors with four screws M10x70 - 8.8 DIN 912. Tightening torque 3,5 daNm [310 lb-in].

KP Overdrukventiel

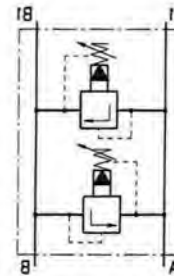
Kleppen voor MV motoren



Single Crossover
Relief Valve
type KPEAV ...



Single Crossover
Relief Valve
type KPEBV ...



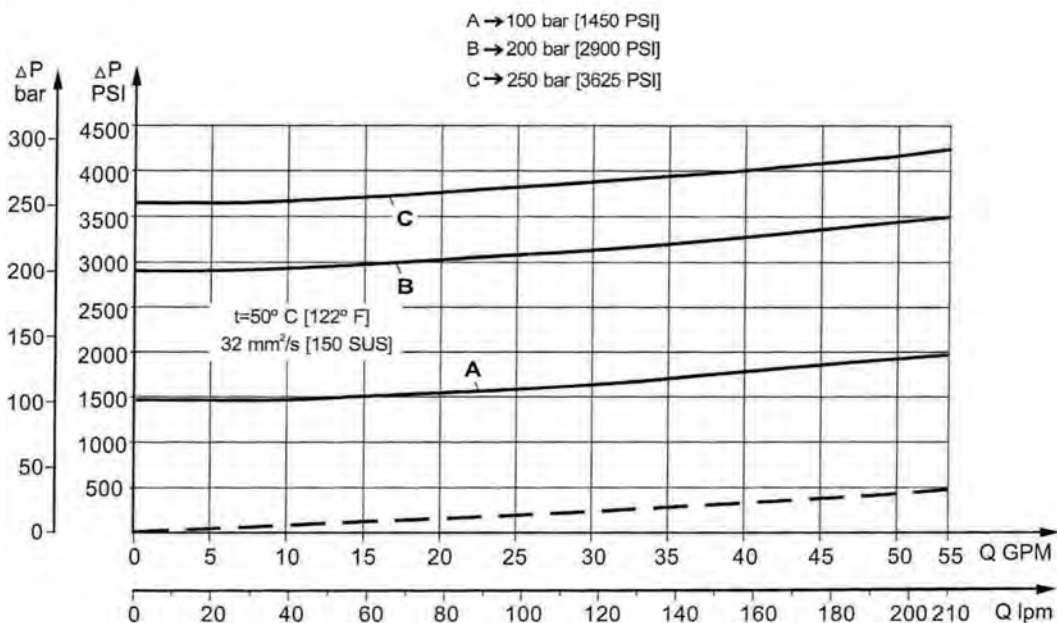
Dual Crossover
Relief Valve
type KP DV ...

SPECIFICATION DATA

Parameters	Type		
	KPEAV	KPEBV	KPDV
Flow Rate , lpm [GPM]	200 [53]		
Pressure Range* , bar [PSI]	10+100; 20+250 [145+1450]; [290+3625]		
Weight , kg [lb]	4,90 [10.8]	7,10 [15.65]	8,00 [17.64]

*Pressure Settings are at flow rate of 5 lpm [1.3 GPM] and viscosity 32 mm²/s [150 SUS] (50 °C [122° F]).

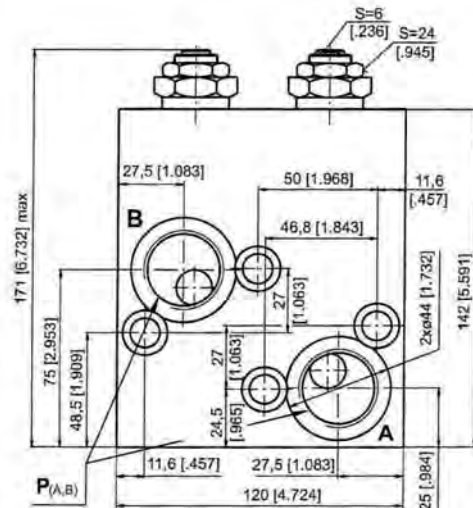
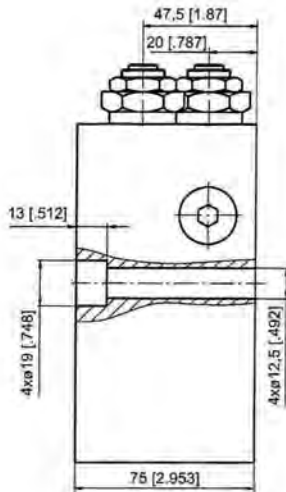
Rated Pressure



KP

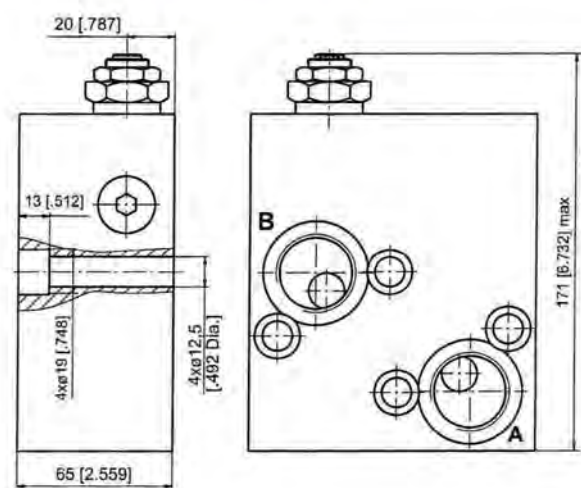
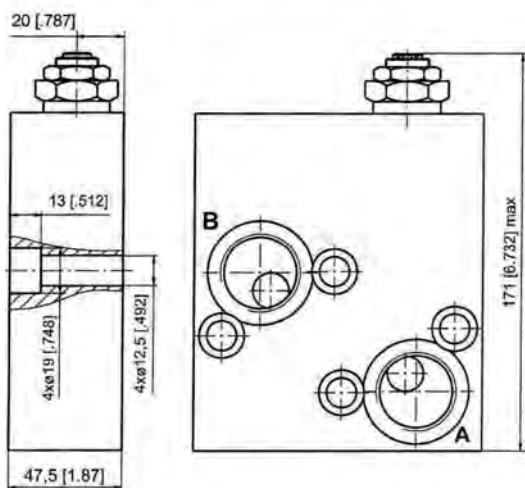
Overdrukventiel

Kleppen voor MV motoren



SINGLE VALVE KPEAV

SINGLE VALVE KPEBV



	Thread Ports - P _(A,B)
-	G1-A 20 [0.79] depth
M	M33x2 20 [0.79] depth
A	1 ⁵ / ₁₆ -12 UN O-ring 20 [0.79] depth

Note : KPDV Blocks are installed directly on MV Motors with four screws M12x75 - 8.8 DIN 912.
 KPEAV Blocks are installed directly on MV Motors with four screws M12x50 - 8.8 DIN 912.
 KPEBV Blocks are installed directly on MV Motors with four screws M12x65 - 8.8 DIN 912.
 Tightening torque 7,5 daNm [665 lb-in].

KP Overdrukventiel

Bestelgegevens

1	2	3	4	5	6	7
K	P	B	-	/	/	

Pos.1 - Housing Type

- R** - Valve block for MP, MR and MH Motors
- S** - Valve block for MS Motors
- W** - Valve block for RW and HW Motors
- T** - Valve block for MT Motors
- V** - Valve block for MV Motors

Pos.2 - Pressure Range, PSI [bar]

- 250** - 1015+3625 [70+250], Std Setting 250 bar@5 lpm

Pos.3 - Pilot Ratio

- 1** - 4,25:1

Pos.4 - Number of Valves

- D** - Two Valves - Dual
- E** - One Valve - Single (for **R** and **S** only)
- AE** - One Valve on line A - Single (for **T**, **V** and **W** only)
- BE** - One Valve on line B - Single (for **T**, **V** and **W** only)

Pos.5 - Threaded Ports

- omit - BSPP thread - ISO 228
- M** - Metric thread - ISO 262
- A** - Unified inch screw threads ANSI B 1.1 - 1982

Pos.6 - Option [Paint]**

- omit - no Paint
- P** - Painted
- PC** - Corrosion Protected Paint

Pos.7 - Design Series

- omit - Factory specified

Notes: * Color at customer's request.

ORDER CODE - SWITCH VALVES

1	2	3	4
K	P	W	

Pos.1 - Housing Type

- R** - Valve block for MP, MR and MH Motors
- S** - Valve block for MS Motors
- T** - Valve block for MT Motors
- V** - Valve block for MV Motors

Pos.2 - Threaded Ports

- omit - BSPP thread - ISO 228
- M** - Metric thread - ISO 262
- A** - Unified inch screw threads ANSI B 1.1 - 1982

Pos.3 - Option [Paint]*

- omit - no Paint
- P** - Painted
- PC** - Corrosion Protected Paint

Pos.4 - Design Series

- omit - Factory specified

Notes: * Color at customer's request.

ORDER CODE - CROSSOVER RELIEF VALVE

1	2	3	4	5	6
K	P		/		

Pos.1 - Number of Valves

- D** - Two Valves - Dual
- E** - One Valve - Single (for **R** and **S** only)
- EA** - One Valve on line A - Single (for **T**, **V** and **W** only)
- EB** - One Valve on line B - Single (for **T**, **V** and **W** only)

Pos.2 - Housing Type

- R** - Valve block for MP, MR and MH Motors
- S** - Valve block for MS Motors
- W** - Valve block for RW and HW Motors
- T** - Valve block for MT Motors
- V** - Valve block for MV Motors

Pos.3 - Pressure Range, bar [PSI]

- 100** - 30+100 [435+1450], Std Setting 100 bar@5 lpm
- 210** - 50+210 [725+3050], Std Setting 210 bar@5 lpm
- 250** - 20+250 [290+3625], Std Setting 250 bar@5 lpm
- 300*** - 80+300 [1160+4350], Std Setting 250 bar@5 lpm

Pos.4 - Threaded Ports

- omit - BSPP thread - ISO 228
- M** - Metric thread - ISO 262
- A** - Unified inch screw threads ANSI B 1.1 - 1982

Pos.5 - Option [Paint] **

- omit - no Paint
- P** - Painted
- PC** - Corrosion Protected Paint

Pos.6 - Design Series

- omit - Factory specified

Notes: * Useful for types **R** and **S** only.

** Color at customer's request.

The Valve Blocks are mangano phosphatized as standard.

Motor met rem specials

Special Feature Description	Order Code	Motor type				
		B/MR	MT/B	MTM/B	SW	TW
Low Leakage	LL	○	-	○	-	-
Low Speed Valving	LSV	○	-	○	-	-
Free Running	FR	-	-	○	-	-
Reverse Rotation	R	○	○	○	-	-
Paint*	P	○	○	○	○	○
Corrosion Protected Paint*	PC	○	○	○	○	○
Check Valves		S	S	-	S	S

* color at customer's request.

○ Optional
 - Not applicable
 S Standard

Berekening applicaties

VEHICLE DRIVE CALCULATIONS

1. Motor speed: n, RPM

$$n = \frac{2,65 \times v_{km} \times i}{R_m} \quad n = \frac{168 \times v_{mi} \times i}{R_m}$$

v_{km} - vehicle speed, km/h;
 v_{mi} - vehicle speed, mil/h;
 R_m - wheel rolling radius, m;
 R_{in} - wheel rolling radius, in;
i - gear ratio between motor and wheels.
 If no gearbox, use $i=1$.

2. Rolling resistance: RR, daN [lbs]

The resistance force resulted in wheels contact with different surfaces:

$$RR = G \times p$$

G- total weight loaded on vehicle, daN [lbs];
p- rolling resistance coefficient (Table 1).

Table 1

Rolling resistance coefficient In case of rubber tire rolling on different surfaces	
Surface	p
Concrete- faultless	0.010
Concrete- good	0.015
Concrete- bad	0.020
Asphalt- faultless	0.012
Asphalt- good	0.017
Asphalt- bad	0.022
Macadam- faultless	0.015
Macadam- good	0.022
Macadam- bad	0.037
Snow- 5 cm	0.025
Snow- 10 cm	0.037
Polluted covering- smooth	0.025
Polluted covering- sandy	0.040
Mud	0.037+0.150
Sand- Gravel	0.060+0.150
Sand- loose	0.160+0.300

3. Grade resistance: GR, daN [lbs]

$$GR = G \times (\sin \alpha + p \times \cos \alpha)$$

α - gradient negotiation angle (Table 2)

Table 2

Grade %	α Degrees	Grade %	α Degrees
1%	0° 35'	12%	6° 5'
2%	1° 9'	15%	8° 31'
5%	2° 51'	20%	11° 19'
6%	3° 26'	25%	14° 3'
8%	4° 35'	32%	18°
10%	5° 43'	60%	31°

4. Accelerate force: FA, daN [lbs]

Force **FA** necessary for acceleration from 0 to maximum speed **v** and time **t** can be calculated with a formula:

$$FA = \frac{v_{km} \times G}{3,6 \times t}, [daN] \quad FA = \frac{v_{mi} \times G}{22 \times t}, [lbs];$$

FA- accelerate force, daN [lbs];
t-time, [s].

5. Tractive effort: DP, daN [lbs]

Tractive effort **DP** is the additional force of trailer. This value will be established as follows:
 -acc.to constructor's assessment;
 -as calculating forces in items 2, 3 and 4 of trailer; the calculated sum corresponds to the tractive effort requested.

6. Total tractive effort: TE, daN [lbs]

Total tractive effort **TE** is total effort necessary for vehicle motion; that the sum of forces calculated in items from 2 to 5 and increased with 10 % because of air resistance.

$$TE = 1,1 \times (RR + GR + FA + DP)$$

RR - force acquired to overcome the rolling resistance;
GR - force acquired to slope upwards;
FA - force acquired to accelerate (acceleration force);
DP - additional tractive effort (trailer).

7. Motor Torque moment: M, daNm [lb-in]

Necessary torque moment for every hydraulic motor:

$$M = \frac{TE \times R_m [R_{in}]}{N \times i \times \eta_m}$$

N- motor numbers;
 η_m -mechanical gear efficiency (if it is available).

8. Cohesion between tire and road covering: M_w , daNm [lb-in]

$$M_w = \frac{G_w \times f \times R_m [R_{in}]}{i \times \eta_m}$$

To avoid wheel slipping, it should be observed the following condition $M_w > M$

f - frictional factor;
G_w-total weight over the wheels, daN [lbs].

Table 3

Surface	Frictional factor f
Steel on steel	0.15 + 0.20
Rubber tire on polluted surface	0.5 + 0.7
Rubber tire on asphalt	0.8 + 1.0
Rubber tire on concrete	0.8 + 1.0
Rubber tire on grass	0.4

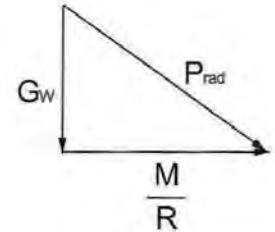
9.Radial motor loading: P_{rad} , daN [lbs]

When motor is used for vehicle motion with wheels mounted directly on motor shaft, the total radial loading of motor shaft P_{rad} is a sum of motion force and weight force acting on one wheel.

G_w - Weight held by wheel;

P_{rad} - Total radial loading of motor shaft;

M/R - Motion force.

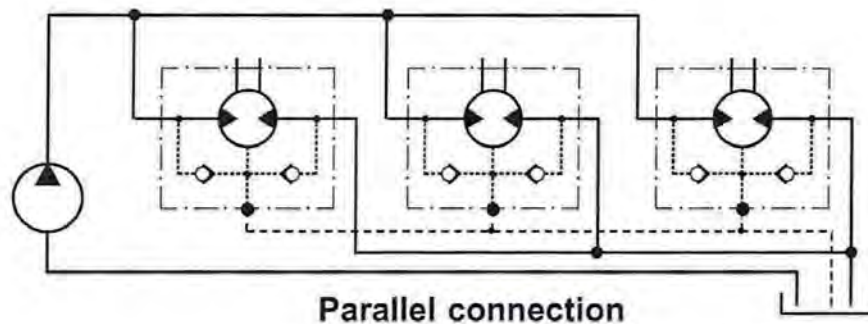
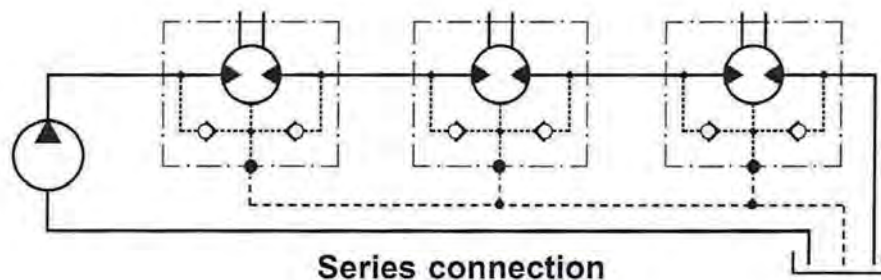


$$P_{rad} = \sqrt{G_w^2 + \left(\frac{M}{R}\right)^2}$$

In accordance with calculated loadings the suitable motor from the catalogue is selected.

DRAINAGE SPACE AND DRAINAGE PRESSURE

Advantages in oil drainage from drain space: Cleaning; Cooling and Seal lifetime prolonging.



Algemene garantievoorwaarden M+S motoren

M+S Hydraulic warrants, what its products, supplied directly to original equipment manufacturer, authorized distributor or other customer, will be free of defects in material or workmanship at the time of shipment from M+S Hydraulic and will conform to the products technical documentation (drawings and specifications) under sale agreement with Buyer.

This warranty will apply only to defects appearing within applicable Warranty period, mentioned below. If Buyer notify M+S Hydraulic within the Warranty period about any such defects, M+S , at its sole option will replace or repair the defective products or their parts found by M+S Hydraulic to be defective in material or workmanship.

THE FOREGOING LIMITED WARRANTY IS AVAILABLE ONLY IF "M+S HYDRAULIC" IS PROMPTLY NOTIFIED IN WRITING OF THE ALLEGED DEFECT AND DOES NOT COVER FAILURE TO FUNCTION CAUSED BY DAMAGE TO THE PRODUCT, IMPROPER INSTALLATION, UNREASONABLE USE OR ABUSE OF THE PRODUCT, FAILURE TO PROVIDE OR USE OF IMPROPER MAINTENANCE OR USUAL, DEGRADATION OF THE PRODUCT DUE TO PHYSICAL ENVIRONMENTS OF AN USUAL NATURE. THE FOREGOING REMEDIES ARE THE SOLE AND EXCLUSIVE REMEDIES AVAILABLE TO CUSTOMER. To facilitate the inspection, M+S Hydraulic may require return of the product/part, which Buyer claims to be defective.

M+S Hydraulic shall not be liable for labor costs or any other expenses incurred during the disassembling or reinstalling of the product/part.

In case the claimed products are returned to M+S Hydraulic in bad condition: dirty, disassembled, with damaged or missing parts during transportation, the warranty will be considered as not applicable and the products will not be liable to repair.

Warranty periods

New products: The Warranty period is limited to 24 consecutive months (2 years) from the date of production of the product.

Repaired products: If the product is repaired in M+S Hydraulic during its warranty period, the warranty period of the repaired item shall continue for the balance of original Warranty period or for a period equal to 50% of the original new product Warranty period, whichever is later.

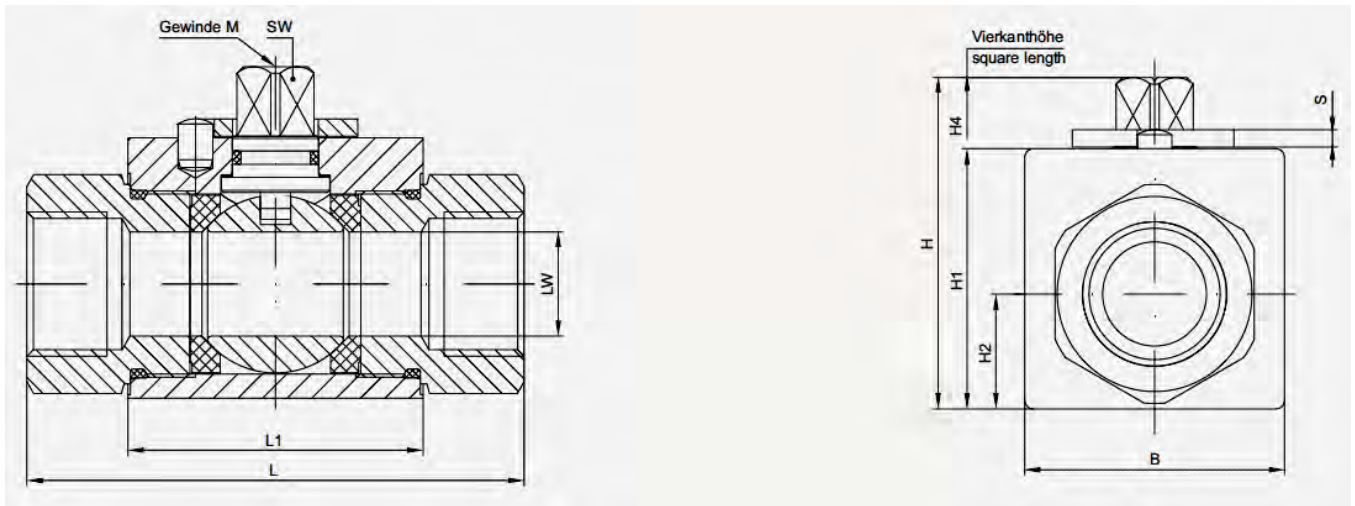
Spare parts: The Warranty period for Spare parts shall be 12 consecutive months (1 year) from the dispatch date of such parts from M+S Hydraulic.

LIMITATION OF LIABILITY M+S Hydraulic's liability for any claim of any kind , for any loss or damage arising out of, connected with or resulting from an order, or from the performance or branch thereof, or from the design, manufacture, sale delivery, operation or use of any of its products shall be limited to , at M+S 's sole option, replacement, repair of any defective product or the issuance of a credit to Customer against any future purchases. Cash refunds will not be made under any circumstances and Customer will not be entitled to recover any damages of any kind against M+S Hydraulic, including but not limited to incidental or consequential damages, whether direct or indirect, known or unknown, foreseen or unforeseen.

BK .P Kogelkraan



Huis, kogel uitgevoerd in staal



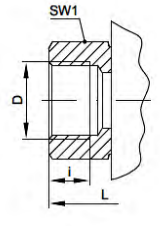
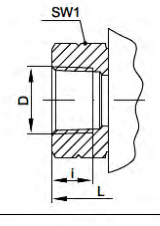
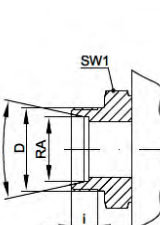
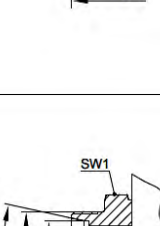
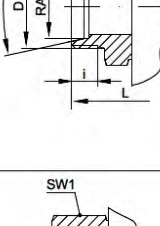
Maten huis

DN mm	LW mm	*PN bar	L1 mm	B mm	H mm	H1 mm	H2 mm	H4 mm	SW mm	M	S mm
4	5	500	36,2	26	43,4	32	12,8	11	9	M5	3
6	6	500	36,2	26	43,4	32	12,8	11	9	M5	3
8	8	500	36,2	26	43,4	32	12,8	11	9	M5	3
10	10	500	43,2	32	49,2	38	16,25	10,9	9	M5	3
13	13	500	48,2	35	51,2	40	17,25	10,9	9	M5	3
16	15	500	48,2	38	61,9	46	18,7	15,5	12	M6	3,5
20	20	400	62,2	49	73,4	57	24,5	16	14	M6	4
25	24	350	66,2	60	76,6	60	26,5	16	14	M6	4

BK .P Kogelkraan



Mogelijke schoefdraden

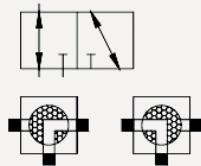
Anschlußart/Connection	DN mm	LW mm	D	RA mm	L mm	i mm	SW1 mm	Gew./weight kg
01 Rohrgewinde DIN/ISO 228 BSP female thread DIN/ISO 228 	4	5	G 1/8	—	69	8	22	0,35
	6	6	G 1/4	—	69	12	22	0,35
	10	8	G 3/8	—	69	12	22	0,35
	10	10	G 1/2	—	73	12	27	0,5
	13	13	G 3/4	—	85	14	30	0,65
	16	15	G 1	—	84	14	32	0,75
	20	20	G 1 1/4	—	96	16	41	1,5
	25	24	G 1 1/2	—	113	18	46	2
	32	24	G 1 1/2	—	121	20	50	2,1
	40	24	G 1 1/2	—	124	22	55	2,1
02 NPT-Innengewinde ANSI B 1.20.1 NPT female thread ANSI B 1.20.1 	4	5	1/8-27 NPT	—	69	8	22	0,35
	6	6	1/4-18 NPT	—	69	11,5	22	0,35
	10	10	3/8-18 NPT	—	73	12	27	0,5
	13	13	1/2-14 NPT	—	92	15,5	30	0,65
	20	20	3/4-14 NPT	—	97	16	41	1,5
	25	24	1 - 11,5 NPT	—	113	19	46	2
	32	24	1 1/4-11,5 NPT	—	131	19,5	50	2,1
	40	24	1 1/2-11,5 NPT	—	139	19,5	55	2,3
03 Rohrverschraubung DIN 2353 L leichte Reihe For compression fitting DIN 2353 L light series 	4	5	M 12x1,5	6	67	7,5	22	0,3
	6	6	M 14x1,5	8	67	7,5	22	0,3
	8	8	M 16x1,5	10	71	8,5	22	0,3
	10	8	M 18x1,5	12	71	8,5	22	0,3
	10	10	M 18x1,5	12	75	8,5	27	0,5
	13	10	M 22x1,5	15	77	9,5	27	0,5
	13	13	M 22x1,5	15	84	9,5	30	0,6
	16	13	M 26x1,5	18	84	9,5	30	0,6
	16	13	M 22x1,5	15	83	9,5	32	0,75
	16	15	M 26x1,5	18	83	9,5	32	0,75
	20	20	M 30x2	22	102	12	41	1,5
	25	24	M 36x2	28	108	12	46	2
	32	24	M 45x2	35	114	13,5	50	2,1
40	24	M 52x2	42	114	13,5	55	2,2	
04 Rohrverschraubung DIN 2353 S schwere Reihe For compression fitting DIN 2353 S heavy series 	4	5	M 14x1,5	6	71,5	9,5	22	0,35
	4	5	M 16x1,5	8	73	9,5	22	0,35
	6	6	M 18x1,5	10	73	9,5	22	0,35
	8	8	M 20x1,5	12	77	9,5	22	0,35
	10	10	M 22x1,5	14	84	11,5	27	0,5
	13	13	M 24x1,5	16	87	11,5	30	0,6
	16	13	M 30x2	20	91	13,5	30	0,65
	16	13	M 24x1,5	16	87	11,5	32	0,75
	16	15	M 30x2	20	91	13,5	32	0,75
	20	20	M 36x2	25	110	15	41	1,5
	25	24	M 42x2	30	120	17	46	2,1
	32	24	M 52x2	38	125	19	55	2,3
31 UN/UNF-Einschraubgewinde SAE J514 UN/UNF female thread SAE J514 	6	6	7/16-20 UNF-2B	—	69	11,5	22	0,35
	10	10	9/16-18 UNF-2B	—	75	12,7	27	0,5
	13	13	3/4-16 UNF-2B	—	85	14,3	30	0,65
	16	15	7/8-14 UNF-2B	—	84	16,7	32	0,75
	20	20	1 1/16-12 UN-2B	—	96	19	41	1,5
	25	24	1 5/16-12 UN-2B	—	114	19	46	2
	32	24	1 3/8-12 UN-2B	—	122	19	50	2,2
	40	24	1 7/8-12 UN-2B	—	128	19	60	2,4

DBK .P 3-weg kogelkraan

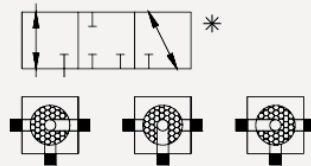
Huis en kogel uitgevoerd in staal



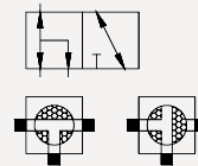
L-Bohrung 0°-90°
L-bore
Best-Nr./order-code: L



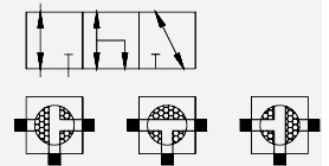
L-Bohrung, pos. Überdeckung 0°-90°-180°
L-bore positive overlap
Best-Nr./order-code: P



T-Bohrung 0°-90°
T-bore
Best-Nr./order-code: T

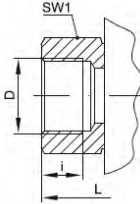
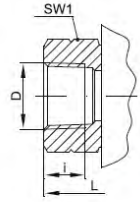
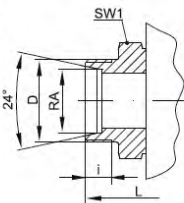
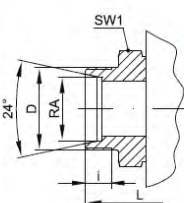
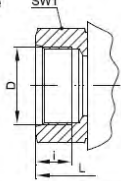


T-Bohrung 0°-90°-180°
T-bore
Best-Nr./order-code: T180°



DN mm	*PN bar	L1 mm	B mm	H mm	H1 mm	H2 mm	H4 mm	M	S mm	SW mm
4	400	36	26	43,5	32	13	10,9	M5	3	9
6	400	36	26	43,5	32	13	10,9	M5	3	9
8	400	36	26	43,5	32	13	10,9	M5	3	9
10	400	43	32	49	38	16,5	10,9	M5	3	9
13	350	48	35	51	40	17,5	10,9	M5	3	9
16	350	48	38	62	46	19	15,5	M6	3,5	12
20	350	61	49	73	57	24,5	16	M6	4	14
25	350	65	60	76	60	26,5	16	M6	4	14
32	350	80	76	104	84	38	18,5	M8	5	17
40	350	85	83	111	92	41,5	18,5	M8	5	17
50	350	100	100	130	111	50	18,5	M8	5	17

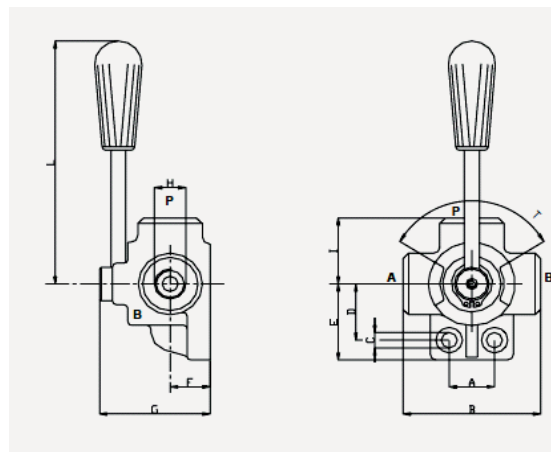
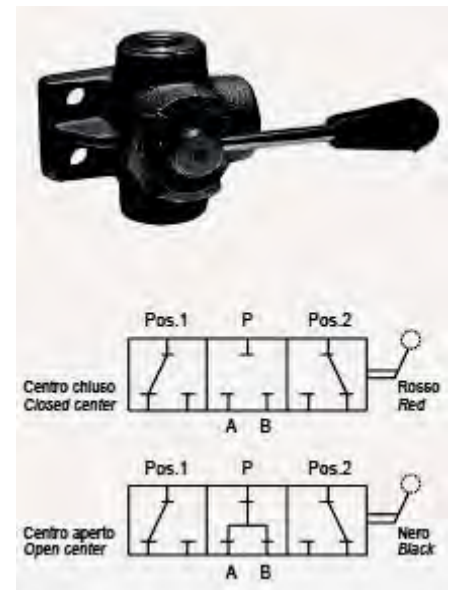
DBK .P 3-weg kogelkraan

Anschlußart/Connection	DN mm	LW mm	D	RA mm	L mm	L10 mm	i mm	SW1 mm	Gew./weight kg
01 Rohrgewinde DIN/ISO 228 BSP female thread DIN/ISO 228 	4	5	G ¼	—	69	32	8	22	0,4
	6	6	G ¼	—	69	32	12	22	0,4
	10	7	G ¾	—	69	37	12	22	0,4
	10	9	G ¾	—	73	35	12	27	0,55
	13	11,5	G ½	—	85	37	14	30	0,7
	16	14	G ½	—	84	38	14	32	0,8
	20	18	G ¾	—	96	47	16	41	1,55
	24	22	G 1	—	113	55	18	46	2,1
	32	22	G 1 ¼	—	121	55	20	50	2,2
	40	22	G 1 ½	—	124	56	22	55	2,4
	32	30	G 1 ¼	—	110	70	20	60	3,4
	40	35	G 1 ½	—	120	74	22	70	4,2
50	44	G 2	—	140	85	24	85	6,1	
02 NPT-Innengewinde ANSI B 1.20.1 NPT female thread ANSI B 1.20.1 	4	5	¼-27 NPT	—	69	32	8	22	0,4
	6	6	¼-18 NPT	—	69	32	11,5	22	0,4
	10	9	¾-18 NPT	—	73	35	12	27	0,55
	16	11,5	½-14 NPT	—	92	42	15,5	30	0,7
	20	18	¾-14 NPT	—	97	47	16	41	1,55
	25	22	1 - 11,5 NPT	—	113	55	19	46	2,1
	32	22	1 ¼-11,5 NPT	—	131	55	19,5	50	2,2
	40	22	1 ½-11,5 NPT	—	139	74	19,5	55	2,5
	32	30	1 ¼-11,5 NPT	—	115	70	19,5	60	3,4
	40	35	1 ½-11,5 NPT	—	135	75	19,5	70	4,2
	50	44	2-11,5 NPT	—	140	85	20	85	6,2
	03 Rohrverschraubung DIN 2353 L leichte Reihe For compression fitting DIN 2353 L light series 	4	5	M 12x1,5	6	67	32	7,5	22
6		6	M 14x1,5	8	67	32	7,5	22	0,35
8		7	M 16x1,5	10	71	32	8,5	22	0,35
10		7	M 18x1,5	12	71	32	8,5	22	0,35
10		9	M 18x1,5	12	75	35	8,5	27	0,55
13		9	M 22x1,5	15	77	40	9,5	27	0,55
13		11,5	M 22x1,5	15	84	42	9,5	30	0,65
16		11,5	M 26x1,5	18	84	42	9,5	30	0,65
16		14	M 26x1,5	18	83	43	9,5	32	0,8
20		18	M 30x2	22	102	47	12	41	1,6
25		22	M 36x2	28	108	55	12	46	2,1
32		22	M 45x2	35	114	60	13,5	50	2,2
40	22	M 52x2	42	114	60	13,5	55	2,4	
32	30	M 45x2	35	128	69	13,5	60	3,2	
40	35	M 52x2	42	133	74	13,5	70	4	
04 Rohrverschraubung DIN 2353 S schwere Reihe For compression fitting DIN 2353 S heavy series 	4	5	M 14x1,5	6	71,5	32	9,5	22	0,4
	4	5	M 16x1,5	8	73	32	9,5	22	0,4
	6	6	M 18x1,5	10	73	32	9,5	22	0,4
	8	7	M 20x1,5	12	77	32	9,5	22	0,4
	10	9	M 22x1,5	14	84	35	11,5	27	0,55
	13	11,5	M 24x1,5	16	87	42	11,5	30	0,65
	16	11,5	M 30x2	20	91	42	13,5	30	0,7
	16	14	M 30x2	20	91	43	13	32	0,8
	20	18	M 36x2	25	110	47	15	41	1,6
	25	22	M 42x2	30	120	55	17	46	2,1
	32	30	M 52x2	38	140	74	19	50	3,2
	31 UN/UNF-Einschraubgewinde SAE J514 UN/UNF female thread SAE J514 	6	6	7/16-20 UNF-2B	—	69	32	11,5	22
10		10	9/16-18 UNF-2B	—	75	35	12,7	27	0,55
13		13	¾-16 UNF-2B	—	85	37	14,3	30	0,7
20		20	1 1/16-12 UN-2B	—	96	50	19	41	1,55
25		24	1 5/16-12 UN-2B	—	114	60	19	46	2,1
32		32	1 ½-12 UN-2B	—	110	70	19	60	3,4
40		38	1 7/8-12 UN-2B	—	117	74	19	70	4,2
50		48	2 ½-12 UN-2B	—	140	85	19	80	6,1

DDF3V..A 3-weg kogelkraan

Uitgevoerd in gegoten staal

Maten	02	03	04	05	07
Max. druk bar	315	280	250	250	200
Max. flow l/min	60	90	120	180	280



Maat	A	B	C	D	E	F	G	H	I	L	T°	GEWICHT KG
02	24	73	8,5	31	42	21	62	3/8	36	125	100	0,87
03	30	85	11	36	53	24	70	1/2	43	125	100	1,45
04	32	91	11	41	58	28	80	3/4	47	125	100	1,84
05	32	98	11	50	64	31,5	90	1	51	160	100	2,51
07	42	130	11	64	80	44	115	1 1/2	65	160	100	6,10

TL

Aster kogelkraan maximale werkdruk tot 25 bar



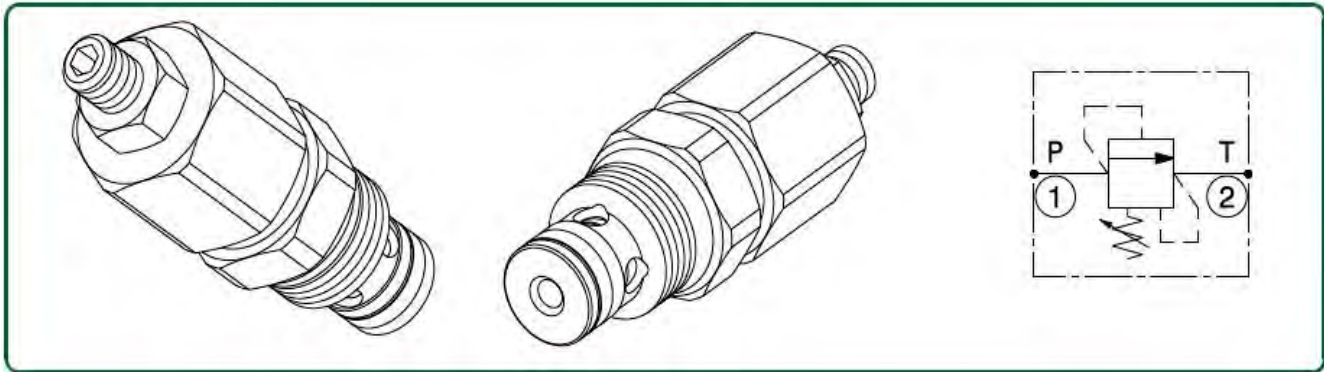
De Aster kogelafsluiter is ontworpen voor veiligheid en kwaliteit, rekening houdend met de vraag naar een scherpe prijs.

Toepassing:	Industrie, land- en tuinbouw, C.V., drinkwater, hydrauliek en pneumatiek.	
Afdichtingen:	Kogel: PTFE. Kogelas: 2 x VITON O-ring + 1 x vlakke PTFE drukring.	
Materiaal:	Huis:	Warm geperst vernikkeld messing (CuZn40PB2) UNI5705-65.
	Kogel:	Messing, hardverchromd (CuZn40PB2) UNI5705-65.
	Kogelas:	Messing (CuZn40PB2) UNI5705-65.
	Handel:	Gespoten aluminium, polyurethaan gecoat/blauw UNI5067.
	Borgmoer:	Verzinkt staal.
	Schroefdraad:	BSP.

Nummer	LENGTE mm	HOOGTE mm	SW	DRUK bar
TL 1/4	37	54	8	25
TL 3/8	42	54	10	22
TL 1/2	50	61	15	18
TL 3/4	58	72	20	18
TL 1	69	80	25	14
TL 1 1/4	81	99	32	10
TL 1 1/2	93	111	40	10
TL 2	110	135	50	8
TL 2 1/2	133	172	65	8
TL 3	156	195	80	4
TL 4	193	226	100	4

VLP05C

Cartridge overdrukventiel



Portata massima Max flow	5 l/min
Pressione massima Max pressure	400 bar
Coppia di serraggio Installation torque	12 ÷ 15 Nm

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Taratura Setting		
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar
01	80	20÷100
02	180	40÷250
03	250	60÷400

**Regolazioni
Adjustments**

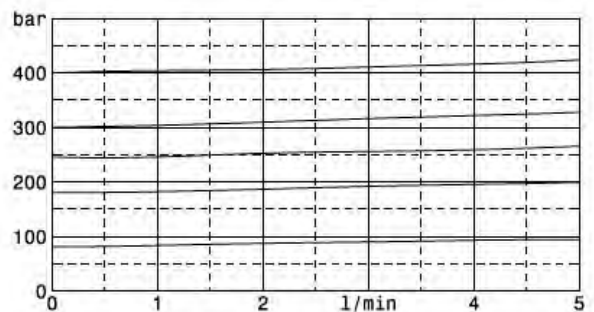
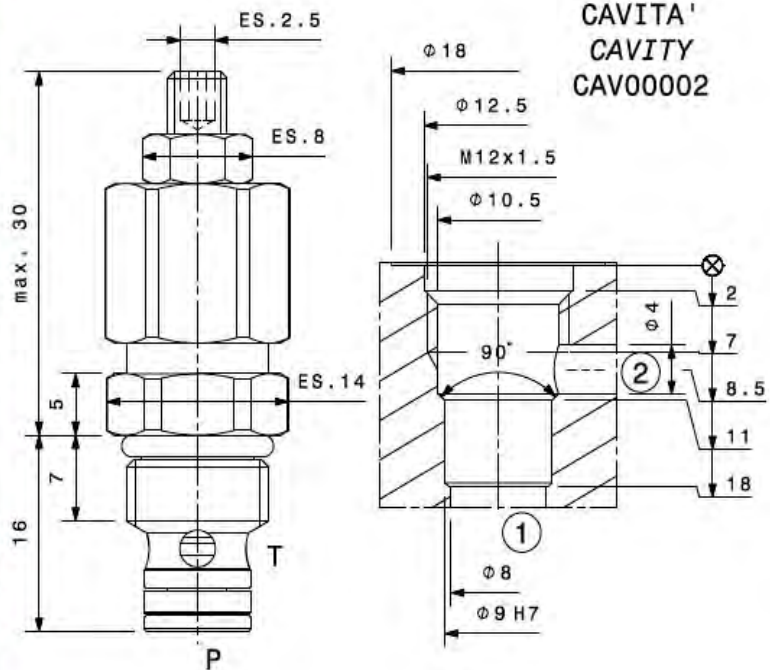
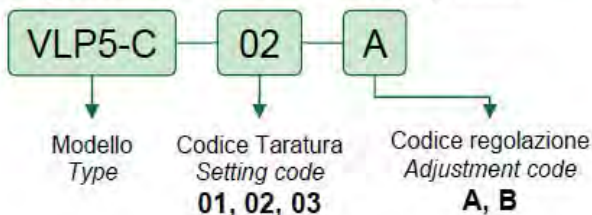
A

Vite esterna esagono incassato
Leakproof hex socket screw
max. 30

B

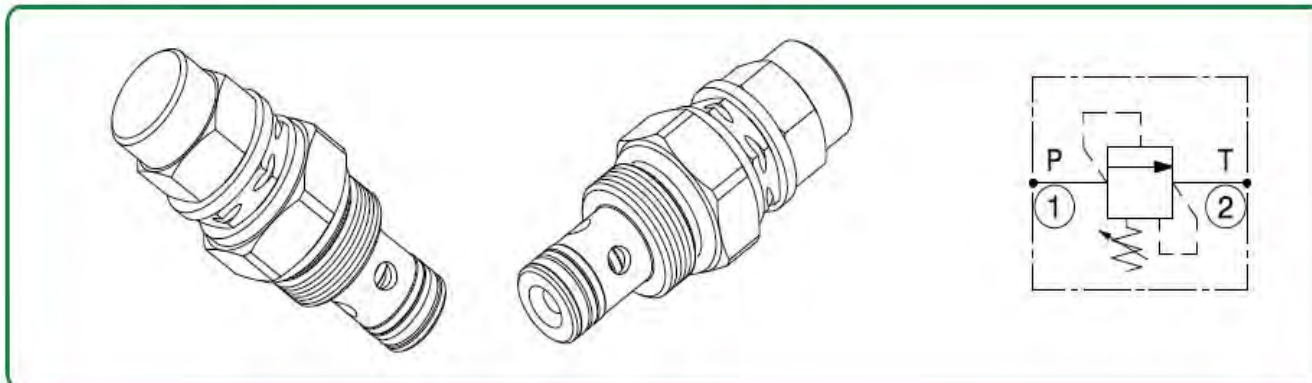
Volantino e dado
Handknob and locknut
max. 46

Sigla di ordinazione / Ordering code



VLP10C

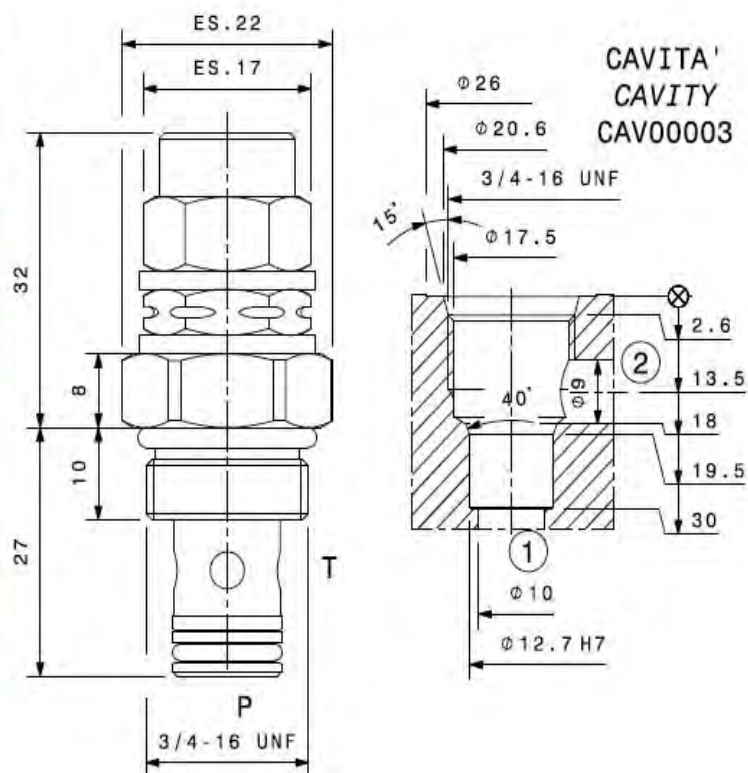
Cartridge overdrukventiel



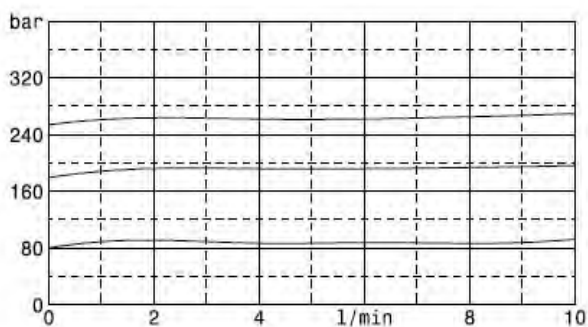
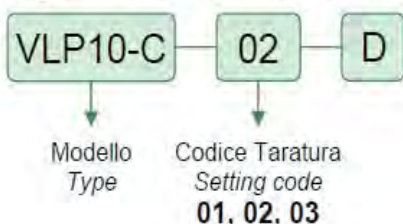
Portata massima Max flow	10 l/min
Pressione massima Max pressure	350 bar
Coppia di serraggio Installation torque	23 - 26 Nm

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Taratura Setting			
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar	Colore molla Spring colour
01	80	20÷100	Bianco White
02	180	40÷250	Giallo Yellow
03	250	60÷350	Nero Black

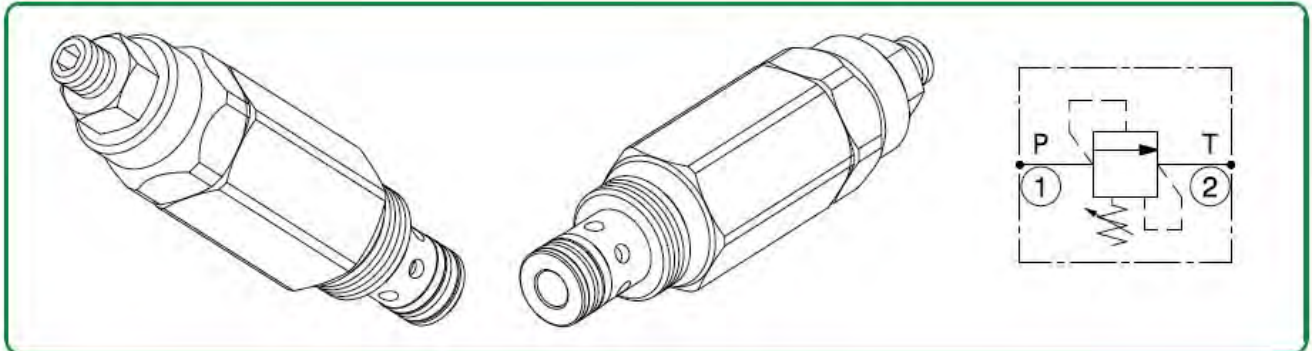


Sigla di ordinazione / Ordering code



VLP30C

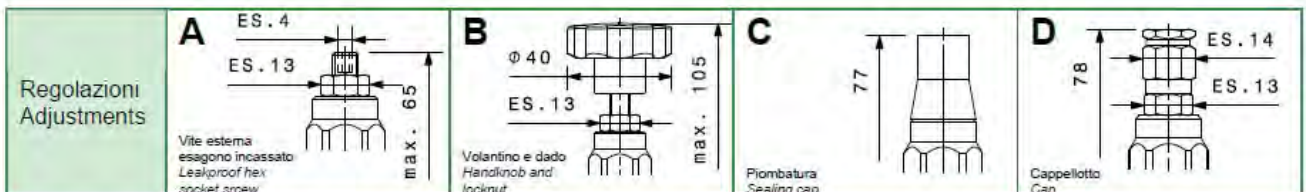
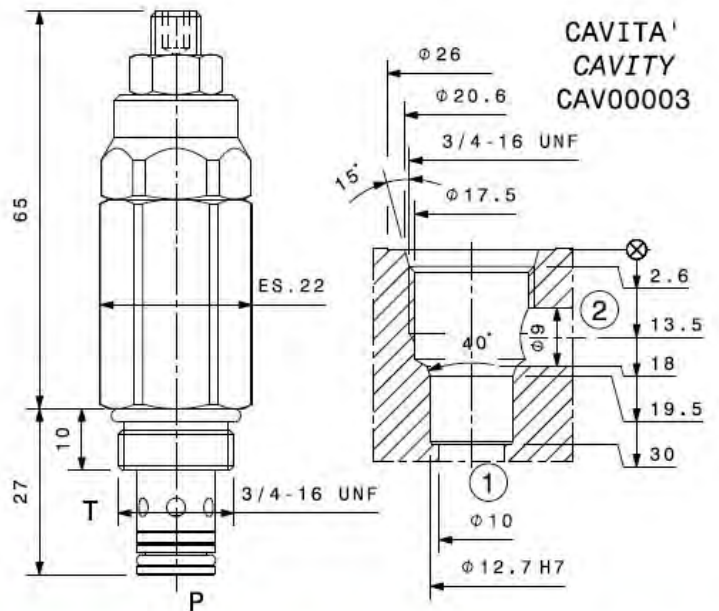
Cartridge overdrukventiel



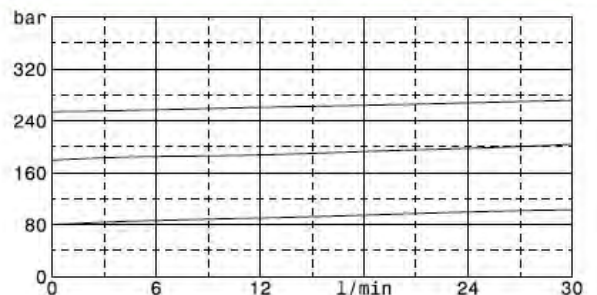
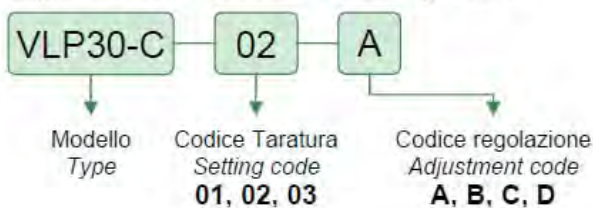
Portata massima Max flow	30 l/min
Pressione massima Max pressure	350 bar
Coppia di serraggio Installation torque	30 ÷ 35 Nm

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Taratura Setting			
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar	Colore molla Spring colour
01	80	20÷100	Bianco White
02	180	40÷250	Giallo Yellow
03	250	60÷350	Nero Black

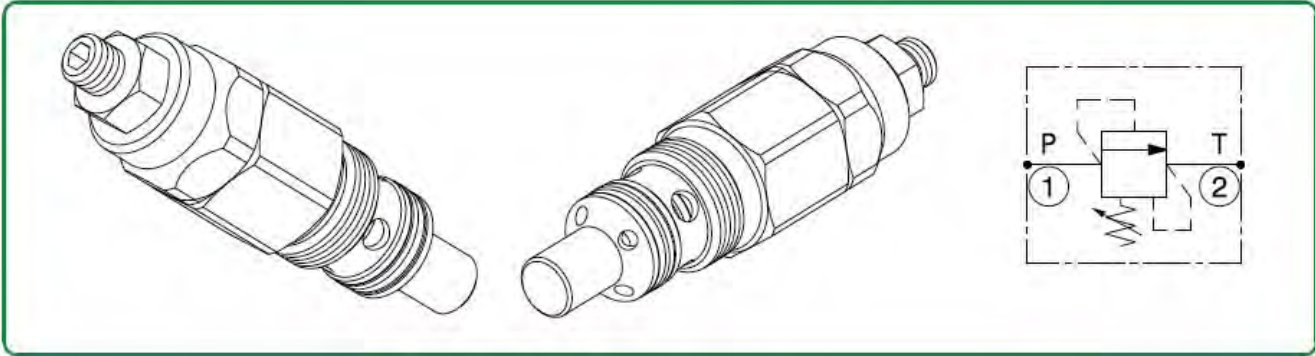


Sigla di ordinazione / Ordering code



VLP40C

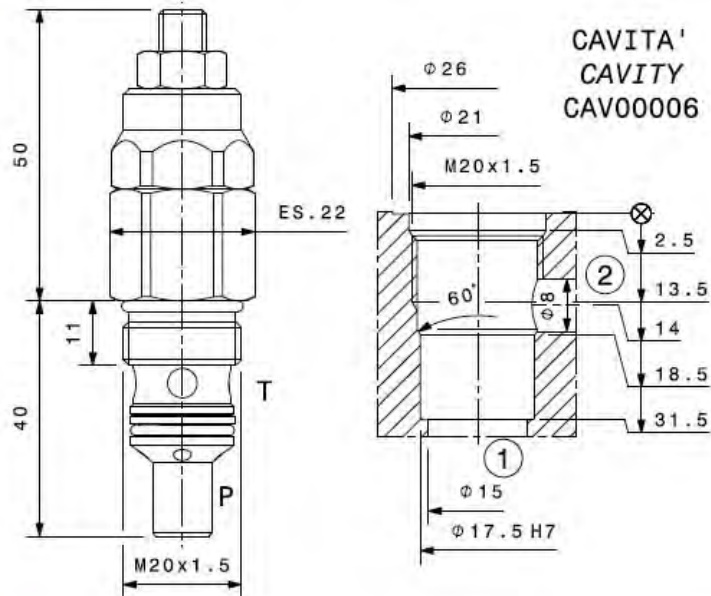
Cartridge overdrukventiel



Portata massima Max flow	40 l/min
Pressione massima Max pressure	350 bar
Coppia di serraggio Installation torque	27 - 30 Nm

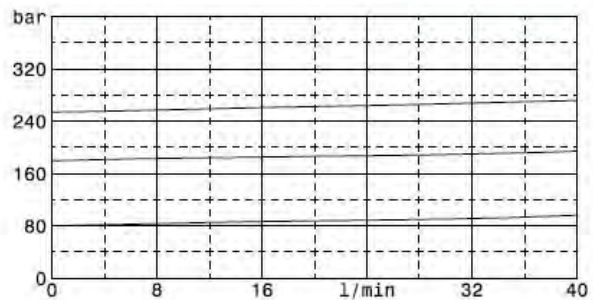
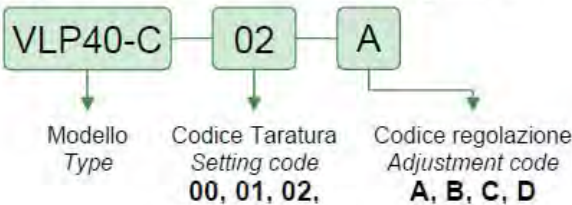
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Taratura Setting			
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar	Colore molla Spring colour
00	40	5÷40	Nero Black
01	80	20÷100	Bianco White
02	180	40÷250	Giallo Yellow
03	250	60÷350	Nero Black



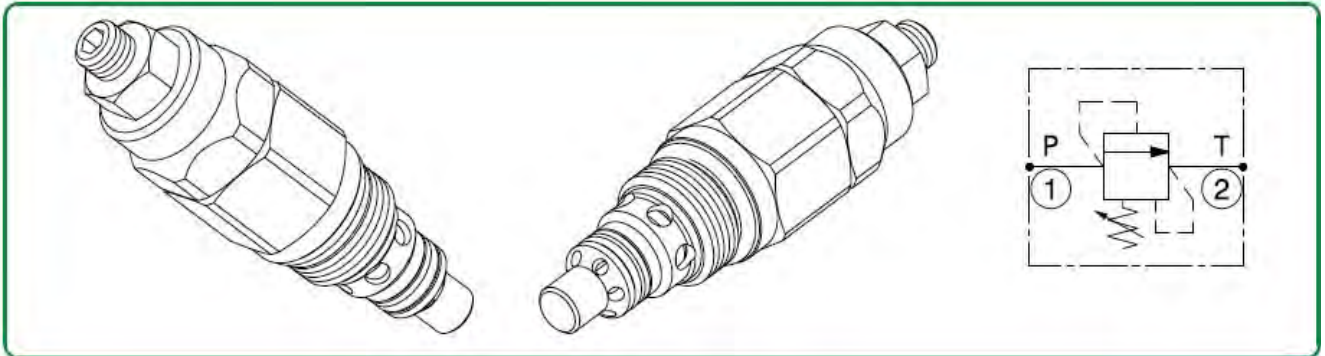
Regolazioni Adjustments	A ES. 4 ES. 13 Vite esterna esagono incassato Leakproof hex socket screw max. 50	B ES. 13 Volantino e dado Handknob and locknut max. 90	C 62 Piombatura Sealing cap	D ES. 14 ES. 13 Cappello Cap 63
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Sigla di ordinazione / Ordering code



VLP4008C

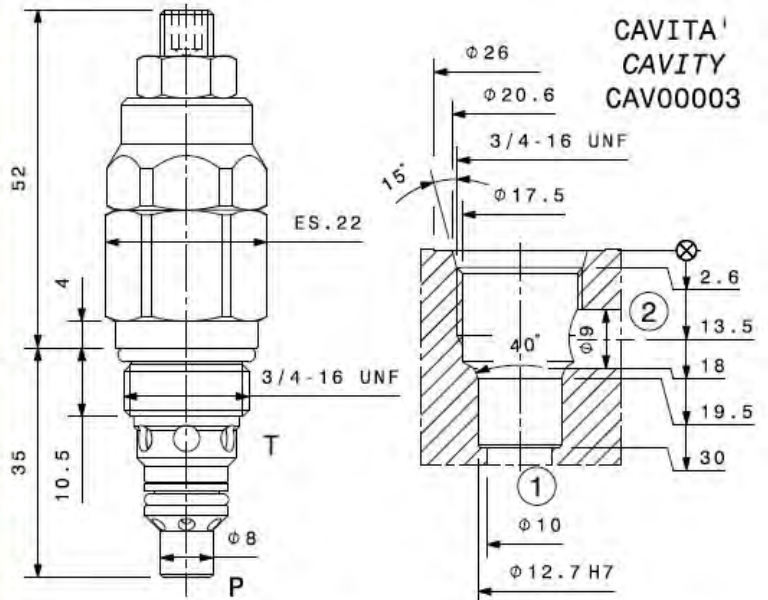
Cartridge overdrukventiel



Portata massima <i>Max flow</i>	40 l/min
Pressione massima <i>Max pressure</i>	350 bar
Coppia di serraggio <i>Installation torque</i>	30 ÷ 35 Nm

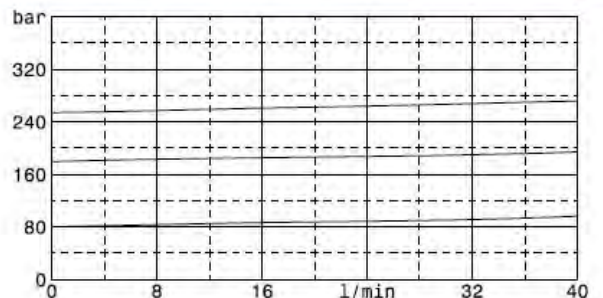
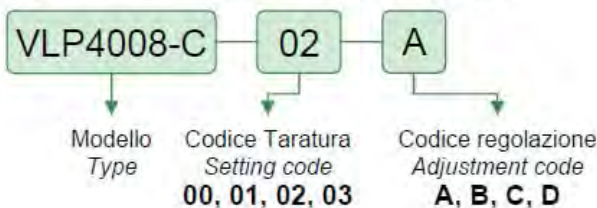
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C <i>Performaces and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C</i>	
Viscosità consigliate <i>Recommended viscosity</i>	10 ÷ 420 cSt
Temperature di lavoro <i>Working temperature</i>	-20 ÷ +90 °C
Filtrazione assoluta <i>Absolute filtration</i>	25 µ

Taratura <i>Setting</i>			
Codice <i>Code</i>	Taratura standard <i>Standard setting bar (Q=5 l/min)</i>	Campo di taratura <i>Adj. Pressure range bar</i>	Colore molla <i>Spring colour</i>
00	40	5÷40	Nero <i>Black</i>
01	80	20÷100	Bianco <i>White</i>
02	180	40÷250	Giallo <i>Yellow</i>
03	250	60÷350	Nero <i>Black</i>



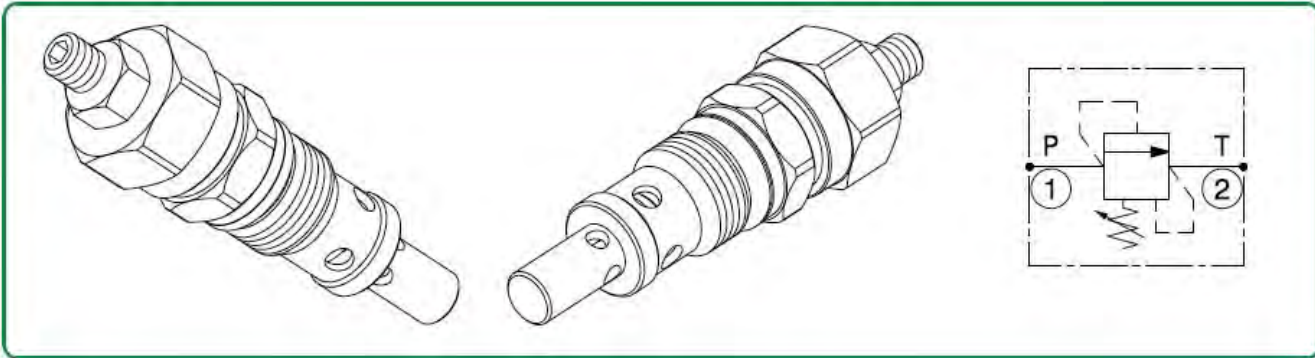
Regolazioni <i>Adjustments</i>	A	B	C	D
	ES. 4 ES. 13 max. 52	φ 40 ES. 13 max. 92	64	ES. 14 ES. 13 65
	Vite esterna esagono inossidato <i>Leakproof hex socket screw</i>	Volantino e dado <i>Handknob and locknut</i>	Piombatura <i>Sealing cap</i>	Cappello <i>Cap</i>

Sigla di ordinazione / Ordering code



VLP45C

Overdrukventiel



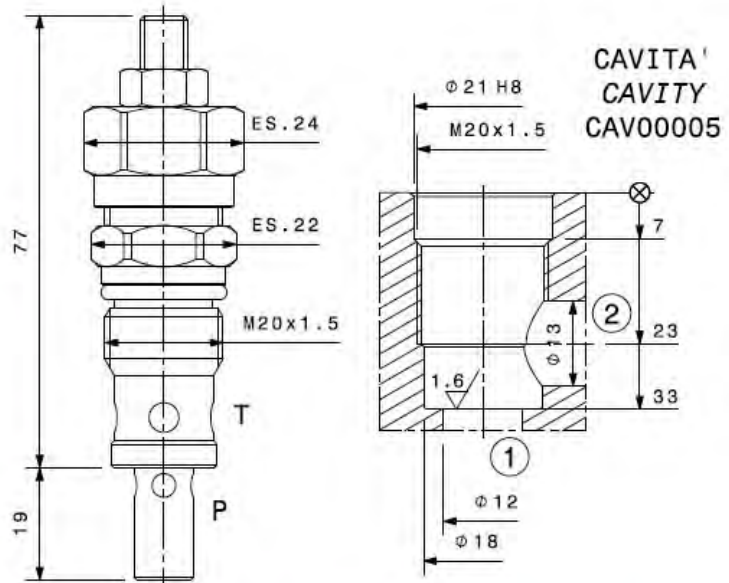
Portata massima Max flow	45 l/min
Pressione massima Max pressure	350 bar
Coppia di serraggio Installation torque	45 ÷ 50 Nm

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C
Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C

Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

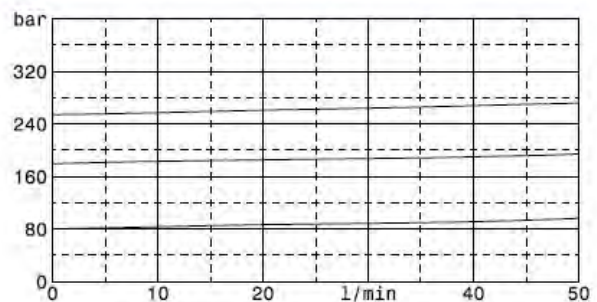
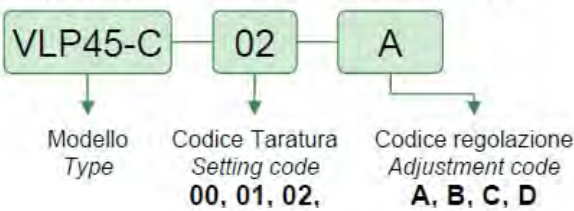
**Taratura
Setting**

Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar	Colore molla Spring colour
00	40	5÷40	Nero Black
01	80	20÷100	Bianco White
02	180	40÷250	Giallo Yellow
03	250	60÷350	Nero Black



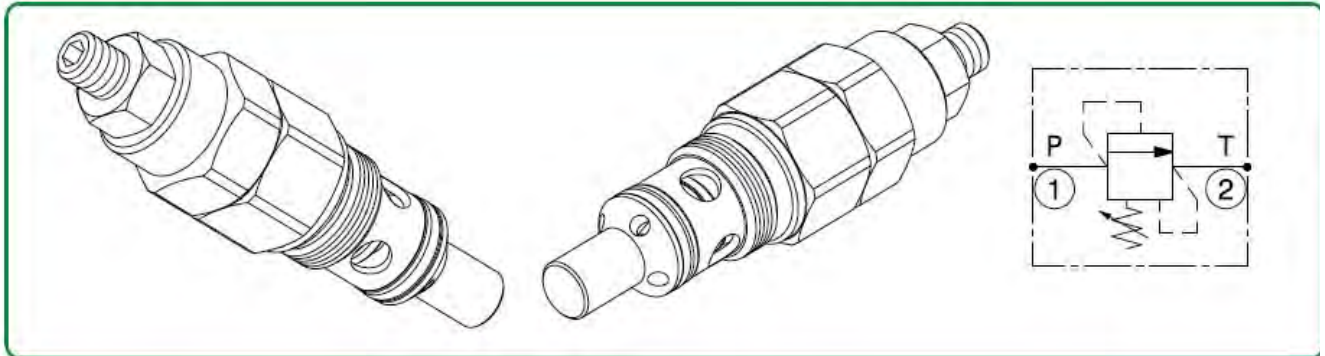
Regolazioni Adjustments	A	B	C	D
	Vite esterna esagono incassato Leakproof hex socket screw	Volantino e dado Handknob and locknut	Piombatura Sealing cap	Cappellotto Cap

Sigla di ordinazione / Ordering code



VLP80C

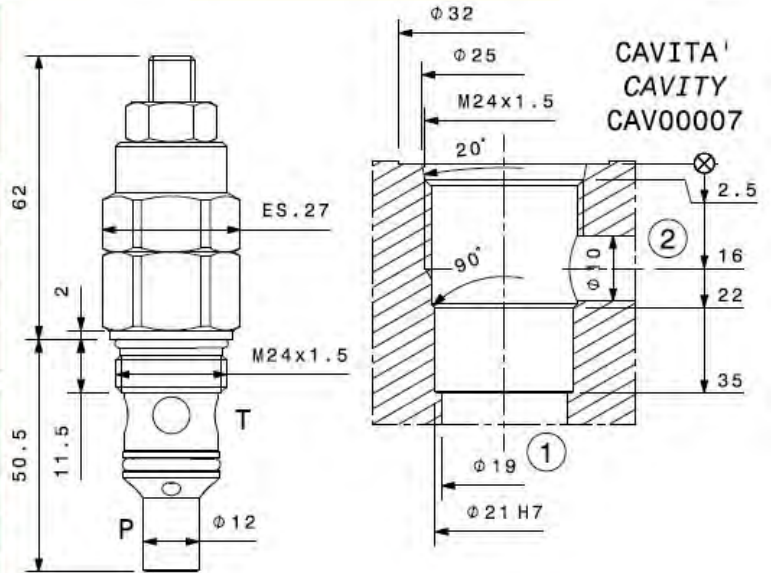
Cartridge overdrukventiel



Portata massima Max flow	80 l/min
Pressione massima Max pressure	350 bar
Coppia di serraggio Installation torque	65 ± 70 Nm

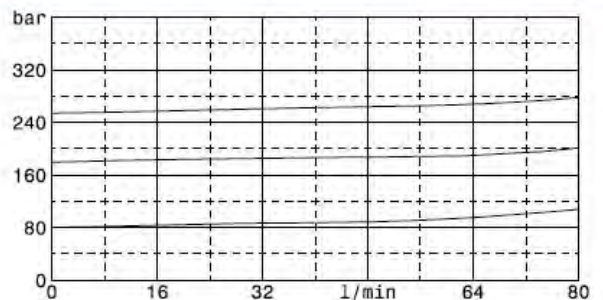
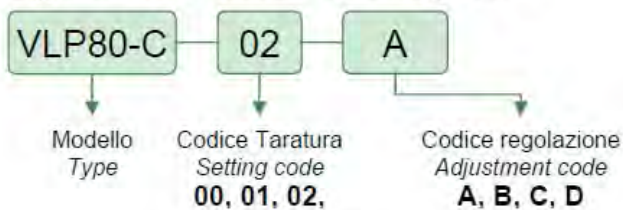
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Taratura Setting			
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar	Colore molla Spring colour
00	40	5÷40	Nero Black
01	80	20÷100	Bianco White
02	180	40÷250	Giallo Yellow
03	250	60÷350	Nero Black



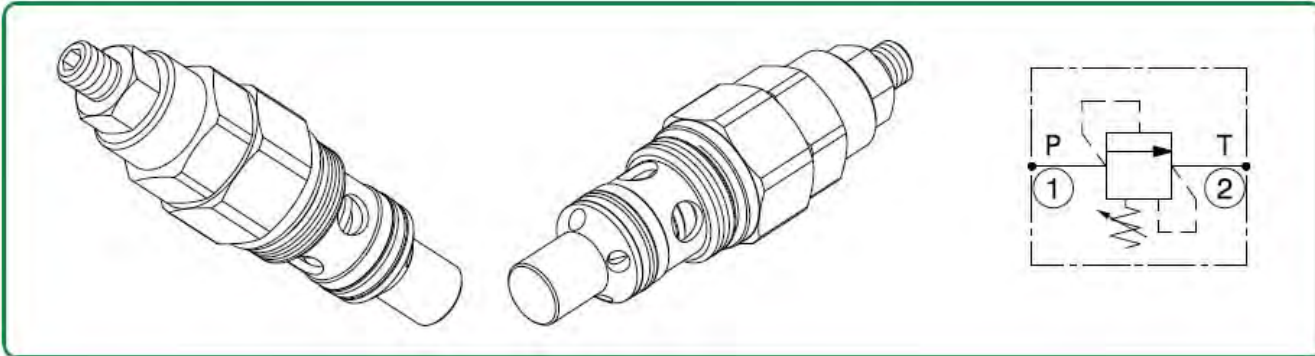
Regolazioni Adjustments	A ES. 5 ES. 17 max. 62 Vite esterna esagono incassato Leakproof hex socket screw	B ES. 17 max. 105 Volantino e dado Handknob and locknut	C 71 Piomatura Sealing cap	D ES. 17 ES. 17 72 Cappello Cap
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Sigla di ordinazione / Ordering code



VLP130CD

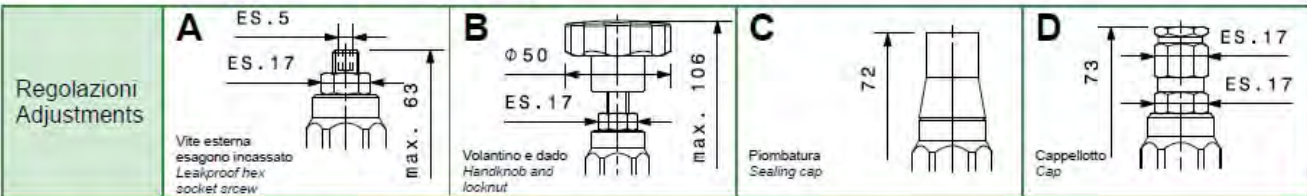
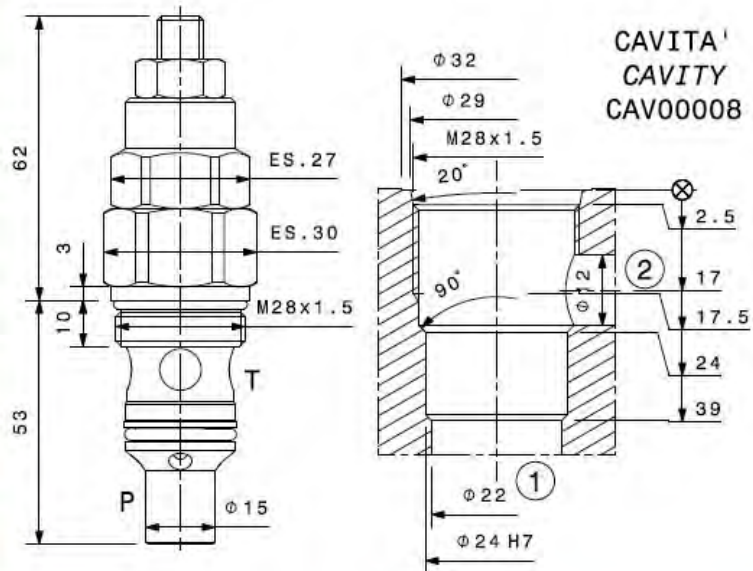
Cartridge overdrukventiel



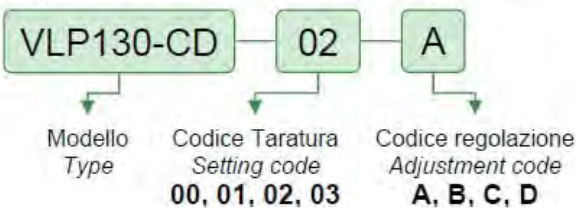
Portata massima Max flow	130l/min
Pressione massima Max pressure	350 bar
Coppia di serraggio Installation torque	140 - 160 Nm

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Taratura Setting			
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar	Colore molla Spring colour
00	40	5÷40	Nero Black
01	80	20÷100	Bianco White
02	180	40÷250	Giallo Yellow
03	250	60÷350	Nero Black

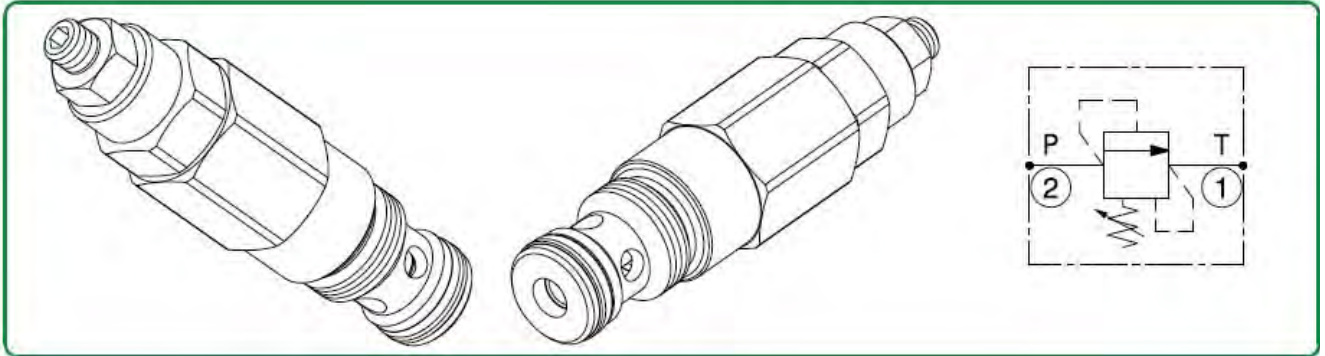


Sigla di ordinazione / Ordering code



VLP150CD

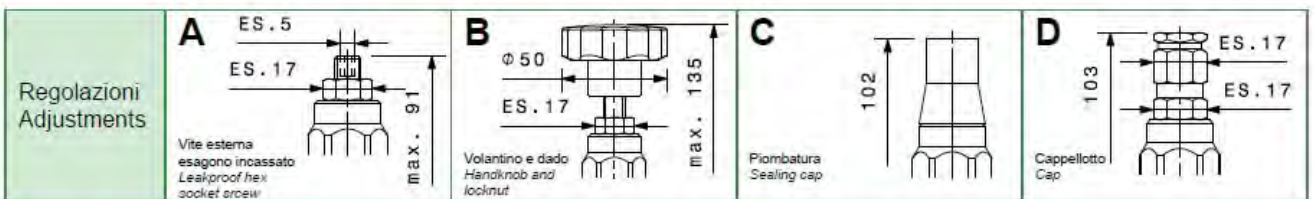
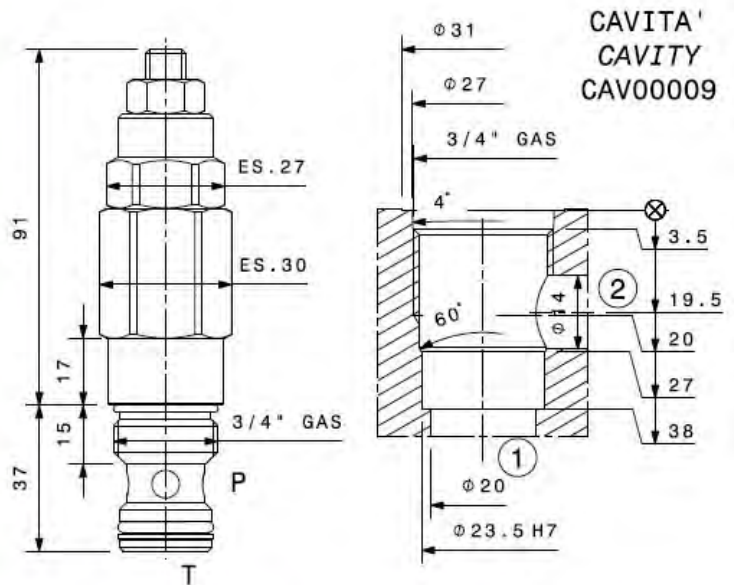
Cartridge overdrukventiel



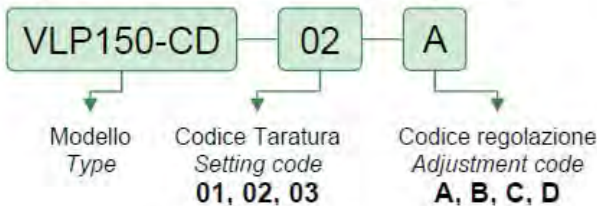
Portata massima <i>Max flow</i>	150 l/min
Pressione massima <i>Max pressure</i>	350 bar
Coppia di serraggio <i>Installation torque</i>	140 – 160 Nm

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C <i>Performaces and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C</i>	
Viscosità consigliate <i>Recommended viscosity</i>	10 – 420 cSt
Temperature di lavoro <i>Working temperature</i>	-20 ÷ +90 °C
Filtrazione assoluta <i>Absolute filtration</i>	25 µ

Taratura <i>Setting</i>			
Codice <i>Code</i>	Taratura standard <i>Standard setting</i> bar (Q=5 l/min)	Campo di taratura <i>Adj. Pressure range</i> bar	Colore molla <i>Spring colour</i>
01	80	20÷100	Bianco <i>White</i>
02	180	40÷250	Giallo <i>Yellow</i>
03	250	60÷350	Nero <i>Black</i>

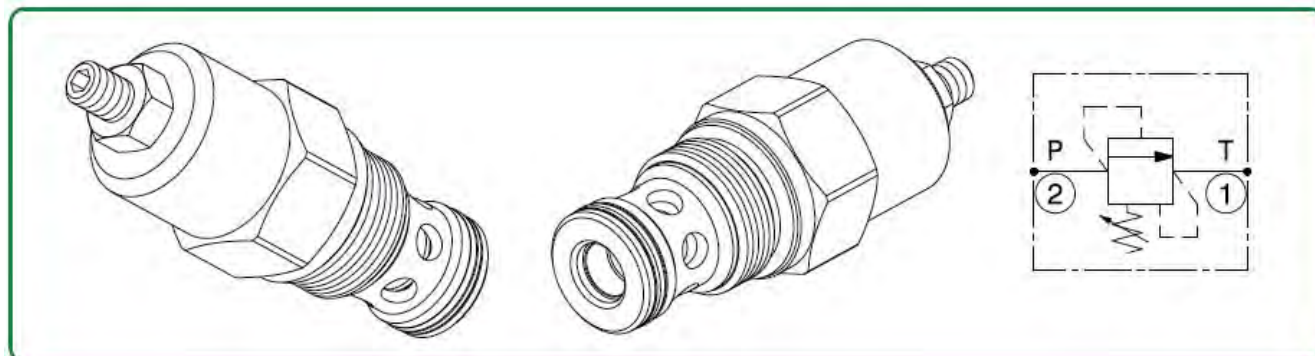


Sigla di ordinazione / Ordering code



VLP20016CD

Cartridge overdrukventiel

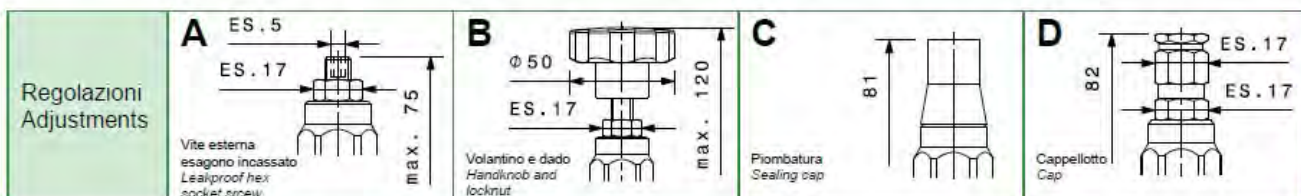
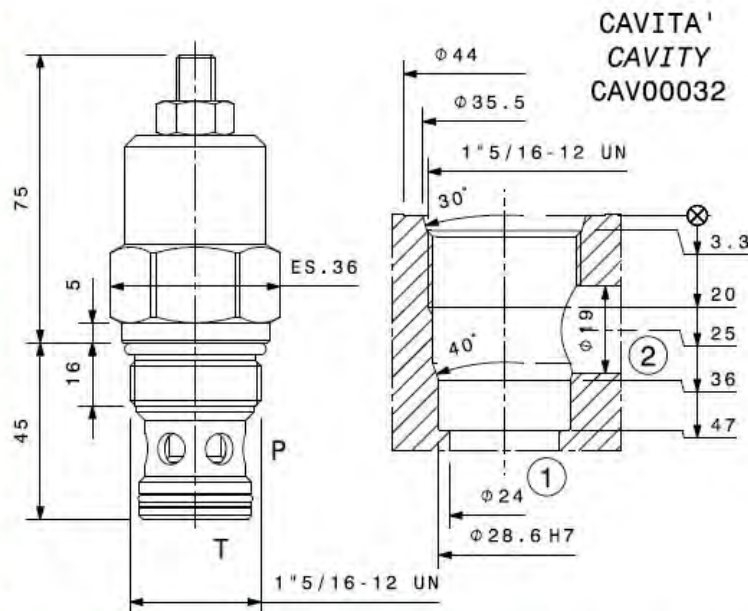


Portata massima Max flow	200 l/min
Pressione massima Max pressure	350 bar
Coppia di serraggio Installation torque	180 ± 200 Nm

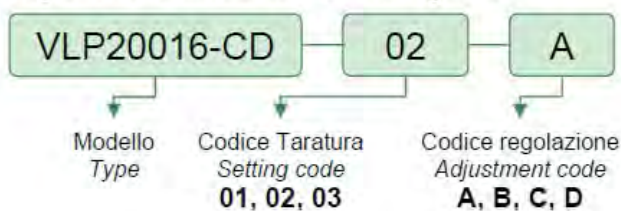
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C
Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C

Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Taratura Setting			
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar	Colore molla Spring colour
01	80	20÷100	Bianco White
02	180	40÷250	Giallo Yellow
03	250	60÷350	Nero Black

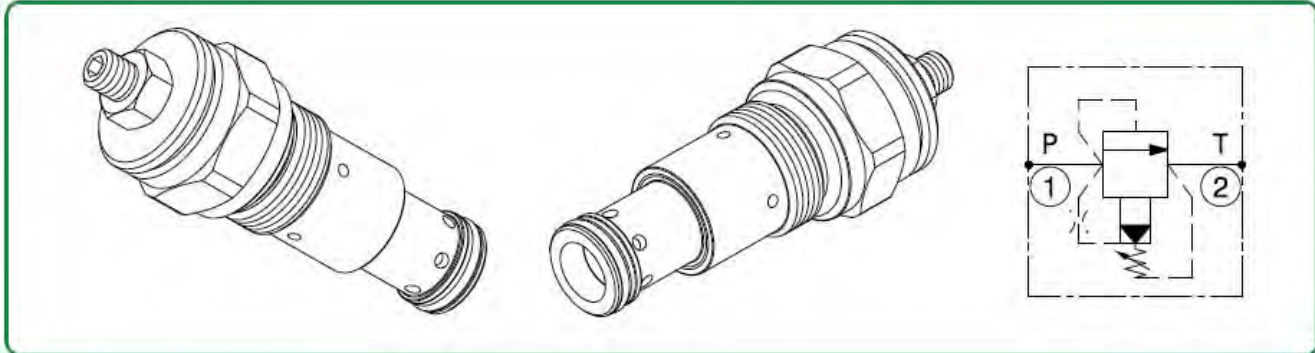


Sigla di ordinazione / Ordering code



VLP150PC

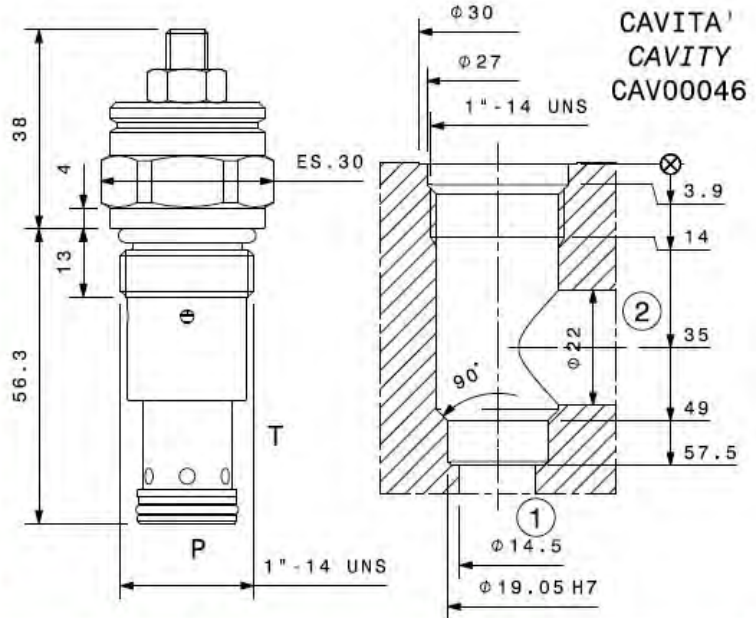
Cartridge overdrukventiel (pilot operated)



Portata massima Max flow	150 l/min
Pressione massima Max pressure	350 bar
Coppia di serraggio Installation torque	120 ÷ 130 Nm

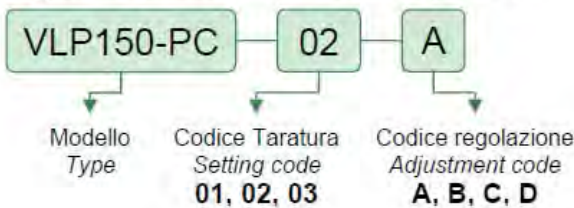
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Taratura Setting			
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar	Colore molla Spring colour
01	80	20÷100	Bianco White
02	180	40÷250	Giallo Yellow
03	250	60÷350	Nero Black



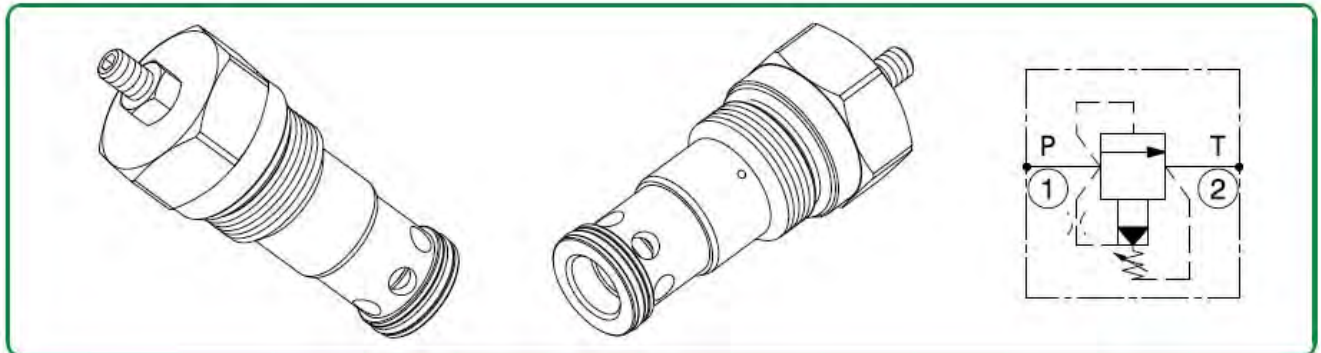
Regolazioni Adjustments	A	B	C	D

Sigla di ordinazione / Ordering code



VLP200PC

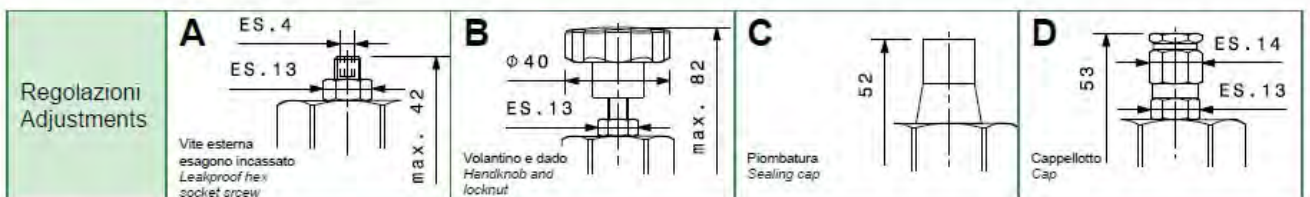
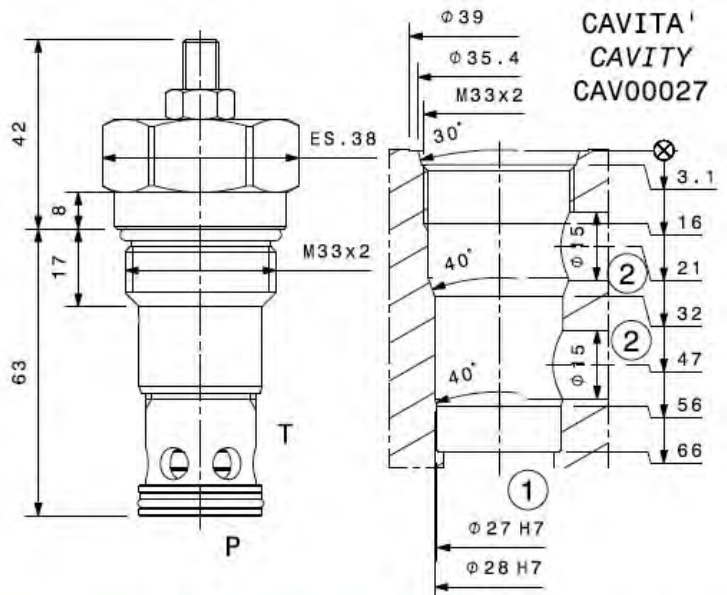
Cartridge overdrukventiel (pilot operated)



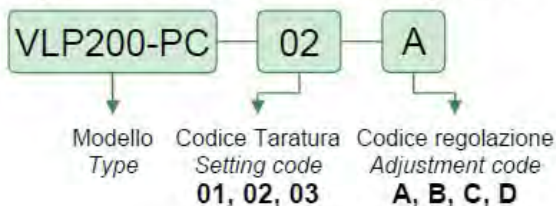
Portata massima Max flow	200 l/min
Pressione massima Max pressure	350 bar
Coppia di serraggio Installation torque	180 - 200 Nm

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperature di lavoro Working temperature	-20 + +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Taratura Setting			
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar	Colore molla Spring colour
01	80	20÷100	Bianco White
02	180	40÷250	Giallo Yellow
03	250	60÷350	Nero Black

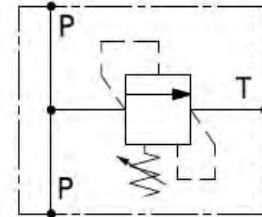
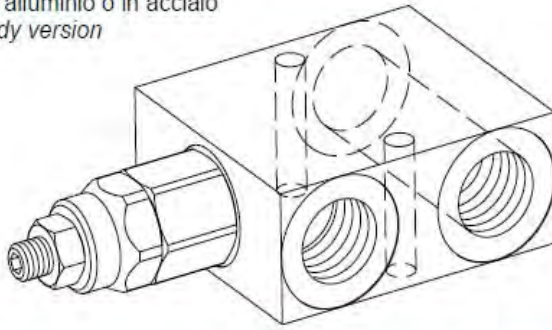


Sigla di ordinazione / Ordering code



VLP
Overdrukventiel

Versione con corpo in alluminio o in acciaio
Aluminium or steel body version



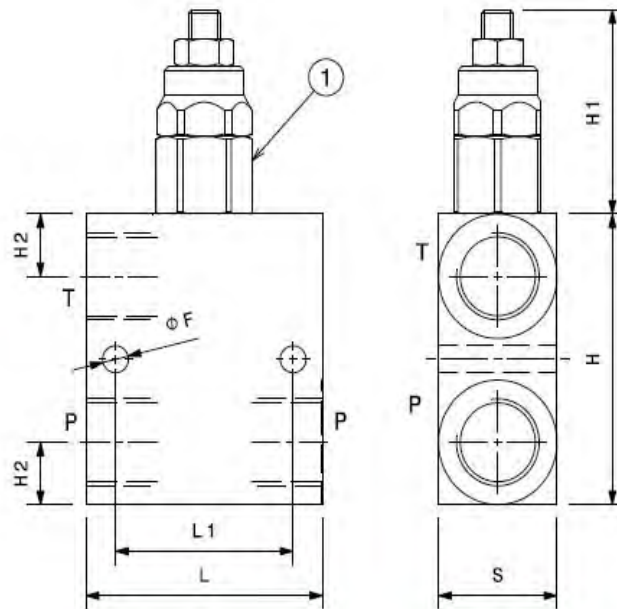
Modello Type	P, T	Pressione max Max pressure	Portata max Max. flow
VLP5-18	1/8" GAS	350 bar	5 l/min
VLP40-14	1/4" GAS	350 bar	25 l/min
VLP40-38	3/8" GAS	350 bar	35 l/min
VLP40-12	1/2" GAS	350 bar	40 l/min
VLP80-12	1/2" GAS	300 bar	80 l/min
VLP80-34	3/4" GAS	300 bar	80 l/min
VLP130-34	3/4" GAS	300 bar	130 l/min
VLP130-10	1" GAS	300 bar	130 l/min

Taratura Setting		
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar
00	40	5÷40
01	80	20÷100
02	180	40÷250
03	250	60÷350

Regolazioni Adjustments

A Vite esterna esagono incassato Leakproof hex socket screw	B Volantino e dado Handknob and locknut	C Piombatura Sealing cap	D Cappello Cap
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Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperature di lavoro Working temperature	-20 + +90 °C
Filtrazione assoluta Absolute filtration	25 µ



Dimensioni Dimensions	①	L	L1	H	H1	H2	F	S
VLP5-18	VLP5C	35	24	40	30	10	5.5	25
VLP40-14	VLP40C	50	35	50	50	13	5.5	30
VLP40-38	VLP40C	60	45	60	50	15	6.5	30
VLP40-12	VLP40C	60	45	70	50	15	6.5	30
VLP80-12	VLP80C	60	45	70	62	16	6.5	35
VLP80-34	VLP80C	70	45	90	62	20	6.5	40
VLP130-34	VLP130CD	70	50	90	62	20	8.5	40
VLP130-10	VLP130CD	70	50	100	62	23	8.5	50

Sigla di ordinazione / Ordering code

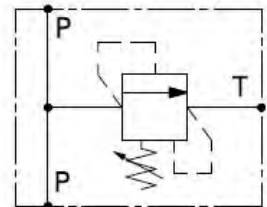
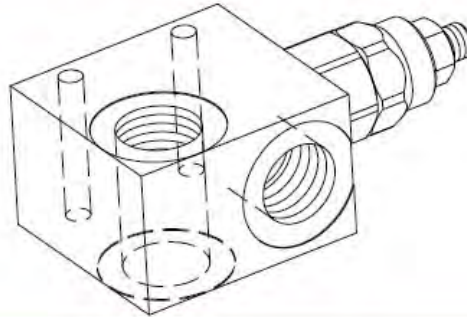
VLP40-14 - 02 - A -

Modello Type	Codice Taratura Setting code 00, 01, 02, 03	Codice regolazione Adjustment code A, B, C, D	- Alluminio / Aluminium A Acciaio / Steel
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VLP-L

Overdrukventiel (in line)

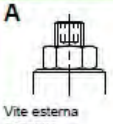
Corpo in alluminio
Aluminium body



Modello Type	P, T	Pressione max Max pressure	Portata max Max. flow
VLP40-L-14	1/4" GAS	350 bar	25 l/min
VLP40-L-38	3/8" GAS	350 bar	35 l/min
VLP40-L-12	1/2" GAS	350 bar	40 l/min
VLP80-L-12	1/2" GAS	300 bar	80 l/min
VLP80-L-34	3/4" GAS	300 bar	80 l/min
VLP130-L-34	3/4" GAS	300 bar	130 l/min
VLP130-L-10	1" GAS	300 bar	130 l/min

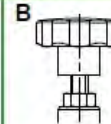
Taratura Setting		
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar
00	40	5÷40
01	80	20÷100
02	180	40÷250
03	250	60÷350

Regolazioni Adjustments



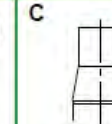
A

Vite esterna esagono incassato
Leakproof hex socket screw



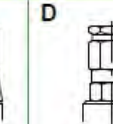
B

Volantino e dado
Handknob and locknut



C

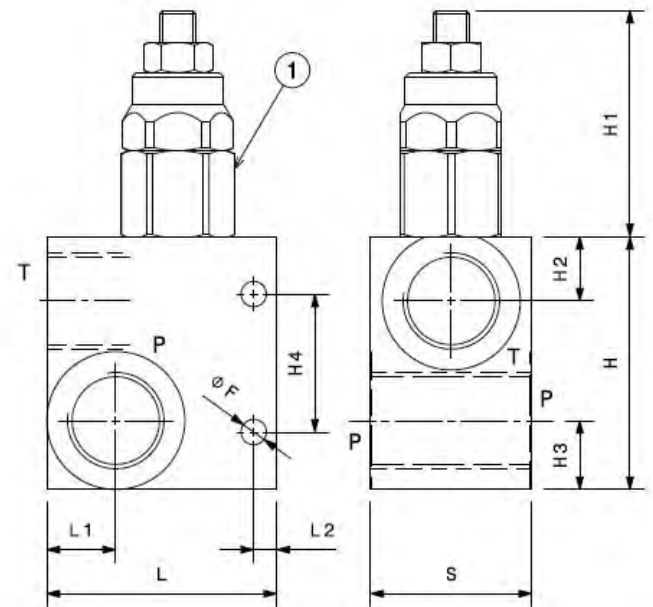
Piombatura
Sealing cap



D

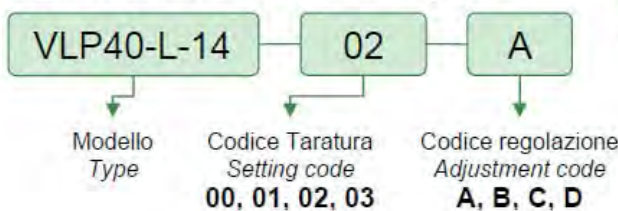
Cappello
Cap

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ



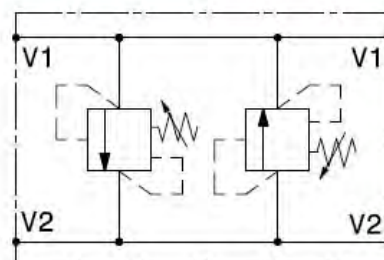
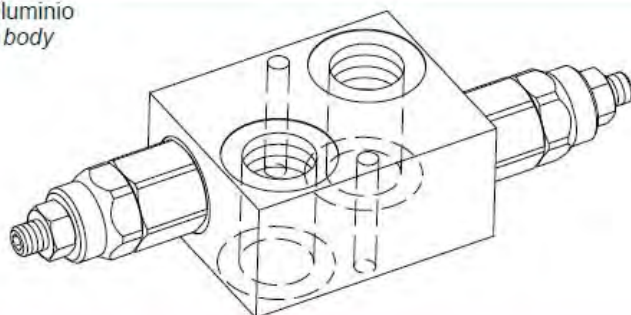
Dimensioni Dimensions	①	L	L1	L2	H	H1	H2	H3	H4	F	S
VLP40-L-14	VLP40C	50	16	5	50	50	14	11	30	5,5	30
VLP40-L-38	VLP40C	50	16	5	50	50	14	15	30	5,5	30
VLP40-L-12	VLP40C	50	15	5	55	50	14	15	30	5,5	35
VLP80-L-12	VLP80C	60	18	7	70	62	16	18,5	58	6,5	35
VLP80-L-34	VLP80C	70	22	7	70	62	20	20	58	6,5	40
VLP130-L-34	VLP130CD	70	22	7	90	62	20	22	76	8,5	40
VLP130-L-10	VLP130CD	80	27	7	100	62	22	25	76	8,5	50

Sigla di ordinazione / Ordering code



VLP-DI Crossover

Corpo in alluminio
Aluminium body



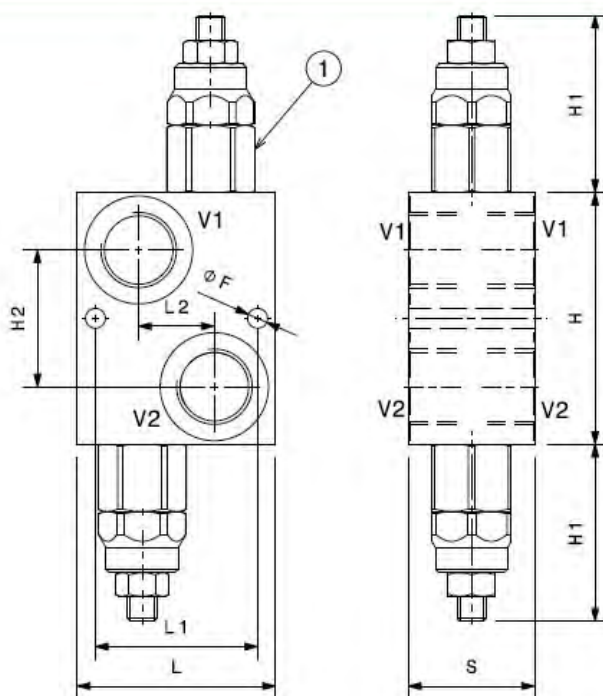
Modello Type	V1, V2	Pressione max Max pressure	Portata max Max. flow
VLP40-DI-38	3/8" GAS	300 bar	35 l/min
VLP40-DI-12	1/2" GAS	300 bar	40 l/min
VLP80-DI-12	1/2" GAS	300 bar	80 l/min
VLP80-DI-34	3/4" GAS	300 bar	80 l/min
VLP130-DI-34	3/4" GAS	250 bar	130 l/min
VLP130-DI-10	1" GAS	250 bar	130 l/min

Taratura Setting		
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar
00	40	5+40
01	80	20+100
02	180	40+250
03	250	60+350

Regolazioni Adjustments			
A	B	C	D
Vite esterna esagono incassato Leakproof hex socket screw	Volantino e dado Handnut and locknut	Piombatura Sealing cap	Cappello Cap

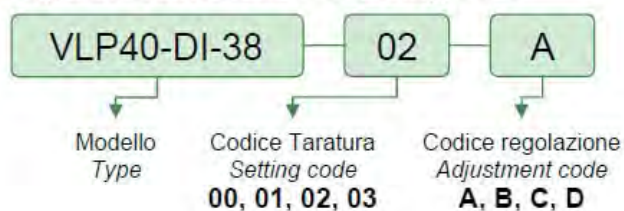
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C
Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C

Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ



Dimensioni Dimensions	①	L	L1	L2	H	H1	H2	F	S
VLP40-DI-38	VLP40C	55	45	19	70	50	38	5,5	30
VLP40-DI-12	VLP40C	55	45	21	70	50	38	5,5	35
VLP80-DI-12	VLP80C	70	60	22	90	62	54	6,5	35
VLP80-DI-34	VLP80C	70	60	26	90	62	50	6,5	40
VLP130-DI-34	VLP130CD	80	60	32	90	62	50	8,5	50
VLP130-DI-10	VLP130CD	90	75	30	95	62	46	8,5	50

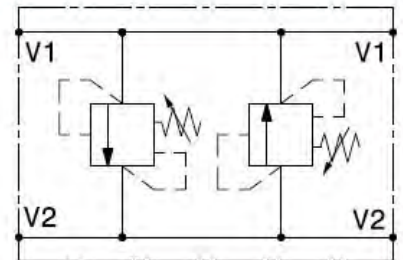
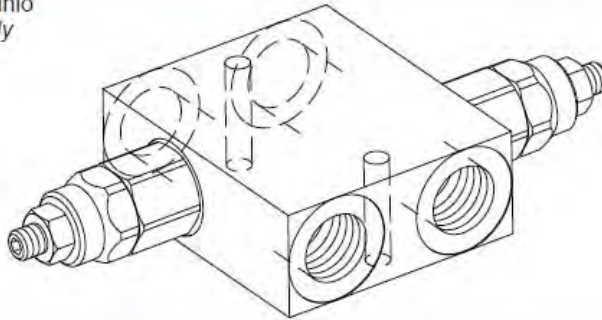
Sigla di ordinazione / Ordering code



VLP-DIL

Crossover (in line)

Corpo in alluminio
Aluminium body

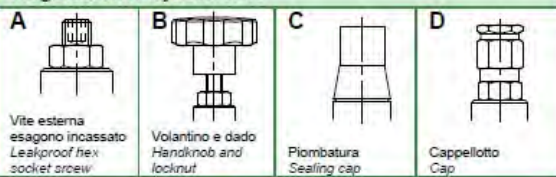


Modello Type	V1, V2	Pressione max Max pressure	Portata max Max. flow
VLP10-DI-L-14	1/4" GAS	300 bar	10 l/min
VLP10-DI-L-38	3/8" GAS	300 bar	10 l/min
VLP40-DI-L-38	3/8" GAS	300 bar	35 l/min
VLP40-DI-L-12	1/2" GAS	300 bar	40 l/min
VLP80-DI-L-12	1/2" GAS	300 bar	80 l/min
VLP80-DI-L-34	3/4" GAS	300 bar	80 l/min
VLP130-DI-L-34	3/4" GAS	250 bar	130 l/min
VLP130-DI-L-10	1" GAS	250 bar	130 l/min

Taratura Setting

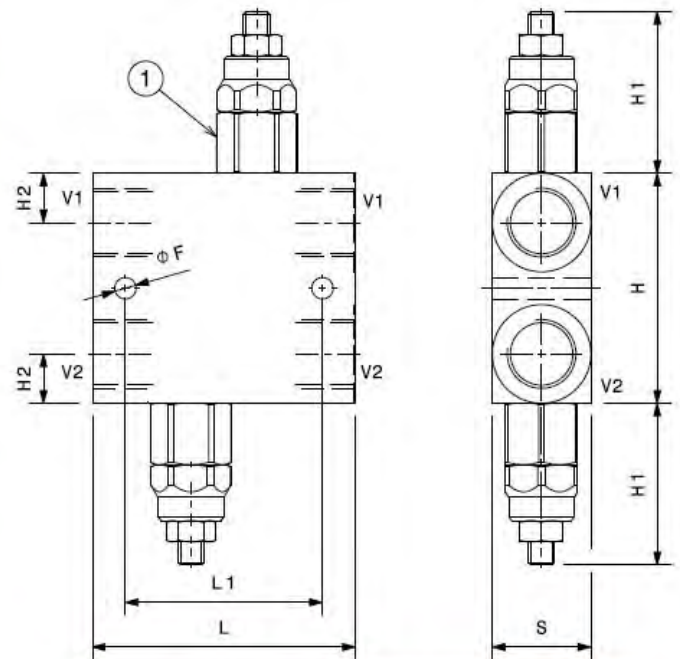
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar
00	40	5÷40
01	80	20÷100
02	180	40÷250
03	250	60÷350

Regolazioni Adjustments



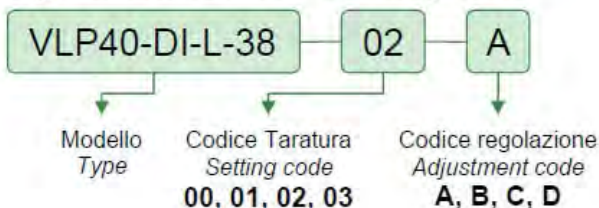
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C
Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C

Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ



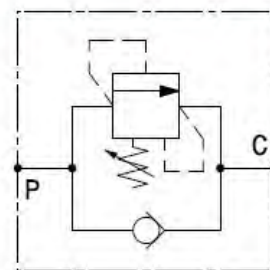
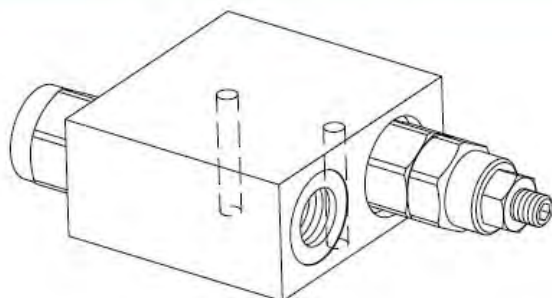
Dimensioni Dimensions	①	L	L1	H	H1	H2	F	S
VLP10-DI-L-14	VLP10C	70	50	60	32	14	6.5	30
VLP10-DI-L-38	VLP10C	70	50	60	32	14	6.5	30
VLP40-DI-L-38	VLP40C	80	60	70	50	15	6.5	30
VLP40-DI-L-12	VLP40C	80	60	70	50	15	6.5	30
VLP80-DI-L-12	VLP80C	100	80	70	62	16	6.5	35
VLP80-DI-L-34	VLP80C	100	80	90	62	19	6.5	40
VLP130-DI-L-34	VLP130CD	110	80	90	62	19	8.5	40
VLP130-DI-L-10	VLP130CD	120	80	100	62	23	8.5	60

Sigla di ordinazione / Ordering code



VSQ Volgordeklep

Corpo in alluminio
Aluminium body

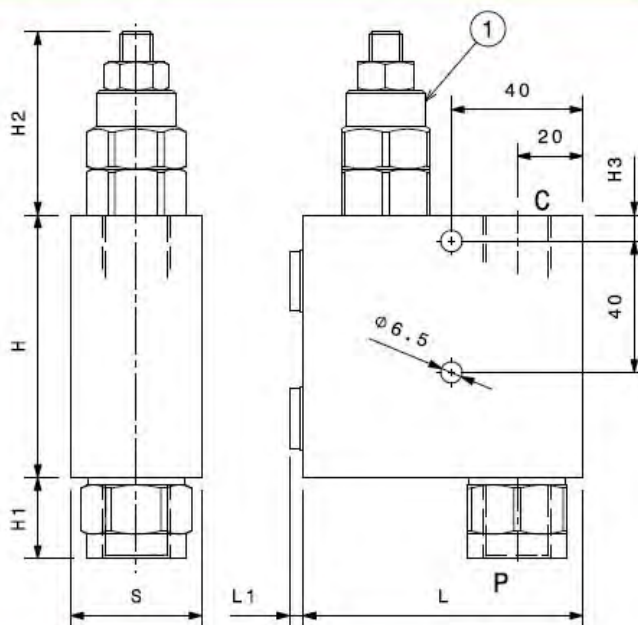


Modello Type	P, C	Pressione max Max pressure bar	Portata max Max. flow l/min
VSQ40-38	3/8" GAS	300	40
VSQ40-12	1/2" GAS	300	40
VSQ80-12	1/2" GAS	300	80
VSQ80-34	3/4" GAS	300	80

Taratura Setting		
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar
00	40	5÷40
01	80	20÷100
02	180	40÷250
03	250	60÷350

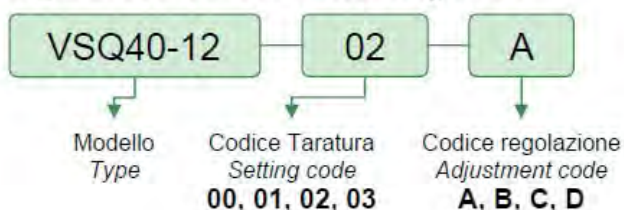
Regolazioni Adjustments			
A 	B 	C 	D
Vite esterna esagono incassato Leakproof hex socket screw	Volantino e dado Handknob and locknut	Piombatura Sealing cap	Cappello Cap

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ



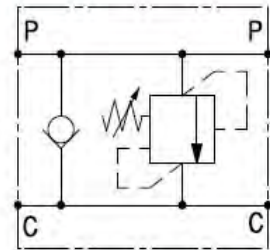
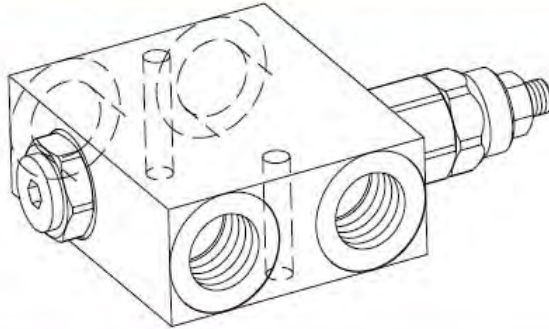
Dimensioni Dimensions	①	L	L1	H	H1	H2	H3	S
VSQ40-38	VLP40C	80	0	70	25	50	5	30
VSQ40-12	VLP40C	80	0	70	25	50	5	30
VSQ80-12	VLP80C	85	4	80	25	56	8	40
VSQ80-34	VLP80C	85	4	80	30	56	8	40

Sigla di ordinazione / Ordering code



VSQ-L
Volgordeklep (in line)

Corpo in alluminio
Aluminium body

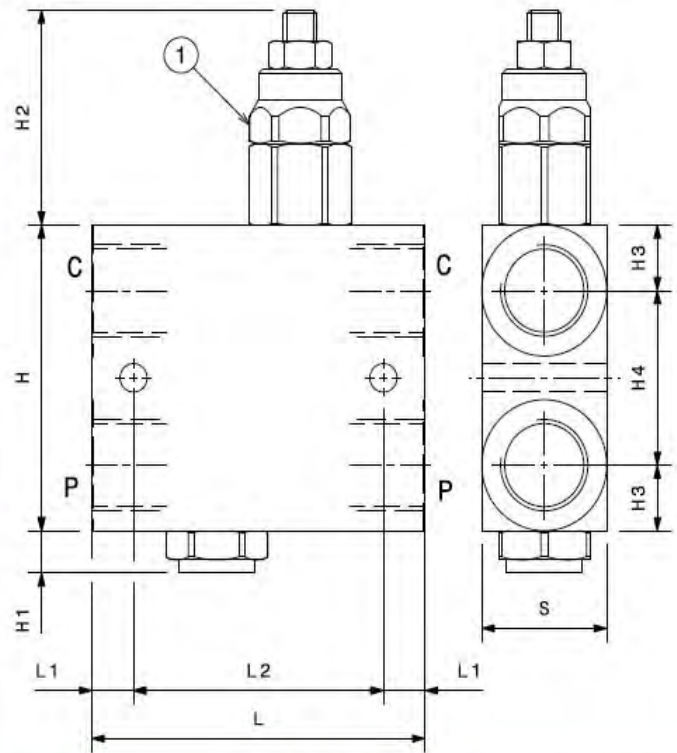


Modello Type	P, C	Pressione max Max pressure bar	Portata max Max. flow l/min
VSQ40-L-38	3/8" GAS	300	40
VSQ40-L-12	1/2" GAS	300	40
VSQ80-L-12	1/2" GAS	300	80
VSQ80-L-34	3/4" GAS	300	80
VSQ130-L-34	3/4" GAS	300	130
VSQ130-L-10	1" GAS	300	130

Taratura Setting		
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar
00	40	5÷40
01	80	20÷100
02	180	40÷250
03	250	60÷350

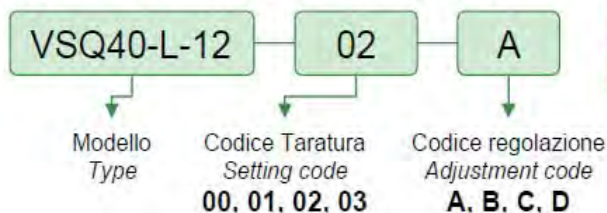
Regolazioni Adjustments			
A	B	C	D
Vite esterna esagono incassato Leakproof hex socket screw	Volantino e dado Handknob and locknut	Piombatura Sealing cap	Cappellotto Cap

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C. Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ



Dimensioni Dimensions	①	L	L1	L2	H	H1	H2	H3	H4	F	S
VSQ40-L-38	VLP40C	80	10	60	70	10	50	15	40	6,5	30
VSQ40-L-12	VLP40C	80	10	60	70	10	50	15	40	6,5	30
VSQ80-L-12	VLP80C	100	10	80	70	19	62	16	38	6,5	35
VSQ80-L-34	VLP80C	100	10	80	90	19	62	19	52	6,5	40
VSQ130-L-34	VLP130CD	110	15	80	90	19	62	19	52	8,5	40
VSQ130-L-10	VLP130CD	120	15	90	100	15	57	23	54	8,5	60

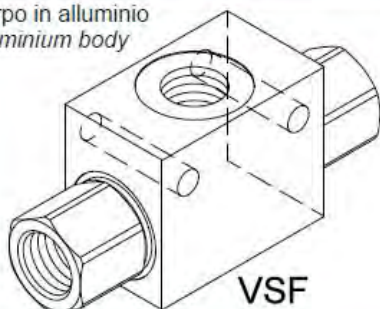
Sigla di ordinazione / Ordering code



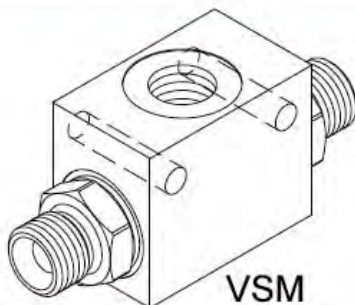
VSF

Wisselklep

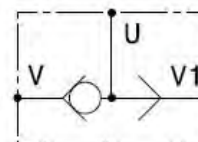
Corpo in alluminio
Aluminium body



VSF



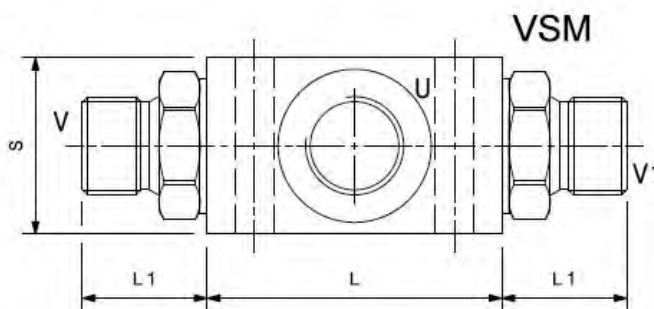
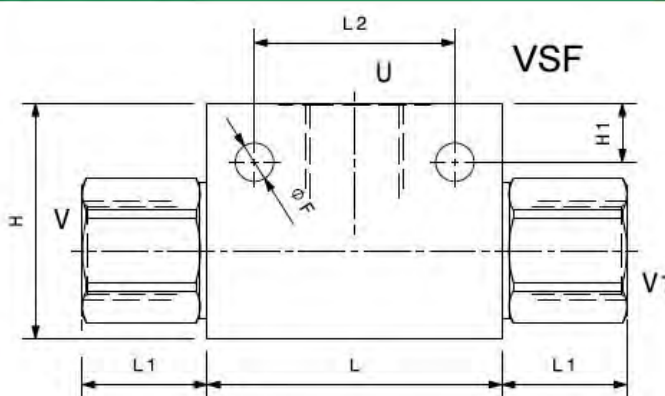
VSM



Modello Type	V V1 U	Portata massima Max flow l/min	Pressione massima Max pressure bar
VSF-14	1/4" GAS	20	350
VSF-38	3/8" GAS	40	350
VSF-12	1/2" GAS	60	350
VSF-34	3/4" GAS	100	280
VSM-14	1/4" GAS	20	350
VSM-38	3/8" GAS	40	350
VSM-12	1/2" GAS	60	350
VSM-34	3/4" GAS	100	280

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C
Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C

Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ



Dimensioni Dimensions	L	L1	L2	H	H1	S	F
VSF-14	40	33	27	40	6	30	6.5
VSF-38	50	21	34	40	10	30	6.5
VSF-12	60	28	40	50	10	30	6.5
VSF-34	60	27	45	60	10	40	8.5
VSM-14	40	10	27	40	6	30	6.5
VSM-38	50	21	34	40	10	30	6.5
VSM-12	60	26	40	50	10	30	6.5
VSM-34	60	30	45	60	10	40	8.5

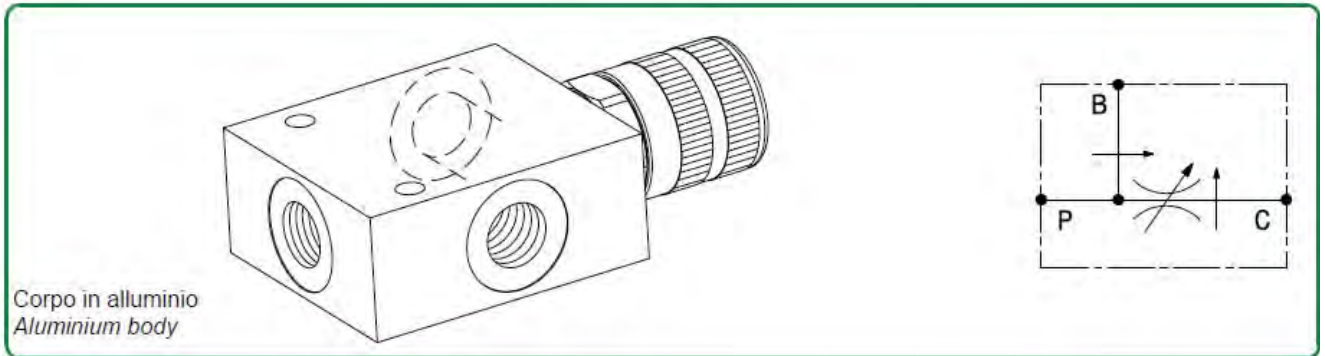
Sigla di ordinazione / Ordering code

VSM-38

Modello
Type

RFP50

3-weg stroomregelklep

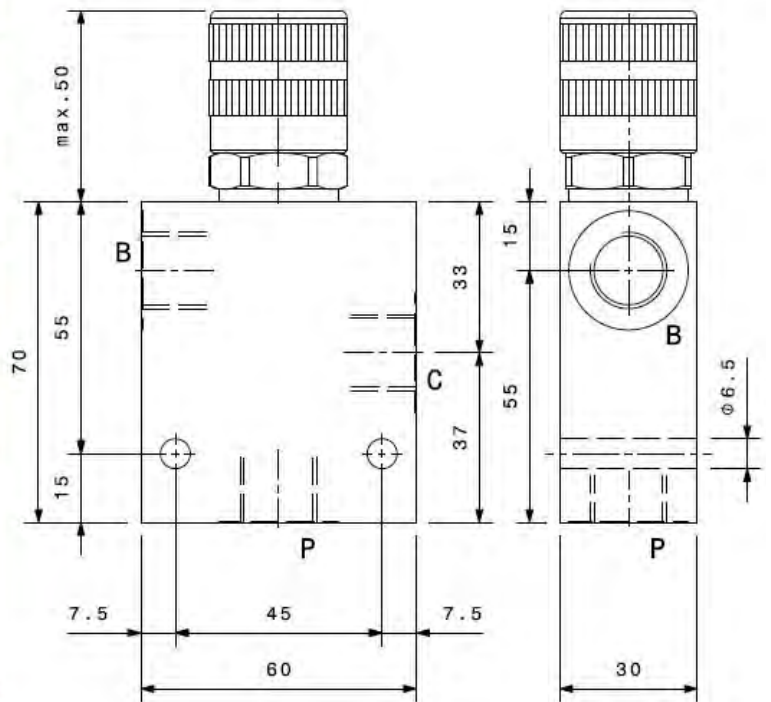
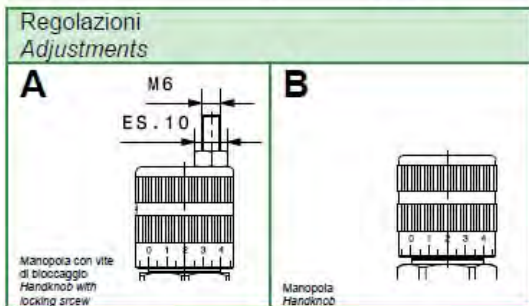


Corpo in alluminio
Aluminium body

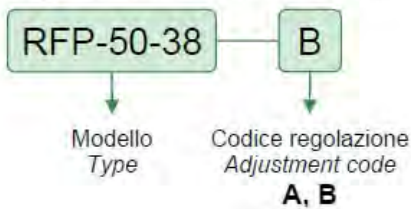
Portata massima Max flow	40 l/min
Portata regolata Regulated flow	0 ÷ 25 l/min
Pressione massima Max pressure	300 bar

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperatura di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Modello Type	C, B, P
RFP50-38	3/8" GAS
RFP50-12	1/2" GAS

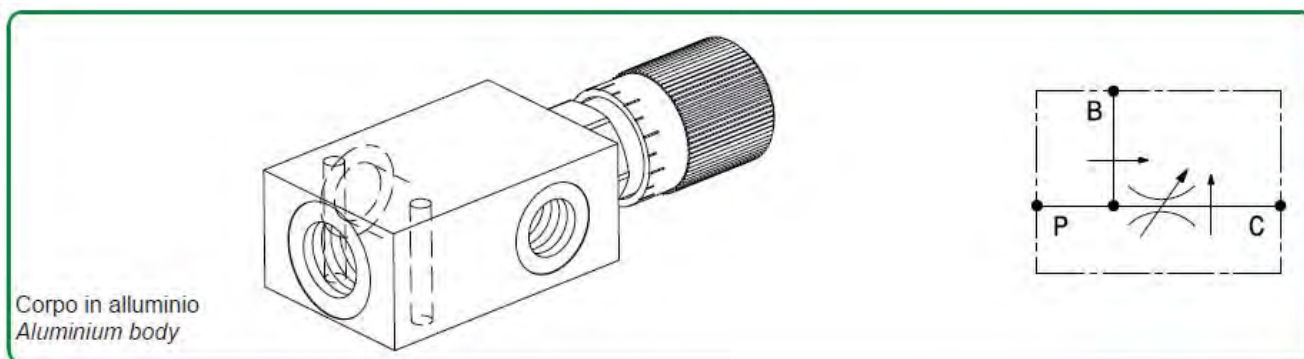


Sigla di ordinazione / Ordering code



RFP90

3-weg stroomregelklep

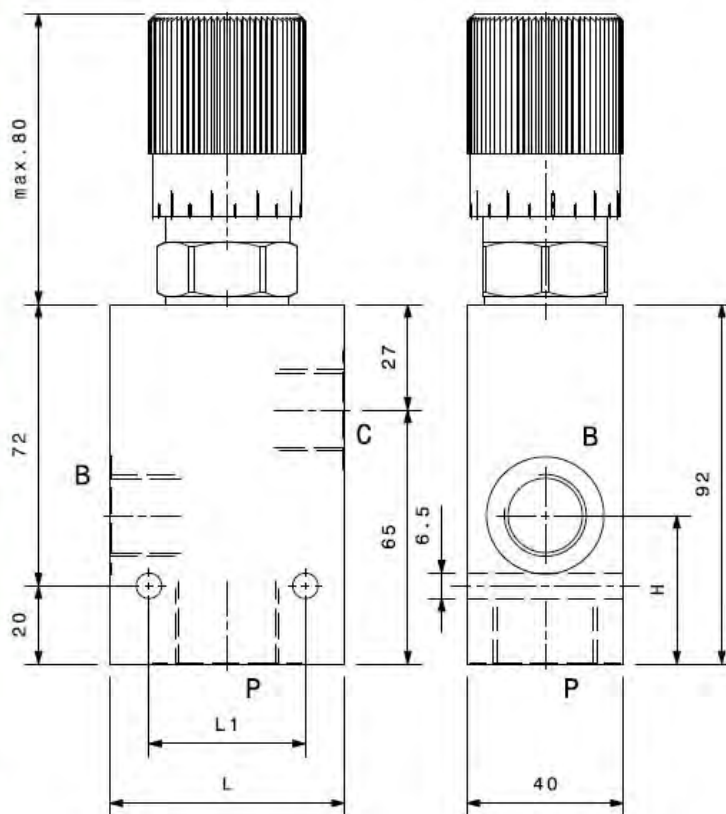
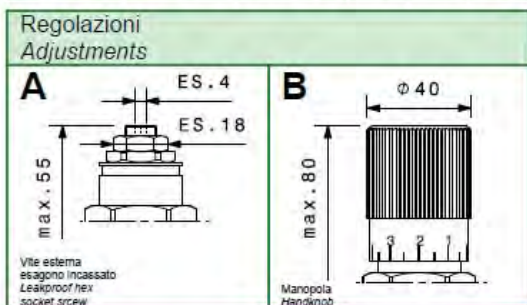


Portata massima Max flow	90 l/min
Portata regolata Regulated flow	2 - 50 l/min
Pressione massima Max pressure	300 bar

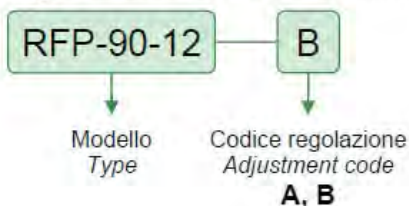
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C
Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C

Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperature di lavoro Working temperature	-20 - +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Modello Type	P	C, B	L	L1	H
RFP90-12	3/4" GAS	1/2" GAS	60	40	38
RFP90-34	3/4" GAS	3/4" GAS	70	45	40

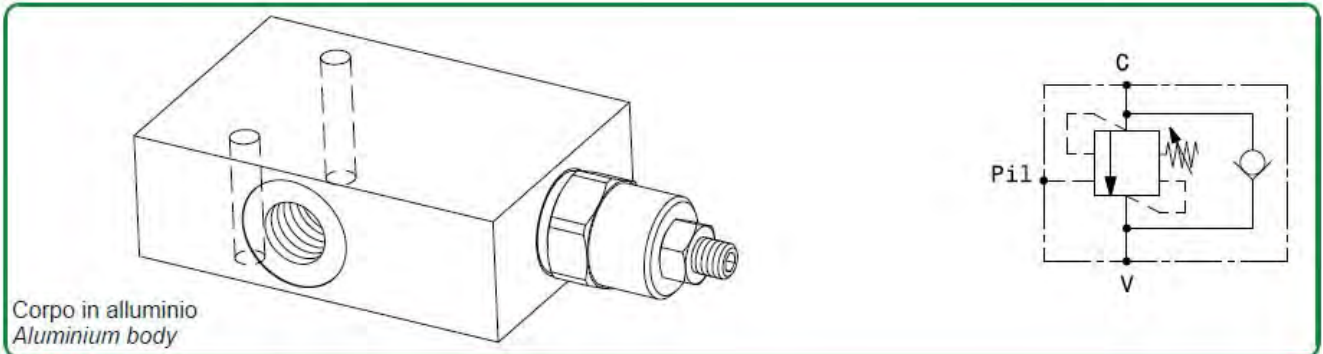


Sigla di ordinazione / Ordering code



OVC-SE

Balanceerklep enkel werkend (pilot operated)

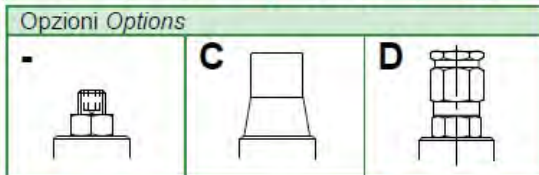


Corpo in alluminio
Aluminium body

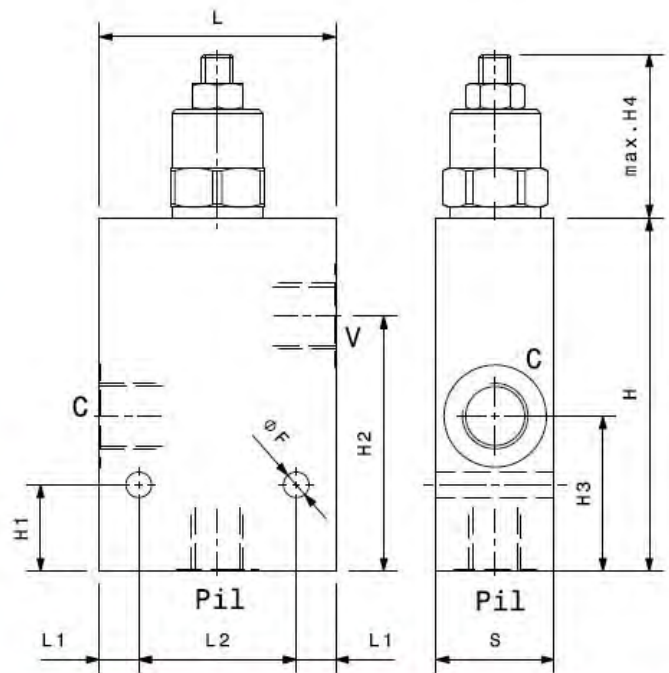
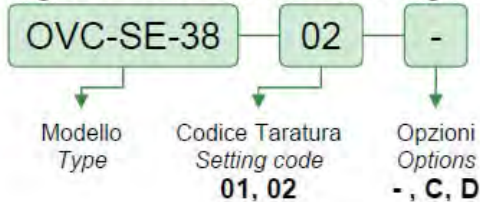
Pressione massima Max pressure	350 bar
Rapporto di pilotaggio Pilot ratio	4.25:1
Rapporti di pilotaggio a richiesta Pilot ratio upon request	3:1 8:1 10:1
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperatura di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Modello Type	V, C	Pil	Portata max Max. flow l/min
OVC-SE-38	3/8" GAS	1/4" GAS	40
OVC-SE-12	1/2" GAS	1/4" GAS	60
OVC-SE-34	3/4" GAS	1/4" GAS	100
OVC-SE-10	1" GAS	1/4" GAS	120

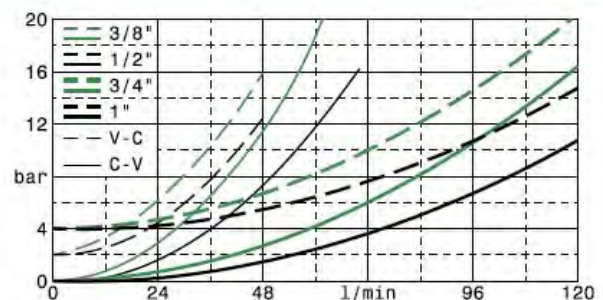
Taratura Setting	La valvola deve essere tarata almeno 1.3 volte la massima pressione indotta dal carico. The valve must be set at least 1.3 times maximum load induced pressure		
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar	Colore molla Spring color
01	100	20÷200	Bianco White
02	280	50÷350	Nero Black



Sigla di ordinazione / Ordering code

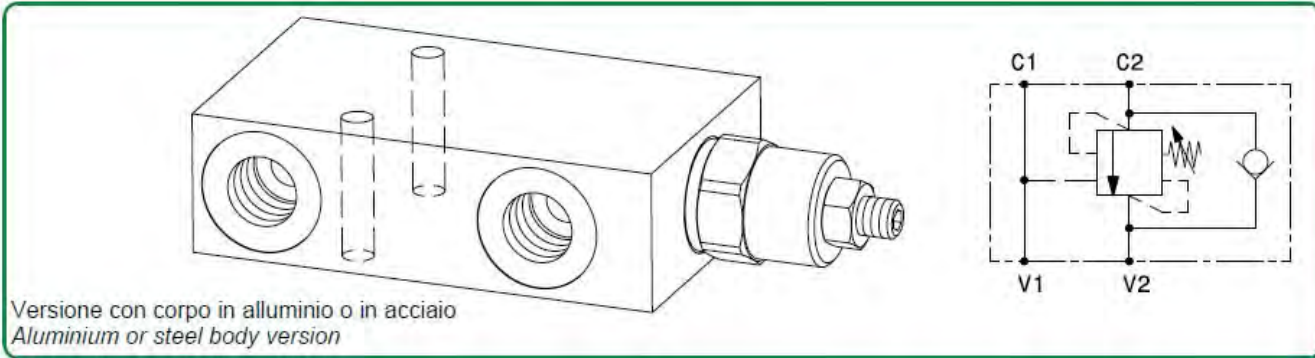


Dimensioni Dimensions	L	H	S	L1	L2	H1	H2	H3	H4	F
OVC-SE-38	60	90	30	10	40	22	65	39.5	42	6.5
OVC-SE-12	60	90	30	10	40	22	65	39.5	42	6.5
OVC-SE-34	70	110	40	10	50	27.5	85	50	46	8.5
OVC-SE-10	70	110	50	10	50	20	81	47	46	8.5



OVC-SE-L

Balanceerklep enkel werkend (in line)



Versione con corpo in alluminio o in acciaio
Aluminium or steel body version

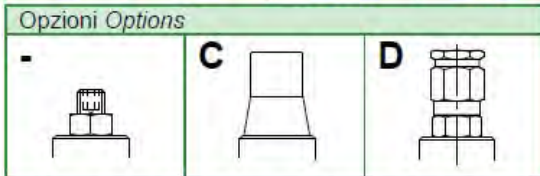
Pressione massima Max pressure	350 bar
Rapporto di pilotaggio Pilot ratio	4.25:1
Rapporti di pilotaggio a richiesta Pilot ratio upon request	3:1 8:1 10:1

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C
Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C

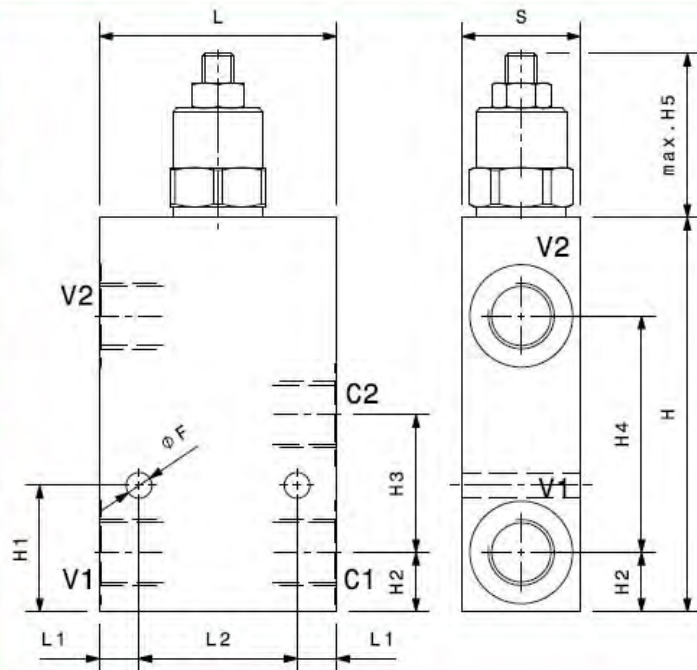
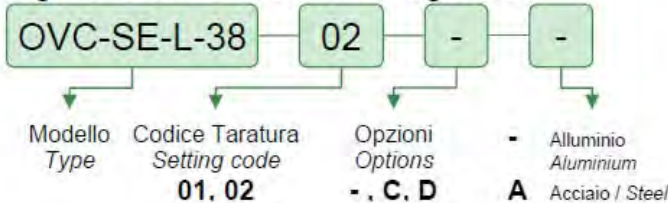
Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Modello Type	V1, V2 C1, C2	Portata max Max. flow l/min
OVC-SE-L-38	3/8" GAS	40
OVC-SE-L-12	1/2" GAS	60
OVC-SE-L-34	3/4" GAS	100
OVC-SE-L-10	1" GAS	120

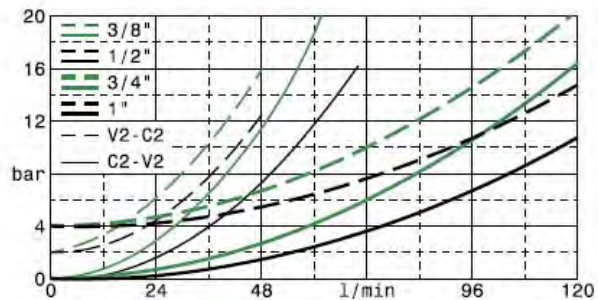
Taratura Setting	La valvola deve essere tarata almeno 1.3 volte la massima pressione indotta dal carico The valve must be set at least 1.3 times maximum load induced pressure		
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar	Colore molla Spring color
01	100	20÷200	Bianco White
02	280	50÷350	Nero Black



Sigla di ordinazione / Ordering code



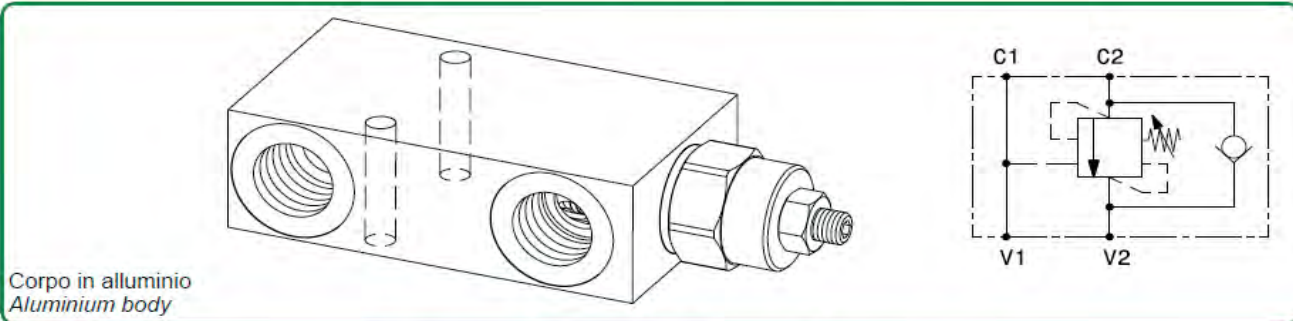
Dimensioni Dimensions	L	H	S	L1	L2	H1	H2	H3	H4	H5	F
OVC-SE-L-38	60	100	30	10	40	32	15	35	60	42	6,5
OVC-SE-L-12	60	100	30	10	40	32	15	35	60	42	6,5
OVC-SE-L-34	70	125	40	10	50	42,5	20	45	80	48	8,5
OVC-SE-L-10	70	140	50	10	50	51	25	52	90	48	8,5



OVC-SE-L-200

Balanceerklep enkel werkend (in line)

Valvola OVERCENTRE semplice effetto in linea
In line, single effect OVERCENTRE valve
mod. **OVC-SE-L-200**



Pressione massima Max pressure	350 bar
Rapporto di pilotaggio Pilot ratio	4:1
Rapporti di pilotaggio a richiesta Pilot ratio upon request	3:1 8:1

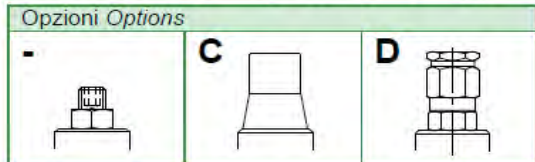
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C
Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C

Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperatura di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

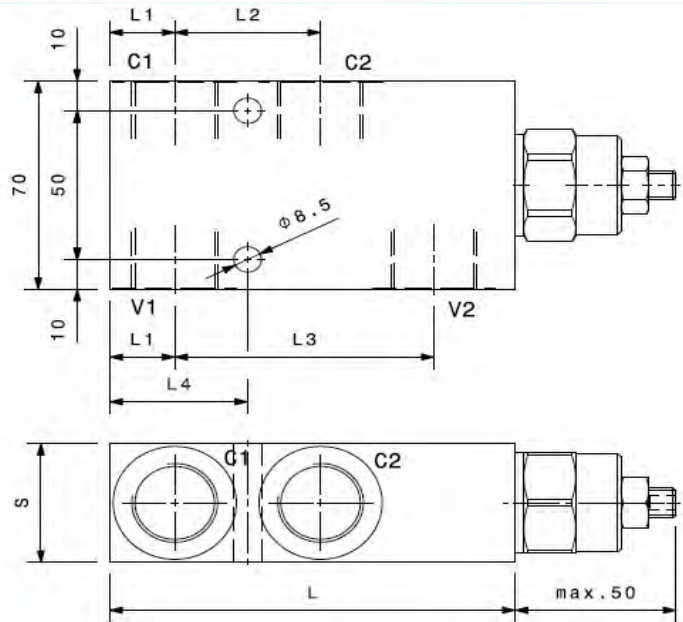
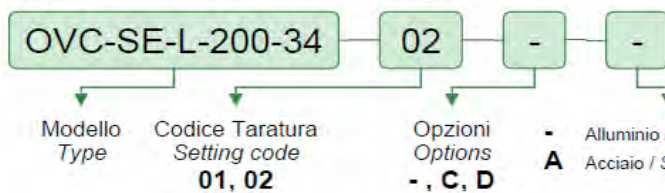
Modello Type	V1, V2 C1, C2	Portata max Max. flow l/min
OVC-SE-L-200-34	3/4" GAS	150
OVC-SE-L-200-10	1" GAS	200

Taratura Setting
La valvola deve essere tarata almeno 1.3 volte la massima pressione indotta dal carico
The valve must be set at least 1.3 times maximum load induced pressure

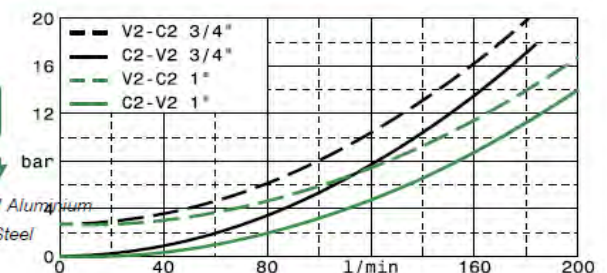
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar	Colore molla Spring color
01	100	20÷200	Bianco White
02	280	50÷350	Nero Black



Sigla di ordinazione / Ordering code

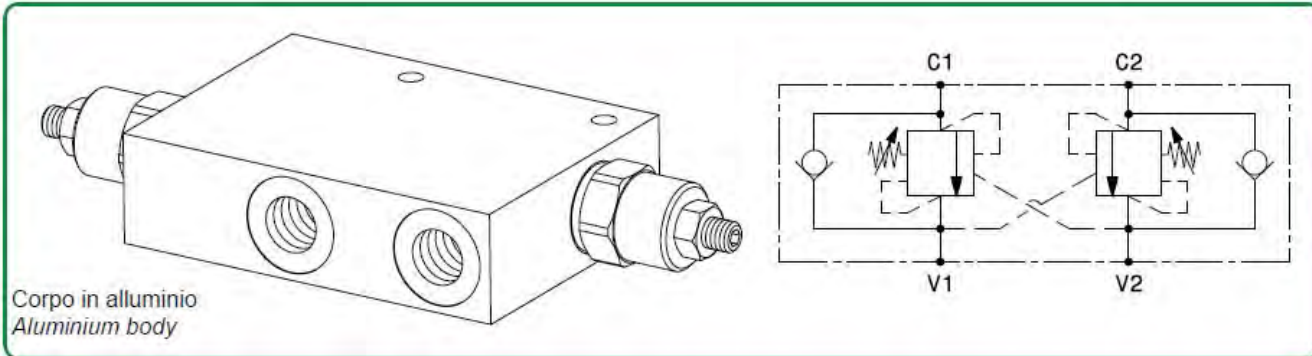


Dimensioni Dimensions	L	S	L1	L2	L3	L4
OVC-SE-L-200-34	125	40	20	45	80	42.5
OVC-SE-L-200-10	140	50	25	52	90	51



OVC-DE

Balanceerklep dubbel werkend

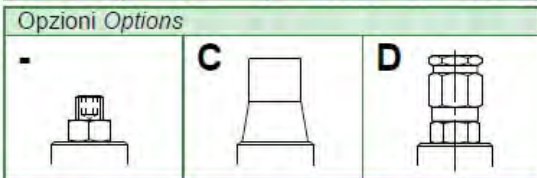


Corpo in alluminio
Aluminium body

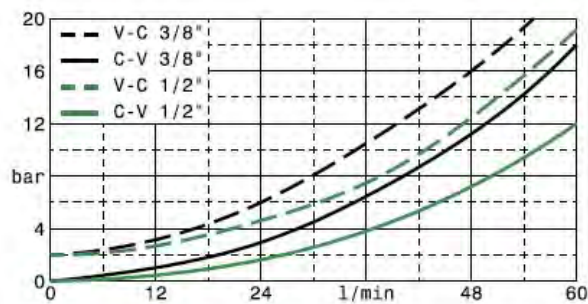
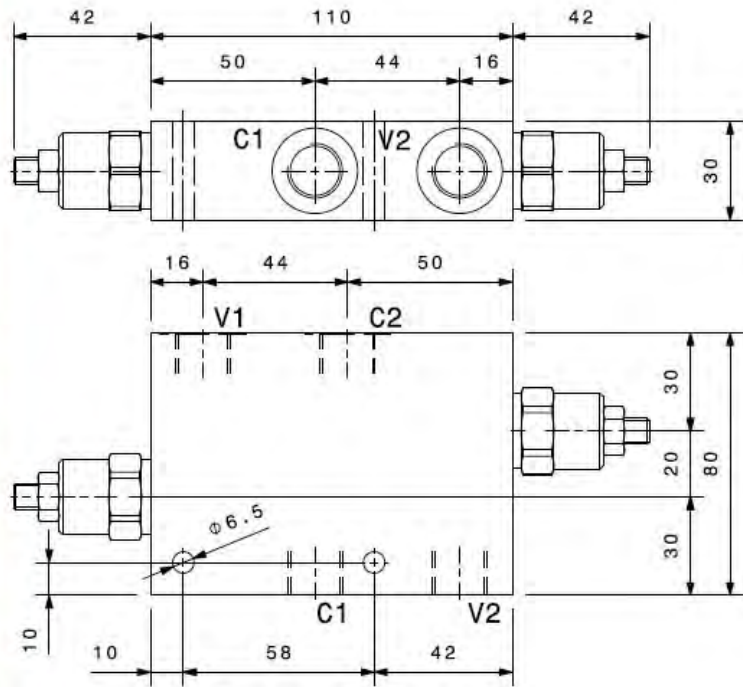
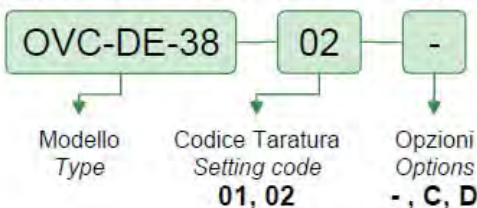
Pressione massima Max pressure	350 bar
Rapporto di pilotaggio Pilot ratio	4.25:1
Rapporti di pilotaggio a richiesta Pilot ratio upon request	3:1 8:1 10:1
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Modello Type	V1, C1 V2, C2	Portata max Max. flow l/min
OVC-DE-38	3/8" GAS	40
OVC-DE-12	1/2" GAS	60

Taratura Setting	La valvola deve essere tarata almeno 1.3 volte la massima pressione indotta dal carico The valve must be set at least 1.3 times maximum load induced pressure		
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar	Colore molla Spring color
01	100	20÷200	Bianco White
02	280	50÷350	Nero Black

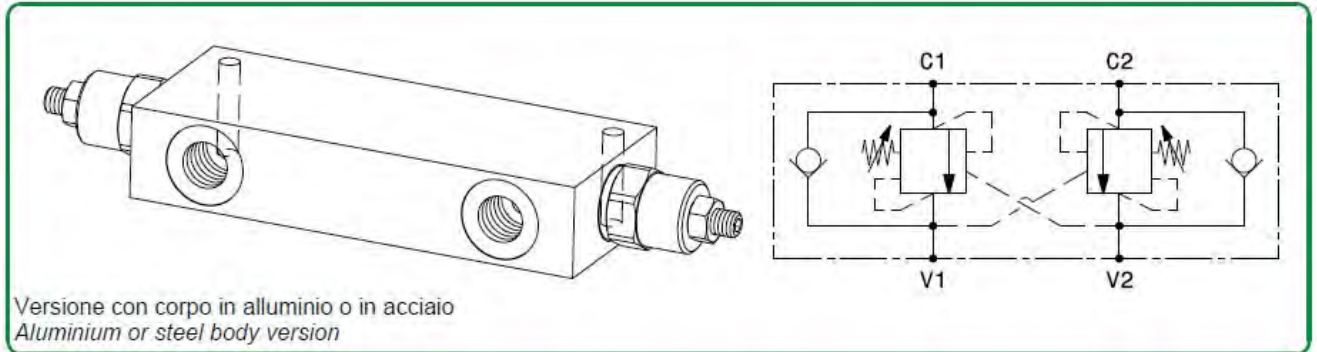


Sigla di ordinazione / Ordering code



OVC-DE-L

Balanceerklep dubbel werkend (in line)



Versione con corpo in alluminio o in acciaio
Aluminium or steel body version

Pressione massima <i>Max pressure</i>	350 bar
Rapporto di pilotaggio <i>Pilot ratio</i>	4.25:1
Rapporti di pilotaggio a richiesta <i>Pilot ratio upon request</i>	3:1 8:1 10:1

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C
Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C

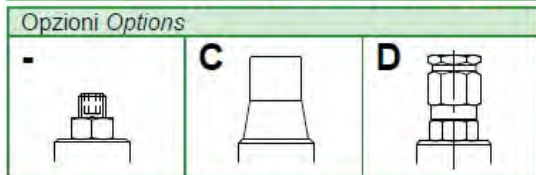
Viscosità consigliate <i>Recommended viscosity</i>	10 ÷ 420 cSt
Temperature di lavoro <i>Working temperature</i>	-20 ÷ +90 °C
Filtrazione assoluta <i>Absolute filtration</i>	25 µ

Modello <i>Type</i>	V1, V2 C1, C2	Portata max <i>Max. flow</i> l/min
OVC-DE-L-38	3/8" GAS	40
OVC-DE-L-12	1/2" GAS	60
OVC-DE-L-34	3/4" GAS	100
OVC-DE-L-10	1" GAS	120

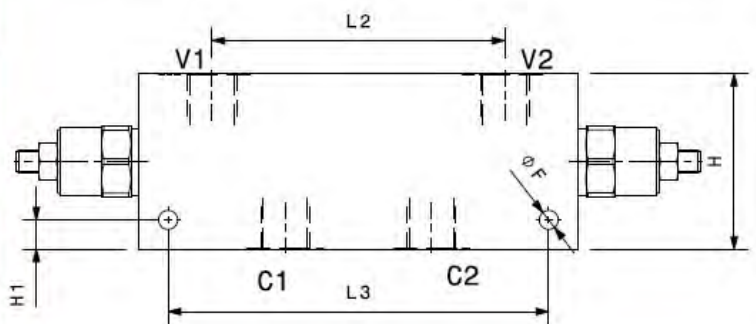
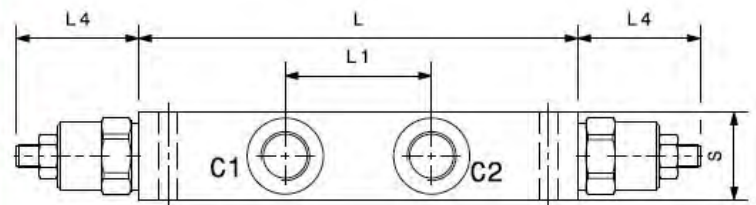
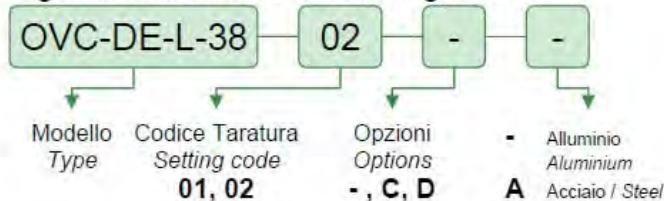
Taratura
Setting

La valvola deve essere tarata almeno 1.3 volte la massima pressione indotta dal carico
The valve must be set at least 1.3 times maximum load induced pressure

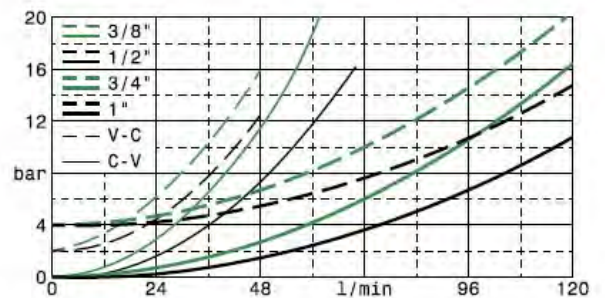
Codice <i>Code</i>	Taratura standard <i>Standard setting</i> bar (Q=5 l/min)	Campo di taratura <i>Adj. Pressure range</i> bar	Colore molla <i>Spring color</i>
01	100	20÷200	Bianco <i>White</i>
02	280	50÷350	Nero <i>Black</i>



Sigla di ordinazione / *Ordering code*

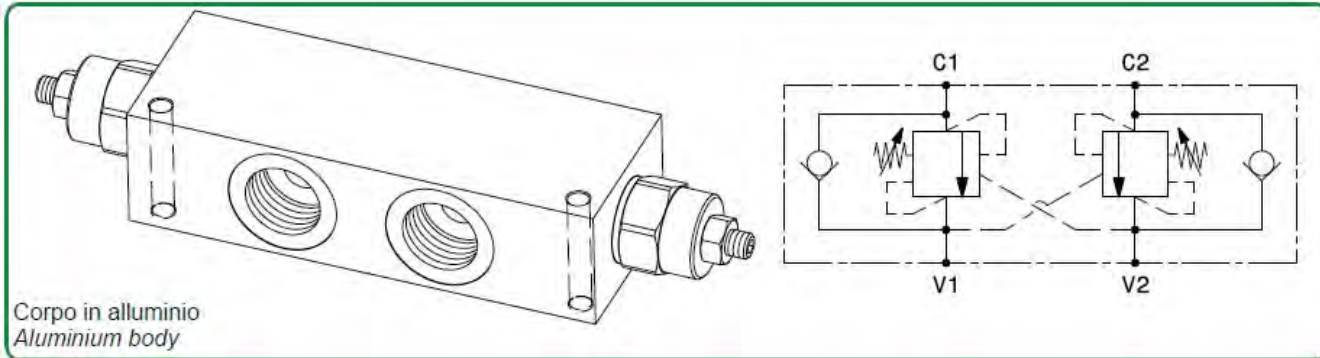


Dimensioni <i>Dimensions</i>	L	H	S	L1	L2	L3	L4	H1	F
OVC-DE-L-38	150	60	30	50	100	130	42	10	6.5
OVC-DE-L-12	150	60	30	50	100	130	42	10	6.5
OVC-DE-L-34	190	70	40	64	138	170	46	10	8.5
OVC-DE-L-10	190	70	50	64	132	170	46	10	8.5



OVC-DE-L-200

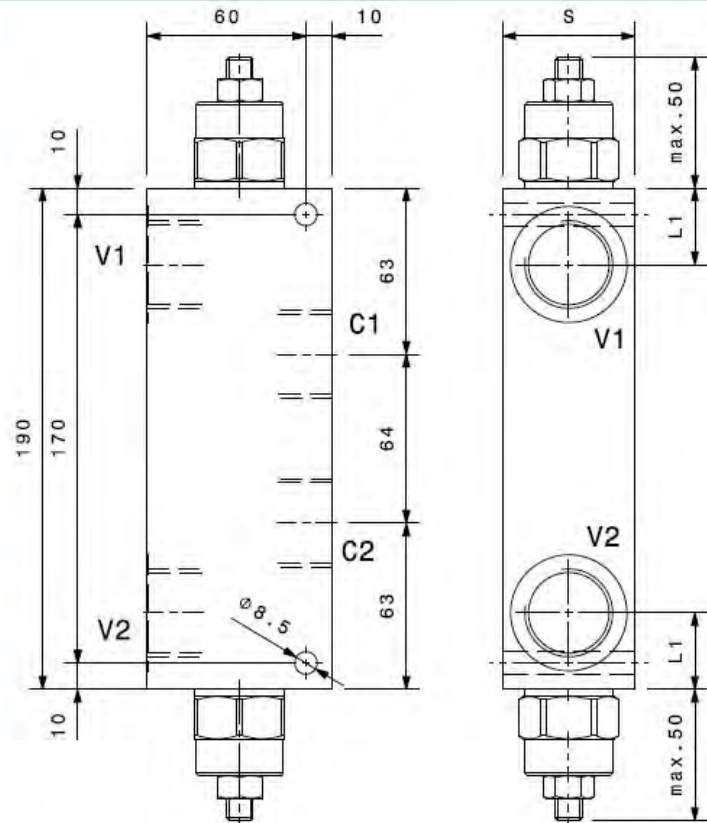
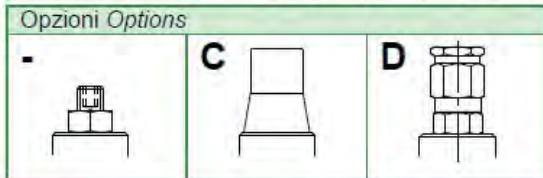
Balanceerklep dubbel werkend (in line)



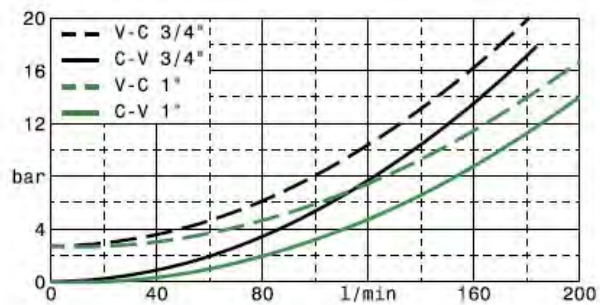
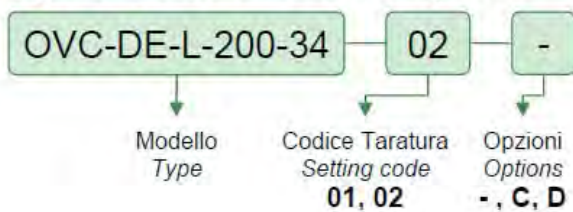
Pressione massima Max pressure	350 bar
Rapporto di pilotaggio Pilot ratio	4:1
Rapporti di pilotaggio a richiesta Pilot ratio upon request	3:1 8:1
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Modello Type	V1, V2 C1, C2	S	L1	Portata max Max. flow l/min
OVC-DE-L-200-34	3/4" GAS	40	26	150
OVC-DE-L-200-10	1" GAS	50	29	200

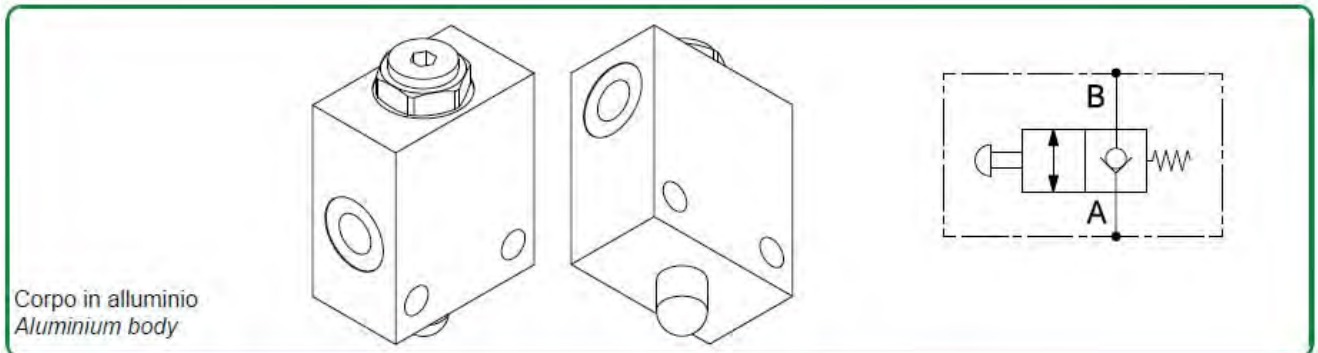
Taratura Setting	La valvola deve essere tarata almeno 1.3 volte la massima pressione indotta dal carico The valve must be set at least 1.3 times maximum load induced pressure		
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. Pressure range bar	Colore molla Spring color
01	100	20÷200	Bianco White
02	280	50÷350	Nero Black



Sigla di ordinazione / Ordering code

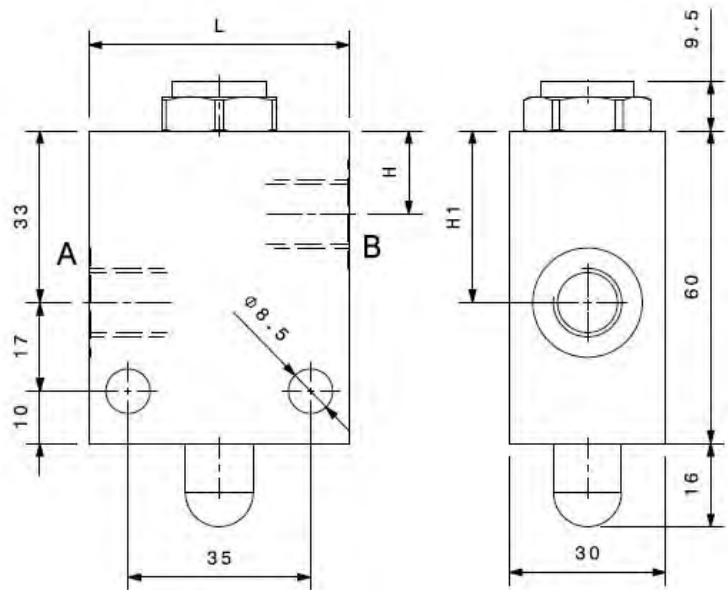


VFC
2/2 klep



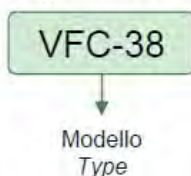
Modello Type	A, B	Portata massima Max flow	Pressione massima Max pressure
VFC-14	1/4" GAS	25 l/min	300 bar
VFC-38	3/8" GAS	40 l/min	300 bar

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperature di lavoro Working temperature	-20 + +90 °C
Filtrazione assoluta Absolute filtration	25 µ



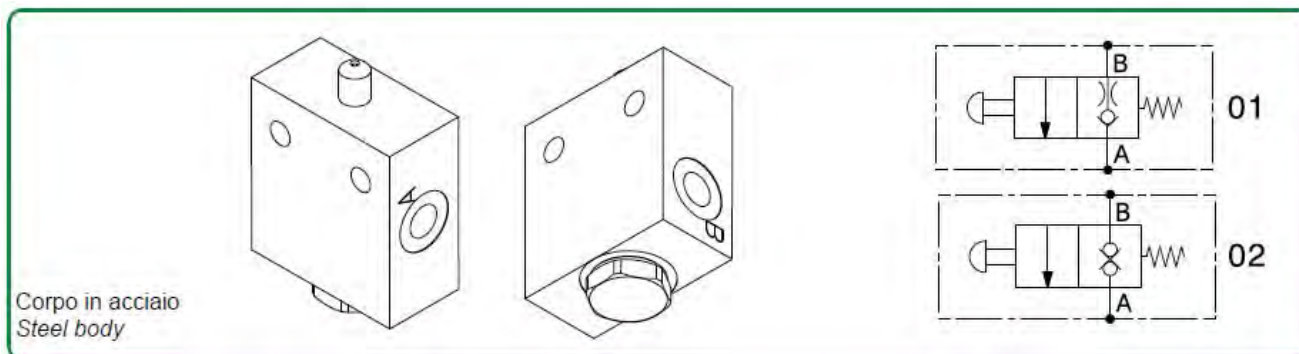
Dimensioni Dimensions	L	H	H1
VFC-14	50	16	33
VFC-38	60	18	33.5

Sigla di ordinazione / Ordering code



VFCA

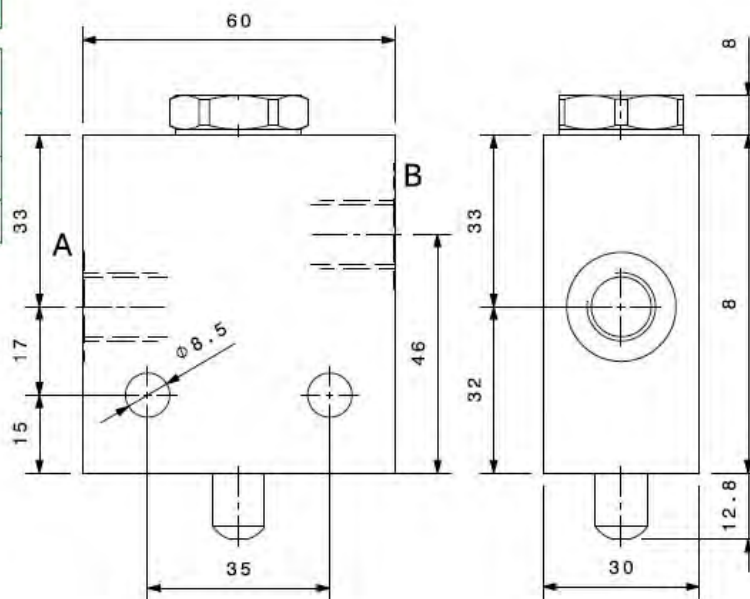
2/2 klep staal



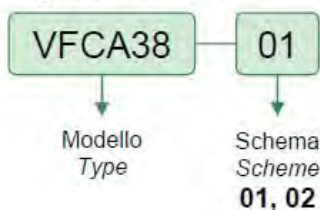
Corpo in acciaio
Steel body

Modello Type	A, B	Portata massima Max flow	Pressione massima Max pressure
VFCA-14	1/4" GAS	25 l/min	350 bar
VFCA-38	3/8" GAS	40 l/min	350 bar

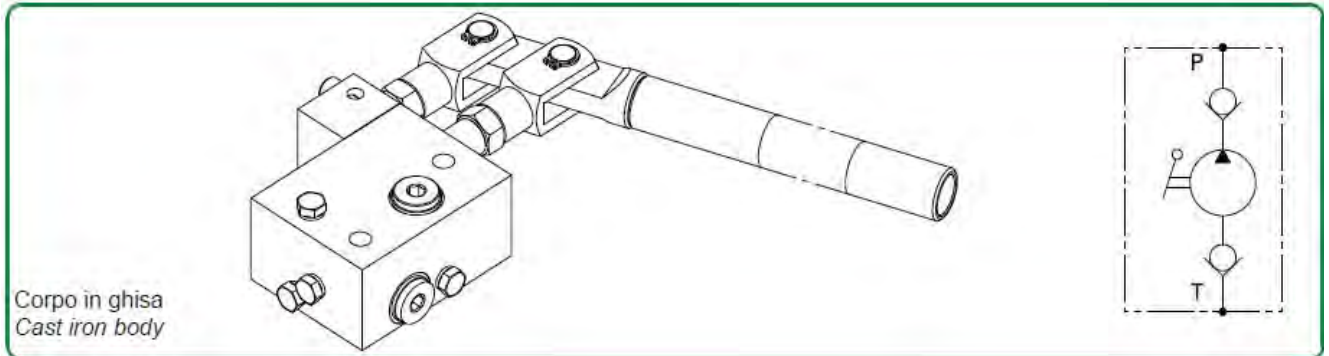
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ



Sigla di ordinazione / Ordering code

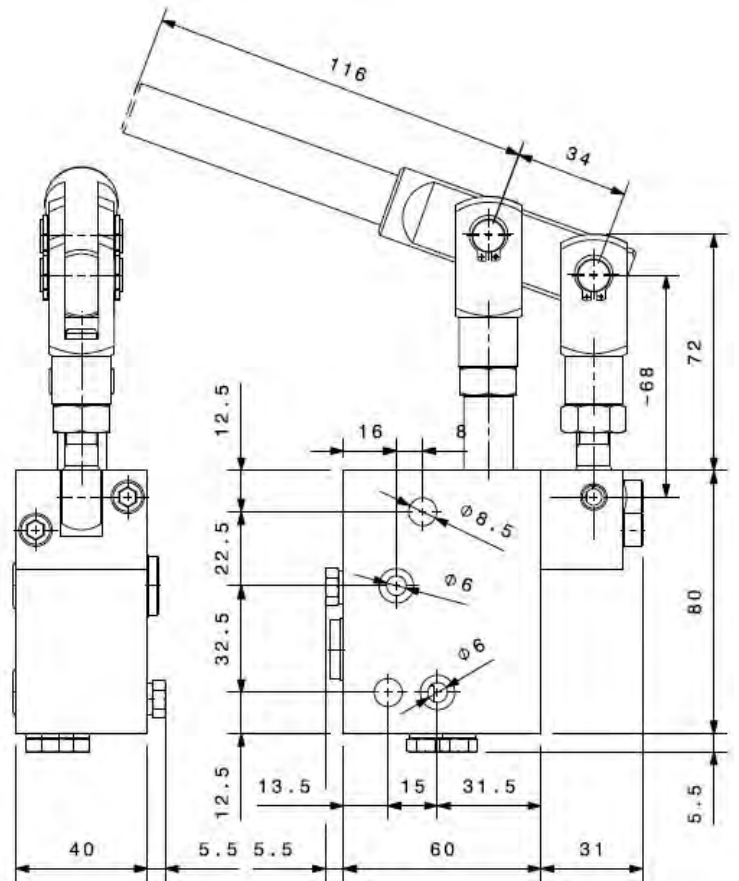


PM15-2
Handpomp



Cilindrata <i>Displacement</i>	5.8 cm ³
Pressione massima <i>Max pressure</i>	250 bar

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C <i>Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C</i>	
Viscosità consigliate <i>Recommended viscosity</i>	10 + 420 cSt
Temperature di lavoro <i>Working temperature</i>	-20 + +90 °C
Filtrazione assoluta <i>Absolute filtration</i>	25 μ



Sigla di ordinazione / Ordering code

PM15-2

Modello
Type

DC-3

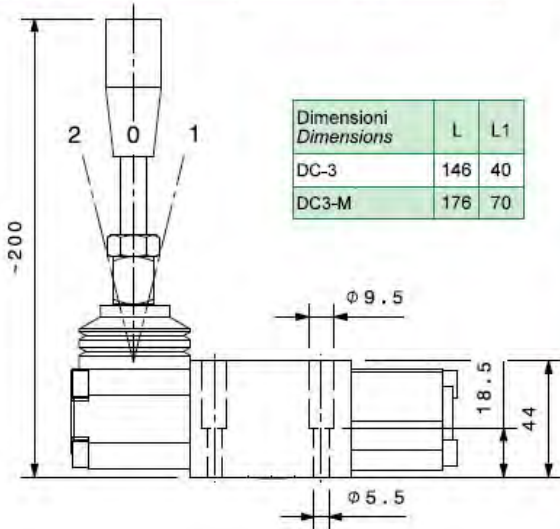
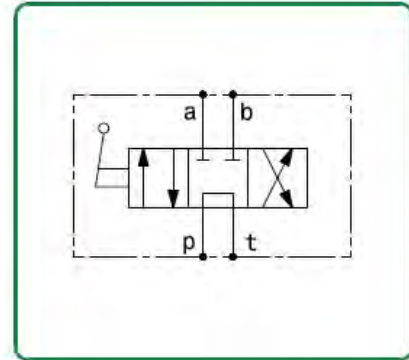
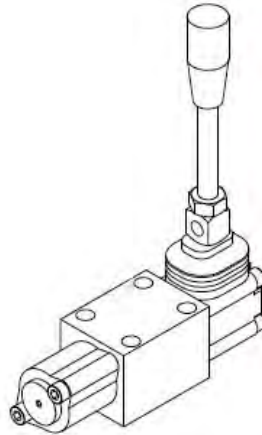
Hydraulisch ventiel NG6 handbediend

Modello Type	Portata massima Max Flow	Pressione massima Max pressure P,A,B	Pressione massima Max pressure T
DC-3	30 l/min	350 bar	150 bar
DC-3-M*	30 l/min	350 bar	150 bar

con predisposizione microinterruttore
* with microswitch predisposition

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C
Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C

Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperatura di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

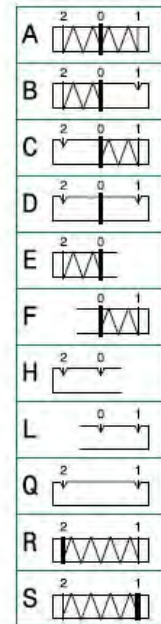
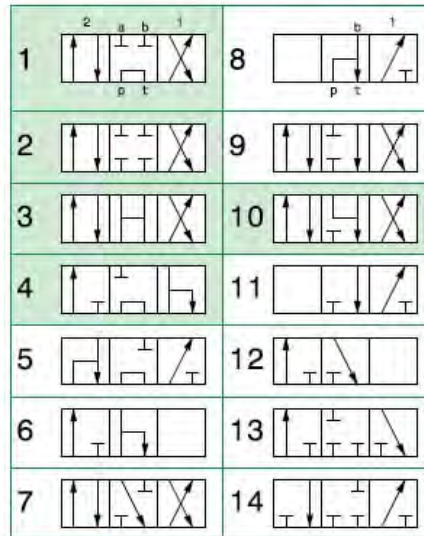


Dimensioni Dimensions	L	L1
DC-3	146	40
DC3-M	176	70

**POSIZIONATORE
SPOOL CONTROL**

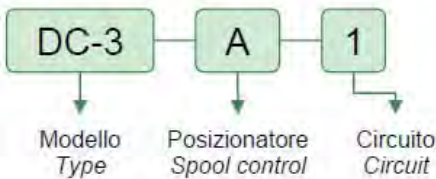
**CIRCUITO
CIRCUIT**

standard
su richiesta upon request



CIRCUITO 1: portata massima 20 l/min
CIRCUIT 1: maximum flow 20 l/min

Sigla di ordinazione / Ordering code



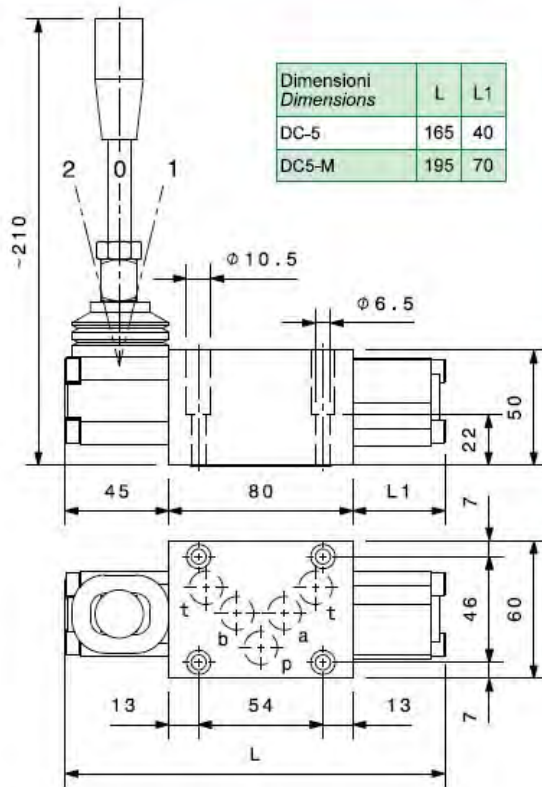
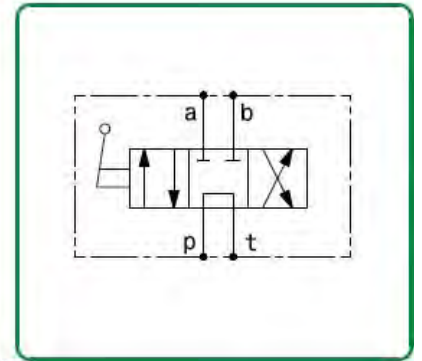
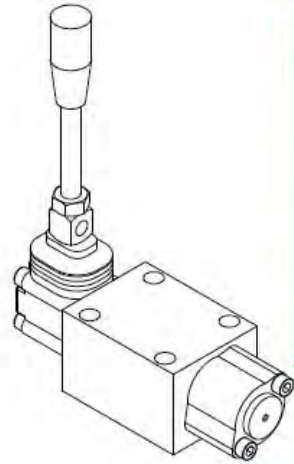
DC-5

Hydraulisch ventiel NG10 handbediend

Modello Type	Portata massima Max Flow	Pressione massima Max pressure P,A,B	Pressione massima Max pressure T
DC-5	70 l/min	350 bar	150 bar
DC-5-M*	70 l/min	350 bar	150 bar

con predisposizione microinterruttore
* with microswitch predisposition

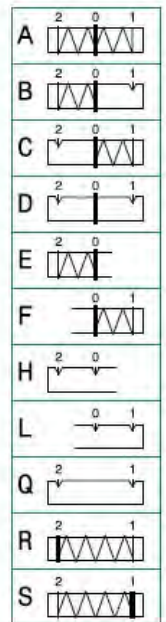
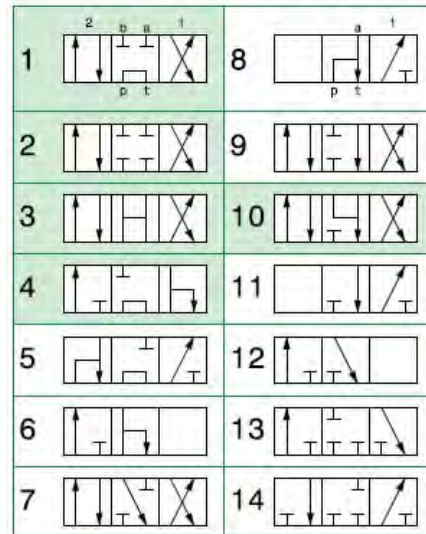
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ



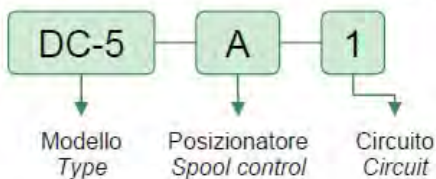
**POSIZIONATORE
SPOOL CONTROL**

**CIRCUITO
CIRCUIT**

standard
su richiesta upon request



Sigla di ordinazione / Ordering code



CIRCUITO 1: portata massima 50 l/min
CIRCUIT 1: maximum flow 50 l/min



HYDRAULIEK VENTIELEN



FT1251/2-01

Regelbare smoring



DOUBLE-ACTING CONTROL VALVES FEMALE-FEMALE IN LINE

They allow the regulation of flow in both directions.

Notable from an aesthetical point of view they are built with materials which are suitable also for applications with fluids different from oil (such as: water, gas and liquids in general).

As an alternative to FT 257/2 (suitable up to 400 bar) where the working pressure does not exceed 210 bar and where ferrous materials cannot be used.

They have the same characteristics as the FT 257 series:

- accurate flow regulation;
- efficient metallic sealing;
- simple setting of flow rates;
- secure against accidental needle withdrawal;
- secure needle position with locking screw inserted in the knob;
- provision for panel mounting, for which special lock nut (G) is supplied on request.

For use with pressure up to 210 bar.

On request

- Versions AISI 316 Code FT 2251/2-01
- Viton (V) seals
- NPT threads
- ABS (mp)Knob
- Complete with lock nut (G)



FT 1251/2-01

TECHNICAL DATA

TYPE	FLOW SQ MM ²	MAX WORKING PRESSURE BAR	WORKING TEMPERATURE °C	FILTRATION GRADE μM
1 B	7,07	210	-20°/+100°	25
1.4	12,57	210	-20°/+100°	25
3 B	19,64	210	-20°/+100°	25
1.2	50,27	210	-20°/+100°	25
3.4	78,54	210	-20°/+100°	25

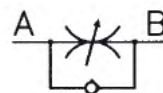


HYDRAULIEK VENTIELEN

8

FT1253/5-01

Regelbare smoring met terugslagklep



SINGLE-ACTING NEEDLE CONTROL VALVE IN LINE

Derived from the pressing of series FT 1251/2 they allow regulation of flow in one direction and full free flow in opposite direction thanks to the needle unit with incorporated ball they are equipped with.

As an alternative to FT 257/5 (suitable up to 400 bar) where the working pressure does not exceed 210 bar and where ferrous materials cannot be used.

They have the same characteristics as the FT 257 series:

- accurate flow regulation;
- efficient metallic sealing;
- simple setting of flow rates;
- secure against accidental needle withdrawal;
- secure needle position;
- provision for panel mounting, for which special lock nut (G) is supplied on request.

For use with pressure up to 210 bar

On request

- Versions AISI 316 Code FT 2253/5
- Viton (V) seals
- NPT threads
- ABS (mp)Knob
- Complete with lock nut (G)



FT 1253/5

TECHNICAL DATA

TYPE	FLOW SQ MM ²	MAX WORKING PRESSURE BAR	WORKING TEMPERATURE °C	FILTRATION GRADE μM
1 B	7,07	210	-20°/+100°	25
1 4	12,57	210	-20°/+100°	25
3 B	19,64	210	-20°/+100°	25
1 2	50,27	210	-20°/+100°	25
3 4	78,54	210	-20°/+100°	25



HYDRAULIEK VENTIELEN



FT257/2

Regelbare smoring



DOUBLE-ACTING SHUT-OFF

They allow flow control in both directions.
They are equipped with a needle so to obtain:

- metallic seal;
- flow linearity at the opening;
- accurate control for a wide range of flow rate.

A double reference system made up of a decimal scale on the handle and of a keyed metal ring with graduated fractional scale and divided into sectors allows the identification of flow conditions.

A locking screw in the handle ensures stable flow values preventing accidental adjustments or movements due to vibrations.

A ring nut (G) is used to carry out the panel mounting, on request.

On request

- Versions AISI 316 code FT 2257/2
- Viton seals (V)
- NPT Threads
- Equipped with ring nuts (G)
- Handlevheel in ABS (mp)



FT 257/2

TECHNICAL DATA

TYPE	FLOW SECTION CM ²	WORKING PRESSURE BAR	MIN. BURSTING PRESSURE BAR	WORKING TEMPERATURE	FILTRATION GRADE μm
1 8	0,12	400	1600	-20°/+100°	25
1 4	0,19	400	1600	-20°/+100°	25
3 8	0,39	400	1600	-20°/+100°	25
1 2	0,68	400	1600	-20°/+100°	25
3 4	1,13	400	1600	-20°/+100°	25
1 0 0	2,09	320	1300	-20°/+100°	25
1 1 4	2,09	320	1300	-20°/+100°	25
1 1 2	3,14	320	1300	-20°/+100°	25
2 0 0	4,91	320	1300	-20°/+100°	25

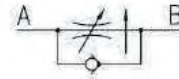


HYDRAULIEK VENTIELEN

8

FT270/5

2-weg drukgecompenseerd snelheidsregelventiel



SINGLE-ACTING PRESSURE COMPENSATED DOUBLE-PORT CONTROL VALVES

The pressure compensated valves are essentially composed of an adjustable orifice and of a pressure compensator. The check valves, realized through a valve poppet, reduce the number of the components in movement. Inside the base there are wide transverse sections which appreciably reduce the loss of pressure. The accuracy of the machining of the internal components ensures a very low hysteresis. The accurate checks carried out on the products ensure a good working of the valves also in bad working conditions.

On request

- Complete with panel mounting ring nut
- Viton (V) seals
- Version AISI 316 code FT 2270/5



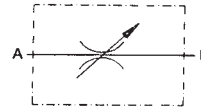
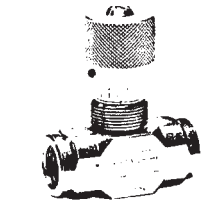
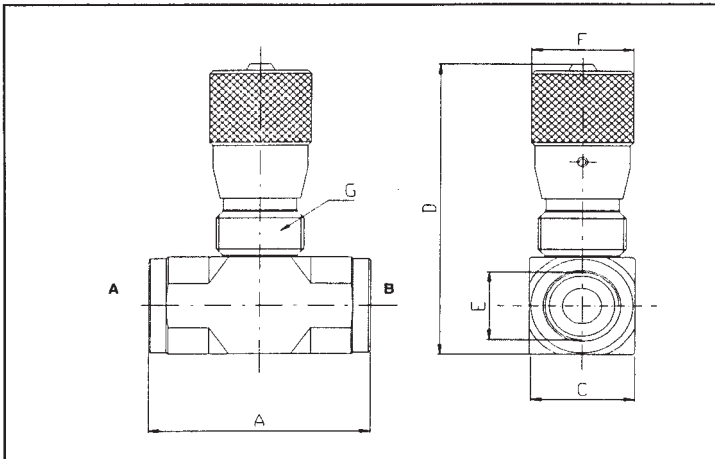
FT 270/5



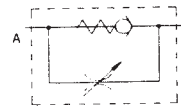
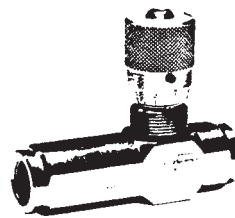
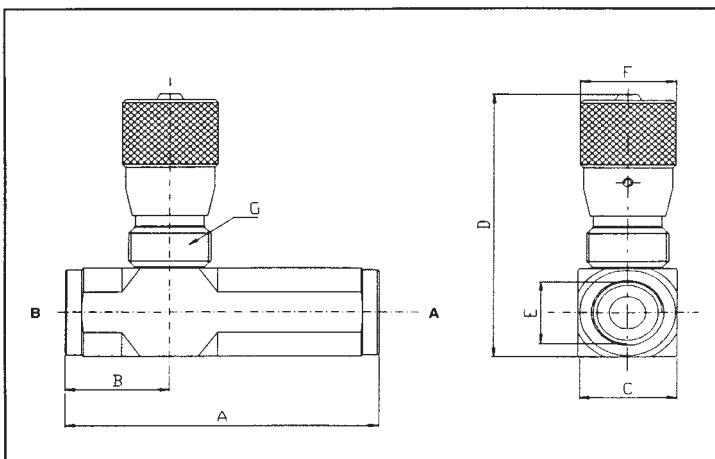
TECHNICAL DATA

TYPE	MAX WORKING PRESSURE BAR	MIN. ΔP WORKING BAR	WORKING TEMPERATURE °C	FILTRATION GRADE μM ABSOLUTE
1 4	250	5	-20°/+70°	25
3 8	250	7	-20°/+70°	25
1 2	250	10	-20°/+70°	25
3 4	250	10	-20°/+70°	25
1 0 0	250	16	-20°/+70°	25

VRFB, VRFU SMORING



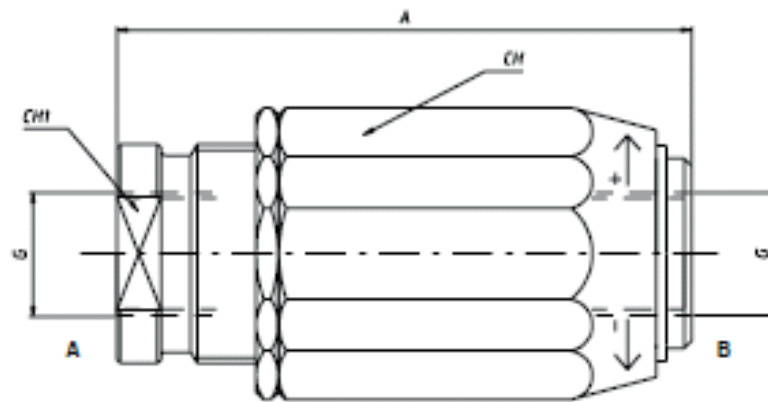
Artikelnummer	E	A	C	D	F	G	max flow	max druk
	bsp	mm	mm	mm	Ø mm		l/min	bar
VRFB9001	1/4	56	25	81	30	25x1.5	15	350
VRFB9002	3/8	56	25	81	30	25x1.5	30	350
VRFB9003	1/2	64	30	88	30	25x1.5	45	350
VRFB9004	3/4	90	40	116	45	35x1.5	80	280



Artikelnummer	E	A	B	C	D	F	G	max flow	max flow B → A	max druk
	bsp	mm	mm	mm	mm	Ø mm		l/min		bar
VRFU9001	1/4	72	28	25	81	30	25x1.5	15	25	350
VRFU9002	3/8	75	29	25	81	30	25x1.5	30	45	350
VRFU9003	1/2	97	34	30	88	30	25x1.5	45	70	350
VRFU9004	3/4	118	44	40	116	45	35x1.5	60	120	280

ST

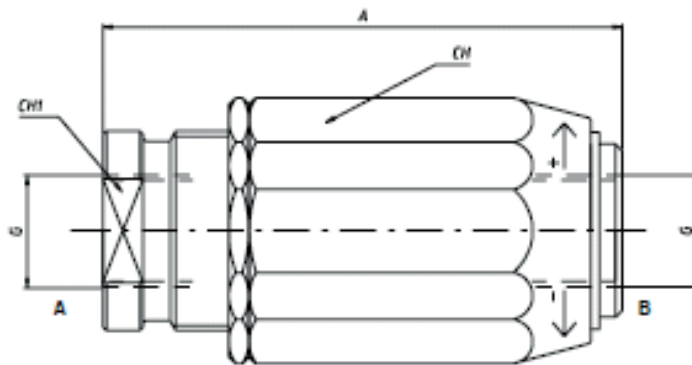
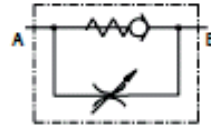
Smoring zonder terugslagklep



Maat	l/min	Bar	A	G BSP	G NPT	G SAE	CH	CH1	GEWICHT Kg
01	15	350	66	1/4	1/4		32	22	0.30
02	30	350	78	3/8	3/8	3/4-16	38	26	0.48
03	45	350	83	1/2	1/2	7/8-14	41	30	0.59
04	80	300	104	3/4	3/4	1 1/16-12	55	38	1.34
05	150	230	125	1	1	1 5/16-12	60	16	2.15

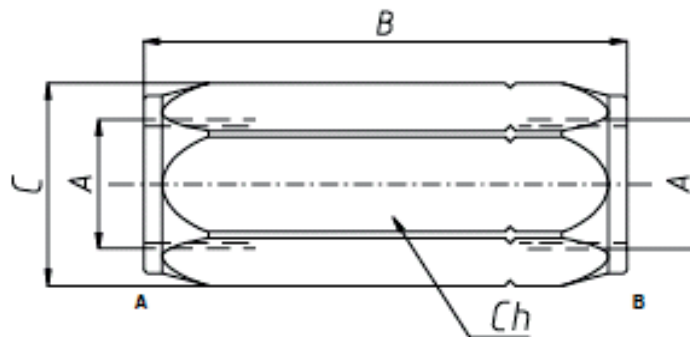
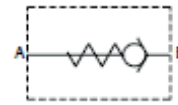
ST-U

Smoring met terugslagklep



Maat	l/min	Bar	A	G BSP	G NPT	G SAE	CH	CH1	GEWICHT Kg
01	15	350	66	1/4	1/4		32	22	0.30
02	30	350	78	3/8	3/8	3/4-16	38	26	0.48
03	45	350	83	1/2	1/2	7/8-14	41	30	0.59
04	80	300	104	3/4	3/4	1 1/16-12	55	38	1.34
05	110	250	118	1	1	1 5/16-12	65	46	2.15
06	150	230	135	1 1/4	1 1/4	1 7/8-12	80	55	3.31
07	210	230	150	1 1/2	1 1/2	1 7/8-12	90	60	4.76

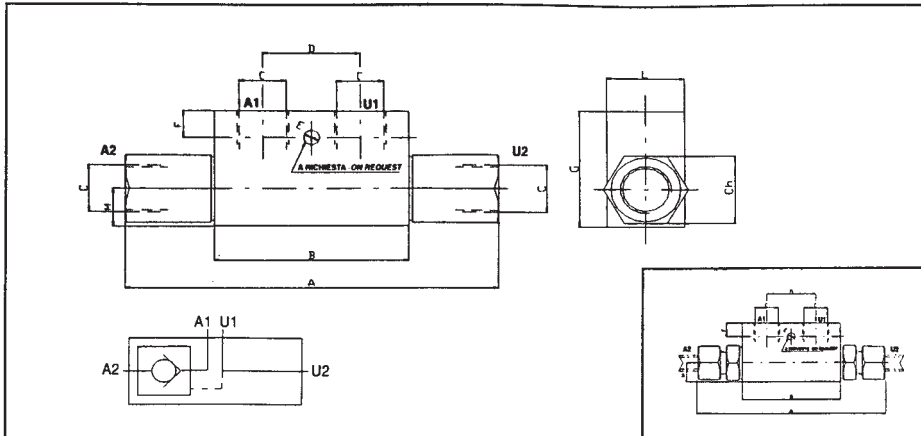
VU
Terugslagklep



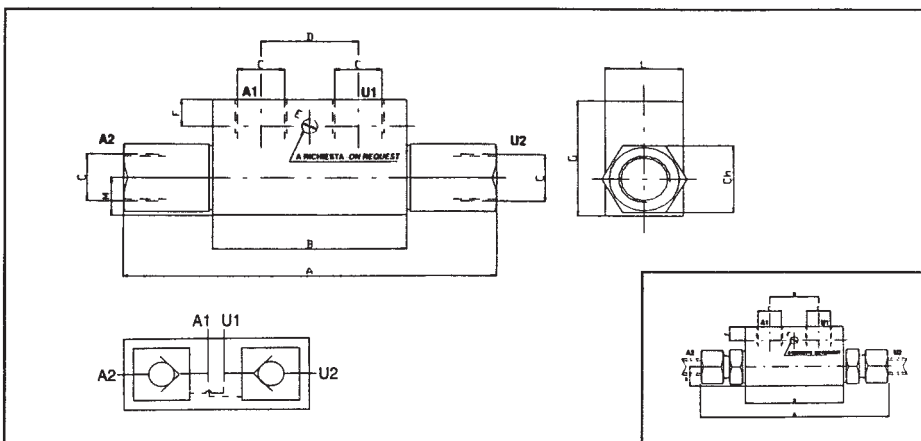
Maat	l/min	Bar	A BSP	A NPT	A SAE	B	C	CH	GEWICHT Kg
01	25	400	1/4	1/4		60	21	19	0.10
02	40	400	3/8	3/8	3/4-16	70	27	24	0.18
03	80	350	1/2	1/2	7/8-14	78	33	30	0.31
04	110	300	3/4	3/4	1 1/16-12	94	40	36	0.56
05	140	270	1	1	1 5/16-12	106	59	45	0.91
06	200	250	1 1/4	1 1/4	1 7/8-12	123	63	55	1.48
07	300	230	1 1/2	1 1/2	1 7/8-12	138	74	65	2.37

VBS, VBD

Enkel en dubbel gestuurde terugslagklep

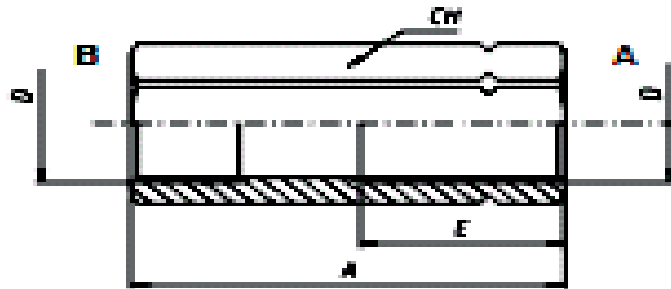
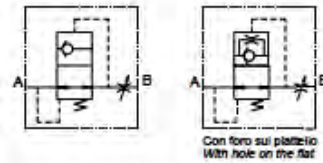


Artikelnummer	C A2/U2	A	B	D	E	F	G	L	M	CH	Max druk	Max flow
Materiaal: staal	bsp mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	bar	l/min
VBS 1/4-ST	1/4	118	68	38	7,0	7	40	30	13	24	350	20
VBS 3/8-ST	3/8	118	68	38	7,0	7	40	30	13	24	350	20
VBS 3/8-ST	3/8	144	80	40	8,5	15	50	30	16	27	350	50
VBS 1/2-ST	1/2	144	80	40	8,5	15	50	30	16	27	300	50
VBS 1/2-ST	1/2	171	90	40	8,5	15	60	40	20	30	300	80
VBS 3/4-ST	3/4	205	105	60	8,5	16	70	50	22	36	300	120
VBS 12L-ST	3/8-12L	138	68	38	7,0	7	40	30	13	24	350	20
VBS 15L-ST	1/2-15L	140	80	40	8,5	15	50	30	16	27	300	50



Artikelnummer	C A2/U2	A	B	D	E	F	G	L	M	CH	Max druk	Max flow
Materiaal: staal	bsp mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	bar	l/min
VBD 1/4-ST	1/4	118	68	38	7,0	7	40	30	13	24	350	20
VBD 3/8-ST	3/8	118	68	38	7,0	7	40	30	13	24	350	20
VBD 3/8-ST	3/8	144	80	40	8,5	15	50	30	16	27	350	50
VBD 1/2-ST	1/2	144	80	40	8,5	15	50	30	16	27	300	50
VBD 1/2-ST	1/2	171	90	40	8,5	15	60	40	20	30	300	80
VBD 3/4-ST	3/4	205	105	60	8,5	16	70	50	22	36	300	120
VBD 12L-ST	3/8-12L	138	68	38	7,0	7	40	30	13	24	350	20
VBD 15L-ST	1/2-15L	140	80	40	8,5	15	50	30	16	27	300	50

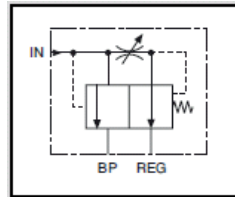
VPN
Slangbreukbeveiliging



Maat	l/min	Bar	A	D BSP	D SAE	E	CH	GEWICHT Kg
01	29	300	48	1/4		26	19	0.07
02	45	300	58	3/8	3/4-16	27	22	0.10
03	67	300	60	1/2	7/8-14	33	27	0.15
04	149	300	76	3/4	1 1/16-12	36	32	0.22
05	190	250	85	1	1 5/16-12	45	41	0.44

2FV2

Oliestroomdeler



Ordering Codes

Manifold mounting available on 2FV2V model only _____ Typical Code **M**

Valve Type (Table 1) _____ **2FV2V**

Regulated Flow Capacity (Table 2) _____ **125**

Porting (Table 3) _____ **J**

Pressure Setting (bar, if Relief Valve required) _____ **()**

Table 1: Valve Type

Code	Description
2FV2V	No Relief Valve
RV2FV2V	Relief Valve between Priority and By Pass Flow Port
RVXD2FV2V	Externally Drained Relief Valve
CK2FV2V	Check Valve between Priority and Inlet Flow Port
AC2FV2V	Anti-cavitation Check Valve between By-Pass and Priority Flow Port
M2FV2V	Manifold Mounted
PB2FV2V	Pull Back Poppet

Table 2: Regulated Flow

Code	Regulated Flow
030	0 - 11 lpm
050	0 - 19 lpm
080	0 - 30 lpm
125	0 - 47 lpm
200	0 - 76 lpm
250	0 - 95 lpm
300	0 - 114 lpm

Table 3: Porting*

Code	Port Threads Inlet Regulated Flow and Excess Flow	Relief Valve External Drain where fitted
J	3/4" BSPP	1/4" BSPP
A	3/4" NPTF	1/4" NPTF
M	M22 x 1.5, M27 x 2	M14 x 1.5
G	1-1/16" -12UN #12 SAE ORB	9/16" -18UN #6 SAE ORB
H	1/2" BSPP	1/4" BSPP
K	Manifold mounted (custom hole pattern)	N/A

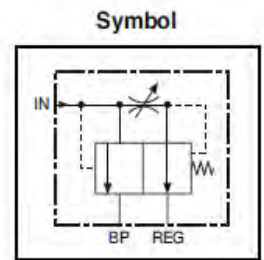
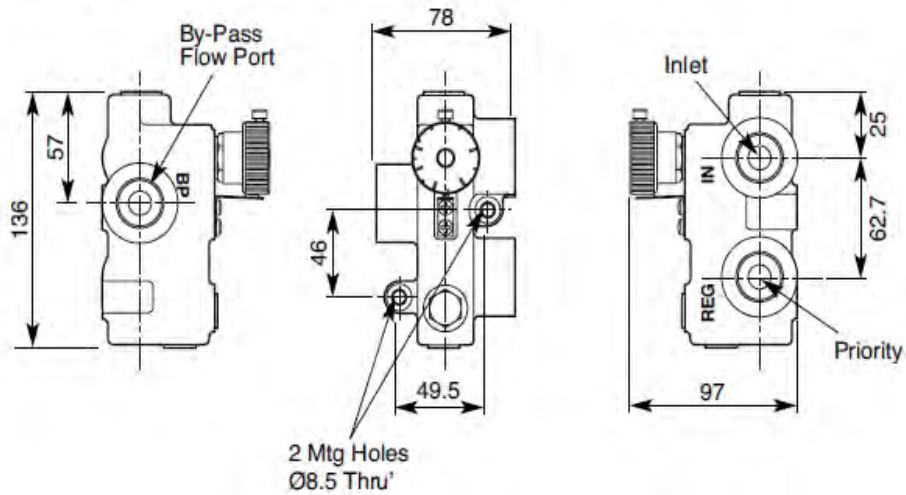
* Other threads available to special order.

Note: M22 only available in flow code 030 to 125
M27 only available in flow code 200 to 300
1/2" BSPP only available in flow code 030 to 125

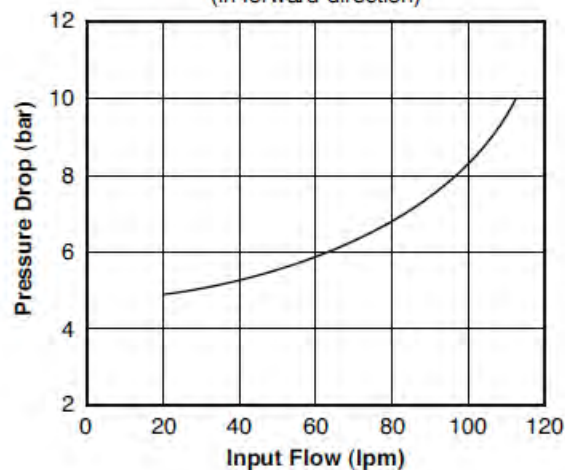
2FV2 Oliestroomdeler



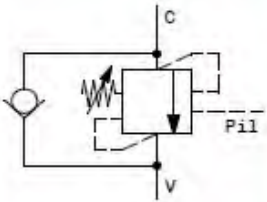
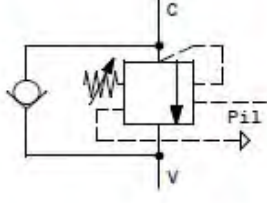
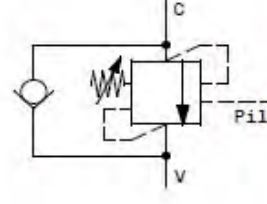
Installation Details
Dimensions in millimetres
(PB) 2FV2V (No Relief Valve)



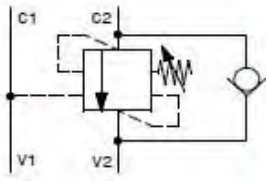
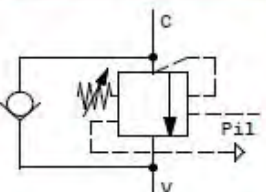
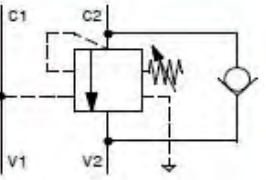
Typical Pressure Drop 2FV2V Series
(in forward direction)



Overzicht alle kleppen

		Q	P	
		[l/min]	[bar]	
Valvola overcentre a cartuccia <i>Pilot assisted overcentre valve – cartridge type</i>				
	OVC60-C	60	350	
	OVC150-C	150	350	
	OVC200-C	200	350	
	OVC2008-C	20	350	
	OVC4010-C	40	350	
	OVC6012-C	60	350	
	OVC15016-C	150	350	
	OVC20020-C	200	350	
Valvola overcentre a cartuccia compensata in pressione <i>Pressure compensated, pilot assisted overcentre valve – cartridge type</i>				
	OVC60CC-C	60	350	
	OVC150CC-C	150	350	
	OVC200CC-C	200	350	
	OVC2008CC-C	20	350	
	OVC4010CC-C	40	350	
	OVC6012CC-C	60	350	
	OVC15016CC-C	150	350	
	OVC20020CC-C	200	350	
Valvola overcentre semplice effetto con pilotaggio esterno <i>Single effect overcentre valve with external pilot</i>				
	OVC-SE-38	40	350	
	OVC-SE-12	60	350	
	OVC-SE-34	100	350	
	OVC-SE-10	120	350	
	Flangiabile con vite cava <i>Nipple screw flangeable</i>			
	OVC-SE-C-38	40	300	
	OVC-SE-C-12	60	300	
	Flangiabile <i>Flange mounted</i>			
	OVC-SE-F38-38	40	350	
	OVC-SE-F38-12	60	350	
	OVC-SE-F2-PST-38	40	350	
	OVC-SE-F2-PST-38	60	350	
	OVC-SE-F-38-...-A	40	350	
	OVC-SE-F-12-...-A	60	350	

Overzicht alle kleppen

		Q	P
		[l/min]	[bar]
Valvola overcentre semplice effetto in linea <i>In line, single effect overcentre valve</i>			
	OVC-SE-L-38	40	350
	OVC-SE-L-12	60	350
	OVC-SE-L-34	100	350
	OVC-SE-L-10	120	350
	OVC-SE-L-200-34	150	350
	OVC-SE-L-200-10	200	350
	Flangiabile con vite cava <i>Nipple screw flangeable</i>		
	OVC-SE-CL-38	40	300
	OVC-SE-CL-12	60	300
	Flangiabile <i>Flange mounted</i>		
OVC-SE-L-F40-PST-12-..-A	80	350	
OVC-SE-L-F40-PST-34-..-A	120	350	
Valvola overcentre semplice effetto con pilotaggio esterno – centro chiuso <i>Singel effect overcentre valve with external pilot – closed centre</i>			
	OVC-SE-CC-38	40	350
	OVC-SE-CC-12	60	350
	OVC-SE-CC-34	100	350
	OVC-SE-CC-10	120	350
Valvola overcentre semplice effetto in linea - centro chiuso <i>In line, single effect overcentre valve - closed centre</i>			
	OVC-SE-L-CC-38	40	350
	OVC-SE-L-CC-12	60	350
	OVC-SE-L-CC-34	100	350
	OVC-SE-L-CC-10	120	350
	OVC-SE-L-200-CC-34	150	350
	OVC-SE-L-200-CC-10	200	350
	Flangiabile <i>Flange mounted</i>		
	OVC-SE-L-F40-PST-12-CC..-A	80	350
OVC-SE-L-F40-PST-34-CC-..-A	120	350	

Overzicht alle kleppen

		Q	P
		[l/min]	[bar]
Valvola overcentre doppio effetto <i>Double effect overcentre valve</i>			
	OVC-DE-38	40	350
	OVC-DE-12	60	350
	Flangiabile con vite cava <i>Nipple screw flangeable</i>		
	OVC-DE-C-38	40	300
	In linea <i>In line</i>		
	OVC-DE-L-38	40	350
	OVC-DE-L-12	60	350
	OVC-DE-L-34	100	350
	OVC-DE-L-10	120	350
	OVC-DE-L-200-34	150	350
OVC-DE-L-200-10	200	350	
OVC-DE-L-2001-34	150	350	
Valvola overcentre doppio effetto in linea flangiabile <i>Flangeable, in line, double effect overcentre valve</i>			
	OVC-DE-L-F40-38	40	350
	OVC-DE-L-F40-12	60	350
	OVC-DE-L-F48-38	40	350
	OVC-DE-L-F30-14	20	350
	OVC-DE-L-F30-38	40	350
Valvola overcentre doppio effetto in linea flangiabile <i>Flangeable, in line, double effect overcentre valve</i>			
	OVC-DE-F2-PST-12	60	350
Valvola overcentre doppio effetto in linea con sblocco freno <i>In line, double effect overcentre valve with brake unclamping</i>			
	OVC-DE-L-SF-38	40	350
	OVC-DE-L-SF-12	60	350
	OVC-DE-L-SF-34	100	350
	OVC-DE-L-SF-10	120	350
Valvola overcentre doppio effetto - centro chiuso <i>Double effect overcentre valve - closed centre</i>			
	OVC-DE-CC-38	40	350
	OVC-DE-CC-12	60	350

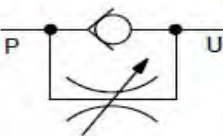
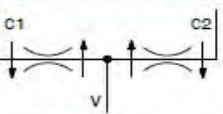
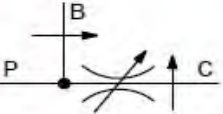
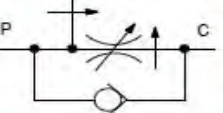

Overzicht alle kleppen

		Q	P
		[l/min]	[bar]
Valvola overcentre doppio effetto in linea - centro chiuso <i>In line, double effect overcentre valve - closed centre</i>			
	OVC-DE-L-CC-38	40	350
	OVC-DE-L-CC-12	60	350
	OVC-DE-L-CC-34	100	350
	OVC-DE-L-CC-10	120	350
	OVC-DE-L-200-CC-34	150	350
	OVC-DE-L-200-CC-10	200	350
Valvola overcentre doppio effetto in linea flangiabile <i>Flangeable, in line, double effect overcentre valve</i>			
	OVC-DE-F2-PST-CC-12	80	350
		Q	P
		[l/min]	[bar]
	VMS-34	150	300
	EV25-VLP40-VNR40-ST-38	25	300
	EV25-VLP40-VNR40-ST-12	25	300
	EV70-VLP80-VNR80-ST-12	70	250
	EV70-VLP80-VNR80-ST-34	70	250
	EV150-VLP130-VNR130-ST-10	130	250

Overzicht alle kleppen

		Q	P
		[l/min]	[bar]
Strozzatore a cartuccia <i>Needle valve – cartridge type</i>			
	STV-C	5	350
	ST5-C	5	350
	ST-C	40	350
	ST08-C	40	350
	ST80-C	80	300
	ST130-C	130	300
Strozzatore unidirezionale a cartuccia <i>Needle valve with free flow check – cartridge type</i>			
	STVU-C	40	350
	STVU08-C	40	350
	ST80VU-C	80	300
Valvola regolatrice di flusso compensata, due vie, a cartuccia <i>2 ways, pressure compensated flow regulator valve – cartridge type</i>			
	RF2-50-C	30	350
	RF2-70-27-C	70	350
	RF2-130-33-C	130	350
	RF2-200-42-C	200	350
	RF2-70-12-C	70	350
	RF2-130-16-C	130	350
RF2-200-20-C	200	350	
Valvola regolatrice di flusso compensata, tre vie, a cartuccia <i>3 ways, pressure compensated flow regulator valve – cartridge type</i>			
	RFP-50-C	40	350
	RFP-90-C	90	350
	RFP-150-33-C	150	350
	RFP-250-42-C	250	350
	RFP-90-12-C	90	350
	RFP-150-16-C	150	350
	RFP-250-20-C	250	350
	RF-C3	40	350
Divisore – riunificatore di flusso a cartuccia <i>Flow divider combiner – cartridge type</i>			
	DFR-C	70	350
	DFR-10-C	40	350
	DFR-12-C	70	350
	DFR-16-C	150	350
	DFR-20-C	250	350
Strozzatore <i>Needle valve</i>			
	ST-14	25	350
	ST-38	40	350
	ST-12	60	350
	ST-34	120	350
	ST-10	200	300
	STP-14	15	350
	STP-38	30	350
	STP-12	45	350
	STP-34	85	300

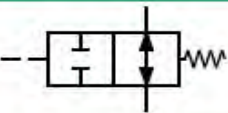
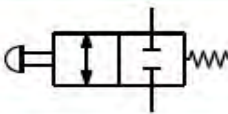
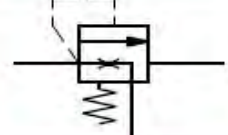
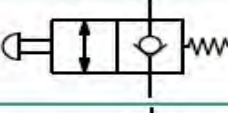
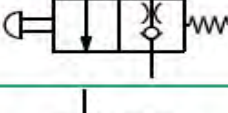
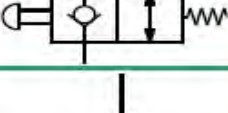
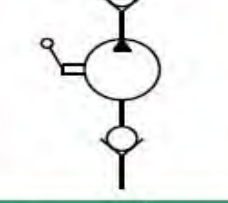
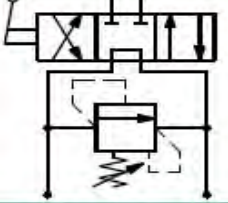
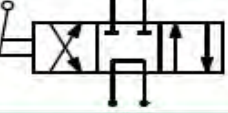
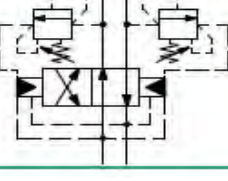
Overzicht alle kleppen

		Q	P
		[l/min]	[bar]
Strozzatore unidirezionale <i>Needle valve with free flow check – cartridge type</i>			
	STU-14	25	350
	STU-38	40	350
	STU-12	60	350
	STU-34	120	350
	STU-10	200	300
	STPU-14	15	350
	STPU-38	30	350
	STPU-12	45	350
STPU-34	85	300	
Divisore – riunificatore di flusso <i>Flow divider combiner</i>			
	DFR-38	25	300
	DFR-12	70	300
	DFR-34	150	250
	DFR-10	150	250
Valvola regolatrice di flusso compensata, tre vie <i>3 ways, pressure compensated flow regulator valve</i>			
	RFP-50-38	40	300
	RFP-50-12	40	300
	RFP-90-12	90	300
	RFP-90-34	90	300
	RF-3-38	40	300
	RF-3-12	40	300
	RFP-38	70	350
	RFPA-38	60	270
	RFPA-12	100	270
	RFPA-34	150	270
	RFPA-10	380	270
	RFPA-38-CE	60	270
	RFPA-12-CE	100	270
RFPA-34-CE	150	270	
RFPA-10-CE	380	270	
RF-G	90	350	
Valvola regolatrice di flusso compensata, tre vie, con ritorno libero <i>3 ways, pressure compensated flow regulator valve, with free flow check</i>			
	RFP-50-VU-38	40	300
	RFP-50-VU-12	40	300
	RFP-90-VU-12	90	300
	RFP-90-VU-34	90	300
Valvola regolatrice di flusso compensata, due vie <i>2 ways, pressure compensated flow regulator valve</i>			
	RF-A2-38	45	270
	RF-A2-12	60	270
	RF-A2-34	90	270
	RF-A2-10	190	270

Overzicht alle kleppen

		Q	P
		[l/min]	[bar]
Valvola regolatrice di flusso compensata, tre vie <i>3 ways, pressure compensated flow regulator valve</i>			
	RF-A-38	60	270
	RF-A-12	100	270
	RF-A-34	150	270
	RF-A-10	280	270
	RF-A-38-L	60	270
	RF-A-12-L	100	270
Valvola regolatrice di flusso compensata, due vie, con ritorno libero <i>2 ways, pressure compensated flow regulator valve, with free flow check</i>			
	RF-A2-VU-38	45	270
	RF-A2-VU-12	60	270
	RF-A2-VU-34	90	270
	RF-A2-VU-10	190	270
Valvola regolatrice di flusso compensata, tre vie, con ritorno libero <i>3 ways, pressure compensated flow regulator valve, with free flow check</i>			
	RF-A-VU-38	60	270
	RF-A-VU-12	100	270
	RF-A-VU-34	150	270
	RF-A-VU-10	280	270
Valvola regolatrice di flusso compensata, tre vie, con limitatrice di pressione <i>3 ways, pressure compensated flow regulator valve, with relief valve</i>			
	RF-A-VLP10-38	60	270
	RF-A-VLP10-12	100	270
	RF-A-VLP10-34	150	270
	RF-A-VLP10-10	280	270
Valvola regolatrice di flusso compensata tre vie azionabile elettricamente con valvola limitatrice di p <i>3 ways, pressure compensated flow regulator valve with solenoid valve and relief</i>			
	RFPAEV-VLP-38	60	270
	RFPAEV-VLP-12	100	270
	RFPAEV-VLP-34	150	270
	RFPAEV-VLP-10	380	270
Valvola regolatrice di flusso compensata, tre vie, con limitatrice di pressione <i>3 ways, pressure compensated flow regulator valve, with relief valve</i>			
	RF-GV	90	350

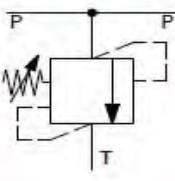
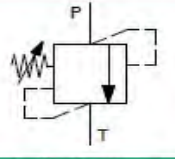
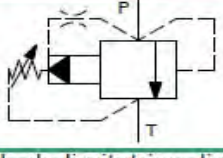
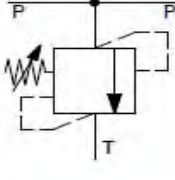
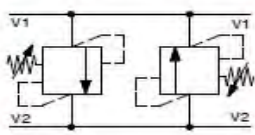
Overzicht alle kleppen

		Q	P
		[l/min]	[bar]
	V3P-C	40	350
	V3P-38	40	350
	V2M-C	40	350
	V2M-14	25	350
	V2M-38	40	350
	VMS-C	200	350
	VFC-14	25	300
	VFC-38	40	300
	VFCA-14	25	350
	VFCA-38	40	350
	VAC38	35	300
	PM15		250
	PM15-2		250
	BM007200		250
	DM-1	30	350
	DM4	5	400
	DC3	30	350
	DC5	70	350
	VAD-F-C3	30	250
	VAD-F-C5	70	250

Overzicht alle kleppen

		Q	P
		[l/min]	[bar]
Valvola limitatrice di pressione a cartuccia <i>Direct acting relief valve – cartridge type</i>			
	VLP5-C	5	400
	VLP10-C	10	350
	VLP30-C	30	350
	VLP40-C	40	300
	VLP4008-C	40	300
	VLP45-C	45	300
	VLP80-C	80	300
	VLP85-C	85	300
Valvola limitatrice di pressione diretta con pistone differenziale a cartuccia <i>Direct acting differential piston relief valve – cartridge type</i>			
	VLP130-CD	130	350
	VLP150-CD	150	350
	VLP20016-CD	200	350
	VLP40020-CD	400	350
Valvola limitatrice di pressione pilotata a cartuccia <i>Pilot operated relief valve – cartridge type</i>			
	VLP150-PC	150	350
	VLP200-PC	200	350
Valvola limitatrice di pressione diretta a cartuccia compensata in pressione <i>Pressure compensated, direct acting relief valve – cartridge type</i>			
	VLP40-CC	40	350
	VLP80-CC	80	350
	VLP130-CC	130	350
Valvola riduttrice di pressione diretta a cartuccia <i>Direct acting pressure reducing valve – cartridge type</i>			
	RP25-C	25	300
	RP40-C	40	300
Valvola di sequenza 3 vie normalmente chiusa a cartuccia <i>3 ways, normally closed sequence valve – cartridge type</i>			
	VP-C	5	350

Overzicht alle kleppen

		Q	P
		[l/min]	[bar]
Valvola limitatrice di pressione <i>Direct acting relief valve</i>			
	VLP5-18	5	350
	VLP40-14	25	350
	VLP40-38	35	350
	VLP40-12	40	350
	VLP80-12	80	300
	VLP80-34	80	300
	VLP130-34	130	300
	VLP130-10	130	300
	VLP10-14	10	350
	VLP10-38	10	350
	VLP30-14	25	350
	VLP30-38	30	350
	VLP30-12	30	350
Valvola limitatrice di pressione pilotata <i>Pilot operated relief valve</i>			
	VLP200P-34	200	250
	VLP200P-10	200	250
Valvola limitatrice di pressione <i>Direct acting relief valve</i>			
	VLP40-L-14	25	350
	VLP40-L-38	35	350
	VLP40-L-12	40	350
	VLP80-L-12	80	300
	VLP80-L-34	80	300
	VLP130-L-34	130	300
	VLP130-L-10	130	300
Valvola limitatrice di pressione <i>Direct acting relief valve</i>			
	VLP40-DI-38	35	300
	VLP40-DI-12	40	300
	VLP80-DI-12	80	300
	VLP80-DI-34	80	300
	VLP130-DI-34	130	250
	VLP130-DI-10	130	250
	<i>In linea</i> <i>In line</i>		
	VLP10-DIL-14	10	300
	VLP10-DIL-38	10	300
	VLP40-DIL-38	35	300
	VLP40-DIL-12	40	300
	VLP80-DIL-12	80	300
	VLP80-DIL-34	80	300
VLP130-DIL-34	130	250	
VLP130-DIL-10	130	250	

Overzicht alle kleppen

		Q	P
		[l/min]	[bar]
Valvola limitatrice di pressione doppia e anticavitazione <i>Dual relief and anticavitation valve</i>			
	VLP40-DA-12	40	300
	VLP80-DA-12	80	300
	VLP80-DA-34	80	300
Valvola limitatrice di pressione semplice e anticavitazione <i>Single relief and anticavitation valve</i>			
	VLP40-A-12	40	300
	VLP80-A-12	80	300
	VLP80-A-34	80	300
Valvola riduttrice di pressione diretta <i>Direct acting pressure reducing valve</i>			
	RP25-38	25	300
	RP25-12	25	300
Valvola riduttrice di pressione diretta con valvola di non ritorno <i>Direct acting pressure reducing valve with check valve</i>			
	RP25-VU-38	25	300
	RP25-VU-12	25	300
Valvola di esclusione alta-bassa pressione <i>High - low pressure, relief and unloading valve</i>			
	VEP-VLP40-38	40	350
	VEP-VLP40-12	40	350
	VEP-VLP80-12	80	350
Valvola di esclusione alta-bassa pressione flangiabile su pompa ad ingranaggi <i>High - low pressure, relief and unloading valve - direct mounting on gear pumps</i>			
	VEP80-FPG	45	350

Overzicht alle kleppen

		Q	P
		[l/min]	[bar]
Valvola di sequenza ad azione diretta <i>Direct acting sequence valve</i>			
	VSQ40-38	40	300
	VSQ40-12	40	300
	VSQ80-12	80	300
	VSQ80-34	80	300
Valvola di sequenza ad azione diretta in linea <i>In line, direct acting sequence valve</i>			
	VSQ40-L-38	40	300
	VSQ40-L-12	40	300
	VSQ80-L-12	80	300
	VSQ80-L-34	80	300
	VSQ130-L-34	130	300
	VSQ130-L-10	130	300
Valvola di sequenza ad azione diretta con esclusione della pressione primaria <i>Direct acting sequence valve with primary pressure cut-off</i>			
	VSQ40-CC-38	40	300
	VSQ40-CC-12	40	300
	VSQ80-CC-12	80	300
	VSQ80-CC-34	80	300
Valvola di sequenza ad azione diretta in linea con esclusione della pressione primaria <i>In line, direct acting sequence valve with primary pressure cut-off</i>			
	VSQ40-L-CC-38	40	300
	VSQ40-L-CC-12	40	300
	VSQ80-L-CC-12	80	300
	VSQ80-L-CC-34	80	300
	VSQ130-L-CC-34	130	300
	VSQ130-L-CC-10	130	300

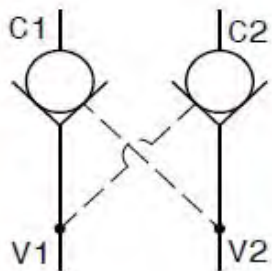
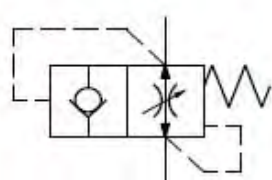
Overzicht alle kleppen

		Q	P
		[l/min]	[bar]
Valvola unidirezionale a cartuccia <i>Check valve – cartridge type</i>			
	VNR40-C	40	350
	VNR40-08-C	40	350
	VNR60-C	60	350
	VNR80-C	80	300
	VNR130-C	130	300
	VNR200-C	200	300
	VNR200-20-C	200	300
Valvola unidirezionale pilotata a cartuccia <i>Pilot operated check valve – cartridge type</i>			
	VBP20-08-C	20	350
	VBP40-C	40	350
	VBP60-10-C	60	350
	VBP90-C	90	350
Valvola paracadute a cartuccia <i>Screw-in hose burst valve</i>			
	VPN-14	25	350
	VPN-38	50	350
	VPN-12	80	350
	VPN-34	150	350
Valvola selettiva <i>Shuttle valve</i>			
	VSF-14	20	350
	VSF-38	40	350
	VSF-12	60	350
	VSF-34	100	280
	VSM-14	20	350
	VSM-38	40	350
	VSM-12	60	350
	VSM-34	100	280
Valvola unidirezionale <i>Check valve</i>			
	VU14-SF	15	500
	VU38-SF	30	500
	VU12-SF	50	500
	VU34-SF	90	350
	VU14-SP	15	500
	VU38-SP	30	500
	VU12-SP	50	500
	VU34-SP	90	350
	VU10-SP	100	350
	VU38-MM	25	350
	VU12-MM	40	350

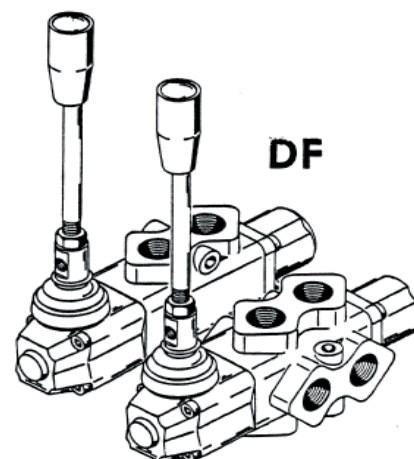
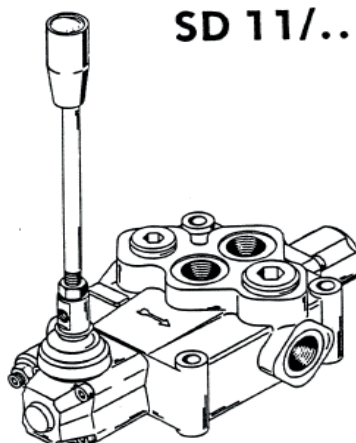
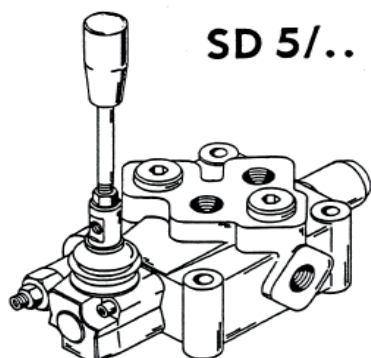
Overzicht alle kleppen

		Q	P	
		[l/min]	[bar]	
Valvola bidirezionale <i>Double acting check valve</i>				
	VBD-E-38	30	350	
Valvola di blocco a semplice effetto <i>Single effect, pilot operated check valve</i>				
	VBS-14-SF	20	350	
	VBS-38-SF	35	350	
	VBS-12-SF	50	350	
	VBS-14-SP	20	350	
	VBS-38-SP	35	350	
	VBS-12-SP	50	350	
	VBS-34-SP	80	250	
	In linea <i>In line</i>			
	VBS-L-14	20	350	
	VBS-L-38	35	350	
	VBS-L-12	50	350	
	VBS-L-34	50	350	
Flangiabile <i>Flangeable</i>				
VBS-L-F-38	35	350		
VBS-L-F-12	50	350		
Valvola di blocco semplice effetto con pilotaggio separato <i>Pilot operated check valve with vented pilot</i>				
	VBS-L-PS-14	20	350	
	VBS-L-PS-38	35	350	
	VBS-L-PS-12	50	350	
	VBS-F-PS-38	35	350	
	VBS-F-PS-12	50	350	
Valvola di blocco pilotata semplice effetto con rubinetto manuale <i>Single effect, pilot operated check valve with manual lever</i>				
	VBS-R-D-38	35	300	
	VBS-R-D-12	50	300	
	VBS-R-S-38	35	300	
	VBS-R-S-12	50	300	
	Flangiabile <i>Flangeable</i>			
	VBS-F-R-D-38	35	300	
VBS-F-R-S-38	35	300		

Overzicht alle kleppen

		Q	P	
		[l/min]	[bar]	
Valvola di blocco a doppio effetto <i>Double effect, pilot operated check valve</i>				
	VBD-14-SF	20	350	
	VBD-38-SF	35	350	
	VBD-12-SF	50	350	
	VBD-14-SP	20	350	
	VBD-38-SP	35	350	
	VBD-12-SP	50	350	
	VBD-34-SP	80	250	
	VBD-14-SF-M16X1.5	20	350	
	VBD-38-SF-M18X1.5	35	350	
	VBD-14-SP-M16X1.5	20	350	
	VBD-38-SP-M18X1.5	35	350	
	In linea <i>In line</i>			
	VBD-L-14	25	350	
	VBD-L-38	35	350	
	VBD-L-12	50	350	
VBD-L-34	80	250		
Flangiabile <i>Flangeable</i>				
VBD-L-F-38	35	350		
VBD-L-F-12	50	350		
VBD-L-F-34	80	350		
Valvola paracadute <i>Hose burst valve</i>				
	VPN-14-MF	25	350	
	VPN-38-MF	50	350	
	VPN-12-MF	80	350	
	VPN-34-MF	150	350	
	VPN-14-FF	25	350	
	VPN-38-FF	50	350	
	VPN-12-FF	80	350	
	VPN-34-FF	150	350	

SD5/SD11/DF



Bestel code

SD5 / 2 38 / 111 / 38 AET

Monobloc uitvoering:
SD4 SD5/.. SD11/.. SD18/..

Compositiebloc uitvoering:
SD6/.. SD10/.. SD16/.. SD20/..

Aantal elementen:

code elementen:
gezien vanaf de zijde van het overdrukventiel

Code element - nr: 1 = **38**
Schakelschema 3, Schuiftype 8.

Code element - nr: 2 = **111**
Schakelschema 1, Schuiftype 11.

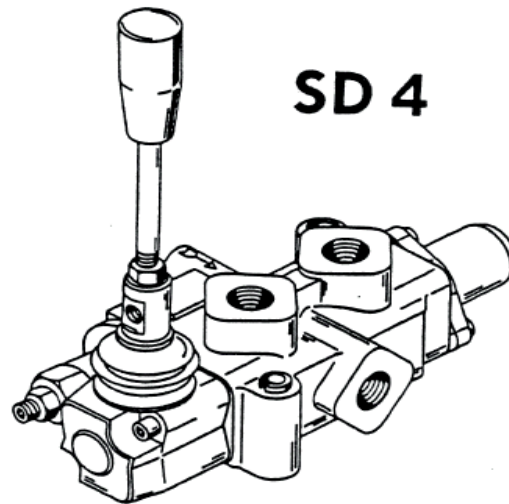
Code element - nr: 3 = **38**
Schakelschema 3, Schuiftype 8.

Drukdoorvoer

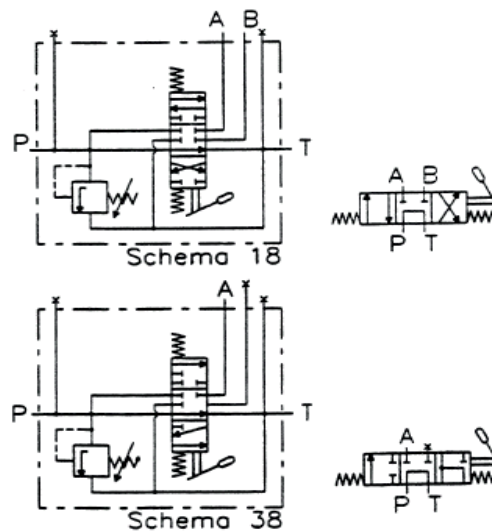
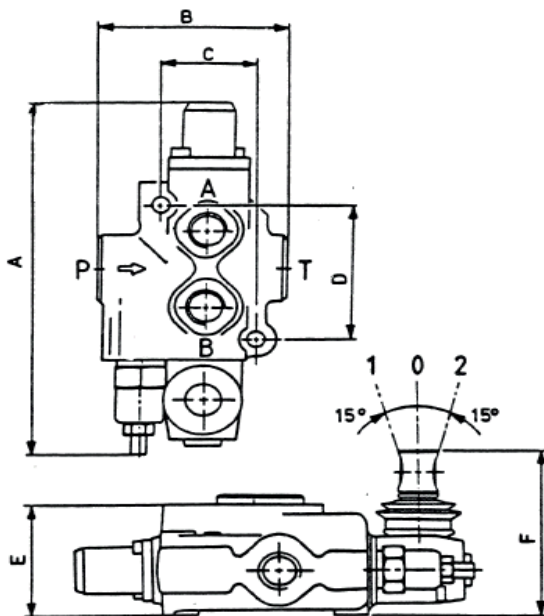
SD4 Stuurschuif

Monobloc uitvoering:

Voorzien van drukkbegrenzingsventiel.
Leverbaar in 2 schakelschema's.
Diverse schuifbedieningen.
Kleine buitenafmetingen.
Exclusief handel.



SD 4



Technische gegevens

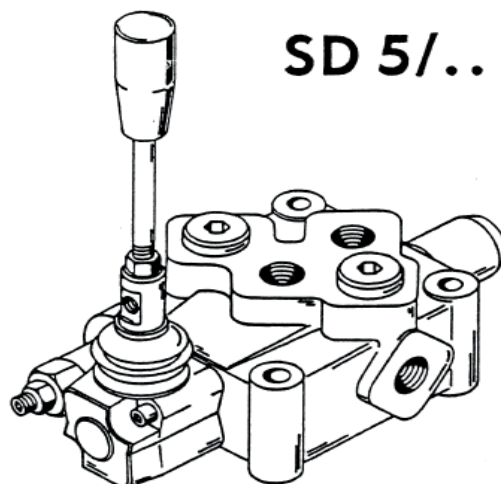
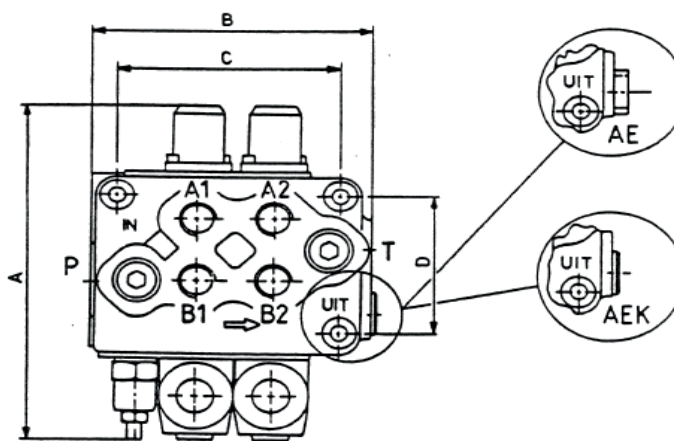
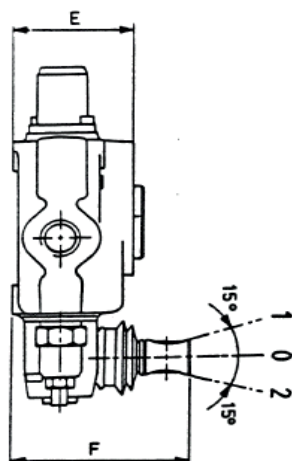
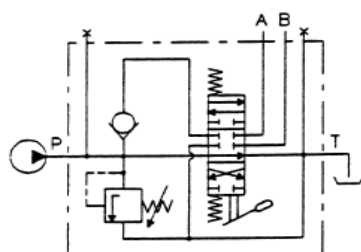
Aansluiting 3/8"Gas
Max. retourdruk: 180 bar
Standaard bereik drukkbegrenzingsventiel: 50-220 bar
Afwijkende drukbereiken zijn ook leverbaar: 0-40, 20-80, 180-400 bar

Type	Flow l/min.	Bar	A	B	C	D	E	F
SD4/1	45	250	182	93	46	70	55	86

SD5 Stuurschuif

Monobloc uitvoering:

Voorzien van drukbegrenzingsventiel.
Diverse schuifbedieningen.
Terugslagklep aan invoerzijde
Kleine buitenafmetingen.
Exclusief handel.



Technische gegevens

Aansluiting 3/8"Gas

Max. retourdruk: 180 bar

Standaard bereik drukbegrenzingsventiel: 50-220 bar

Afwijkende drukbereiken zijn ook leverbaar: 0-40, 20-80, 180-400 bar

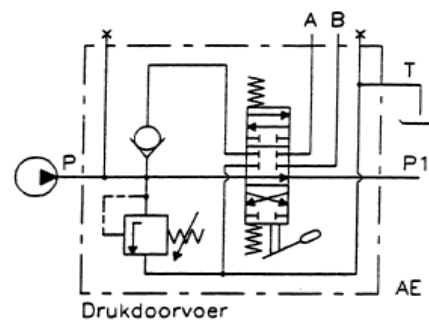
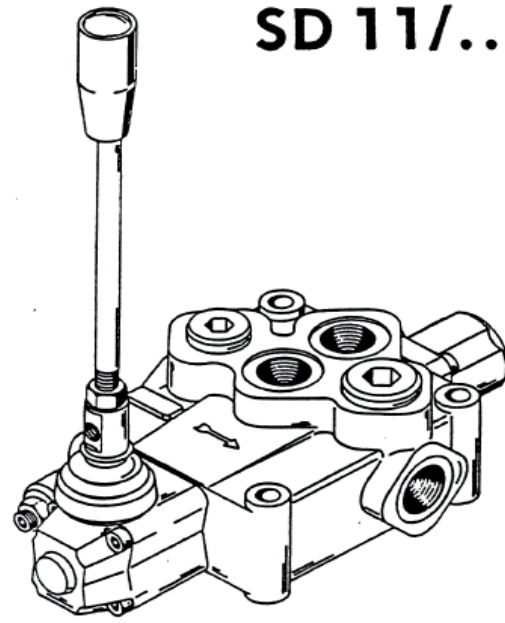
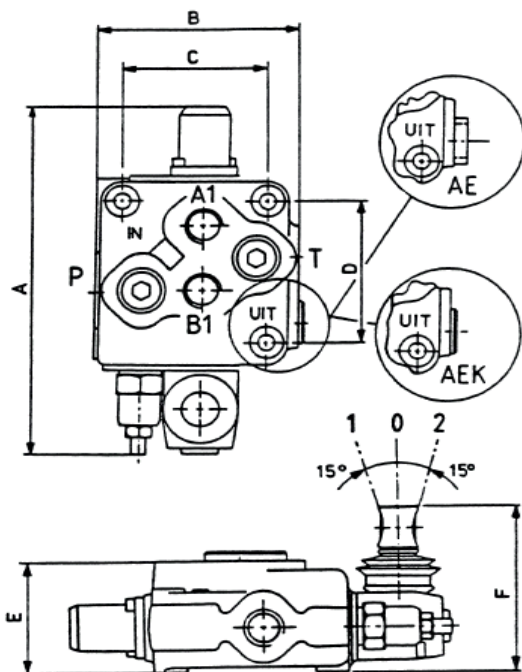
Type	Flow l/min.	Bar	A	B	C	D	E	F
SD5/1	45	400	185	101	73	81	64	90
SD5/2	45	400		138	110			
SD5/3	40	350		175	147			
SD5/4	40	350		212	184			
SD5/5	35	320		249	221			
SD5/6	35	300		286	258			

SD11

Stuurschuif

Monobloc uitvoering:

Voorzien van drukbegrenzingsventiel.
Terugslagklep aan invoerzijde.



Technische gegevens

Aansluiting 1/2" Gas (poort P-A-B).

Retour aansluiting 3/4" Gas (poort T).

Max. retourdruk: 80 bar

Standaard bereik drukbegrenzingsventiel: 50-220 bar

Afwijkende drukbereiken zijn ook leverbaar: 0-40, 20-80, 180-400 bar

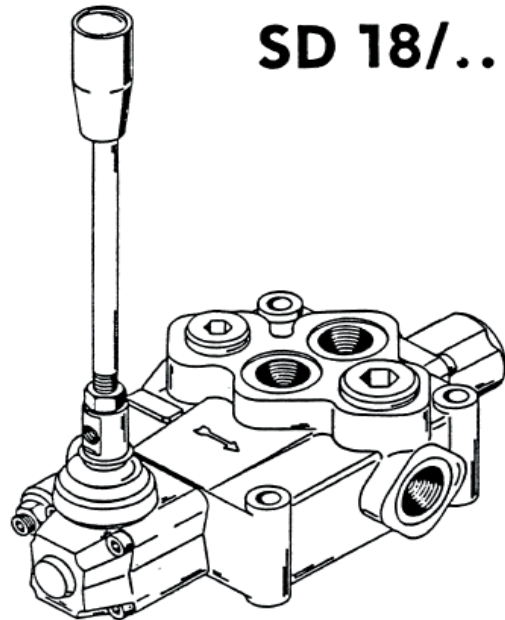
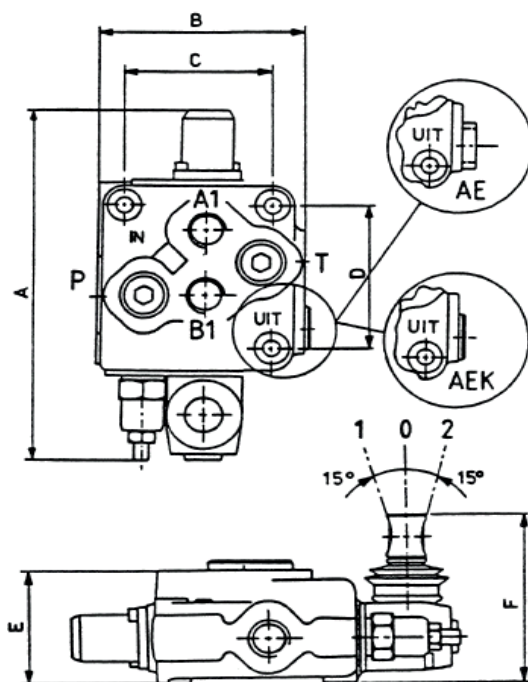
Type	Flow l/min.	Bar	A	B	C	D	E	F
SD11/1	65	350	244	129	100	103	72	103
SD11/2	65	320		174	145			
SD11/3	60	300		219	190			
SD11/4	55	250		264	235			
SD11/5	50	250		309	280			
SD11/6	50	250		354	325			

SD18

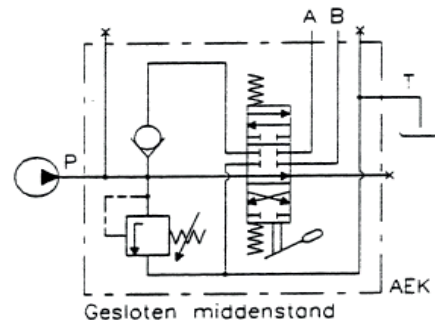
Stuurschuif

Monobloc uitvoering:

Voorzien van drukbegrenzingsventiel.
Terugslagklep aan invoerzijde.



SD 18/..



Technische gegevens

Aansluiting 3/4"Gas (poort P-A-B).

Retour aansluiting 1"Gas (poort T).

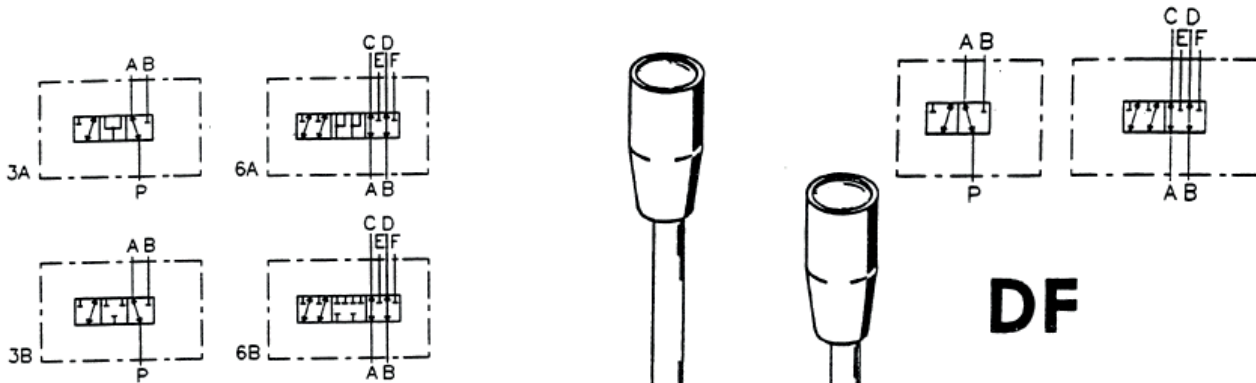
Max. retourdruk: 70 bar.

Standaard bereik drukbegrenzingsventiel: 50-220 bar

Afwijkende drukbereiken zijn ook leverbaar: 0-40, 20-80, 180-400 bar

Type	Flow l/min.	Bar	A	B	C	D	E	F
SD18/1	120	350	320	161	129	152	91	124
SD18/2	110	320		212	182			
SD18/3	105	300		265	235			
SD18/4	100	250		318	288			
SD18/5	95	250		371	341			
SD18/6	90	250		424	394			

DF Stuurschuif



Technische gegevens:

Type	Flow l/min.	max. bar	Aansl.
DF5	60	350	3/8"G
DF10	90	350	1/2"G
DF20	140	350	3/4"G
DF25	220	350	1" G

3/2- Schuiven

Type	Omschrijving
DF5/3A12L	arr. Pos. 1 en 2, exclusief handel
DF5/3B12L	arr. Pos. 1 en 2, exclusief handel
DF5/3A18L	veerret. Pos. 2, exclusief handel

DF10/3A12L	arr. Pos. 1 en 2, exclusief handel
DF10/3B12L	arr. Pos. 1 en 2, exclusief handel

DF20/3A12L	arr. Pos. 1 en 2, exclusief handel
DF20/3B12L	arr. Pos. 1 en 2, exclusief handel

DF25/3A12L	arr. Pos. 1 en 2, exclusief handel
DF25/3B12L	arr. Pos. 1 en 2, exclusief handel

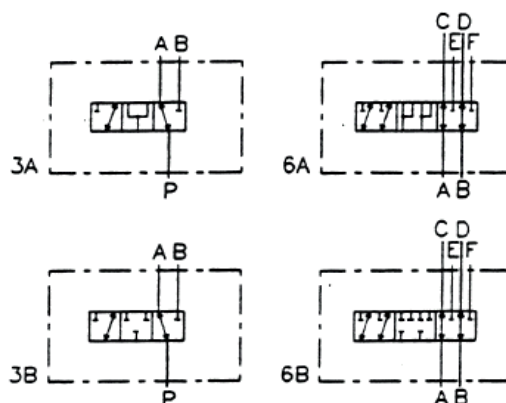
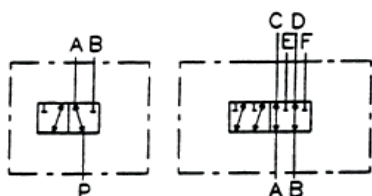
6/2- Schuiven

Type	Omschrijving
DF5/6A12L	arr. Pos. 1 en 2, exclusief hand
DF5/6B12L	arr. Pos. 1 en 2, exclusief hand

DF10/6A12L	arr. Pos. 1 en 2, exclusief hand
DF10/6B12L	arr. Pos. 1 en 2, exclusief hand

DF20/6A12L	arr. Pos. 1 en 2, exclusief hand
DF20/6AB12L	arr. Pos. 1 en 2, exclusief hand

DFE
Stuurschuif



Technische gegevens

Type	Flow l/min.	max.	Aansl.
DFE 5ES	30	160	3/8" Gas
DFE10ES	60	160	1/2" Gas
DFE20ES	100	160	3/4" Gas

3/2- schuiven

Type*	Omschrijving
DFE 5/3A18ES	open / schakelen
DFE 5/3B18ES	gesloten / schakelen

DFE10/3A18ES	open / schakelen
DFE10/3B18ES	gesloten / schakelen

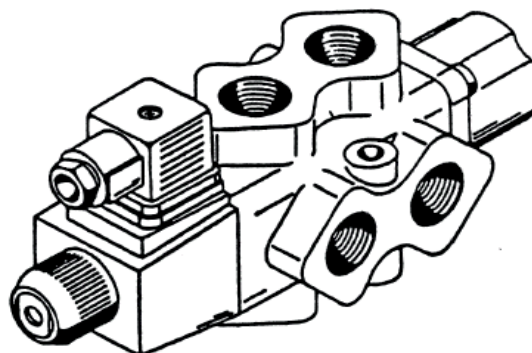
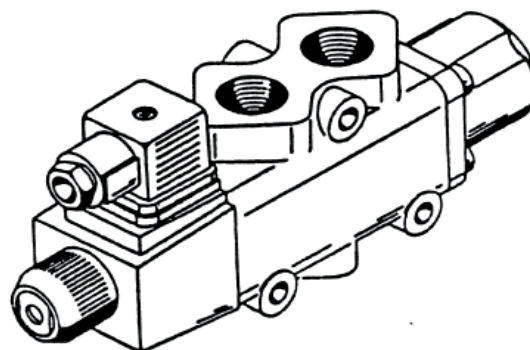
DFE20/3A18ES	open / schakelen
DFE20/3B18ES	gesloten / schakelen

6/2- schuiven

Type*	Omschrijving
DFE 5/6B18ES	gesloten / schakelen
DFE10/6B18ES	gesloten / schakelen

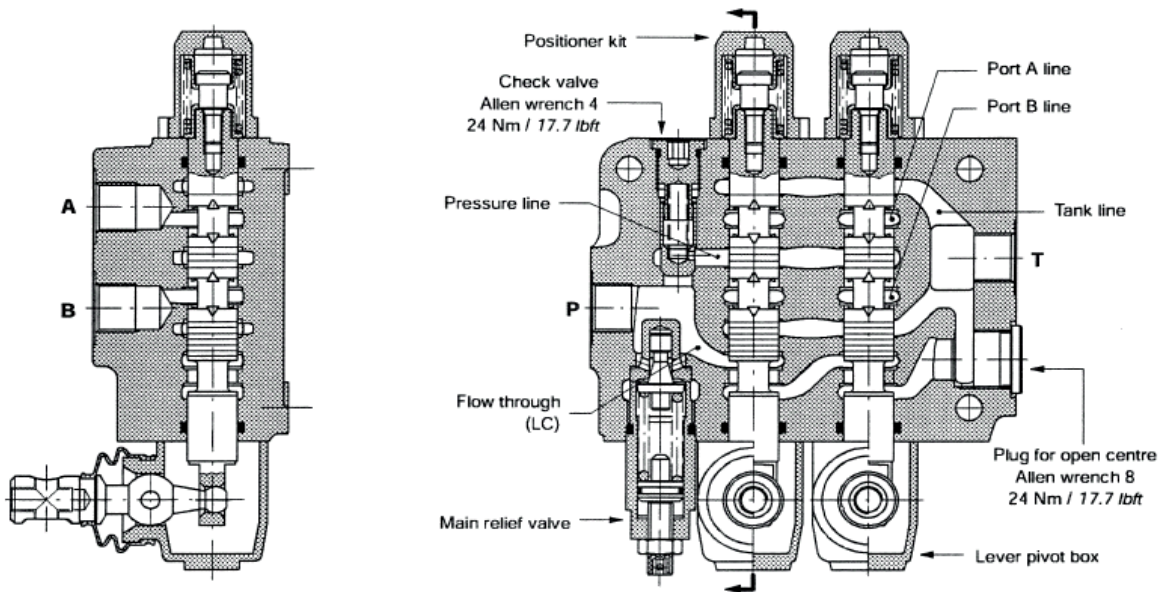
* Bij bestelling gewenste spoelspanning opgeven.
12 VDC
24 VDC

DFE

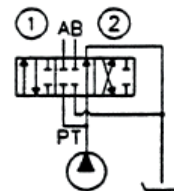


Schakelschema

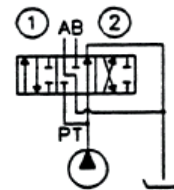
Schakelschema's



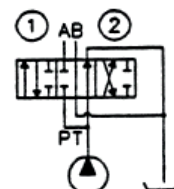
1 Dubbelwerkend
In ruststand A - B gesloten.
3 standen



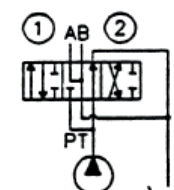
1A Dubbelwerkend
In ruststand A verbonden met tank.
3 standen



1B Dubbelwerkend
In ruststand B verbonden met tank.
3 standen



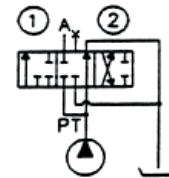
2 Dubbelwerkend
In ruststand A - B verbonden met tank.
3 standen



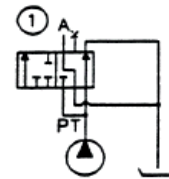
Schakelschema

Schakelschema's

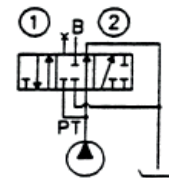
- 3** Enkelwerkend op poort A.
In de ruststand A gesloten.
3 standen



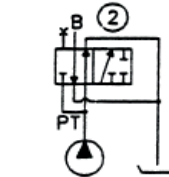
- 3A** Enkelwerkend op poort A.
In ruststand A verbonden met tank.
2 standen



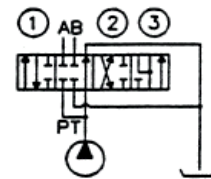
- 4** Enkelwerkend op poort B.
In ruststand B verbonden met tank.
3 standen



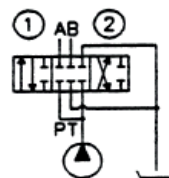
- 4B** Enkelwerkend op poort B.
In ruststand B verbonden met tank.
2 standen



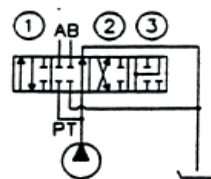
- 5*** Dubbelwerkend
In stand 3: A - B verbonden met tank*(behalve SD 10 in stand 3: A - B - P - T verbonden).
4 standen



- 6** Dubbelwerkend
In ruststand alle poorten gesloten (AEK).
3 standen

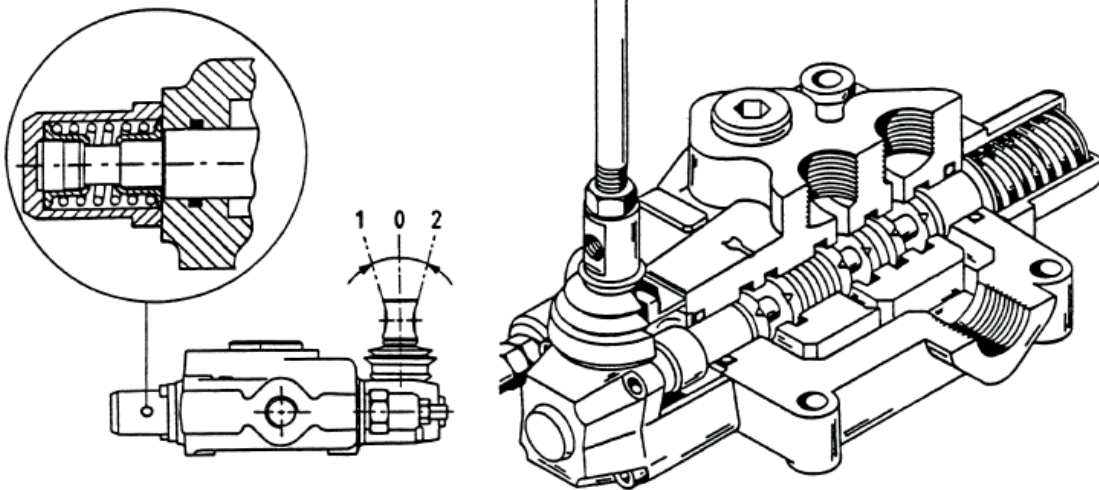


- 8*** Dubbelwerkend
In ruststand A - B gesloten.
In stand 3: ijlgangschakeling A - B - P verbonden.
4 standen



* Niet om te bouwen d.m.v. plunjer hiervoor is een speciaal huis nodig.

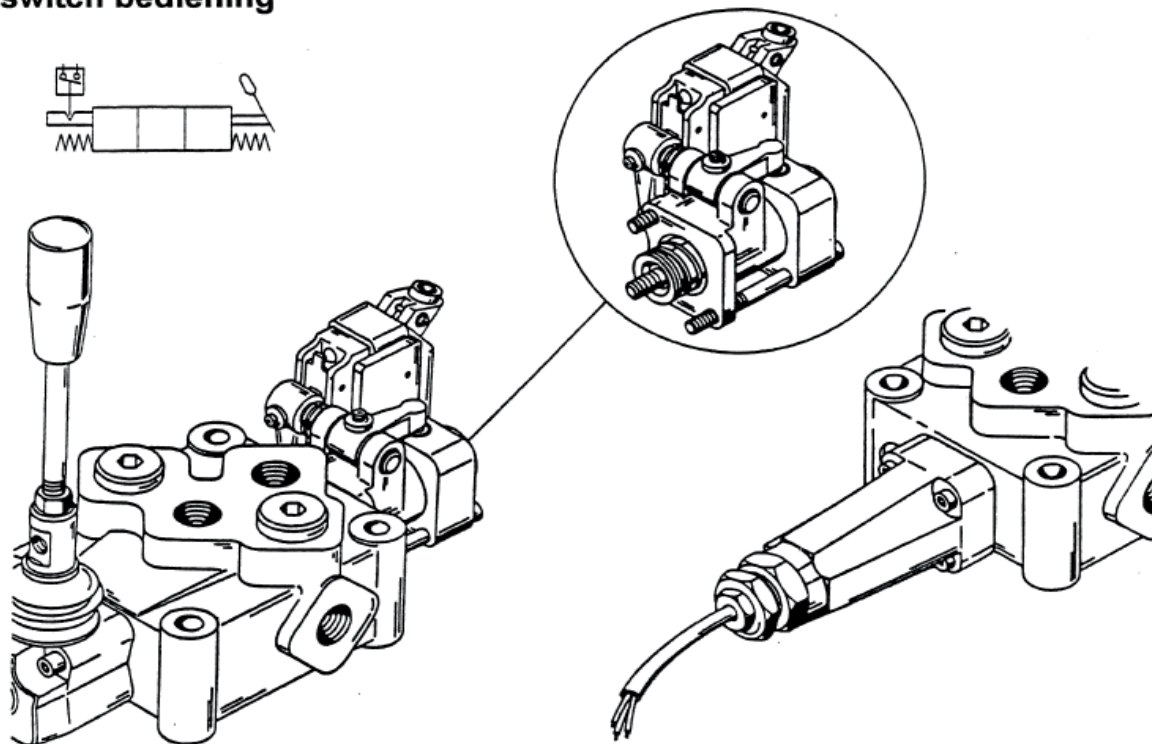
Schuifbediening (A-POORTZIJDE).



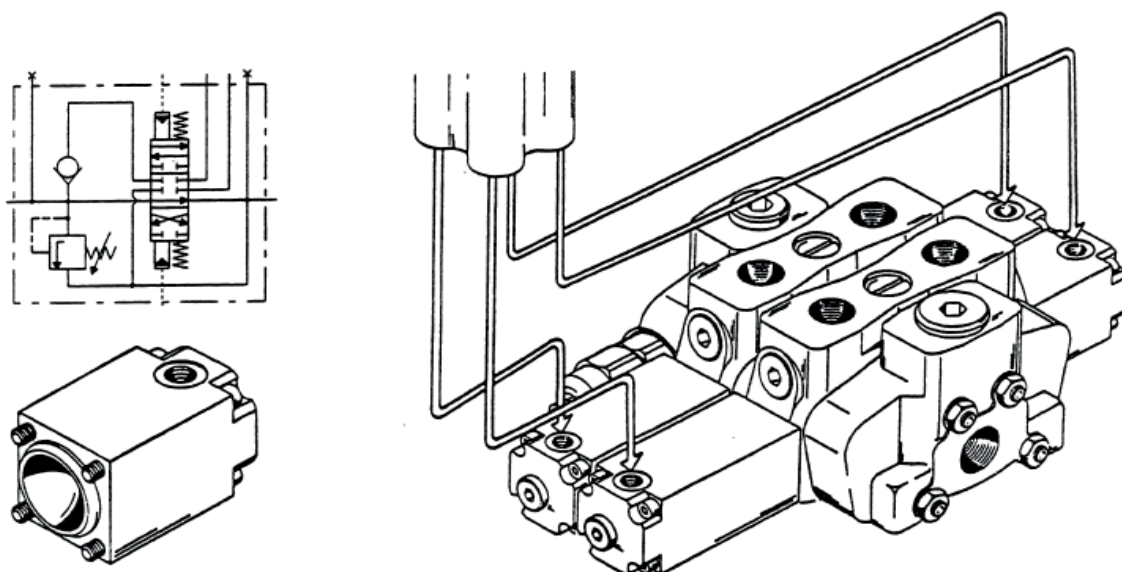
Type	Omschrijving	Schema
8	Veerretour in positie 0	
9	Arretering in positie 1	
10	Arretering in positie 2	
11	Arretering in 3 posities	
12	Arretering in positie 1 en 2	
13	Arretering in positie 3	
14	Arretering in 4 postities	
15	Arretering in positie 1 en 0	
16	Arretering in positie 2 en 0	
17	Veerretour in positie 1	
18	Veerretour in positie 2	

De stuurschouven kunnen worden voorzien van diverse schuifbedieningen en opbouw functies waarvan hier een beperkt aantal genoemd.

Microswitch bediening

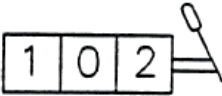
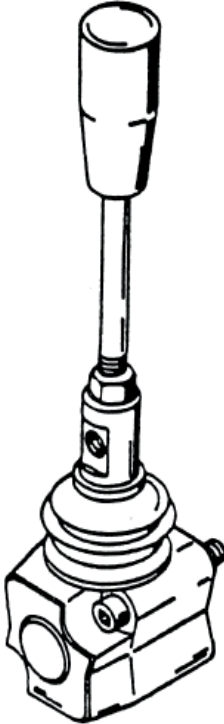
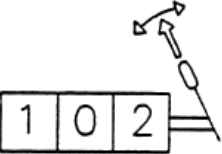
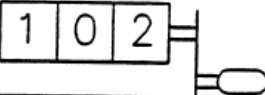
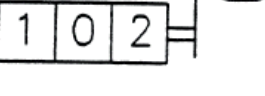
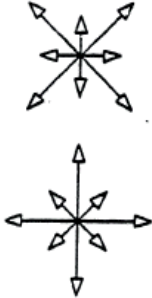


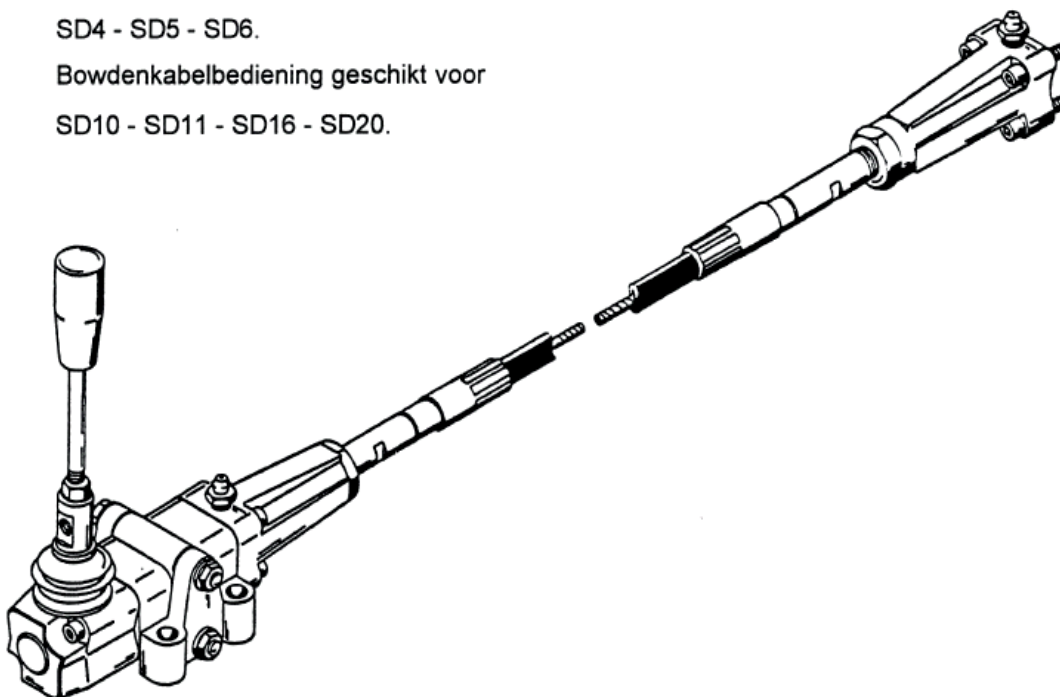
Pneumatisch- of hydraulisch bekrachtigd.



Schuifbedieningen (B-poortzijde).

Type Omschrijving Schema

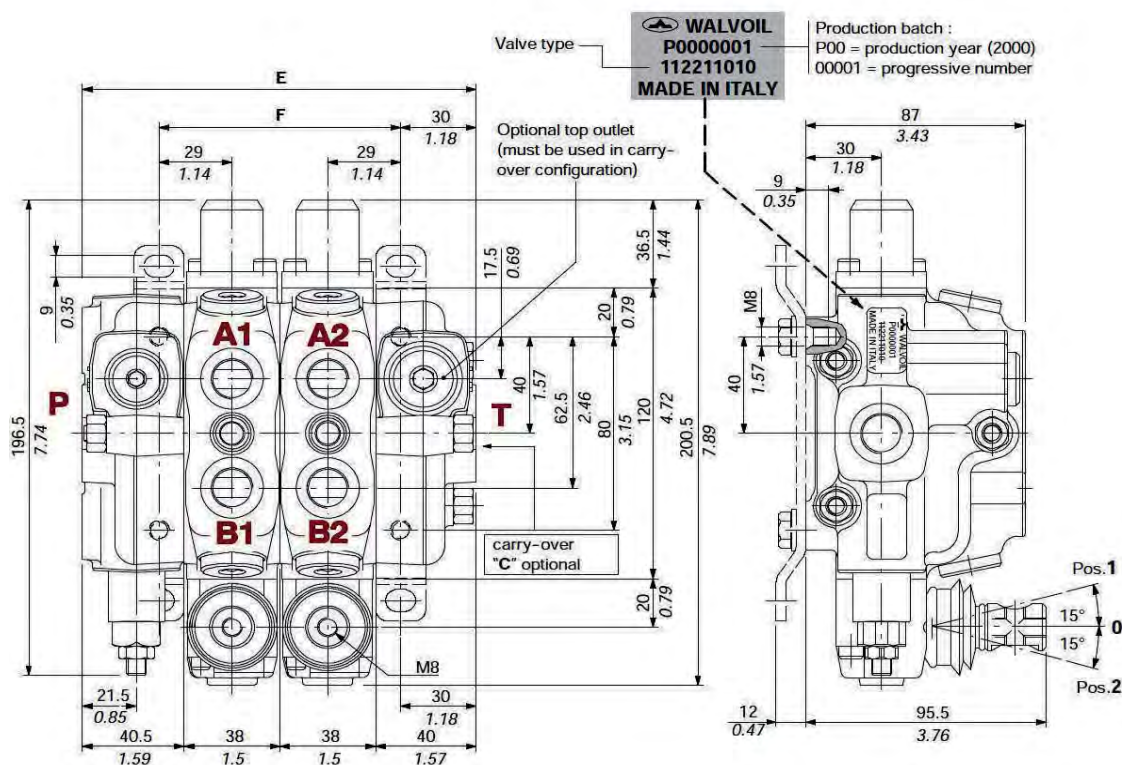
L	Standaard handelkap.		
LE	Handelkap met arretering.		
SL	Kap t.b.v. stang met vork.		
TC	Bowden-kabelbediening.		
LC	Joystick Kruisbediening (x as).		
LCB	Joystick Kruisbediening (+ as).		
TC 5	Bowdenkabelbediening geschikt voor SD4 - SD5 - SD6.		
TC10	Bowdenkabelbediening geschikt voor SD10 - SD11 - SD16 - SD20.		



SD6

Stuurschuif (sectieblok),

- mogelijkheid uit te breiden tot 12 secties
- nominale flow 45 l/min
- maximale werkdruk parallel 315 bar, serie 210 bar
- maximale druk op retour 25 bar
- maximale temperatuur bij NBR -20 tot 100 °C



TYPE	E		F		Weight	
	mm	in	mm	in	kg	lb
SD6/1	118.5	4.66	58	2.28	5.3	11.7
SD6/2	156.5	6.16	96	3.78	7.6	16.6
SD6/3	194.5	7.66	134	5.28	9.9	21.8
SD6/4	232.5	9.15	172	6.77	12.2	26.9
SD6/5	270.5	10.65	210	8.27	14.8	32.6
SD6/6	308.5	12.15	248	9.76	17.1	37.7

TYPE	E		F		Weight	
	mm	in	mm	in	kg	lb
SD6/7	346.5	13.65	286	11.26	19.4	42.8
SD6/8	384.5	15.15	324	12.76	21.7	47.9
SD6/9	422.5	16.65	362	14.26	24	53
SD6/10	460.5	18.15	400	15.76	26.3	58.1
SD6/11	498.5	19.65	438	17.26	28.6	63.2
SD6/12	536.5	21.15	476	18.76	30.9	68.3

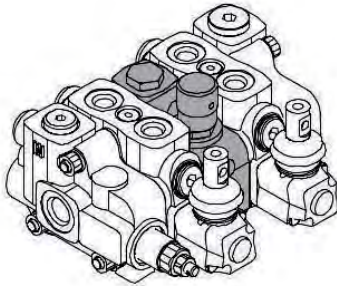
Standard threads

PORT	BSP (ISO 228/1)	UN-UNF (ISO 11926-1)	METRIC (ISO 262)
Inlet P	G 3/8	3/4-16 UNF-2B (SAE 8)	M18x1.5
A and B ports	G 3/8	9/16-18 UNF-2B (SAE 6)	M18x1.5
Outlet T and carry-over C	G 1/2	3/4-16 UNF-2B (SAE 8)	M22x1.5
PILOT PORTS			
Hydraulic	G 1/4	9/16-18 UNF-2B (SAE 6)	G 1/4
Pneumatic	NPTF 1/8-27	NPTF 1/8-27	NPTF 1/8-27

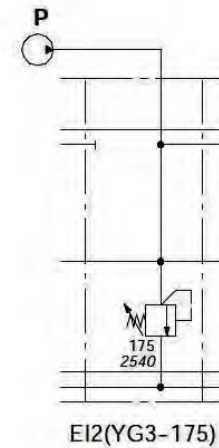
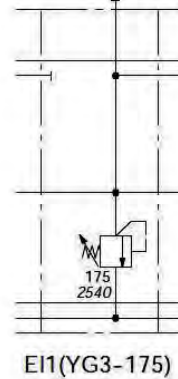
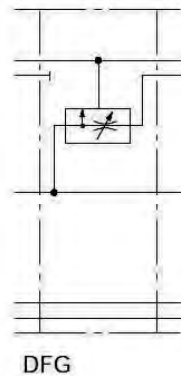
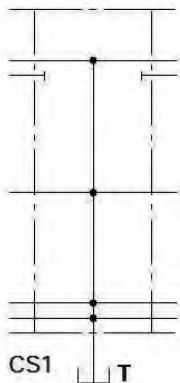
SD6

Stuurschuif (sectieblok),

Mogelijke werksecties



TYPE	CODE	DESCRIPTION
CS1	612400010	Mid return manifold section
DFG	612410030	Pressure compensated flow regulator section
EI1(YG3)	612421130	Secondary direct pressure relief valve
EI2(YG3)	612421135	Mid inlet with secondary direct pressure relief valve



Mogelijke poortveiligheden

Anti-shock valve

P(G2-63)	5KIT206112	From 40 to 80 bar / from 580 to 1150 psi standard setting 63 bar / 900 psi
P(G3-100)	5KIT206113	From 63 to 200 bar / from 900 to 2900 psi standard setting 100 bar / 1450 psi
P(G4-200)	5KIT206114	From 160 to 315 bar / from 2300 to 4600 psi standard setting 200 bar / 2900 psi

Anti-shock and anti-cavitation valve

U(G2-63)	5KIT306112	From 63 to 125 bar / from 900 to 1800 psi standard setting 63 bar / 900 psi
U(G3-100)	5KIT306113	From 100 to 250 bar / from 1450 to 3600 psi standard setting 100 bar / 1450 psi
U(G4-200)	5KIT306114	From 200 to 315 bar / from 2900 to 4600 psi standard setting 200 bar / 2900 psi

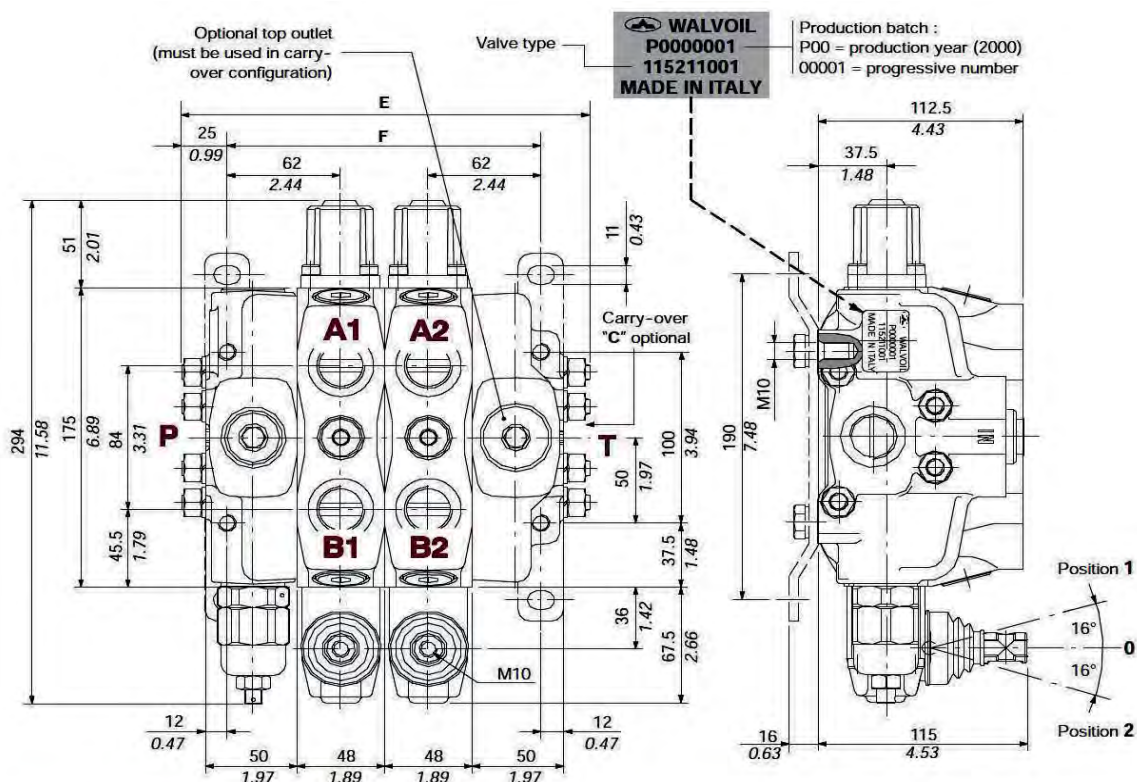
Standard setting is referred to 10 l/min flow.

C	5KIT406100	Anti-cavitation
P3T	XTAP524280	A and B ports valve blanking plugs

SD16

Stuurschuif (sectieblok),

- mogelijkheid uit te breiden tot 12 secties
- nominale flow 140 l/min
- maximale werkdruk parallel 315 bar, serie 210 bar
- maximale druk op retour 25 bar
- maximale temperatuur bij NBR -20 tot 100 °C



TYPE	E		F		Weight	
	mm	in	mm	in	kg	lb
SD16/1	176	6.63	124	4.88	13	28.7
SD16/2	224	8.82	172	6.77	19	41.9
SD16/3	272	10.71	220	8.66	24.9	54.9
SD16/4	320	12.60	268	10.55	30.9	68.1
SD16/5	368	14.49	316	12.44	36.8	81.1
SD16/6	416	16.38	364	14.33	42.8	94.4

TYPE	E		F		Weight	
	mm	in	mm	in	kg	lb
SD16/7	464	18.27	412	16.22	48.7	107.7
SD16/8	512	20.16	460	18.11	54.6	121
SD16/9	560	22.05	508	20	60.5	134.3
SD16/10	608	23.94	556	21.89	66.4	147.6
SD16/11	656	25.83	604	23.78	72.3	160.9
SD16/12	704	27.72	652	25.67	78.2	174.2

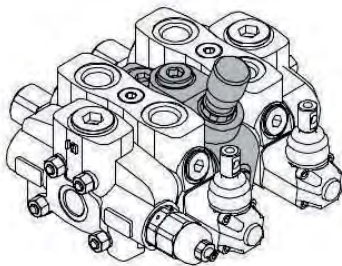
Standard threads

PORTS	BSP	UN-UNF
	(ISO 228/1)	(ISO 11926-1)
Inlet P	G 3/4	1 5/16-12 UN-2B (SAE 16)
A and B ports	G 3/4	1 1/16-12 UN-2B (SAE 12)
Outlet T and carry-over C	G 1	1 5/16-12 UN-2B (SAE 16)
PILOT PORTS		
Hydraulic	G 1/4	9/16-18 UNF-2B (SAE 6)
Pneumatic	NPTF 1/8-27	NPTF 1/8-27

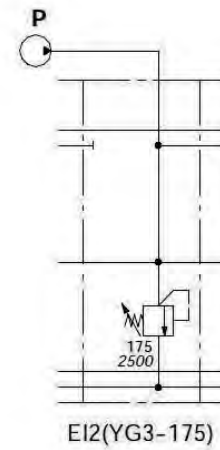
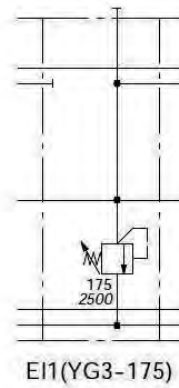
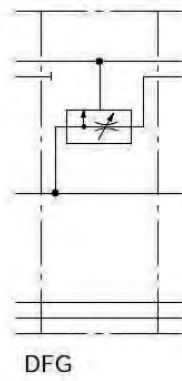
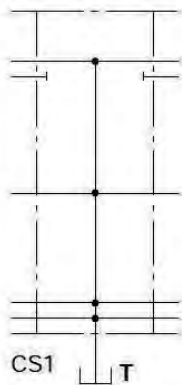
SD16

Stuurschuif (sectieblok),

Mogelijke werksecties



TYPE	CODE	DESCRIPTION
CS1	615401010	Mid return manifold section
DFG	615411020	Pressure compensated flow divider section
EI1(YG3)	615421010	Secondary direct operated pressure relief valve
EI2(YG3)	615421015	Mid inlet with secondary direct operated pressure relief valve



Mogelijke poortveiligheden

Anti-shock valve

- P(G2-63)** XCAR216115 Range 63 to 125 bar / from 900 to 1800 psi
standard setting 63 bar / 900 psi
- P(G3-100)** XCAR216116 Range 100 to 250 bar / from 1450 to 3600 psi
standard setting 100 bar / 1450 psi
- P(G4-200)** XCAR216117 Range 200 to 315 bar / from 2900 to 4600 psi
standard setting 200 bar / 290 psi

Anti-shock and anti-cavitation valve

- U(G2-63)** XCAR316112 Range 63 to 125 bar / from 900 to 1800 psi
standard setting 63 bar / 900 psi
- U(G3-100)** XCAR316113 Range 100 to 250 bar / from 1450 to 3600 psi
standard setting 100 bar / 1450 psi
- U(G4-200)** XCAR316114 Range 200 to 315 bar / from 2900 to 4600 psi
standard setting 200 bar / 2900 psi

Standard setting is referred to 10 l/min flow.

- C** 3XCAR416100 Anti-cavitation
- P3T** 3XTAP528360 A and B ports valve blanking plugs

SDM105

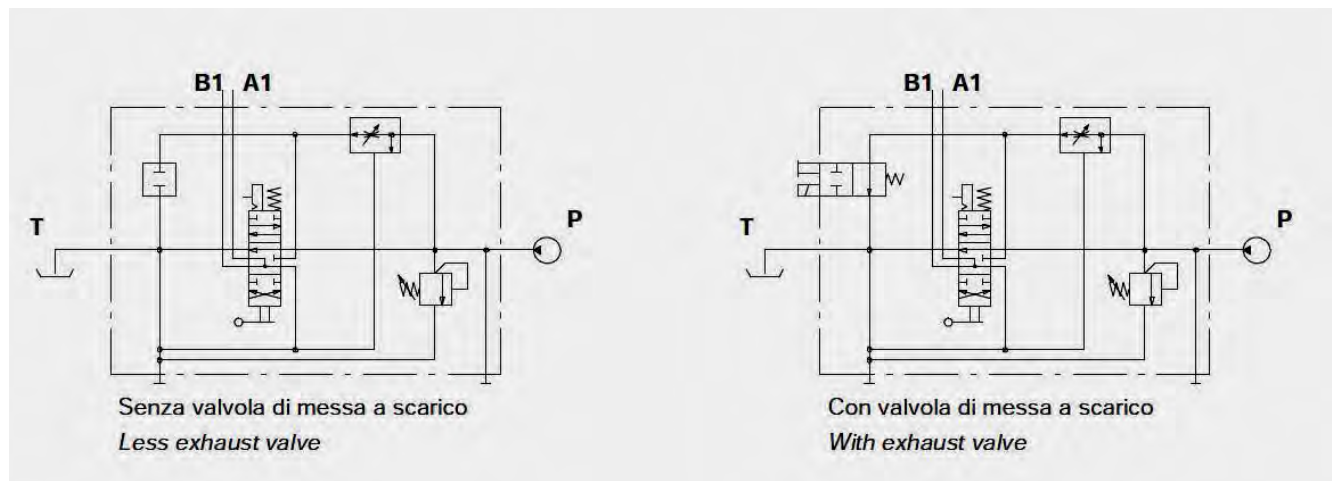
Stuurschuif met 3weg stroomregelklep

Mogelijk tot 6 secties



Nominal flow rating	45 l/min
Max. regulated flow	40 l/min
Operating pressure	315 bar (4600 psi)
Max backpressure on outlet port T	25 bar (360 psi)
Internal leakage	3 cm ³ /min (0.2 in ³ /min)
<i>(A/B→T, with 100 bar / 1450 psi)</i>	
Hydraulic fluid	mineral base oil
Viscosity	-12 to 400 mm ² /s (cSt)
Max level of fluid contamination	19/16-ISO4406
Fluid temperature	from -20° to 80° C
Ambient temperature	from -30° to 60° C

Hydraulisch schema



SDM105

*Stuurschuif met 3weg stroomregelklep
Mogelijk tot 6 secties*



Bestelgegevens

SDM105/1(JG3-175) M / 2 10 L / EL-12VDC

numero di sezioni **1**
sections number .. **6**

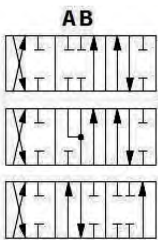
tensione bobina (12 - 24 Vdc)
coil voltage (12 - 24 Vdc)

valvola di sovrappressione diretta tarata a 175 bar **JG3-175**
main relief direct operated valve set to 2540 psi
senza valvola di sovrappressione **SV**
less main relief valve

LT senza valvola di messa a scarico
less exhaust valve
EL con valvola di messa a scarico
with exhaust valve

volantino per regolazione manuale della portata
manual flow regulator with graduated handwheel

L con leva
with lever
SLP ... senza leva con piastrina
less lever with dust cover



AB
cursore doppio effetto, A e B a chiusi al centro **1**
double acting spool, A and B closed in neutral
PT
cursore doppio effetto, A e B a scarico al centro **2**
double acting spool, A and B open to tank in neutral
LC
cursore doppio effetto, A a scarico e B in pressione
al centro **9T**
double acting spool, A open to pressure and B open
to tank in neutral

8 ritorno a molla in centro
spring centered to neutral
10 ... ritenuta in posizione 2, con ritorno a molla in centro
detent in position 2, spring centered to neutral
11 ... ritenuta nelle 3 posizioni
detent in 3 positions

BOCCA - PORTS	BSP (ISO 228/1)	METRICA - METRIC (ISO 6149)	UN-UNF (ISO 11926-1)
P			3/4-16 UNF-2B (SAE 8)
A - B	G 3/8	M18x1,5	9/16-18 UNF-2B (SAE 6)
T			3/4-16 UNF-2B (SAE 8)

SV

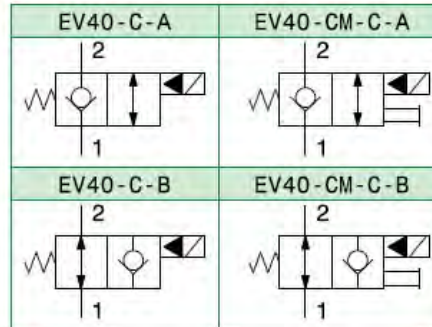
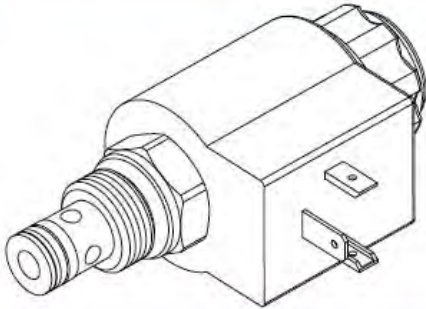
Ook leverbaar



Meer informatie op aanvraag mogelijk

EV40

Cartridge 2/2 klep

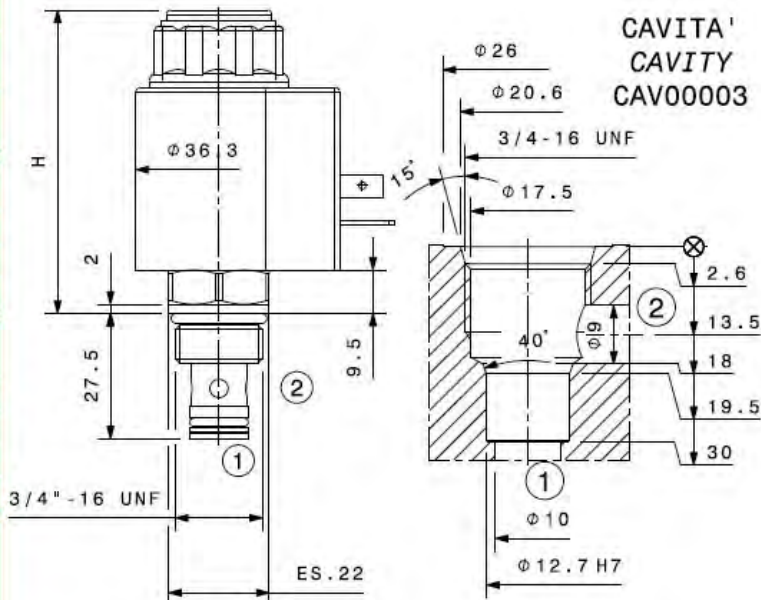


Portata massima Max flow	40 l/min
Pressione massima Max pressure	350 bar
Coppia di serraggio Installation torque	27 ÷ 30 Nm

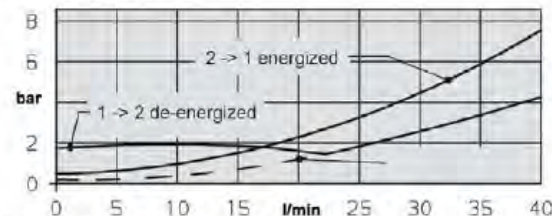
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 ÷ 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Modello Type	H	Emergenza Override
EV40-C-A	57.5	/
EV40-CM-C-A	71	a vite / screw
EV40-C-B	70.5	/
EV40-CM-C-B	71.5	a spingere / push

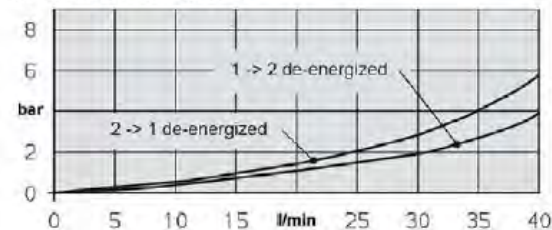
Tensione Voltage	12 V CC-DC 24 V CC-DC 110 V CC-DC
	110V/50Hz CA-AC 230V/50Hz CA-AC 24V/50Hz CA-AC
Connettore Connector	DIN 43650



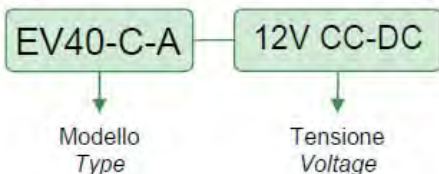
EV40-C-A / EV40-CM-C-A



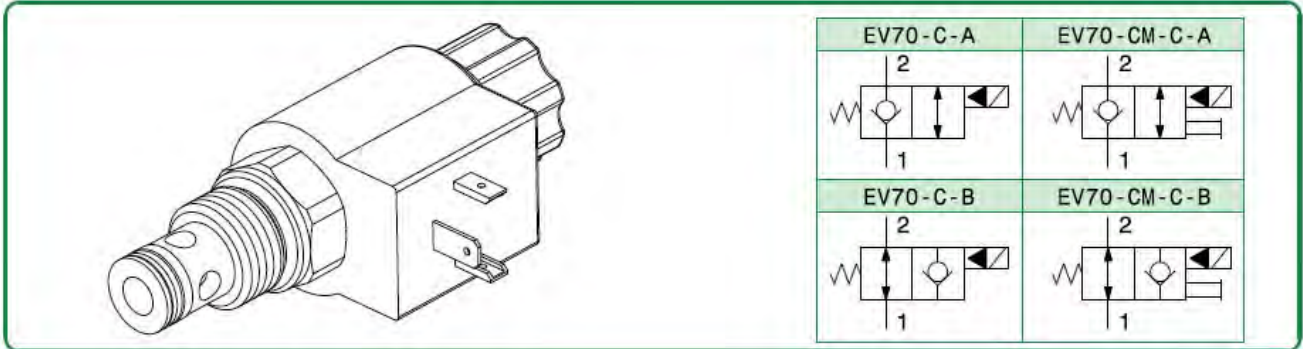
EV40-C-B / EV40-CM-C-B



Sigla di ordinazione / Ordering code



EV70
Cartridge 2/2 klep



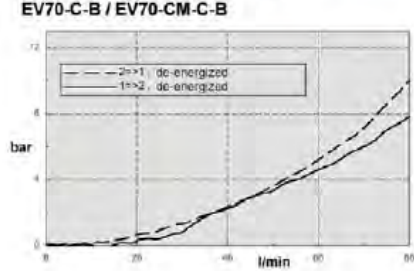
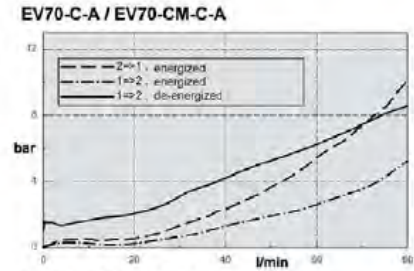
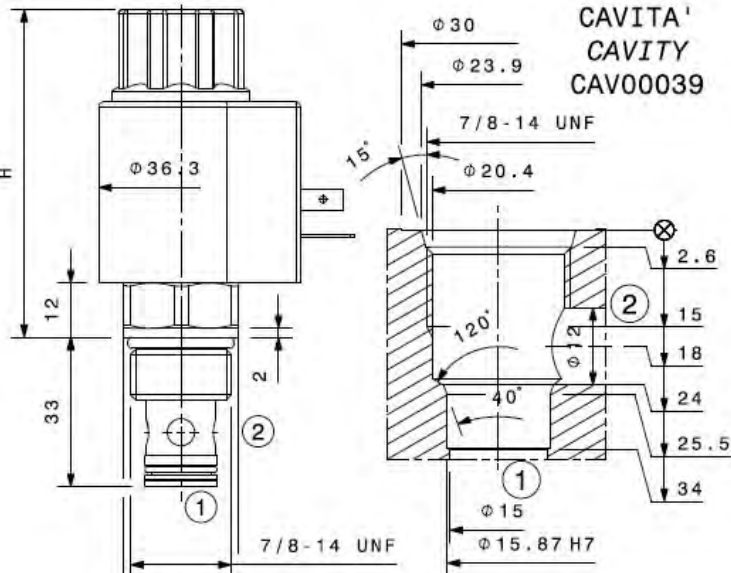
Portata massima <i>Max flow</i>	70 l/min
Pressione massima <i>Max pressure</i>	350 bar
Coppia di serraggio <i>Installation torque</i>	45 + 50 Nm

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C
Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C

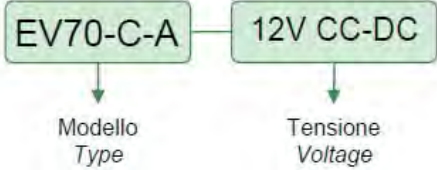
Viscosità consigliate <i>Recommended viscosity</i>	10 + 420 cSt
Temperature di lavoro <i>Working temperature</i>	-20 + +90 °C
Filtrazione assoluta <i>Absolute filtration</i>	25 µ

Modello <i>Type</i>	H	Emergenza <i>Override</i>
EV70-C-A	60	/
EV70-CM-C-A	74	a vite / screw
EV70-C-B	73	/
EV70-CM-C-B	74	a spingere / push

Tensione <i>Voltage</i>	12 V CC-DC 24 V CC-DC 110 V CC-DC
	110V/50Hz CA-AC 230V/50Hz CA-AC 24V/50Hz CA-AC
Connettore <i>Connector</i>	DIN 43650

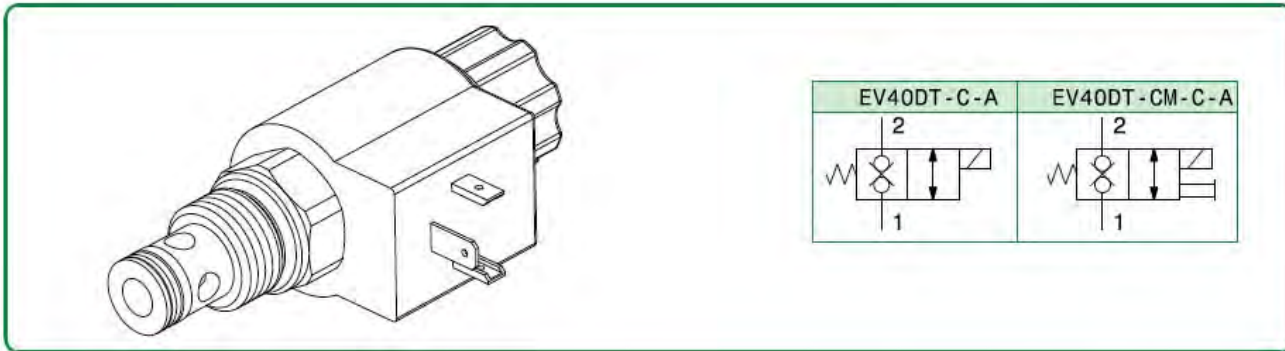


Sigla di ordinazione / Ordering code



EV40DT

Cartridge 2/2 klep volledig gesloten



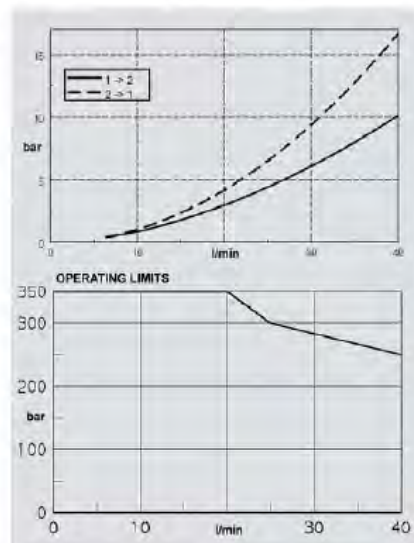
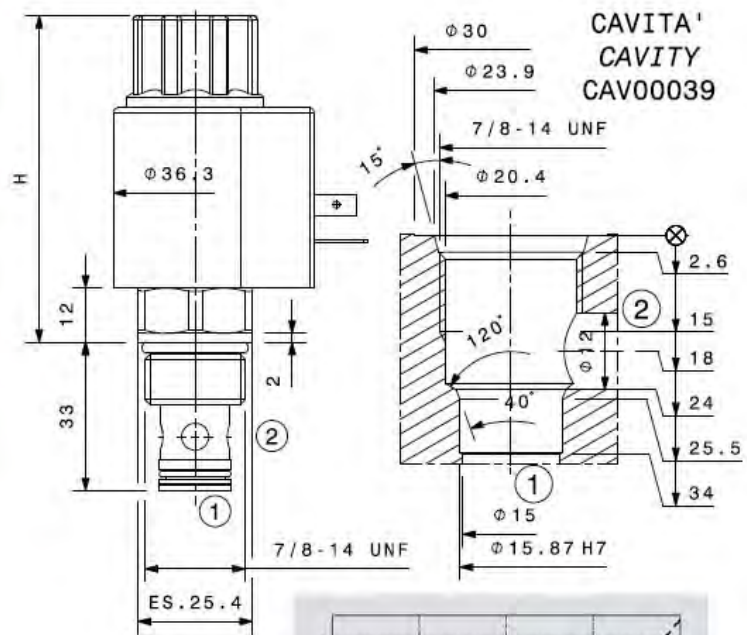
Portata massima Max flow	40 l/min
Pressione massima Max pressure	350 bar
Coppia di serraggio Installation torque	45 ÷ 50 Nm

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C
Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C

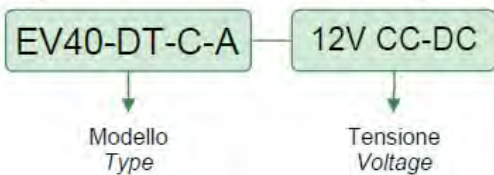
Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Modello Type	H	Emergenza Override
EV40DT-C-A	80	/
EV40DT-CM-C-A	85	a spingere / push

Tensione Voltage	12 V CC-DC
	24 V CC-DC
	110 V CC-DC
	110V/50Hz CA-AC 230V/50Hz CA-AC 24V/50Hz CA-AC
Connettore Connector	DIN 43650

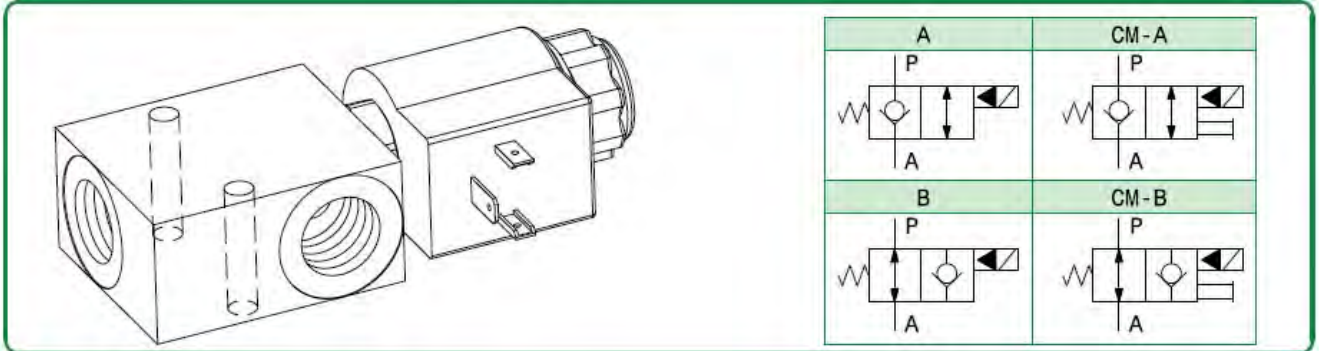


Sigla di ordinazione / Ordering code



EV40

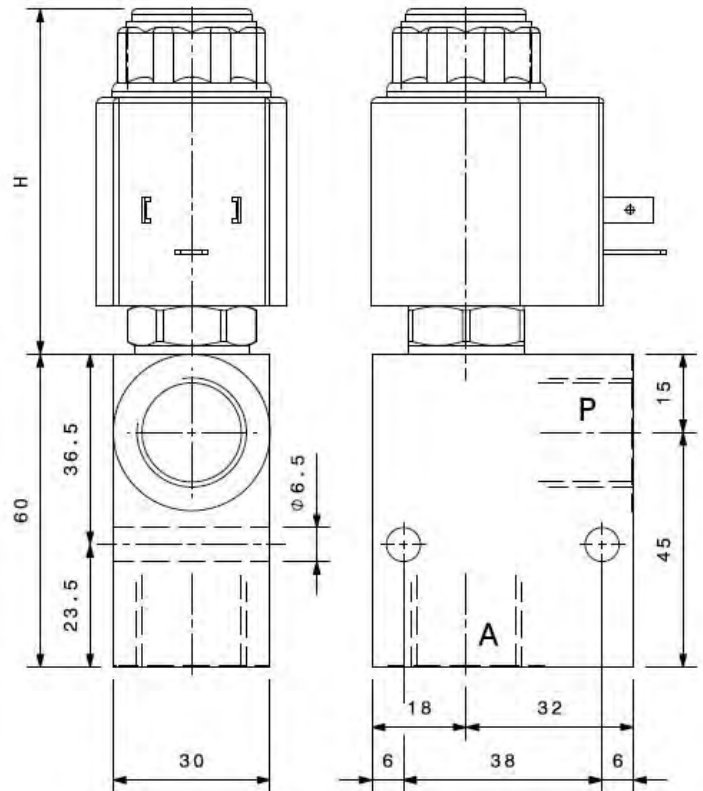
2/2 klep normally open of gesloten, ook leverbaar in staal



Portata massima Max flow	40 l/min
Pressione massima Max pressure	350 bar
Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperature di lavoro Working temperature	-20 ÷ +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Modello Type	P,A	H	Emergenza Override
EV4038-A	3/8" GAS	57	l
EV4038-CM-A	3/8" GAS	71	a vite / screw
EV4038-B	3/8" GAS	70	l
EV4038-CM-B	3/8" GAS	71	a spingere / push
EV4012-A	1/2" GAS	57	l
EV4012-CM-A	1/2" GAS	71	a vite / screw
EV4012-B	1/2" GAS	70	l
EV4012-CM-B	1/2" GAS	71	a spingere / push

Tensione Voltage	12 V CC-DC 24 V CC-DC 110 V CC-DC
	110V/50Hz CA-AC 230V/50Hz CA-AC 24V/50Hz CA-AC
Connettore Connector	DIN 43650

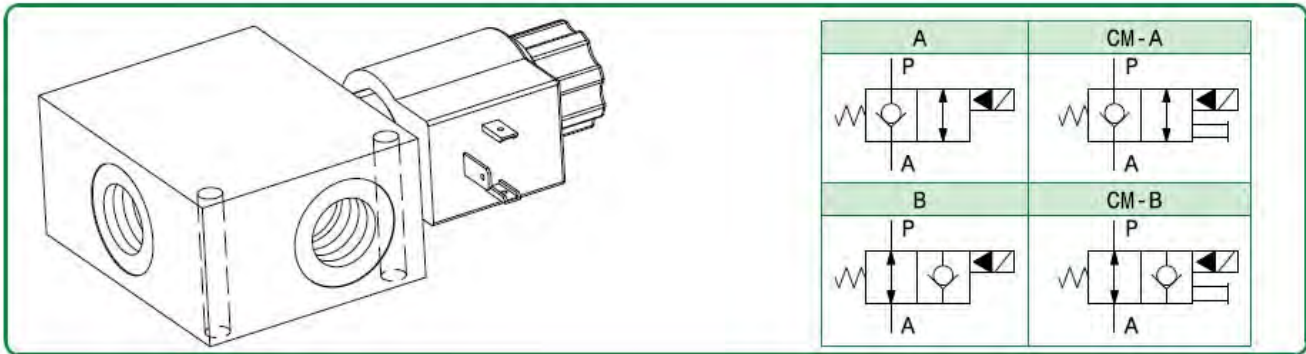


Sigla di ordinazione / Ordering code



EV70

2/2 klep normally open of gesloten, ook leverbaar in staal

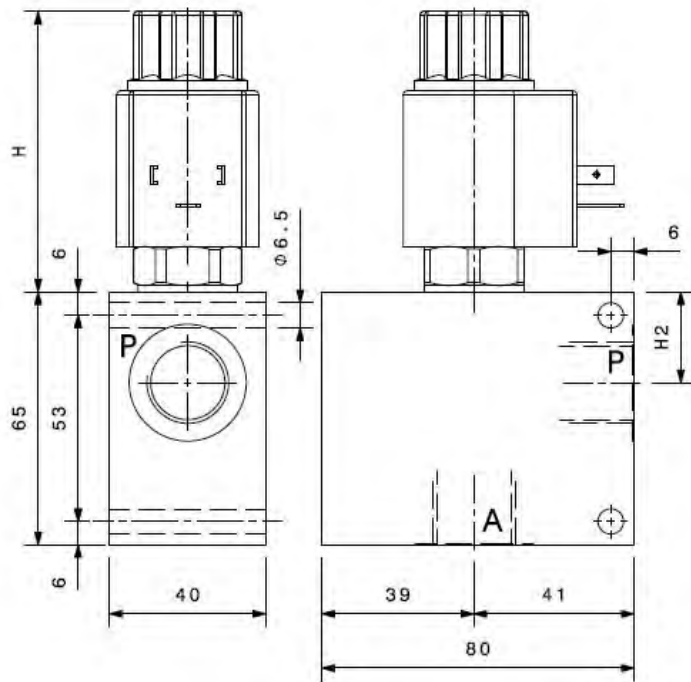


Portata massima Max flow	70 l/min
Pressione massima Max pressure	350 bar

Dati e tarature ottenuti usando olio con viscosità 30 cSt a 50°C Performances and calibrations are carried out by using hydraulic oil with 30 cSt viscosity at 50°C	
Viscosità consigliate Recommended viscosity	10 - 420 cSt
Temperatura di lavoro Working temperature	-20 + +90 °C
Filtrazione assoluta Absolute filtration	25 µ

Modello Type	P, A	H	Emergenza Override
EV7012-A	1/2" GAS	60	/
EV7012-CM-A	1/2" GAS	74	a vite / screw
EV7012-B	1/2" GAS	73	/
EV7012-CM-B	1/2" GAS	74	a spingere / push
EV7034-A	3/4" GAS	60	/
EV7034-CM-A	3/4" GAS	74	a vite / screw
EV7034-B	3/4" GAS	73	/
EV7034-CM-B	3/4" GAS	74	a spingere / push

Tensione Voltage	12 V CC-DC 24 V CC-DC 110 V CC-DC 110V/50Hz CA-AC 230V/50Hz CA-AC 24V/50Hz CA-AC
Connettore Connector	DIN 43650

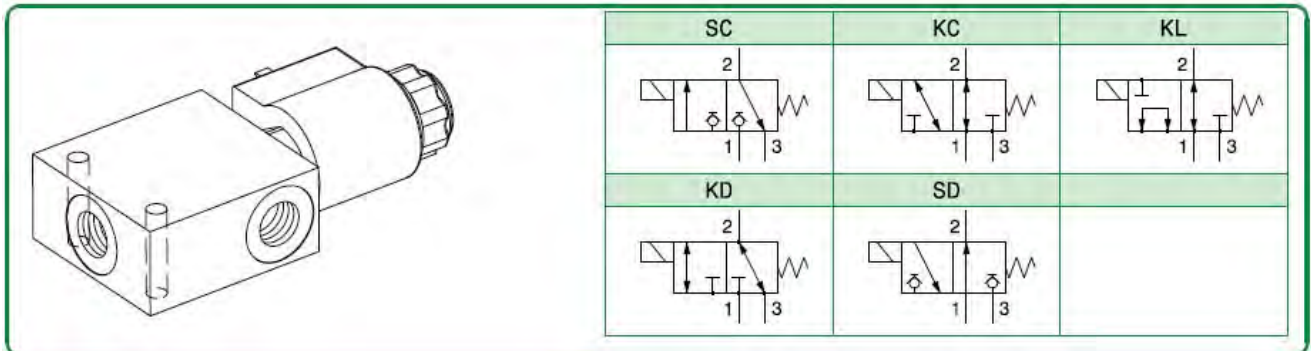


Dimensioni Dimensions	H2
EV7012	23.5
EV7034	25

Sigla di ordinazione / Ordering code



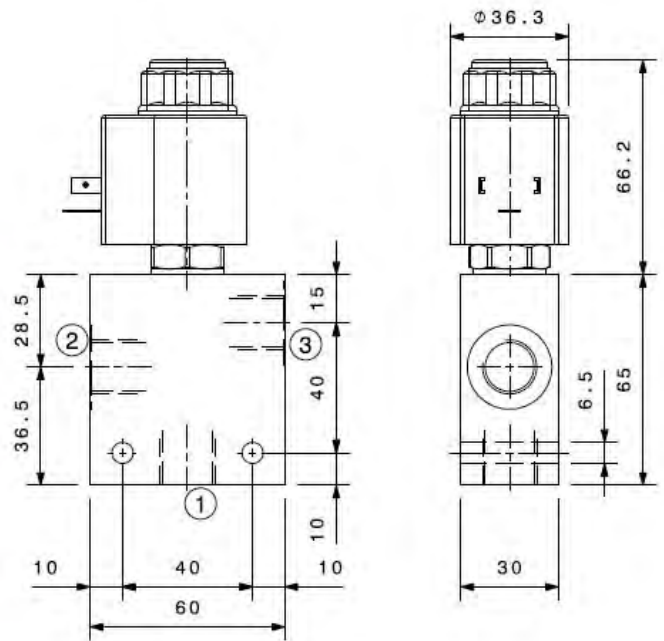
EV3
3/2 klep



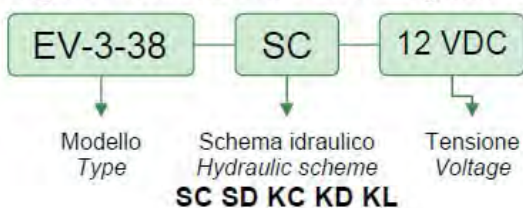
Portata massima <i>Max flow</i>	17 l/min
Pressione massima <i>Max pressure</i>	350 bar
Trafila <i>Leakage</i>	90 cm ³ /min (250 bar, 34 mm ² /s)
Viscosità consigliate <i>Recommended viscosity</i>	10 ÷ 420 cSt
Filtrazione <i>Filtration</i>	CLASS 21/19/16 ISO 4406
Temperature di lavoro <i>Working temperature</i>	-20 ÷ +90 °C

Modello <i>Type</i>	1,2,3
EV-3-14	1/4" GAS
EV-3-38	3/8" GAS
EV-3-12	1/2" GAS

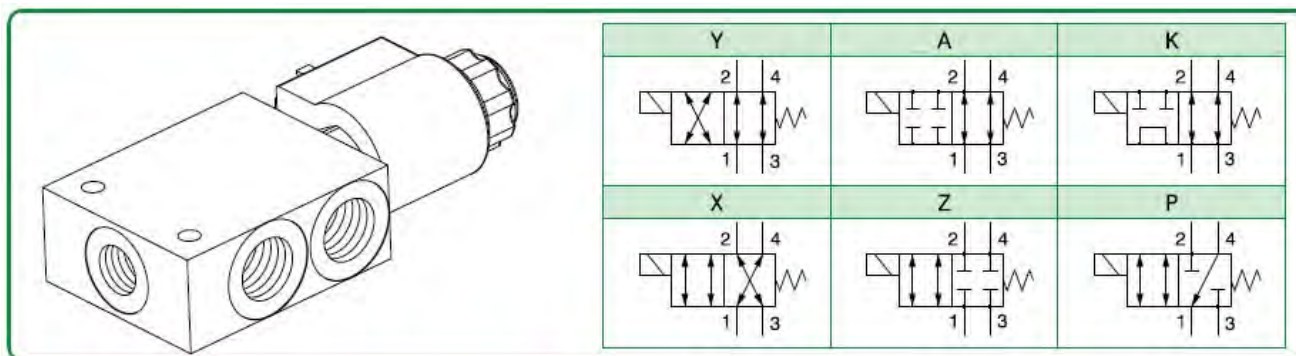
Tensione <i>Voltage</i>	12 V DC 24 V DC 110 V DC
Connettore <i>Connector</i>	DIN 43650
Corrente a 20°C <i>Current draw 20°C</i>	1.5 A - 12 V DC 0.8 A - 24 V DC



Sigla di ordinazione / Ordering code



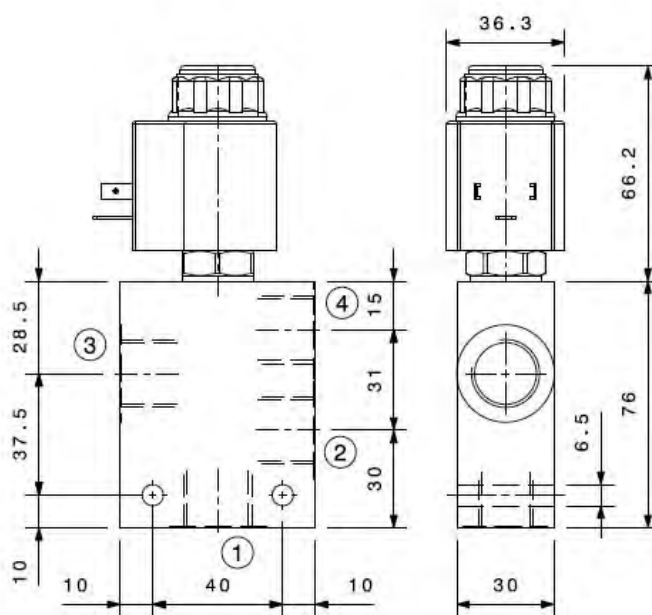
EV4
4/2 klep



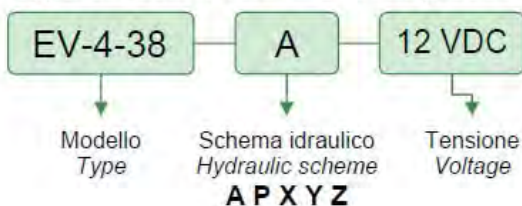
Portata massima Max flow	17 l/min
Pressione massima Max pressure	350 bar
Trafila Leakage	90 cm ³ /min (250 bar, 34 mm ² /s)
Viscosità consigliate Recommended viscosity	10 - 420 cSt
Filtrazione Filtration	CLASS 21/19/16 ISO 4406
Temperature di lavoro Working temperature	-20 - +90 °C

Modello Type	1,2,3,4
EV-4-14	1/4" GAS
EV-4-38	3/8" GAS
EV-4-12	1/2" GAS

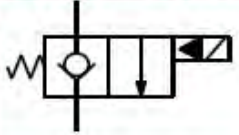
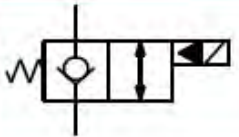
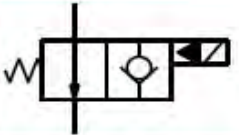
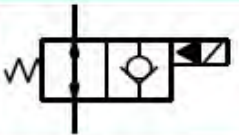
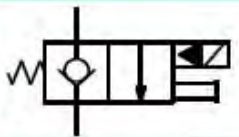
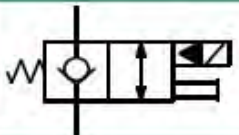
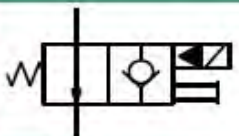
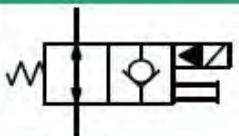
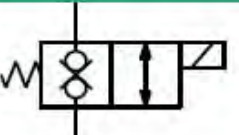
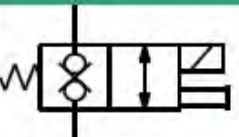
Tensione Voltage	12 V DC 24 V DC 110 V DC
Connettore Connector	DIN 43650
Corrente a 20°C Current draw 20°C	1.5 A - 12 V DC 0.8 A - 24 V DC



Sigla di ordinazione / Ordering code



Overzicht alle elektrisch bediende kleppen van CBF

		Q	P
		[l/min]	[bar]
Elettrovalvola 2 vie a cartuccia 2 ways, solenoid valve – cartridge type			
	EV25-C-A	25	250
	EV40-C-A	40	350
	EV70-C-A	70	350
	EV150-C-A	150	350
	EV25-C-B	25	250
	EV40-C-B	40	350
	EV70-C-B	70	350
	EV150-C-B	150	350
	EV25-CM-C-A	25	250
	EV40-CM-C-A	40	350
	EV70-CM-C-A	70	350
	EV150-CM-C-A	150	350
	EV25-CM-C-B	25	250
	EV40-CM-C-B	40	350
	EV70-CM-C-B	70	350
	EV150-CM-C-B	150	350
	EV40DT-C-A	40	350
	EV40DT-CM-C-A	40	350

Overzicht alle elektrisch bediende kleppen van CBF

		Q	P
		[l/min]	[bar]
Elettrovalvola 2 vie 2 ways, solenoid valve			
	EV2514-A	25	250
	EV2538-A	25	250
	EV4038-A	40	350
	EV4012-A	40	350
	EV7012-A	70	350
	EV7034-A	70	350
	EV15034-A	150	350
	EV15010-A	150	350
	EV2514-B	25	250
	EV2538-B	25	250
	EV4038-B	40	350
	EV4012-B	40	350
	EV7012-B	70	350
	EV7034-B	70	350
	EV15034-B	150	350
	EV15010-B	150	350
	EV2514-CM-A	25	250
	EV2538-CM-A	25	250
	EV4038-CM-A	40	350
	EV4012-CM-A	40	350
	EV7012-CM-A	70	350
	EV7034-CM-A	70	350
	EV15034-CM-A	150	350
	EV15010-CM-A	150	350
	EV2514-CM-B	25	250
	EV2538-CM-B	25	250
	EV4038-CM-B	40	350
	EV4012-CM-B	40	350
	EV7012-CM-B	70	350
	EV7034-CM-B	70	350
	EV15034-CM-B	150	350
	EV15010-CM-B	150	350
	EV4038-DT-A	40	350
	EV4038-DT-CM-A	40	350

Overzicht alle elektrisch bediende kleppen van CBF

		Q	P
		[l/min]	[bar]
	EV2514-A-VE	25	250
	EV2538-A-VE	25	250
	EV4014-A-VE	40	350
	EV4038-A-VE	40	350
	EV4012-A-VE	40	350
	EV7012-A-VE	70	350
	EV7034-A-VE	70	350
	EV15034-A-VE	150	350
	EV15010-A-VE	150	350
	EV2514-B-VE	25	250
	EV2538-B-VE	25	250
	EV4014-B-VE	40	350
	EV4038-B-VE	40	350
	EV4012-B-VE	40	350
	EV7012-B-VE	70	350
	EV7034-B-VE	70	350
	EV15034-B-VE	150	350
	EV15010-B-VE	150	350
Elettrovalvola 3 e 4 vie 3 and 4 ways, solenoid valve			
	EV-3-14	17	350
	EV-3-38	17	350
	EV-3-12	17	350
	EV-4-14	17	350
	EV-4-38	17	350
	EV-4-12	17	350
Elettrovalvola 2 vie con limitatrice di pressione 2 ways, solenoid valve with relief valve			
	EV40-A-VLP40-38	40	300
	EV40-A-VLP40-12	40	300
	EV70-A-VLP80-34	70	300
	EV40-B-VLP40-38	40	300
	EV40-B-VLP40-12	40	300
	EV70-B-VLP80-34	70	300

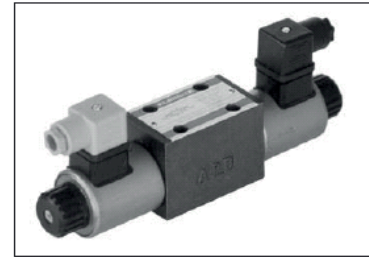
KV4/2, KV4/3

Elektrisch ventiel (directional)

NG6

Drukberik tot 350 bar

Flow tot 75 L/min



Directional valves type KV with direct solenoid operation control the direction of the hydraulic medium flow.

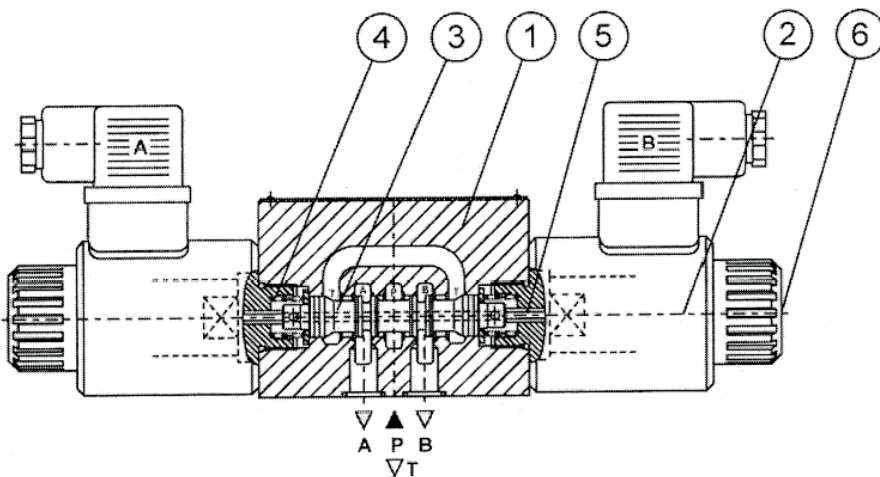
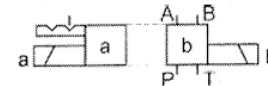
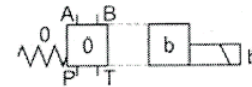
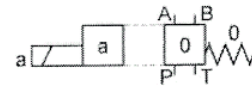
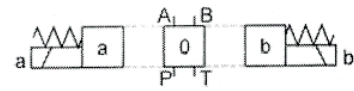
These directional valves consist of a housing (1), a control spool (3), and one solenoid (2) with two return springs (4) in 4/2-way directional valves, and two solenoids (2) with two return springs (4) in 4/3-way directional valves. In 4/3-way directional valves the centre position of the control spool is the neutral position. The change-over to the operating position (a) and (b) is done by energizing the solenoids (2) "a" and "b" respectively, whereby the solenoid plunger acts on the control spool (3) via the operating pin (5), thus clearing the corresponding flow ways and establishing relevant links between ports A, B, P, and T.

When the solenoid (2) is de-energized, the control spool (3) is returned to its neutral position by the return spring (4). The change-over can be done manually by pressing the emergency hand operator (6).

KV-4/2-5KO-6-81

Directional valve with two operating position, two solenoids without springs allow the control spool to be held in the operating position (detent). The control spool remains in the operation position also when the solenoids are de-energized.

Spool types



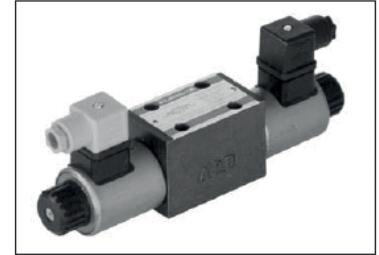
KV4/2, KV4/3

Elektrisch ventiel (directional)

NG6

Druk bereik tot 350 bar

Flow tot 75 L/min



Eigenschappen

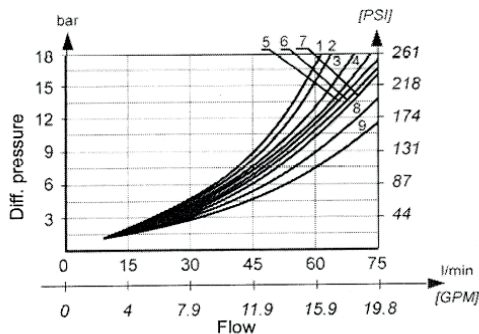
Hydraulic			
Size			6
Flow rate		L/min [GPM]	see ΔP-Q curves
Operating pressure	Ports A, B, P	bar [PSI]	350 [5 076]
	Port T	bar [PSI]	250 [3 625]
Viscosity range		mm ² /s [SUS]	15 to 380 [69.5 to 1 760]
Oil temperature range		°C [°F]	-20 to +70 [-4 to 158]
Filtration		NAS 1638	8
Mass	4/2	Kg [lb]	1,9 [4.2]
	4/3		2,7 [5.9]
Mounting position			Optional
Electrical			
Supply voltage	Direct	V	12, 24, 48
	Alternating		110, 230
Power		W	29*
Switch-on time**		ms	50 to 80
Switch-off time**		ms	30 to 55
Switching frequency		1/h	15 000
Ambient temperature		°C [°F]	to 50 [122]
Coil temperature		°C [°F]	to 180 [356]
Duty cycle			Continuous

* 12 V supply voltage - 36 W.

** The switching-on and off times apply to 24 V DC solenoids.

ΔP-Q Performance curves

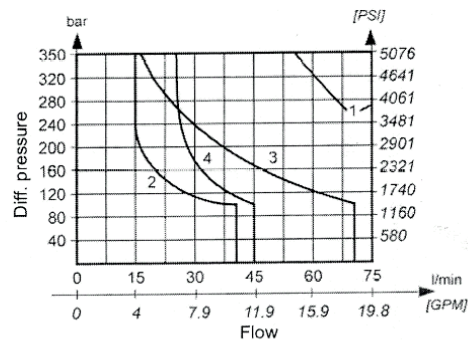
Measured at 50°C [122°F] and viscosity of 32 mm²/s [148 SUS].



Spool	Flow path				
	P-A	P-B	A-T	B-T	P-T
1	8	8	6	6	-
2	5	5	4	4	1
3	8	8	7	7	-
6	5	5	9	9	-
81	5	5	1	1	-
51A, 51B	5	5	1	1	-
41A, 41B	7	7	-	-	-

ΔP-Q Operating limits

Measured at 50°C [122°F] and viscosity of 32 mm²/s [148 SUS].



Spool	curve
1	1
2	4
3	3
6	3
81	1
51A, 51B	1
41A, 41B	2

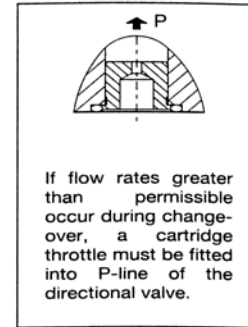
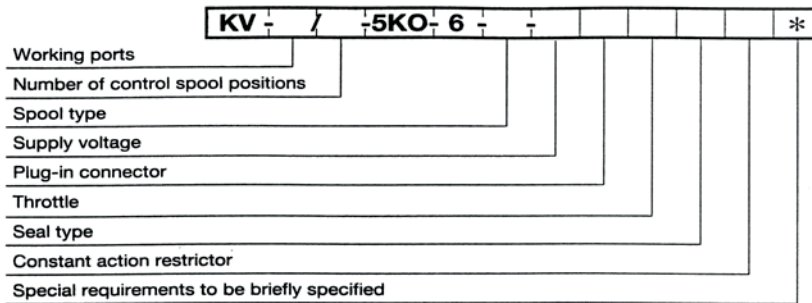
The operating limits of the valve are determined at a voltage 10% below the nominal rating. The curves refer to application with symmetrical flow through the valve (P-A and B-T). In the case of asymetric flow (e.g. one part not used) reduced values may result.

Note: For valves with adjustment of the switching time reduced values of the operating limits may result.

KV4/2, KV4/3

Elektrisch ventiel (directional)

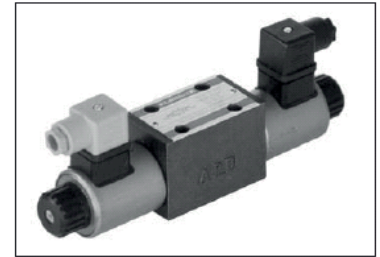
Ordering code



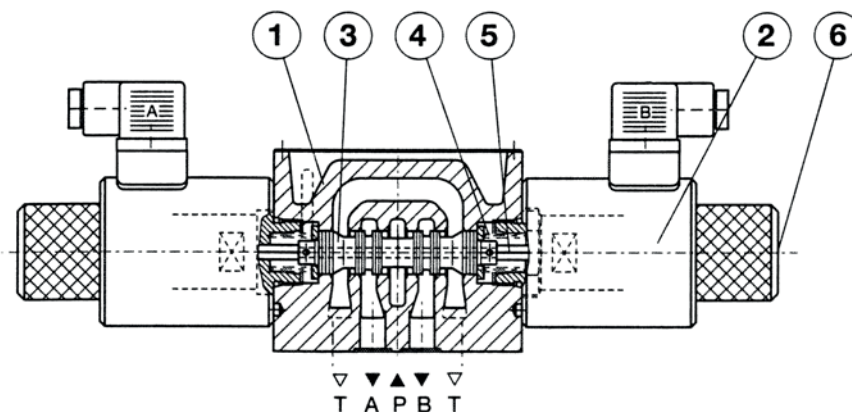
<p>Working ports</p> <p>3 working ports = 3 4 working ports = 4</p>	<p>Plug-in connector</p> <p>without signal lamp K1 = no design with signal lamp K1L = L</p>																																																		
<p>Number of control spool positions</p> <p>two positions = 2 three positions = 3</p>	<p>Throttle</p> <p>without throttle in "P" line = no design. throttle 0,8 mm dia = D08 throttle 1,0 mm dia = D10 throttle 1,2 mm dia = D12</p>																																																		
<p>Supply voltage</p> <table border="0"> <tr> <td>direct voltage</td> <td>alternating voltage</td> </tr> <tr> <td>24 V = no design.</td> <td>12 V = 12 AC</td> </tr> <tr> <td>12 V = 12 DC</td> <td>24 V = 24 AC</td> </tr> <tr> <td>48 V = 48 DC</td> <td>48 V = 48 AC</td> </tr> <tr> <td>110 V = 110 DC</td> <td>110 V = 110 AC</td> </tr> <tr> <td>230 V = 230 DC</td> <td>230 V = 230 AC</td> </tr> </table> <p>- Alternating voltage solenoids are fitted with a bridge rectifier. - With solenoids of over 48 V an earthing clamp (⊥) to ISO 4400 must be connected. * To fulfill EMC (89/336/EEC) a capacitor must be built in (see 10.2.2)</p>	direct voltage	alternating voltage	24 V = no design.	12 V = 12 AC	12 V = 12 DC	24 V = 24 AC	48 V = 48 DC	48 V = 48 AC	110 V = 110 DC	110 V = 110 AC	230 V = 230 DC	230 V = 230 AC	<p>Seal type</p> <p>NBR seals for mineral oil HL, HLP, to DIN 51524 = no design. FPM seals for HETG, HEES, HEPG to VDMA 24568 = E</p>																																						
direct voltage	alternating voltage																																																		
24 V = no design.	12 V = 12 AC																																																		
12 V = 12 DC	24 V = 24 AC																																																		
48 V = 48 DC	48 V = 48 AC																																																		
110 V = 110 DC	110 V = 110 AC																																																		
230 V = 230 DC	230 V = 230 AC																																																		
<p>Constant action restrictor</p> <p>Without restrictor = no design. Restrictor 0,3 dia. = UD</p>																																																			
<p>Spool types</p> <table border="0"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>=1</td> <td>=1A</td> <td>=81</td> <td>=51A</td> <td>=51B</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>=2</td> <td>=2A</td> <td>=1B</td> <td>=41A</td> <td>=41B</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>=3</td> <td>=3A</td> <td>=2B</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>=6</td> <td>=6A</td> <td>=3B</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>=6B</td> <td></td> <td></td> </tr> </table>							=1	=1A	=81	=51A	=51B						=2	=2A	=1B	=41A	=41B						=3	=3A	=2B								=6	=6A	=3B										=6B		
=1	=1A	=81	=51A	=51B																																															
=2	=2A	=1B	=41A	=41B																																															
=3	=3A	=2B																																																	
=6	=6A	=3B																																																	
		=6B																																																	
<p>- Port T in the valves with spool type 41A and 41B to be used as leakage line. Important note: Valves with adjustment of the switching time - a constant or short - time static oil pressure of at least ≥ 4 bar must prevail at connection T of the directional control valve to maintain the pressure in the spring chambers.</p>																																																			

KV4/2, KV4/3
Elektrisch ventiel (directional)

NG10
Drukberiek tot 350 bar
Flow tot 120 L/min



Description of operation



Directional valves type KV with direct solenoid operation control the direction of the hydraulic medium flow.

These directional valves consist of a housing (1), a control spool (3), and one solenoid (2) with two return springs (4) in 4/2-way directional valves, and two solenoids (2) with two return springs (4) in 4/3-way directional valves. In 4/3-way directional valves the centre position of the control spool is the neutral position. The change-over to the operating position (a) and (b) is done by energising the solenoids (2) "a" and "b" respectively, whereby the solenoid plunger acts on the control spool (3) via the operating pin (5), thus clearing the corresponding flow ways and establishing relevant links between ports A, B, P, and T. For selection of spool types refer to page 3.8.2.

When the solenoid (2) is de-energised, the control spool (3) is returned to its neutral position by the return spring (4). The change-over can be done manually by pressing the emergency hand operator (6).

KV-4/2-5KO-10-81

Directional valve with two operating position, two solenoids without springs allows the control spool to be held in the operating position (detent). The control spool remains in the operation position also when the solenoids are de-energised.

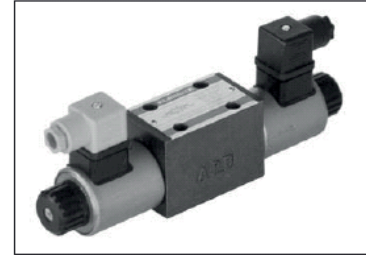
KV4/2, KV4/3

Elektrisch ventiel (directional)

NG10

Druk bereik tot 350 bar

Flow tot 120 L/min



Eigenschappen

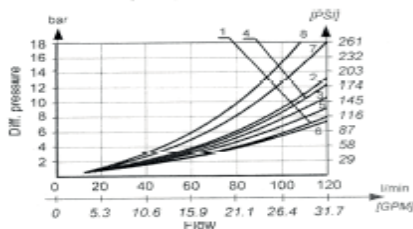
Hydraulisch

Grootte				16
Flow		L/min [GPM]		zie ΔP-Q curves
Werk druk	Met YZ	bar [PSI]		350 [5076]
	Zonder YZ	bar [PSI]		250 [3625]
Werk temperatuur		°C [°F]		-20 tot +70 [-4 tot +158]
Viscosity		mm ² /s [SUS]		15 tot 380 [3,24 tot 82]
Gewicht	4/2	Kg [lb]		6,5 [14,3]
	4/3	Kg [lb]		7,3 [16,1]
Filtratie		NAS 1638		8

Elektrisch

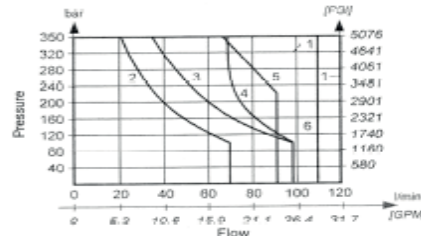
Voltage	Direct	V		12, 24, 48 DC
	Alternating	V		110, 230
Power		W		45
Schakel frequency		1/h		15000
Switch-on tijd		ms		70 tot 95
Switch-of tijd		ms		40 tot 80
Temperatuur patroon		°C [°F]		tot +50 [tot +122]
Temperatuur spoel		°C [°F]		tot +180 [tot +356]
Werk cycle				Continu

ΔP-Q Performance curves
Measured at 50°C [122°F] and viscosity of 32 mm²/s [148 SUS].



Spool	Flow path			
	P-A	P-B	A-T	B-T
1	1	1	6	6
2	3	3	2	7 B
3	6	6	3	4
6	1	1	2	2
9	6	6	2	2
81	1	1	3	3
51A, 51B	1	1	3	3
41A, 41B	6	6	-	-

ΔP-Q Operating limits
Measured at 50°C [122°F] and viscosity of 32 mm²/s [148 SUS].

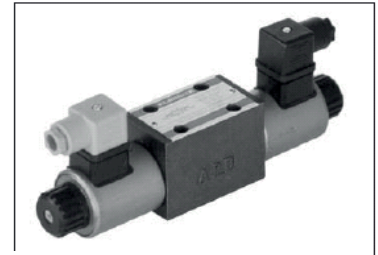


Spool	curve
1	1
2	4
3	5
6	3
9	6
81	1
51A, 51B	1
41A, 41B	2

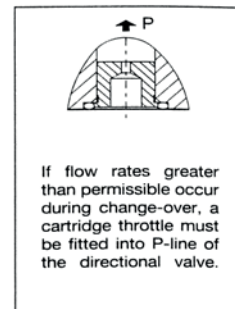
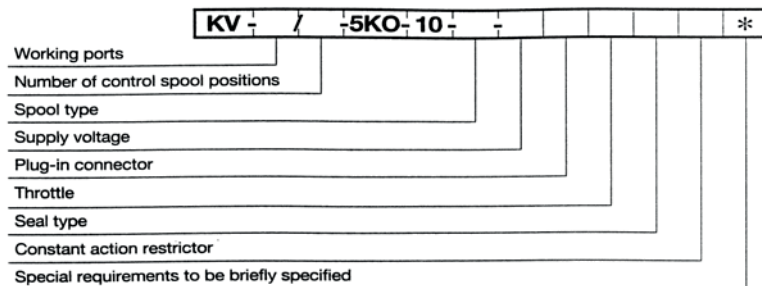
The operating limits of the valve are determined at a voltage 10% below the nominal rating. The curves refer to application with symmetrical flow through the valve (P-A and B-T). In the case of asymmetric flow (e.g. one part not used) reduced values may result.
Note: For valves with adjustment of the switching time reduced values of the operating limits may result.

KV4/2, KV4/3
Elektrisch ventiel (directional)

NG10
Drukbereik tot 350 bar
Flow tot 120 L/min



Ordering code



<p>Working ports</p> <p>3 working ports = 3 4 working ports = 4</p>	<p>Plug-in connector</p> <p>without signal lamp K1 = no design with signal lamp K1L = L</p>																																																		
<p>Number of control spool positions</p> <p>two positions = 2 three positions = 3</p>	<p>Throttle</p> <p>without throttle in "P" line = no design. throttle 0,8 mm dia = D08 throttle 1,0 mm dia = D10 throttle 1,2 mm dia = D12</p>																																																		
<p>Supply voltage</p> <table border="0"> <tr> <td>direct voltage</td> <td>alternating voltage</td> </tr> <tr> <td>24 V = no design.</td> <td>12 V = 12 AC</td> </tr> <tr> <td>12 V = 12 DC</td> <td>24 V = 24 AC</td> </tr> <tr> <td>48 V = 48 DC</td> <td>48 V = 48 AC</td> </tr> <tr> <td>110 V = 110 DC</td> <td>110 V = 110 AC</td> </tr> <tr> <td>230 V = 230 DC</td> <td>230 V = 230 AC</td> </tr> </table> <p>- Alternating voltage solenoids are fitted with a bridge rectifier. - With solenoids of over 48 V an earthing clamp (\perp) to ISO 4400 must be connected.</p>	direct voltage	alternating voltage	24 V = no design.	12 V = 12 AC	12 V = 12 DC	24 V = 24 AC	48 V = 48 DC	48 V = 48 AC	110 V = 110 DC	110 V = 110 AC	230 V = 230 DC	230 V = 230 AC	<p>Seal type</p> <p>NBR seals for mineral oil HL, HLP, to DIN 51524 = no design. FPM seals for HETG, HEES, HEPG to VDMA 24568 = E</p>																																						
direct voltage	alternating voltage																																																		
24 V = no design.	12 V = 12 AC																																																		
12 V = 12 DC	24 V = 24 AC																																																		
48 V = 48 DC	48 V = 48 AC																																																		
110 V = 110 DC	110 V = 110 AC																																																		
230 V = 230 DC	230 V = 230 AC																																																		
<p>Constant action restrictor</p> <p>Without restrictor = no design. Restrictor 0,5 dia. = UD</p>																																																			
<p>Spool types</p> <table border="0"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>=1</td> <td>=1A</td> <td>=81</td> <td>=51A</td> <td>=51B</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>=2</td> <td>=2A</td> <td>0</td> <td>=41A</td> <td>=41B</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>=3</td> <td>=3A</td> <td>=1B</td> <td>=2B</td> <td>=3B</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>=6</td> <td>=6A</td> <td>=3B</td> <td>=6B</td> <td>=6B</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>=9</td> <td></td> <td>=6B</td> <td></td> <td></td> </tr> </table>							=1	=1A	=81	=51A	=51B						=2	=2A	0	=41A	=41B						=3	=3A	=1B	=2B	=3B						=6	=6A	=3B	=6B	=6B						=9		=6B		
=1	=1A	=81	=51A	=51B																																															
=2	=2A	0	=41A	=41B																																															
=3	=3A	=1B	=2B	=3B																																															
=6	=6A	=3B	=6B	=6B																																															
=9		=6B																																																	
<p>- Port T in the valves with spool type 41A and 41B to be used as leakage line. Important note: Valves with adjustment of the switching time - a constant or short - time static oil pressure of at least ≥ 4 bar must prevail at connection T of the directional control valve to maintain the pressure in the spring chambers.</p>																																																			

KV4/2, KV4/3

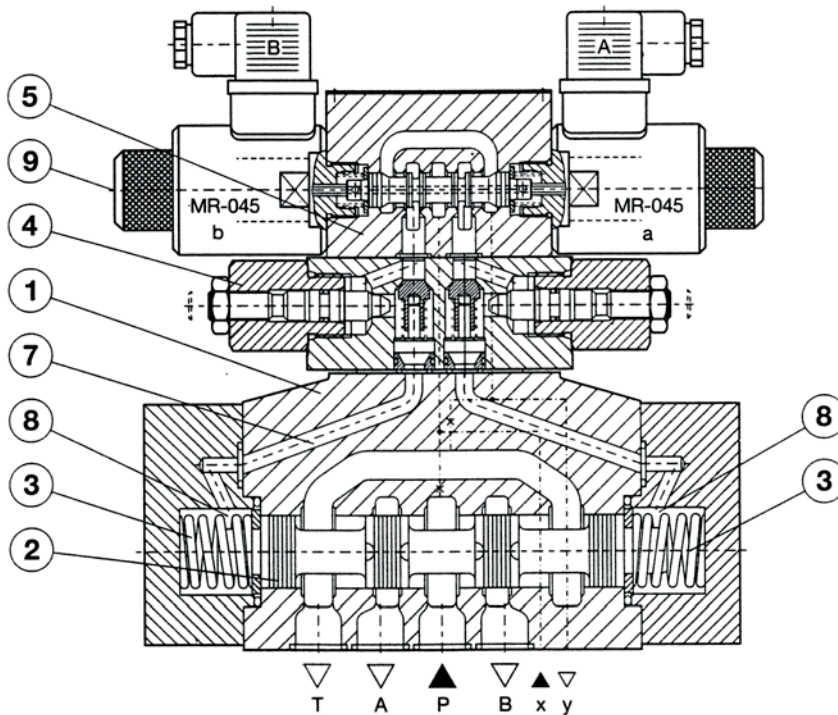
Elektrisch ventiel (directional)

NG16

Druk bereik tot 350 bar

Flow tot 300 L/min

Description of operation



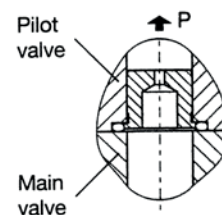
Directional valves type KV with indirect, solenoid-hydraulic operation control the hydraulic fluid flow direction. These valves consist of the main valve (1), a control spool (2), two return springs (3) in 4/3-way valves and none in 4/2-way valves, a double throttle check/valve (4) and a pilot valve (5). The pilot valve (5) is connected with the pressure chambers (8) via the pilot line (7). Feeding of the pilot valve oil is either or external (via the port "x"). Change-over of the control spool to one of the operating position is activated by the introduction of oil via the pilot valve (5) into one of the pressure chambers (8). A pressure rise in chambers provokes the movement of the control spool (2). Suitable links between ports A,B,P,T according to spool types are established as set forth in the table.

When the solenoid of the pilot valve (5) are de-energised a link between the pressure chamber (8) and the return line "y" for the pilot oil discharge is established. A pressure drop in the chamber actuates the main valve return spring (3) which automatically return the control spool to the neutral position.

Discharge of the return pilot oil from the pressure chambers is either internal or external (via the port "y"). Manual change-over of the main valve is also possible by pressing the emergency hand operator (9). Indirect directional valves can also be provided with a manual pilot valve. These valves are manually operated by moving the operating lever.

Throttle

If the pilot oil supply rate (x) is greater than permissible a cartridge throttle shall be fitted into the P line of the directional valve.



KV4/2, KV4/3
Elektrisch ventiel (directional)

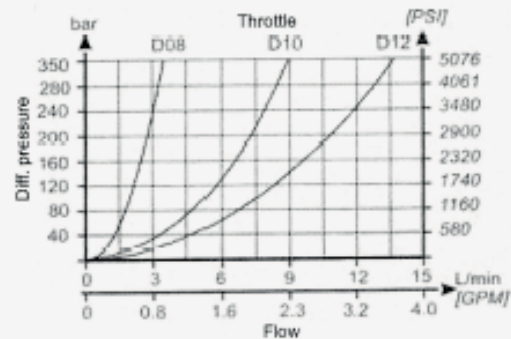
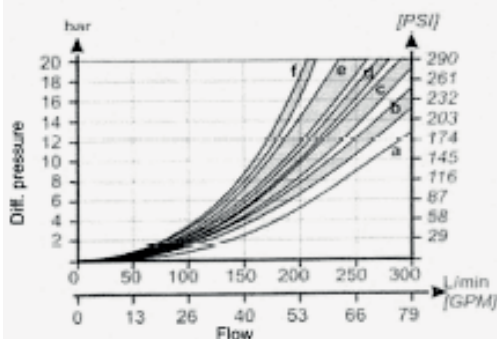
NG16
Druk bereik tot 350 bar
Flow tot 300 L/min

Flow rate	l/min [GPM]	300 [79.2]
Operating pressure	bar [PSI]	Ports A, B, P 350 [5076.3]
		Port T 250 [3625.9]
Pilot oil pressure (x-external)	bar [PSI]	90-280 [720.2-3025.9]
Pilot oil pressure (x-internal) Pre-load valve is fitted into P-port of the main valve Without Pre-load valve in the P-port of the main valve		In valve types with internal pilot oil supply (x) the spool types 2, 3, and 4 are possible only when the oil flow in the direction from P towards T achieves the flow rate Q = 150 l/min [39.6 GPM], with the control spool in the centre position.
Oil temperature range	°C [°F]	-20 to +70 [-4 to 158]
Viscosity range	mm ² /S	15 to 380
Required pilot oil volume	cm ³ [cu.in]	2 positions valve 7.8 [0.47]
		3 positions valve 3.9 [0.24]
	Kg [lb]	Main valve 8 [17.6]
		4/3 pilot valve 2.5 [5.5]
		4/2 pilot valve 2.2 [4.8]
		Throttle/check valve 1.45 [3.2]
Pressure reducing valve 1.70 [3.7]		
Mounting position	Optional, horizontal for spool types 4/2	
Switch-on time	(ms)	3 positions valve 60
Solenoid change-over from the operating to the centre position		2 positions valve 85
Switch-off time	(ms)	3 positions valve 45
Solenoid change-over from the operating to the centre position		2 positions valve 50
Filtration	NAS 1638	8
Ambient temperature range	°C [°F]	+50 [122]
Coil temperature range	°C [°F]	+180 [356]
Power	w	29 (12V supply voltage - 36W)
Voltage	V	12, 24, 48, 110, 230

The switch-on and switch-off times apply to 24 V DC solenoids.

ΔP-Q Performance curves

Measured at 50°C [122°F] and viscosity of 32 mm²/s [148 SUS].



Spool type	P-A	P-B	A-T	B-T	P-T
1, R1, 51B, 51A, F51, R51	e	e	e	f	-
2, R2	a	b	c	e	f
3, R3	b	b	c	d	-
4, R4	b	c	c	e	-
5, R5	b	c	c	e	-
a, 5B	b	c	d	e	-

See Model Code for spool type choice.

KV4/2, KV4/3

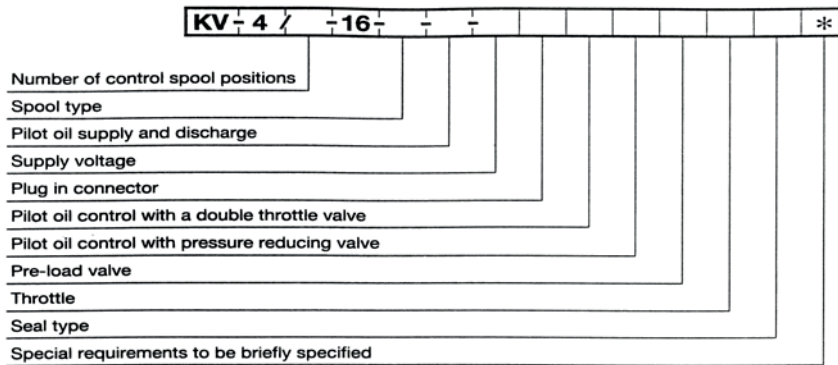
Elektrisch ventiel (directional)

NG16

Drukbereik tot 350 bar

Flow tot 300 L/min

Ordering code



<p>Number of control spool position</p> <p>two positions = 2 three positions = 3</p>	<p>Plug-in connector</p> <p>without signal lamp K1 = no design with signal lamp K1L = L</p>												
<p>Pilot oil supply and discharge</p> <p>external x,y = Z internal x,y = N internal x, external y = XN internal y, external x = YN</p> <p>for supply and discharge with spool types 2 and 3, refer to the table of technical data</p>	<p>Pilot oil control with a double throttle valve</p> <p>without a double throttle valve = no design. with a double throttle valve = H</p> <p>Pilot oil control with pressure reducing valve</p> <p>without pressure reducing valve = no design. with pressure reducing valve = RT</p>												
<p>Supply voltage</p> <table border="0"> <tr> <td>direct voltage</td> <td>alternating voltage</td> </tr> <tr> <td>24 V = no design.</td> <td>12 V = 12 AC</td> </tr> <tr> <td>12 V = 12 DC</td> <td>24 V = 24 AC</td> </tr> <tr> <td>48 V = 48 DC</td> <td>48 V = 48 AC</td> </tr> <tr> <td>110 V = 110 DC</td> <td>110 V = 110 AC</td> </tr> <tr> <td>230 V = 230 DC</td> <td>230 V = 230 AC</td> </tr> </table> <p>- Alternating voltage solenoids are fitted with a bridge rectifier. - With solenoids of over 48 V an earthing clamp (⏚) to DIN 43650 must be connected. * To fulfill EMC (89/336/EEC) a capacitor must be built in (see 10.2.2)</p>	direct voltage	alternating voltage	24 V = no design.	12 V = 12 AC	12 V = 12 DC	24 V = 24 AC	48 V = 48 DC	48 V = 48 AC	110 V = 110 DC	110 V = 110 AC	230 V = 230 DC	230 V = 230 AC	<p>Pre-load valve</p> <p>without pre-load valve = no design. with pre-load valve = V</p> <p>Throttle</p> <p>without throttle in "P" line = no design. throttle 0,8 mm dia = D08 throttle 1,0 mm dia = D10 throttle 1,2 mm dia = D12</p> <p>Seal type</p> <p>NBR seals for mineral oil HL, HLP, to DIN 51524 = no design. FPM seals for HETG, HEES, HEPG to VDMA 24568 = E</p>
direct voltage	alternating voltage												
24 V = no design.	12 V = 12 AC												
12 V = 12 DC	24 V = 24 AC												
48 V = 48 DC	48 V = 48 AC												
110 V = 110 DC	110 V = 110 AC												
230 V = 230 DC	230 V = 230 AC												
<p>Spool types</p> <p>=1 =R1 =2 =R2 =3 =R3 =4 =R4 =5 =R5 =6 =R6</p> <p>=51B =51A =F51 =R51</p>													

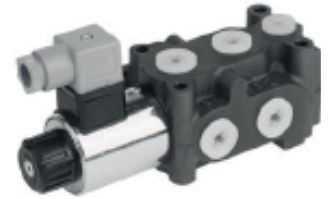
KV6/2

Elektrisch ventiel (directional)

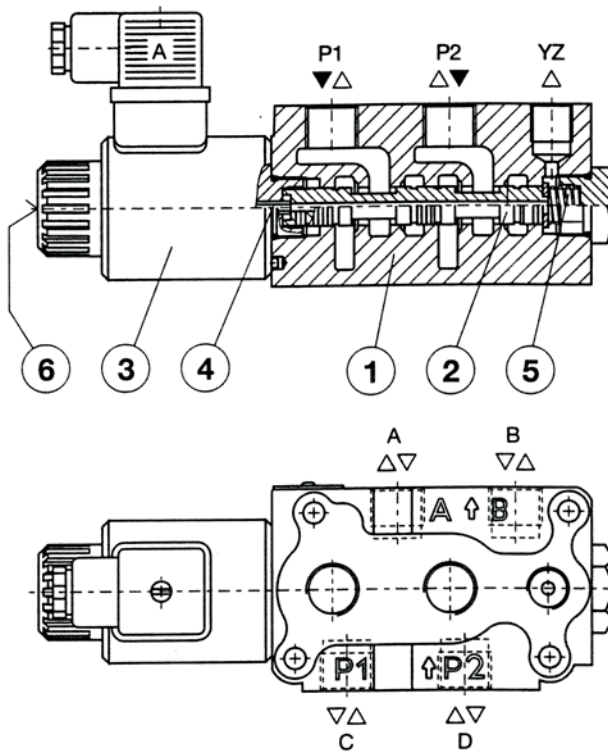
NG6

Drukberik tot 350 bar

Flow tot 50 L/min



Description of operation



Directional valves type KV with direct solenoid operation control the direction of the hydraulic medium flow. They are mostly used as link between two consumers and the basic directional valve, when we want to control both consumers alternately by means of one basic directional valve.

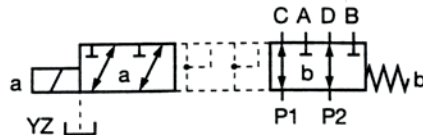
The KV type directional valves consist of a housing (1), a control spool (2), a solenoid (3) and a return spring (5).

Change-over to the operating position is done by energising the solenoid (3), whereby the solenoid plunger acts on the control spool (2) via the operating pin (4), thus clearing the corresponding flow ways and establishing respective links between the ports P1, A, B and P2.

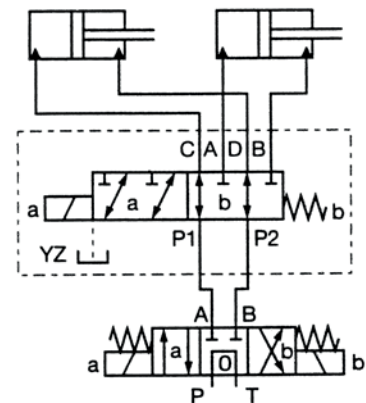
When the solenoid (3) is de-energised, the control spool (2) is returned to its neutral position by the return spring (5), thus establishing again the links between ports P1, C, D and P2.

The change-over can also be done manually by pressing the emergency hand operator (6).

Symbol



Mounting example



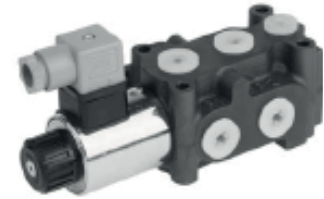
KV6/2

Elektrisch ventiel (directional)

NG6

Druk bereik tot 350 bar

Flow tot 50 L/min



Eigenschappen

Hydraulisch

Grootte				6
Flow		L/min [GPM]		50 [13,2]
Werk druk	met YZ	bar [PSI]		350 [5076]
	zonder YZ	bar [PSI]		250 [3625]
Werk temperatuur		°C [°F]		-20 tot +70 [-4 tot +158]
Viscosity		mm ² /s [SUS]		15 tot 380 [3,24 tot 82]
Gewicht		Kg [lb]		6,5 [14,3]
Filtratie		NAS 1638		8

Elektrisch

Voltage	Direct	V		12, 24 DC
Power		W		29
Schakel frequency		1/h		15000
Temperatuur patroon		°C [°F]		tot +50 [tot +122]
Temperatuur spoel		°C [°F]		tot +180 [tot +356]
Werk cycle				Continu

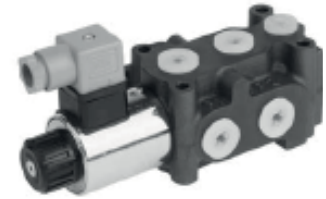
KV6/2

Elektrisch ventiel (directional)

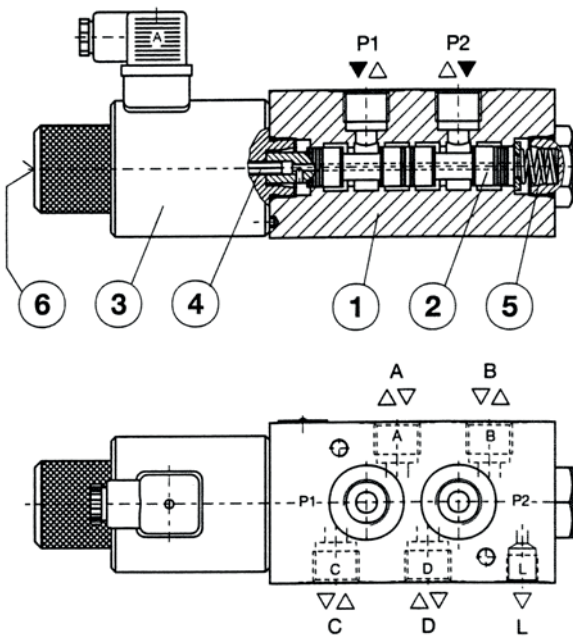
NG10

Druk bereik tot 350 bar

Flow tot 120 L/min



Description of operation



Directional valves type KV with direct solenoid operation control the direction of the hydraulic medium flow. They are mostly used as link between two consumers and the basic directional valve, when we want to control both consumers alternately by means of one basic directional valve.

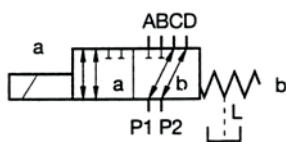
The KV type directional valves consist of a housing (1), a control spool (2), a solenoid (3) and a return spring (5).

Change-over to the operating position is done by energising the solenoid (3), whereby the solenoid plunger acts on the control spool (2) via the operating pin (4), thus clearing the corresponding flow ways and establishing respective links between the ports P1, A, B and P2.

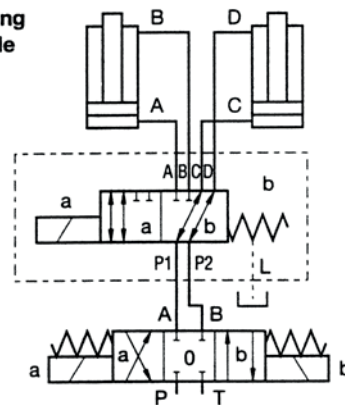
When the solenoid (3) is de-energised, the control spool (2) is returned to its neutral position by the return spring (5), thus establishing again the links between ports P1, C, D and P2.

The change-over can also be done manually by pressing the emergency hand operator (6).

Symbol



Mounting example



KV6/2

Elektrisch ventiel (directional)

NG10

Druk bereik tot 350 bar

Flow tot 120 L/min



Eigenschappen

Hydraulisch

Grootte				10
Flow		L/min [GPM]		120 [31,7]
Werk druk	Met YZ	bar [PSI]		350 [5076]
	Zonder YZ	bar [PSI]		250 [3625]
Werk temperatuur		°C [°F]		-20 tot +70 [-4 tot +158]
Viscosity		mm ² /s [SUS]		15 tot 380 [3,24 tot 82]
Gewicht		Kg [lb]		5,5 [12,12]
Filtratie		NAS 1638		8

Elektrisch

Voltage		V		12, 24 DC
Power		W		45
Schakel frequency		1/h		15000
Temperatuur patroon		°C [°F]		tot +50 [tot +122]
Temperatuur spoel		°C [°F]		tot +180 [tot +356]
Werk cycle				Continu

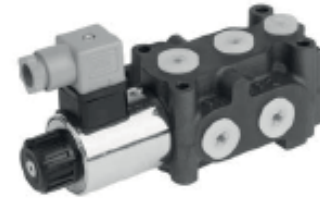
KV6/2

Elektrisch ventiel (directional)

NG10

Druk bereik tot 350 bar

Flow tot 120 L/min



Ordering code

KV-6/2-10 - - - - *

Supply voltage	
Threaded connections	
Plug-in connector	
Seal type	
Special requirements to be briefly specified	

Supply voltage

direct voltage 24 V = no desig.
direct voltage 12 V = 12 DC

Threaded connections M / ML

M 22x1,5 / M14x1,5 = no desig.
M 27x2 / M14x1,5 = M 27

G 1/2 / G 1/4 = G 1/2
G 3/4 / G 1/4 = G 3/4

Plug-in connector

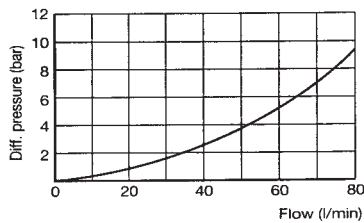
without signal lamp K1 = no desig.
with signal lamp K1L = L

Seal type

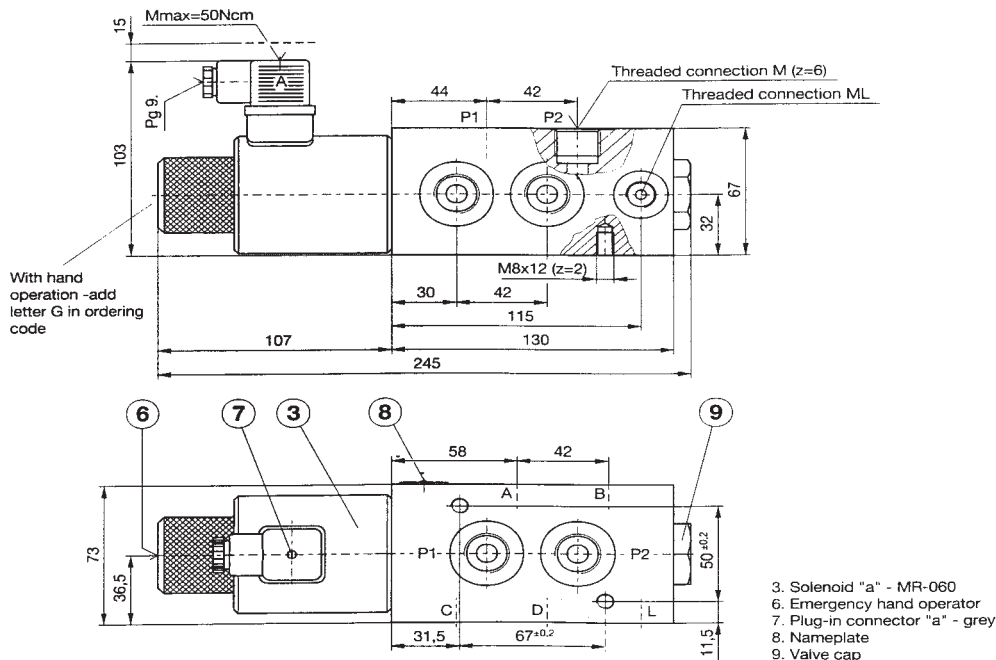
NBR seals for mineral oil HL, HLP, to DIN 51524 = no desig.
FPM seals for HETG, HEES, HEPG to VDMA 24568 = E

$\Delta p-Q$ Performance curves

(measured at $t = 50\text{ }^\circ\text{C}$ and $v = 32\text{ mm}^2/\text{s}$)



Dimensions (mm)



KV6/2

Elektrisch ventiel (directional)

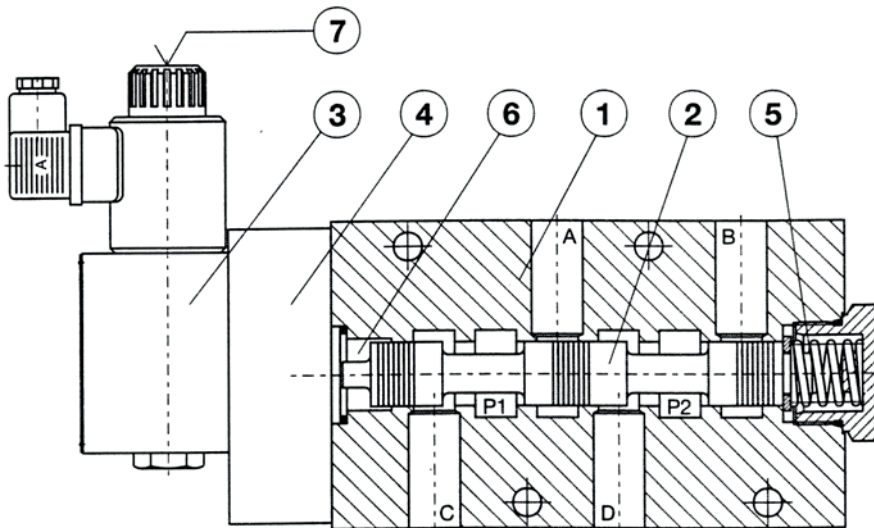
NG16

Druk bereik tot 350 bar

Flow tot 250 L/min



Description of operation



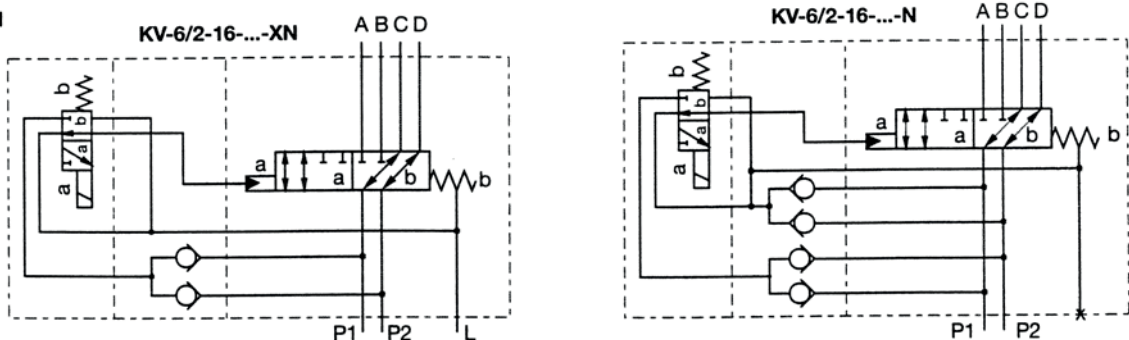
Directional valves type KV-6/2-16 with indirect, solenoid-hydraulics operation control the direction of the hydraulic medium flow. They are mostly used as link between two consumers and the basic directional valve, when we want to control both consumers alternately by means of one basic directional valve.

The KV type directional valves consist of a housing (1), a control spool (2), a pilot valve (3) a sandwich plate (4) and a return spring (5).

Change-over to the operating position is done by energising the solenoid of the pilot valve (3). A pressure rise in the pressure chamber (6), provoke the movement of the control spool (2), thus clearing the corresponding flow ways and establishing respective links between the ports P1, A, B and P2.

When the solenoid of the pilot valve is de-energised, the control spool (2) is returned to its neutral position by the return spring (5), thus establishing again the links between ports P1, C, D and P2. The change-over can also be done manually by pressing the emergency hand operator (7) of the pilot valve.

Symbol



KV6/2

Elektrisch ventiel (directional)

NG16

Drukbereik tot 350 bar

Flow tot 250 L/min

Eigenschappen

Hydraulisch

Grootte				16
Flow		L/min [GPM]		250 [31,7]
Werk druk		bar [PSI]		15 to 350 [5076]
	L poort of retour	bar [PSI]		250 [3625]
Werk temperatuur		°C [°F]		-20 tot +70 [-4 tot +158]
Viscosity		mm ² /s [SUS]		15 tot 380 [3,24 tot 82]
Gewicht		Kg [lb]		22 [48,5]
Filtratie		NAS 1638		8

Elektrisch

Voltage	Direct	V		12, 24 DC
Power		W		29
	12v DC			36
Schakel frequency		1/h		15000
Temperatuur patroon		°C [°F]		tot +50 [tot +122]
Temperatuur spoel		°C [°F]		tot +180 [tot +356]
Werk cycle				Continu

KV8/3

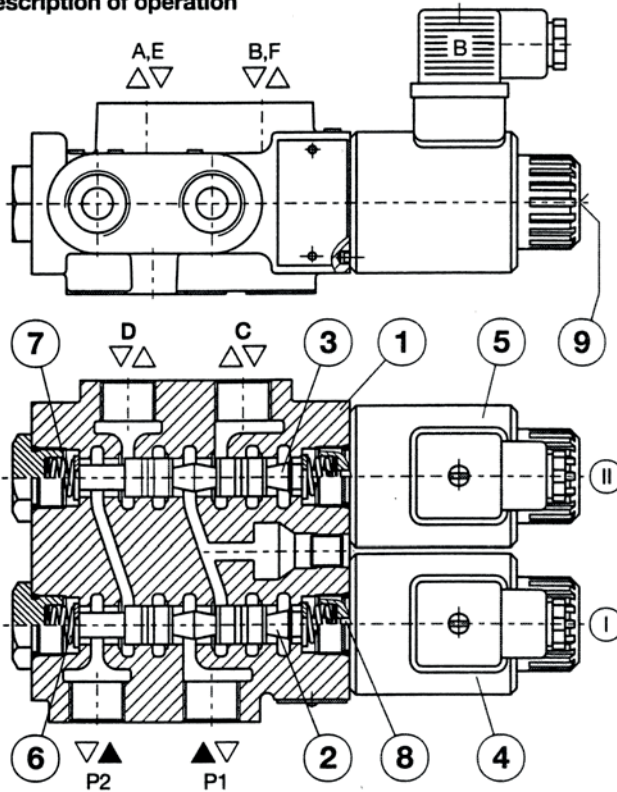
Elektrisch ventiel (directional)

NG6

Druk bereik tot 350 bar

Flow tot 50 L/min

Description of operation



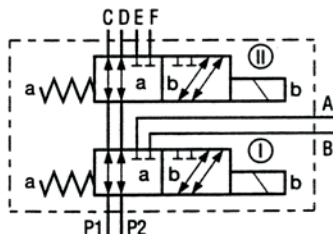
Directional valves type KV with direct solenoid operation control the direction of the hydraulic medium flow. They are mostly used as link between three consumers and the basic directional valve, when we wish to control both consumers alternately by means of one basic directional valve.

The KV type directional valves consist of a housing (1), a control spool (2,3), two solenoids (4,5) with return spring (6,7). Change-over to one of the operating positions is done by combination of operation of solenoids (4,5), whereby the solenoid plunger acts on the control spool (2,3) via the operating pin (8), thus clearing the corresponding flow ways and establishing respective links between the ports P1, A, B, C, D, E, F and P2, as seen forth in the schematic diagram of a mounting example.

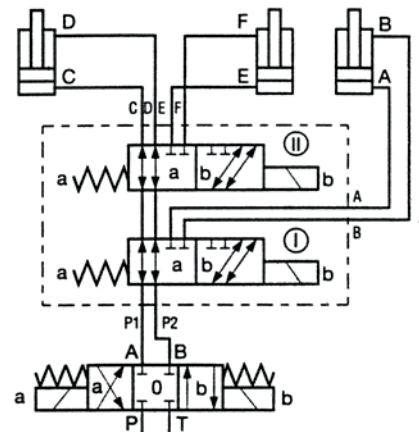
When the solenoid (4,5) is de-energised, the control spool (2,3) is returned to their neutral position by the return spring (6,7).

The change-over can also be done manually by pressing the emergency hand operator (9).

Symbol



Mounting example



KV8/3

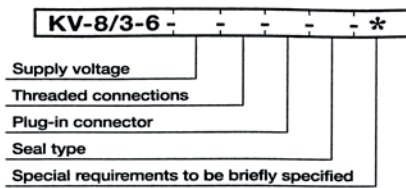
Elektrisch ventiel (directional)

NG6

Drukbereik tot 350 bar

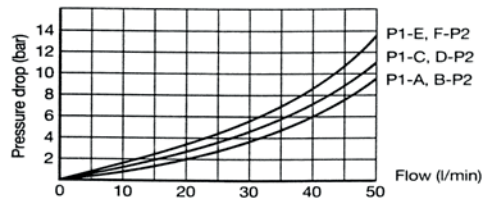
Flow tot 50 L/min

Ordering code

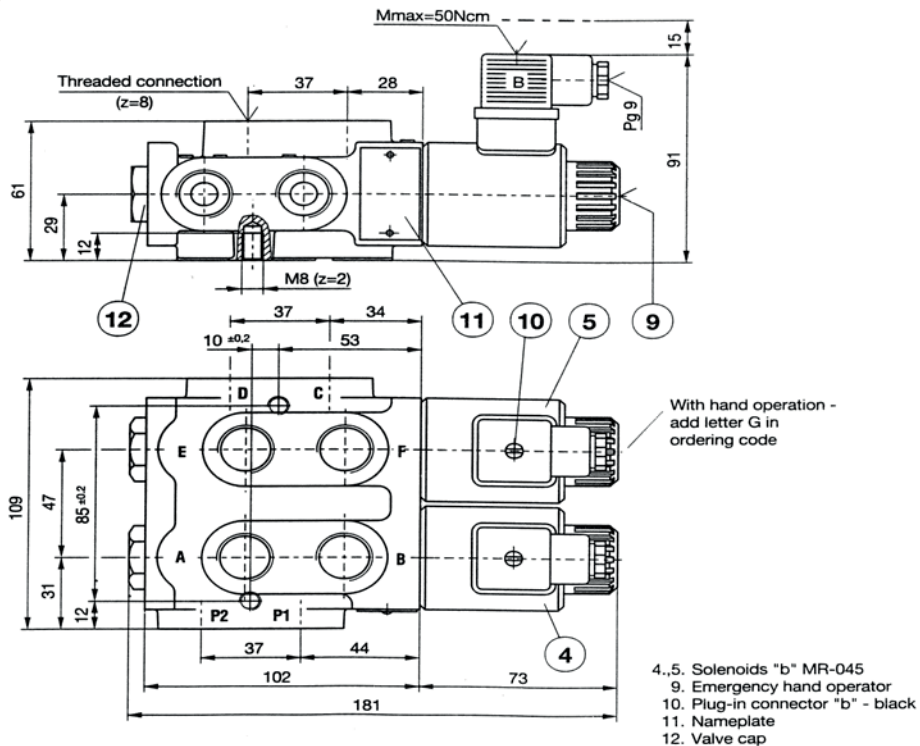


<p>Supply voltage direct voltage 24 V = no desig. direct voltage 12 V = 12 DC</p>
<p>Threaded connections M 18x1.5 = no desig. M 22x1,5 = M 22 G 3/8 = G 3/8 G 1/2 = G 1/2</p>
<p>Plug-in connector without signal lamp K1 = no desig. with signal lamp K1L = L</p>
<p>Seal type NBR seals for mineral oil HL, HLP, to DIN 51524 = no desig. FPM seals for HETG, HEES, HEPG to VDMA 24568 = E</p>

Δ p-Q Performance curves
(measured at t = 50 °C and ν = 32 mm²/s)



Dimensions (mm)

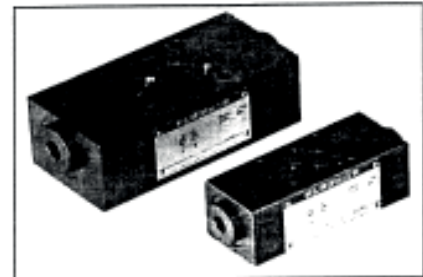


VP-NOV

Gestuurde terugslagklep

CHECK VALVE type VP-NOV

- NS-6, 10
- to 315 bar
- to 100 l/min
- Direct operated
- Connecting dimensions to ISO 4401
- Flow shut-off in both or one service line
- For vertical stacking - sandwich plate design
- Height and width of the valves to ISO 7790 norms

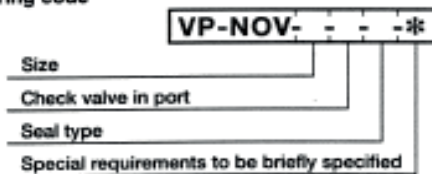


VP-NOV-10-..., VP-NOV-6-..

Description of operating

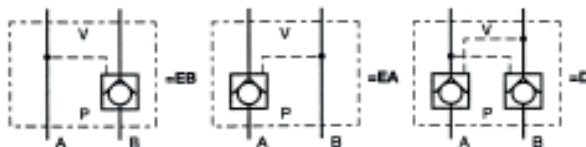
Pilot operated check valves type VP-NOV enable the hydraulic fluid flow in the service lines to be automatically shut off and made free, respectively. Free flow direction is always from the valve side "V" to the subplate side "P". In the opposite direction is the valve blocked for the hydraulic fluid flow. Free flow in port A in direction P to V is achieved by means of pressure in port B, and vice versa. To assure zero leakage there is necessary to discharge ports A and B towards T in the zero position of the directional valve.

Ordering code



Size	Seal type	
Size 6 = 6	NBR seals for mineral oil	= no desig.
Size 10 = 10	HL, HLP, to DIN 51524	
	FPM seals for HETG,	= E
	HEES, HEPG to VDMA 24568	

Check valve in port (symbol)

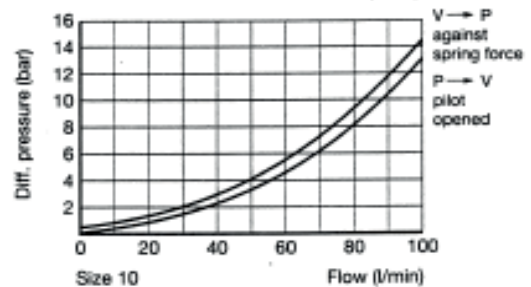
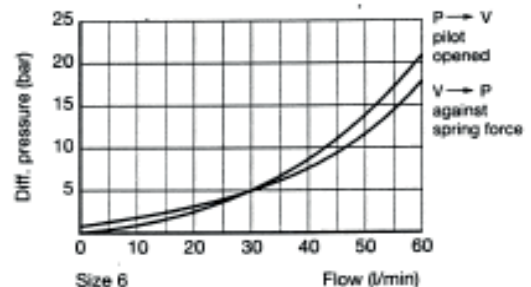


Technical data

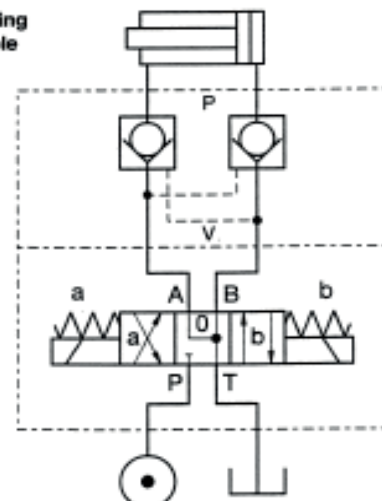
Size		6	10
Flow rate	l/min	60	100
Operating pressure	bar	315	315
Cracking pressure	bar	1	0,5
Area ratio		1:3,9	1:3,6
Oil temperature range	°C	-20 to +70	-20 to +70
Viscosity range	mm²/s	15 to 380	15 to 380
Filtration	NAS 1638	9	9
Mass	kg	1,8	3,5

Performance curves

$\Delta p - Q$ Performance curves of the flow in direction V to P (through check valve) and in direction P to V (check valve pilot opened with $p_p=80$ bar). Measured at $t = 50$ °C and $\nu = 32$ mm²/s



Mounting example



VP-RT

Poortveiligheid en overdrukventiel

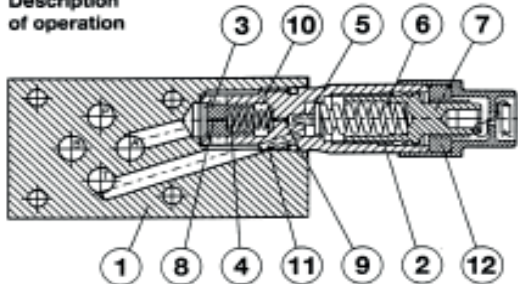
PRESSURE RELIEF VALVE
type VP-RT

- NS 6,10
- to 315 bar
- to 100 l/min
- Pilot operated
- Connecting dimensions to ISO 4401
- For vertical stacking - sandwich plate design
- Two pressure setting ranges



VP-RT-10, VP-RT-6

Description
of operation

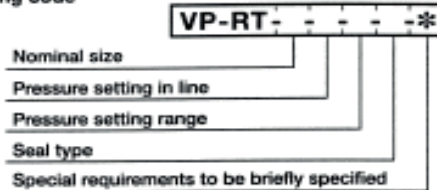


Pilot operated pressure relief valves type VP-RT of sandwich plate design, for vertical stacking, are used for maintaining and limiting the maximum pressure in a hydraulic system.

These valves consist of a stack plate (1), pressure relief valve housing (2), main spool insert (3) with a spring (4), pilot poppet (5), spring (6) and pressure setting element (7). The P-line of this pressure relief valve is connected with the hydraulic system. The hydraulic medium pressure acts on the front side of the main spool insert (3). The bores (8,9) permit the introduction of pilot oil into the pressure chamber (10) and the application of pressure to the opposite side of the main spool insert.

This pressure relief valve remains in closed position till the system pressure exceeds the valve set at the spring (6). A pressure rise in the system above the value set by the pressure setting element (7), provokes the movement of the pilot poppet (5) of the seat, freeing the pilot oil discharge through the bores (9) and (11). A pressure drop in the pressure chamber (10) rises the main spool insert (3), thus clearing the hydraulic medium flow in the direction from port P towards port T. Loosening of the pressure setting element is prevented by a counternut (12).

Ordering code



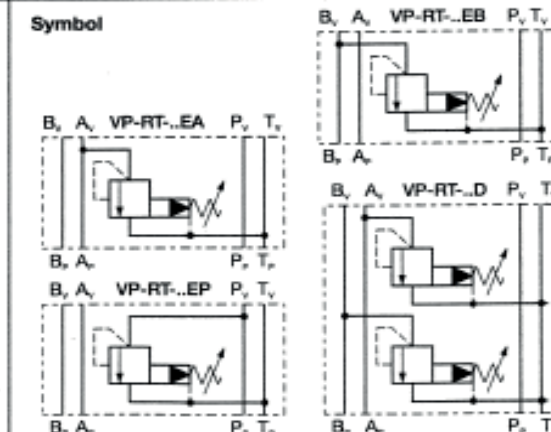
Nominal size	
Size 6 = 6	
Size 10 = 10	

Pressure setting in line	
setting in line A	= EA
setting in line B	= EB
setting in line P	= EP
setting in line A and B (for size 6 only)	= D
Pressure setting range	
to 100 bar	= 100
to 315 bar	= 315
Seal type	
NBR seals for mineral oil HL, HLP, to DIN 51524	= no desig.
FPM seals for HETG, HEES, HEPG to VDMA 24568	= E

Technical data

Size		6	10
Flow rate	l/min	50	100
Pressure setting range	bar	to 315	to 315
Oil temperature range	°C	-20 to +70	-20 bis +70
Viscosity range	mm ² /s	15 to 380	15 to 380
Mass	kg	1,2-1,7(D)	2,6
Filtration	NAS 1638	9	9

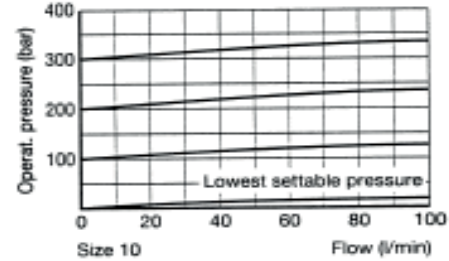
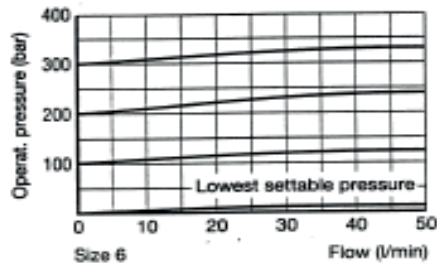
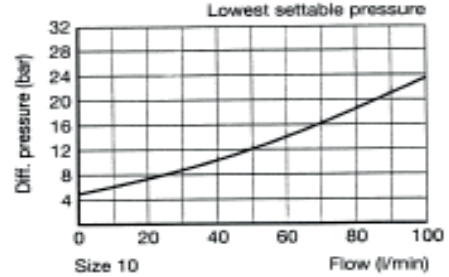
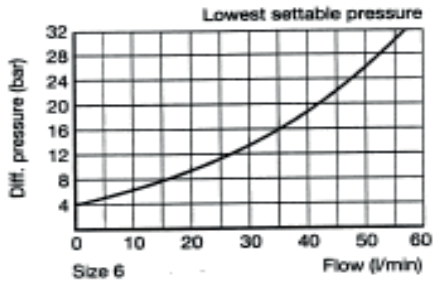
Symbol



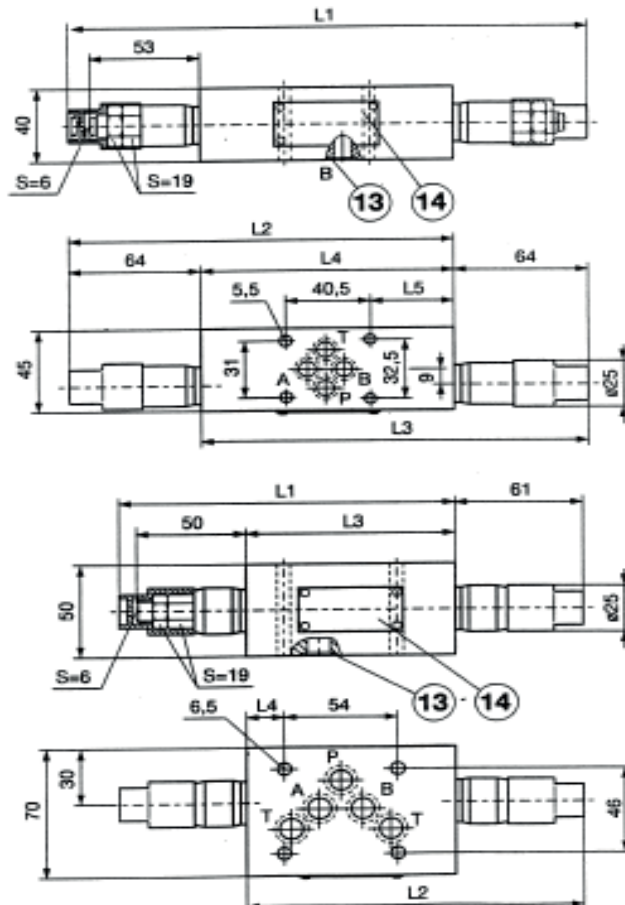
VP-RT

Poortveiligheid en overdrukventiel

$\Delta p - Q$ Performance curves (measured at $t = 50\text{ }^\circ\text{C}$ and $\nu = 32\text{ mm}^2/\text{s}$)



Dimensions (mm)



	VP-RT-6-EA	VP-RT-6-EB	VP-RT-6-EP	VP-RT-6-D
L1	-	-	-	249
L2	154	-	-	-
L3	-	154	154	-
L4	90	90	90	121
L5	9	40,5	40,5	40

13. O-ring 9,2x1,78
14. Nameplate

The value set on the pressure setting element is protected by means of a lead stamp $\varnothing 11$ and a wire $\varnothing 1,1$ mm.

Required quality of the mating surface

	VP-RT-10-EP	VP-RT-10-EA	VP-RT-10-EB
L1	156	161	-
L2	-	-	161
L3	95,5	100,5	100,5
L4	28,5	28,5	18

13. O-ring 12x2
14. Nameplate

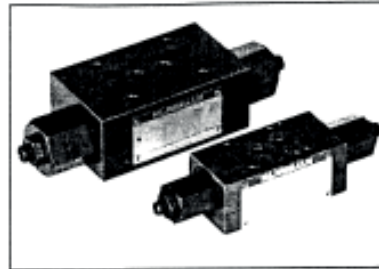
The value set on the pressure setting element is protected by means of a lead stamp $\varnothing 11$ and a wire $\varnothing 1,1$ mm.

VP-NDV

Snelheidsregelventiel

THROTTLE/CHECK VALVE type VP-NDV

- NS-6, 10
- to 315 bar
- to 100 l/min
- Connecting dimensions to ISO 4401
- For flow control in both service lines
- For throttling in supply - and return lines
- For vertical stacking - sandwich plate design
- Height and width of the valves to ISO 7790 norms

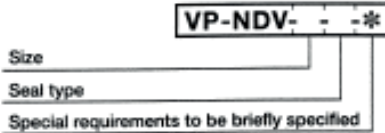


VP-NDV-10-..., VP-NDV-6-...

Description of operating

Throttle/check valves type VP-NDV are used for throttling the pilot and main flow of the hydraulic fluid in the line A and B. These valves consist of two throttling spools with setting screws and two check valves which are built in a housing. In direction V to P (see the hydraulic symbol) flows the hydraulic fluid with low pressure loss through the check valve. In direction P to V is the hydraulic fluid flow throttled depending on adjustment of the throttling spool.

Ordering code



Size

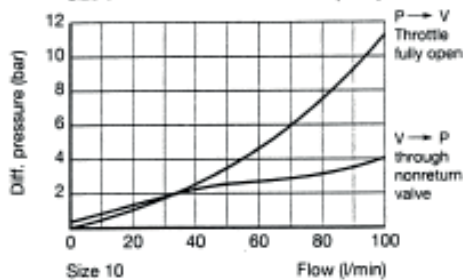
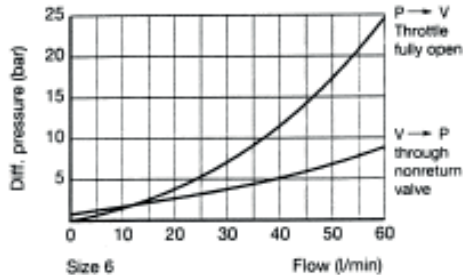
Size 6 = 6
Size 10 = 10

Seal type

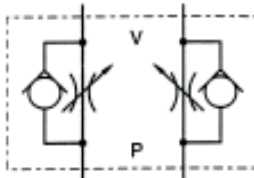
NBR seals for mineral oil HL, HLP, to DIN 51524 = no desig.
FPM seals for HETG, HEES, HEPG to VDMA 24568 = E

Performance curves

$\Delta p - Q$ Performance curves of the flow in direction V to P (through the nonreturn valve with throttle closed) and in direction P to V (throttle in fully open position). Measured at $t = 50^\circ\text{C}$ and $\nu = 32 \text{ mm}^2/\text{s}$



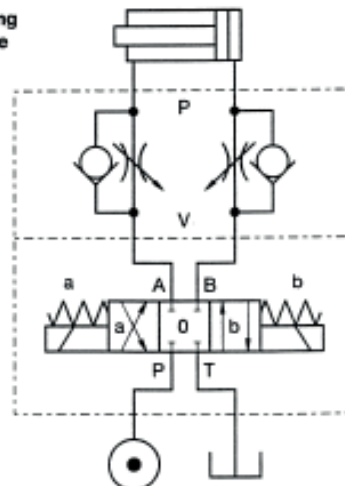
Symbol



Technical data

Size		6	10
Flow rate	l/min	60	100
Operating pressure	bar	315	315
Cracking pressure	bar	0,4	0,4
Oil temperature range	$^\circ\text{C}$	-20 to +70	-20 to +70
Viscosity range	mm^2/s	15 to 380	15 to 380
Filtration	NAS 1638	9	9
Mass	kg	1,45	3,3

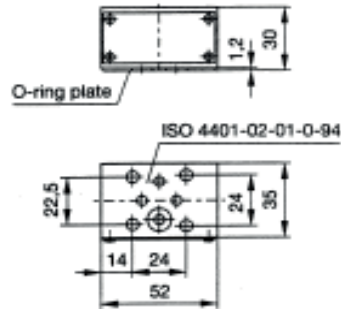
Mounting example



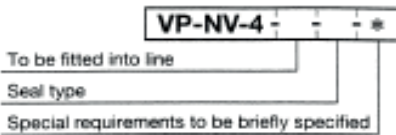
VP-NV-4, VP-NOV-4

CHECK VALVE type VP-NV-4

Dimensions (mm)



Ordering code

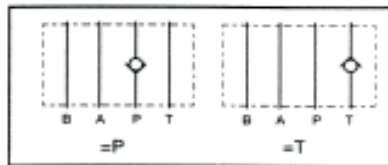


To be fitted into line ...	
- To be fitted into line P	=P
- To be fitted into line T	=T
Seal type	
- NBR seals for mineral oil	=no design.
- HL, HLP, to DIN 51524	
- FPM seals for HETG, HEES,	=E
- HEPG to VDMA 24568	

Technical data

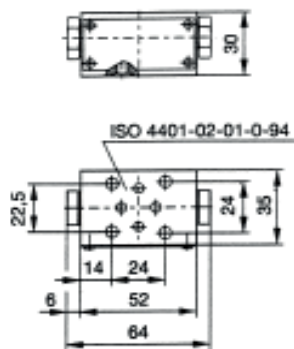
Size		4
Flow rate	l/min	20
Operating pressure	bar	315
Cracking pressure	bar	1
Masse	kg	0,35

Symbol

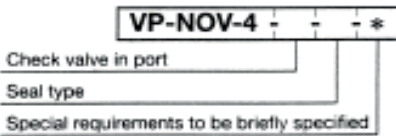


CHECK VALVE type VP-NOV-4

Dimensions (mm)

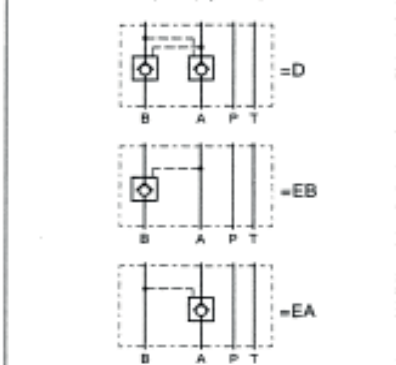


Ordering code



Seal type	
- NBR seals for mineral oil	=no design.
- HL, HLP, to DIN 51524	
- FPM seals for HETG, HEES,	=E
- HEPG to VDMA 24568	

Check valve in port (Symbol)



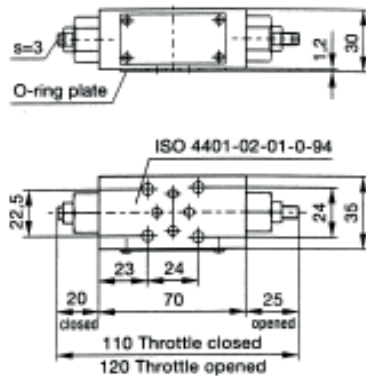
Technical data

Size		4
Flow rate	l/min	20
Operating pressure	bar	315
Cracking pressure	bar	1
Area ratio		3
Masse	kg	0,40

VP-NDV-4, VP-TS-4-4

THROTTLE/CHECK VALVE type VP-NDV-4

Dimensions (mm)



Ordering code

VP-NDV-4 - - *

Seal type

Special requirements to be briefly specified

Seal type

- NBR seals for mineral oil =no design.
- HL, HLP, to DIN 51524
- FPM seals for HETG, HEES, =E
- HEPG to VDMA 24568

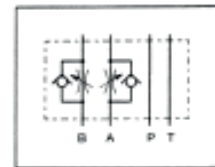
Technical data

Size		4
Flow rate	l/min	20
Operating pressure	bar	315
Cracking pressure	bar	1
Mass	kg	0,55

Assembly Instructions

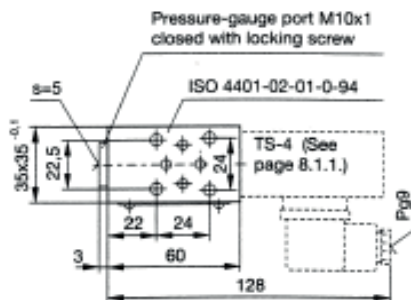
With these valves there can be throttling of the hydraulic fluid flow in return line or supply line achieved. Direction of throttling can be selected by turning the installation position of the valve around the longitudinal axis. The O-ring plate is always mounted on the subplate side.

Symbol



STACKING SANDWICH PLATE type VP-TS-4-4 FOR PRESSURE SWITCH

Dimensions (mm)



Ordering code

VP-TS-4 - - - *

Signal TS-4

pressure switch from line...

Seal type

Special requirements to be briefly specified

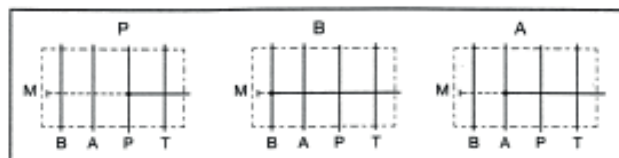
Signal TS-4 pressure switch from line...

- A =A
- B =B
- P =P

Seal type

- NBR seals for mineral oil =no design.
- HL, HLP, to DIN 51524
- FPM seals for HETG, HEES, =E
- HEPG to VDMA 24568

Symbol



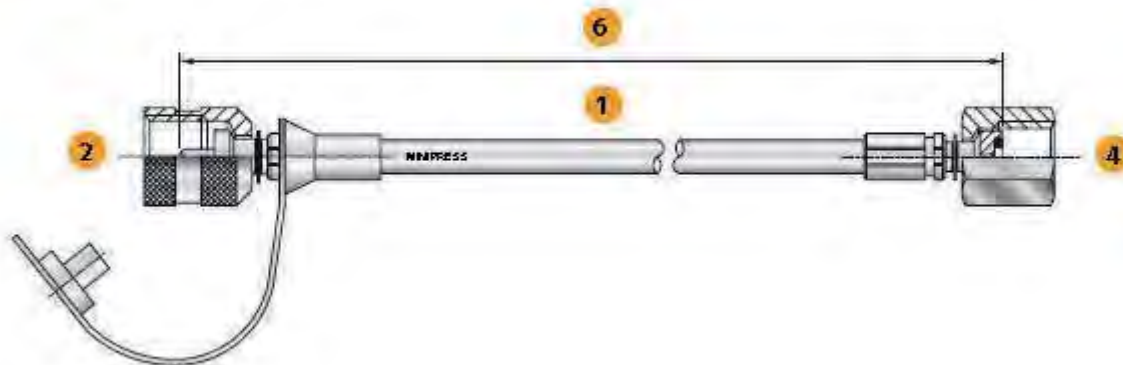
Technical data

Size		4
Flow rate	l/min	20
Pressure	bar	315
Mass	kg	0,55

Hoe de slang te bestellen

Codice ordine / Order code					
1	2	3	4	5	6

- 1 Slang / Hose type
- 2 Slangkoppeling / Fitting type
- 3 Graden bocht
Elbow fitting angle
- 4 Slangkoppeling / Fitting type
- 5 Graden bocht
Elbow fitting angle
- 6 Slanglengte / Hose length

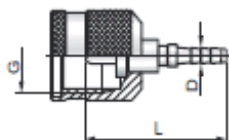


Slang referenties

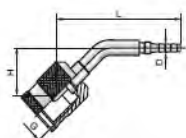
Slang code/ Hose code				
RD2-RD3-RD4				
<i>For mineral and hydraulic oil. Type ASTM 3, fuel. Brake systems oil (type DOT 4)</i>				
<i>Voor minerale en hydraulische oliën, type ASTM 3, benzine, rem olie (type DOT 4)</i>				
		RD2	RD3	RD4
Outside diameter Buiten diameter	mm	5	6	8
Inside diameter Binnen diameter	mm	2	3	4
Max working pressure Max werk druk	Bar	630	630	500
Min bursting pressure Min barst druk	Bar	1890	1890	1500
Min bending radius Min. Buig radius	mm	20	25	35
Working temperature Werk temperatuur	°C	-40...+100	-40...+100	-40...+100

Slangkoppeling meetslang

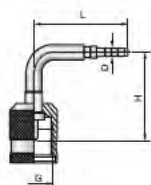
Wartel voor testkoppeling



Hose Slang	G	L	PN bar	D	Art.code
RD2	M16x2	32.5	630	2.3	XMP16223
	M16x2	32.5	630	2.3	IXMP16223
	M16x1.5	32.5	630	2.3	XMP161523
RD3	M12.65x1.5	32.5	400	2.3	XMP12651523
	M16x2	32.5	630	3.0	XMP1623
	M16x1.5	32.5	630	3.0	XMP16153
RD4	M12.65x1.5	32.5	400	3.0	XMP1265153
	M16x2	32.5	630	4.2	XMP16242
	M16x1.5	32.5	630	4.2	XMP161542
	M12.65x1.5	32.5	400	4.2	XMP12651542



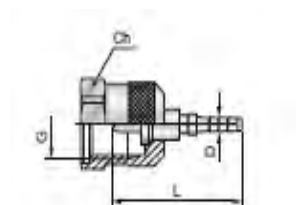
Hose Slang	G	L	H	PN bar	D	Art.code
RD2	M16x2	48	18.5	630	2.3	XMP4516223
	M16x2	48	18.5	630	2.3	IXMP4516223
	M16x1.5	48	18.5	630	2.3	XMP45161523
	M12.65x1.5	48	19	400	2.3	XMP4512651523
RD3	M16x2	48	18.5	630	3.0	XMP451623
	M16x1.5	48	18.5	630	3.0	XMP4516153
	M12.65x1.5	48	19	400	3.0	XMP451265153
RD4	M16x2	53	18.5	630	4.2	XMP4516242
	M16x1.5	53	18.5	630	4.2	XMP45161542
	M12.65x1.5	53	19	400	4.2	XMP4512651542



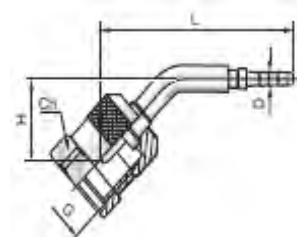
Hose Slang	G	L	H	PN bar	D	Art.code
RD2	M16x2	48	18.5	630	2.3	XMP4516223
	M16x2	48	18.5	630	2.3	IXMP4516223
	M16x1.5	48	18.5	630	2.3	XMP45161523
	M12.65x1.5	48	19	400	2.3	XMP4512651523
RD3	M16x2	48	18.5	630	3.0	XMP451623
	M16x1.5	48	18.5	630	3.0	XMP4516153
	M12.65x1.5	48	19	400	3.0	XMP451265153
RD4	M16x2	53	18.5	630	4.2	XMP4516242
	M16x1.5	53	18.5	630	4.2	XMP45161542
	M12.65x1.5	53	19	400	4.2	XMP4512651542

Slangkoppeling meetslang

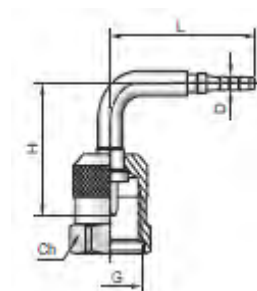
Wartel met zeskant voor testkoppeling



Hose slang	G	L	CH	PN BAR	D	Artikel
RD2	M16x2	32,5	19	630	2,3	XMPH16223
	M16x2	32,5	19	630	2,3	IXMPH16223
	M16X1,5	32,5	19	630	2,3	XMPH161523
RD3	M16X2	32,5	19	630	3,0	XMPH1623
	M16X1,5	32,5	19	630	3,0	XMPH16153
RD4	M16X2	32,5	19	630	4,2	XMPH16242
	M16X1,5	32,5	19	630	4,2	XMPH161542

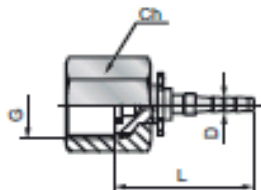


Hose slang	G	L	H	CH	PN BAR	D	Artikel
RD2	M16x2	48	18,5	19	630	2,3	XMPH4516223
	M16X1,5	48	18,5	19	630	2,3	XMPH45161523
RD3	M16X2	48	18,5	19	630	3,0	XMPH451623
	M16X1,5	48	18,5	19	630	3,0	XMPH4516153
RD4	M16X2	53	18,5	19	630	4,2	XMPH4516242
	M16X1,5	53	18,5	19	630	4,2	XMPH45161542

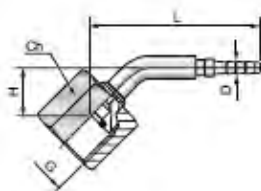


Hose slang	G	L	H	CH	PN BAR	D	Artikel
RD2	M16x2	34,5	31	19	630	2,3	XMPH9016223
	M16X1,5	34,5	31	19	630	2,3	XMPH90161523
RD3	M16X2	34,5	31	19	630	3,0	XMPH901623
	M16X1,5	34,5	31	19	630	3,0	XMPH9016153
RD4	M16X2	39,5	31	19	630	4,2	XMPH9016242
	M16X1,5	39,5	31	19	630	4,2	XMPH90161542

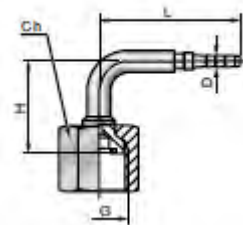
Slangkoppeling meetslang Zeskant wartel voor manometer



Hose slang	G	L	CH	PN BAR	D	Artikel
RD2	G 1/4	26,5	17	630	2,3	XMP 1/4 MANO
	G 1/4	26,5	17	630	2,3	IXMP 1/4 MANO
	G 1/2	31,5	27	630	2,3	XMP 1/2 MANO
	M20x1,5	31,5	27	630	2,3	XMP M20 MANO
RD3	G 1/4	26,5	17	630	3,0	XMP3 1/4 MANO
	G 1/2	31,5	27	630	3,0	XMP3 1/2 MANO
	M20x1,5	31,5	27	630	3,0	XMP3 M20 MANO
RD4	G 1/4	26,5	17	630	4,2	XMP4 1/4 MANO
	G 1/2	31,5	27	630	4,2	XMP4 1/2 MANO
	M20x1,5	31,5	27	630	4,2	XMP4 M20 MANO



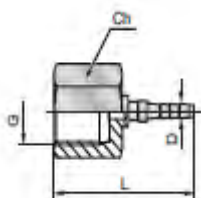
Hose slang	G	H	L	CH	PN BAR	D	Artikel
RD2	G 1/4	14,0	47,0	17	630	2,3	XMP45 1/4 MANO
	G 1/2	21,0	54,5	27	630	2,3	XMP45 1/2 MANO
	M20x1,5	21,0	54,5	27	630	2,3	XMP45 M20 MANO
RD3	G 1/4	14,0	47,0	17	630	3,0	XMP345 1/4 MANO
	G 1/2	21,0	54,5	27	630	3,0	XMP345 1/2 MANO
	M20x1,5	21,0	54,5	27	630	3,0	XMP345 M20 MANO
RD4	G 1/4	14,0	52,0	17	630	4,2	XMP445 1/4 MANO
	G 1/2	21,0	59,5	27	630	4,2	XMP445 1/2 MANO
	M20x1,5	21,0	59,5	27	630	4,2	XMP445 M20 MANO



Hose slang	G	H	L	CH	PN BAR	D	Artikel
RD2	G 1/4	25,0	38,0	17	630	2,3	XMP90 1/4 MANO
	G 1/2	37,5	41,5	27	630	2,3	XMP90 1/2 MANO
	M20x1,5	37,5	41,5	27	630	2,3	XMP90 M20 MANO
RD3	G 1/4	25,0	38,0	17	630	3,0	XMP390 1/4 MANO
	G 1/2	37,5	41,5	27	630	3,0	XMP390 1/2 MANO
	M20x1,5	37,5	41,5	27	630	3,0	XMP390 M20 MANO
RD4	G 1/4	25,0	43,0	17	630	4,2	XMP490 1/4 MANO
	G 1/2	37,5	46,5	27	630	4,2	XMP490 1/2 MANO
	M20x1,5	37,5	46,5	27	630	4,2	XMP490 M20 MANO

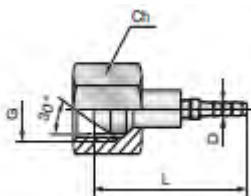
Slangkoppeling meetslang

Zeskant wartel voor manometer NPT *



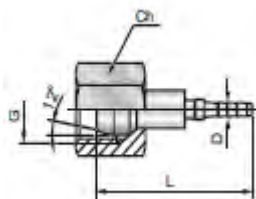
Hose Slang	G	L	CH	PN BAR	D	Artikel
RD2	1/4-18 nptf	37,0	19	630	2,3	XMN 1/4
RD3	1/4-18 nptf	37,0	19	630	3,0	XMN3 1/4
RD4	1/4-18 nptf	42,0	19	630	4,2	XMN4 1/4

Zeskant wartel BSP met 60gr conus *



Hose Slang	G	L	CH	PN BAR	D	Artikel
RD2	G 1/8	27,5	14	630	2,3	XMBF022
	G 1/4	29,0	17	630	2,3	XMBF042
RD3	G 1/8	27,0	14	630	3,0	XMBF023
	G 1/4	29,0	17	630	3,0	XMBF043
RD4	G 1/8	31,0	14	630	4,2	XMBF024
	G 1/4	32,5	17	630	4,2	XMBF044

Zeskant wartel DKOL met 24gr conus *

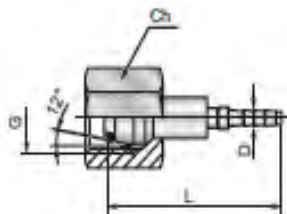


Hose slang	Ø mm	G	L	CH	D	Artikel
RD2	4	M8x1	29,5	10	2,3	XMFE010042
	6	M10x1	30,5	12	2,3	XMFE010062
	6	M12x1,5	35,0	14	2,3	XMFE012062
	8	M14x1,5	35,0	17	2,3	XMFE014082
	10	M16x1,5	36,5	19	2,3	XMFE016102
	12	M18x1,5	37,5	22	2,3	XMFE018122
RD3	6	M12x1,5	35,0	14	3,0	XMFE012063
	8	M14x1,5	35,0	17	3,0	XMFE014083
	10	M16x1,5	36,0	19	3,0	XMFE016103
RD4	6	M12x1,5	36,0	14	4,2	XMFE012064
	8	M14x1,5	36,0	17	4,2	XMFE014084
	10	M16x1,5	41,5	19	4,2	XMFE016104
	12	M18x1,5	42,5	22	4,2	XMFE018124

* op aanvraag leverbaar in 45gr en 90gr

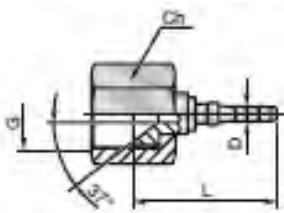
Slangkoppeling meetslang

Zeskant wartel DKOS met 24gr conus *



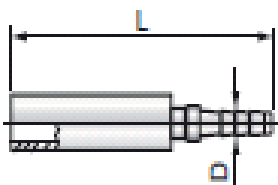
Hose slang	Ø mm	G	L	CH	D	Artikel
RD2	6	M14x1,5	35,0	14	2,3	XMFE014062
	8	M16x1,5	35,0	17	2,3	XMFE016082
	10	M18x1,5	36,5	19	2,3	XMFE018102
	12	M20x1,5	37,5	22	2,3	XMFE020122
RD3	6	M14x1,5	35,0	14	3,0	XMFE014063
	8	M16x1,5	35,0	17	3,0	XMFE016083
	10	M18x1,5	36,0	19	3,0	XMFE018103
RD4	6	M14x1,5	36,0	14	4,2	XMFE014064
	8	M16x1,5	36,0	17	4,2	XMFE016084
	10	M18x1,5	41,5	19	4,2	XMFE018104

Zeskant wartel DKJ jic 74gr conus *



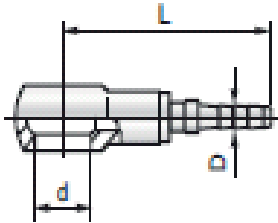
Hose slang	G	L	CH	PN bar	D	Artikel
RD2	7/16-20 unf	25,0	14	310	2,3	XMJF072
	1/2-20 unf	28,5	17	275	2,3	XMJF082
	3/8-24 unf	24,5	12	345	2,3	XMJF062
	9/16-18unf	28,5	19	275	2,3	XMJF092
RD3	7/16-20 unf	25,0	14	310	3,0	XMJF073
	1/2-20 unf	28,5	17	275	3,0	XMJF083
	3/8-24 unf	24,5	12	345	3,0	XMJF063
RD4	7/16-20 unf	28,0	14	310	4,2	XMJF074
	1/2-20 unf	31,5	17	275	4,2	XMJF084
	3/8-24 unf	28,5	12	345	4,2	XMJF064

Standpijp *



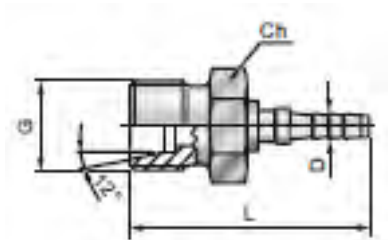
Hose slang	G	L	D	Artikel	
RD2		4	36,0	2,3	XMEZ042
		6	36,0	2,3	XMEZ062
		8	37,5	2,3	XMEZ082
RD3		4	36,0	3,0	XMEZ043
		6	36,0	3,0	XMEZ063
		8	37,5	3,0	XMEZ083
RD4		4	41,0	4,2	XMEZ044
		6	41,0	4,2	XMEZ064
		8	41,0	4,2	XMEZ084

Slangkoppeling meetslang Banjokoppeling *



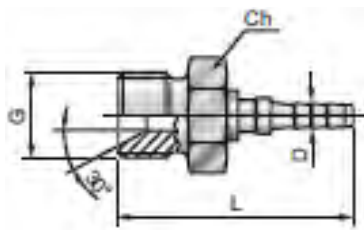
Hose slang	G	L	D	Artikel
RD2	8	29,5	2,3	XMQE082
	10	31,5	2,3	XMQE102
RD3	8	29,5	3,0	XMQE083
	10	31,5	3,0	XMQE103
RD4	8	34,5	4,2	XMQE084
	10	36,5	4,2	XMQE104
	14	40,5	4,2	XMQE144

Metrische koppeling draadaansluiting



Hose slang	G	L	Ch	D	Artikel
RD2	M12x1,5	31,5	12	2,3	XMME12062
	M14x1,5	31,5	14	2,3	XMME14082
	M16x1,5	32,5	17	2,3	XMME16102
RD3	M12x1,5	31,5	12	3,0	XMME12063
	M14x1,5	31,5	14	3,0	XMME14083
	M16x1,5	32,5	17	3,0	XMME16103
RD4	M12x1,5	36,5	12	4,2	XMME12064
	M14x1,5	36,5	14	4,2	XMME14084
	M16x1,5	37,5	17	4,2	XMME16104

BSP koppeling draadaansluiting

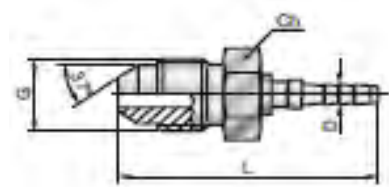


Hose slang	G	L	Ch	D	Artikel
RD2	G 1/8	33,5	14	2,3	XMBM022
	G 3/8	36,0	19	2,3	XMBM062
RD3	G 1/8	33,5	14	3,0	XMBM023
	G 3/8	36,0	19	3,0	XMBM063
RD4	G 1/8	38,5	14	4,2	XMBM024
	G 3/8	41,0	19	4,2	XMBM064

- Ook leverbaar in 45gr en 90gr.

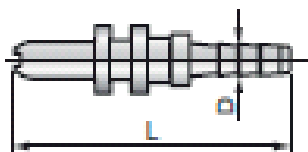
Slangkoppeling meetslang

JIC koppeling draadaansluiting



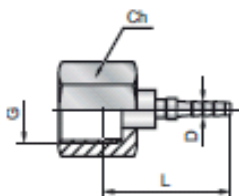
Hose slang	G	L	CH	D	Artikel
RD2	3/8-28 UNF	34,0	12	2,3	XMJM062
	7/16-20 UNF	34,5	12	2,3	XMJM072
	1/2-20 UNF	36,0	14	2,3	XMJM082
RD3	3/8-24 UNF	34,0	12	3,0	XMJM063
	7/16-20 UNF	34,5	12	3,0	XMJM073
	1/2-20 UNF	36,0	14	3,0	XMJM083
RD4	3/8-24 UNF	39,0	12	4,2	XMJM064
	7/16-20 UNF	39,5	12	4,2	XMJM074
	1/2-20 UNF	41,0	14	4,2	XMJM084

Plug-in connector *



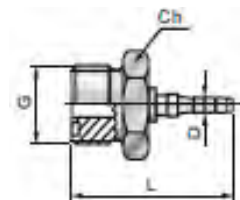
Hose slang	L	PN bar	D	Artikel
RD2	27,0	400	2,3	XMPI2
RD3	27,0	400	3,0	XMPI3
RD4	32,0	400	4,2	XMPI4

ORFS wartel koppeling, UNF draad *



Hose Slang	G	L	CH	PN bar	D	Artikel
RD2	9/16-18 UNF	25,0	17,0	413	2,3	XMFU092
RD3		25,0	17,0	413	3,0	XMFU093
RD4		28,0	17,0	413	4,2	XMFU094

ORMS koppeling, UNF draad

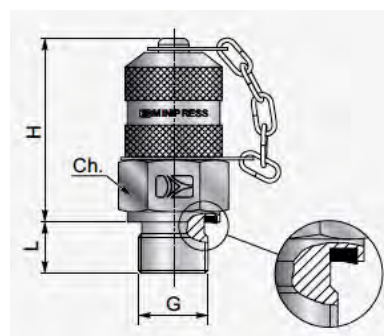


Hose slang	G	PN bar	D	Artikel
RD2	9/16-18 UNF	413	2,3	XMMU092
RD3		413	3,0	XMMU093
RD4		413	4,2	XMMU094

MP1

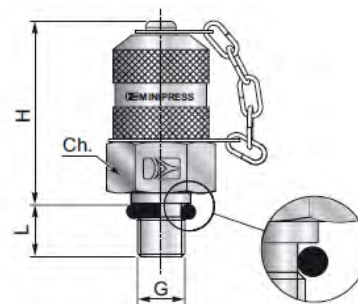
Meetkoppeling metrisch en bsp met parallel buitendraad

G	H	L	CH	PN BAR	Artikel
Metrisch parallel					
M 10x1	37	8	17	630	MP1 M10X1
M 12x1,5	37	10	17	630	MP1 M12X1,5
M 14x1,5	37	12	19	630	MP1 M14X1,5
M 16x1,5	37	12	22	630	MP1 M16X1,5
B.S.P. parallel					
G 1/8	37	8	17	630	MP1 1/8 BSPF
G 1/4	37	12	19	630	MP1 1/4 BSPF
G 3/8	37	14	22	630	MP1 3/8BSPF
G 1/2	37	15	27	630	MP1 1/2BSPF



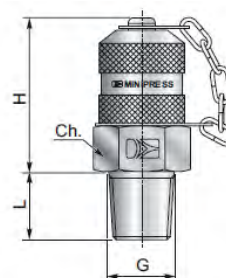
Meetkoppeling UNF buitendraad

G	H	L	CH	PN BAR	Artikel
UNF					
7/16-20	37	9	17	630	MP1 7/16 UNF
1/2-20	37	10	17	630	MP1 1/2 UNF
9/16-18	37	10	19	630	MP1 9/16 UNF
3/4-16	37	14	22	630	MP1 3/4 UNF



Meetkoppeling BSPT buitendraad

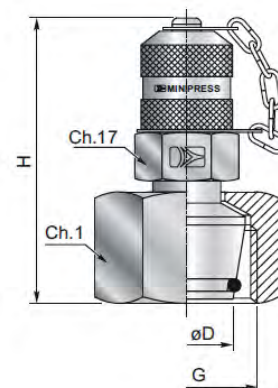
G	H	L	CH	PN BAR	Artikel
BSPT					
1/8	37	9	17	630	MP1 7/16 UNF
1/4	37	10	17	630	MP1 1/2 UNF
3/8	37	10	19	630	MP1 9/16 UNF
3/4-16	37	14	22	630	MP1 3/4 UNF



MP2

Meetkoppeling met 24° conus met oring type DKO

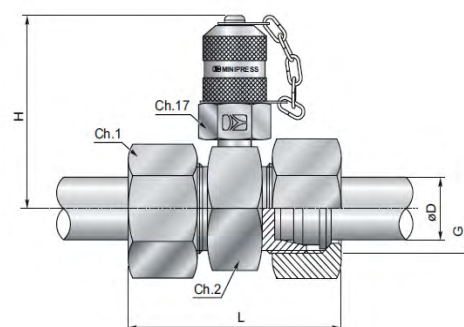
G	D	H	CH1	PN BAR	Artikel
M12X1,5	6	54	14	315	MP2 06L
M14X1,5	8	54	17	315	MP2 08L
M16X1,5	10	59	19	315	MP2 10L
M18X1,5	12	59	22	315	MP2 12L
M22X1,5	15	59	27	315	MP2 15L
M26X1,5	18	59	32	315	MP2 18L
M30X2	22	59	36	160	MP2 22L
M14X1,5	6	54	17	630	MP2 06S
M16X1,5	8	54	19	630	MP2 08S
M18X1,5	10	59	22	630	MP2 10S
M20X1,5	12	59	24	630	MP2 12S
M22X1,5	14	59	27	630	MP2 14S
M24X1,5	16	60	30	630	MP2 16S
M30X2	20	62	36	400	MP2 20S
M36X2	25	65	46	400	MP2 25S



MP3

Meetkoppeling voor leidingmontage

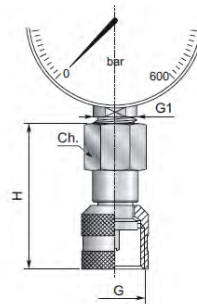
G	D	H	L	CH2	PN BAR	Artikel
M12X1,5	6	49	51	14	315	MP3 06L
M14X1,5	8	49	51	17	315	MP3 08L
M16X1,5	10	49	53	19	315	MP3 10L
M18X1,5	12	49	53	22	315	MP3 12L
M22X1,5	15	50,5	55	27	315	MP3 15L
M26X1,5	18	53	57	32	315	MP3 18L
M30X2	22	53	61	36	160	MP3 22L
M14X1,5	6	49	55	17	630	MP3 06S
M16X1,5	8	49	55	19	630	MP3 08S
M18X1,5	10	49	57	22	630	MP3 10S
M20X1,5	12	49	57	24	630	MP3 12S
M22X1,5	14	49	63	27	630	MP3 14S
M24X1,5	16	52	63	30	630	MP3 16S
M30X2	20	53	69	36	400	MP3 20S
M36X2	25	57,5	75	46	400	MP3 25S



MP5

Meetskoppeling M16x2 naar BSP ISO 228

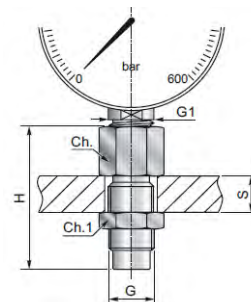
G	G1	H	CH	CH1	PN BAR	Artikel
M16X2	1/4	50	19	19	630	MP5 1/4 MANO
M16X2	1/2	55	27	19	630	MP5 1/2 MANO



MP6

Meetskoppeling M16x2 naar BSP ISO

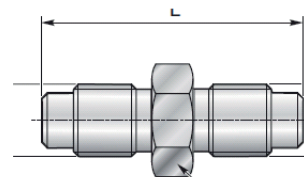
G	G1	H	CH	CH1	S max	PN BAR	Artikel
M16X2	1/4	50	19	19	11	630	MP5 1/4 MANO
M16X2	1/2	57	27	19	13	630	MP5 1/2 MANO



MP7

Meetskoppeling recht voor verbinding meetslangen

G	L	CH	PN BAR	Artikel
M16X2	43	17	630	MP7 16x2



Koffer met de meest voorkomende koppelingen en manometers. Zeer geschikt voor gebruik in de servicebus.

MAR

Manometer met onder en achter aansluiting leverbaar in kast 40,63 en 100mm (ook leverbaar met sleepwijzer en in de klasse 1.0)

Materialen; RVS huis, glycerine gevuld, klasse 1.6, ruit plastic, 1/4" aansluiting, temperatuur van -20 C° tot 80 C°

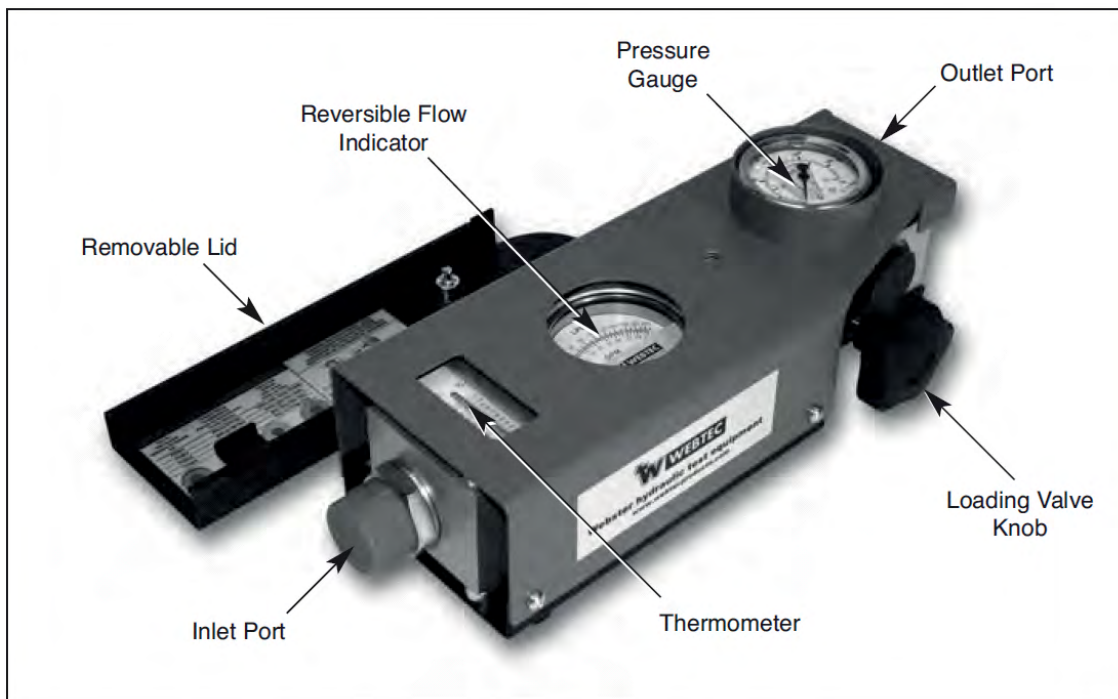
Artikelnummer	Kast Ø mm	Aansluiting BSP	bereik bar
MAR40-010	40	1/8	0-10
MAR63--001	63	1/4	-1-0
MAR63-001	63	1/4	0-1
MAR63-02.5	63	1/4	0-2,5
MAR63-006	63	1/4	0-6
MAR63-010	63	1/4	0-10
MAR63-016	63	1/4	0-16
MAR63-025	63	1/4	0-25
MAR63-040	63	1/4	0-40
MAR63-060	63	1/4	0-60
MAR63-100	63	1/4	0-100
MAR63-160	63	1/4	0-160
MAR63-250	63	1/4	0-250
MAR63-400	63	1/4	0-400
MAR63-600	63	1/4	0-600
MAR63-1000	63	1/4	0-1000
MAR100-025	100	1/2	0-25
MAR100-060	100	1/2	0-60
MAR100-100	100	1/2	0-100
MAR100-160	100	1/2	0-160
MAR100-250	100	1/2	0-250
MAR100-400	100	1/2	0-400
MAR100-600	100	1/2	0-600
MAR100-1000	100	1/2	0-1000



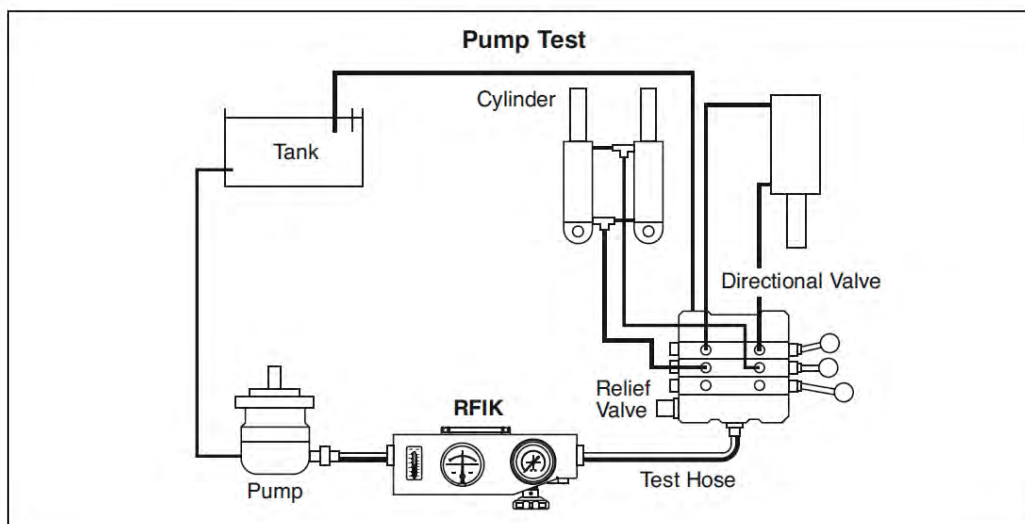
*Bij achteraansluiting wordt achter het nummer een A vermeld. bijv. MAR40-010A

RFIK

Testapparaat met manometer, flowmeter en thermometer.



Model No.	Flow Range	Max. Working Pressure	Temperature Range
RFIK120-B-6	5 - 120 lpm	420 bar	20 - 110 °C
RFIK200-B-6	10 - 200 lpm	420 bar	20 - 110 °C



Testopstelling

Overzicht testers

Testers en flowblokken zowel digitaal als analoog zijn leverbaar.



LG

Thermometer

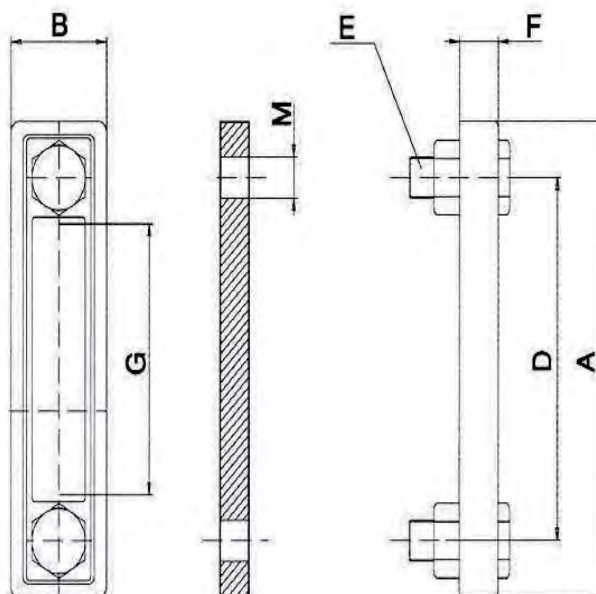
Materiaal : stalen huis met “tragamid” protectie glas

Temperatuur : -20 °C tot 80 °C

Maximale werkdruk : 1 Bar

Torque aandraaien bouten : 10 Nm

Tipo Type	Dimensioni / Dimensions (mm)							
	A	B	F	G	D	E	M	
							Ø min.	Ø max.
LG1	116	39	16	40	76	M10	10,5	11
LG1T	116	39	16	40	76	M10	10,5	11
LG1-M12	116	39	16	40	76	M12	10,5	11
LG1T-M12	116	39	16	40	76	M12	10,5	11
LG2	177	48	18	127	127	M12	12,5	13
LG2T	177	48	18	127	127	M12	12,5	13
LG2-M10	177	48	18	127	127	M10	12,5	13
LG2T-M10	177	48	18	127	127	M10	12,5	13



Kijkglas

Kijkglas TLA/F is leverbaar in de maten
1/4”BSP tot 1 1/4” BSP.

Dit Kijkglas is niet geschikt voor benzine,
Alcohol en diesel.

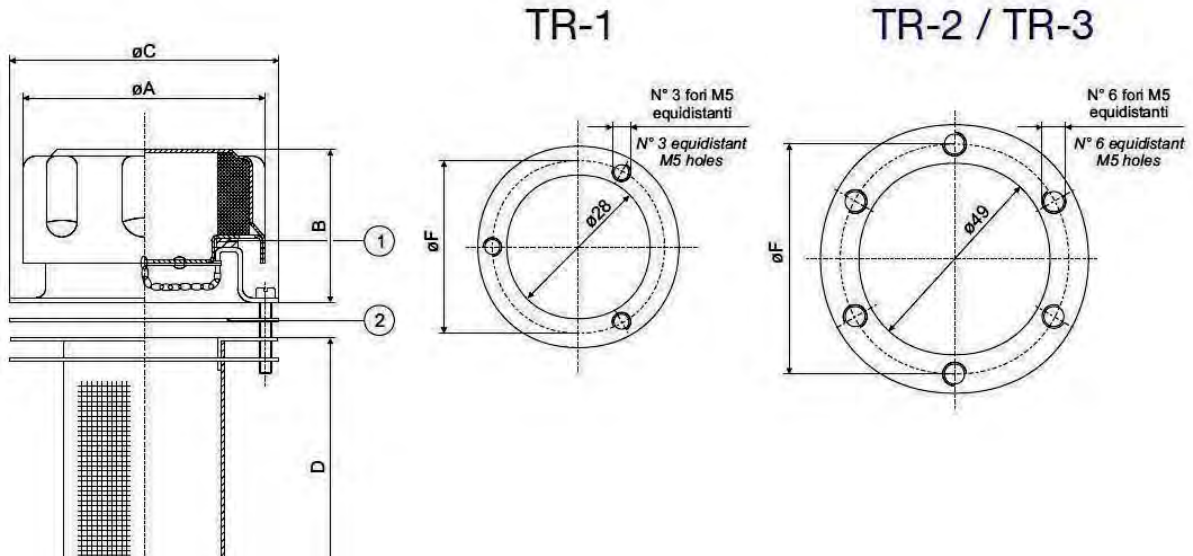


Aggregaat

Aggregaten worden volgens klantspecificatie gemaakt. Onderdelen zijn op aanvraag leverbaar.



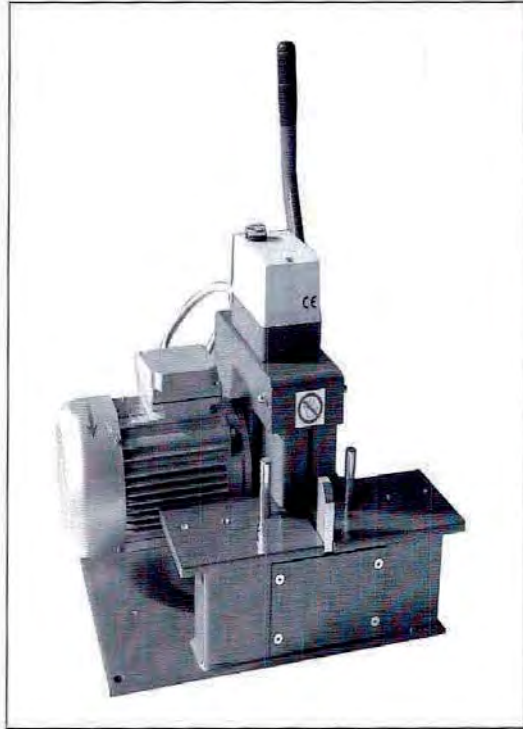
TR Tankdop



Tipo Type	Filtro aria / Air filter		Dimensioni / Dimensions (mm)						
	Filtrazione micron Micron filtering	Flusso raccomandato Recommended flow dm ³ /min	øA	B	øC	D	øE	øF	Fori fissaggio Fixing holes N°
TR-1	40 Spugna / 40 Sponge	250	48	35	52	66	27	41	3
TR-2	40 Spugna / 40 Sponge	700	75	45	83	95	48	73	6
TR-3	40 Spugna / 40 Sponge	700	75	45	83	150	48	73	6
TR-1S1	10 Spugna / 10 Sponge	250	47	35	52	66	27	41	3
TR-2S1	10 Spugna / 10 Sponge	700	75	45	83	95	48	73	6
TR-3S1	10 Spugna / 10 Sponge	700	75	45	83	150	48	73	6
TR-1P1	10 Carta / 10 Paper	250	47	35	52	66	27	41	3
TR-2P1	10 Carta / 10 Paper	700	75	45	83	95	48	73	6
TR-3P1	10 Carta / 10 Paper	700	75	45	83	150	48	73	6

HSP K 250

slangenafkortmachine



Artikelnummer

HSP K 250

Specificaties

- ➔ slangen
 - 1 en 2 staalinlagen tot 2"
 - 4 staalinlagen tot 1 1/2"
- ➔ electromotor 220/380V - 50 Hz - 1,5Kw
- ➔ 2850 omw./min.
- ➔ mes - staal HSS - Ø 250 mm

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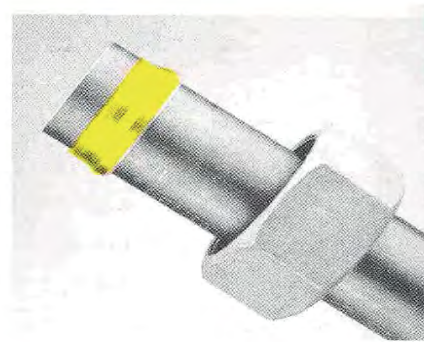
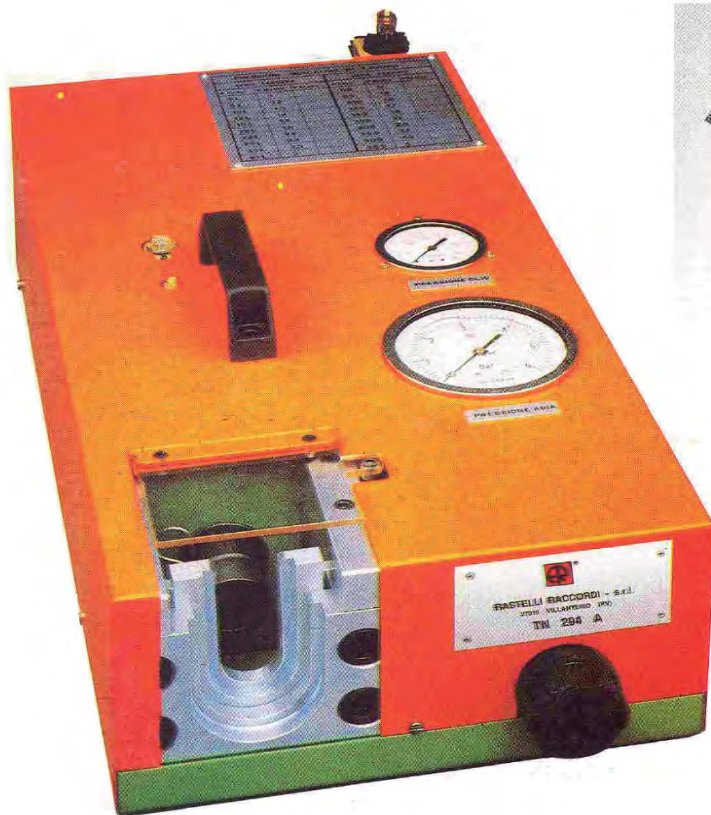
Leidingbuigmachine

Buigijzer voor het buigen van
Leiding van 6 tot 22mm



Voormontage machine*Op aanvraag leverbaar*

I - 27019 VILLANTERIO (PV)

STN**TN 294A**

Attrezzatura pneumatica portatile, pratica, per il premontaggio degli anelli dei raccordi DIN 2353 - ISO 8434-1

Zweckmäßige und tragbare Luftvorrichtung zur Vormontage von Verschraubungs-Schneidringen nach DIN 2353 - ISO 8434-1

Pneumatic pre-assembly machine to attach cutting rings for pipe union to DIN 2353 - ISO 8434-1

Appareil pneumatique, portable, pratique, pour le prémontage des bagues des raccords DIN 2353 - ISO 8434-1

Voormontage machine*Op aanvraag leverbaar***TN 285A**

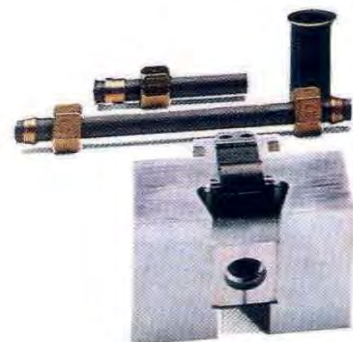
Attrezzature per il montaggio delle ogive dei raccordi
DIN 2353 - ISO 8434-1
Attrezzature per la svasatura a 37° dei tubi d'acciaio.

Vorrichtungen zur Vormontage von Schneidringen auf
Verschraubungen nach DIN 2353 - ISO 8434-1
Vorrichtungen zum Spitzsenken von Sthrohren auf 37°

Tools for the pre-fitting of the cutting ring for
DIN 2353 - ISO 8434-1
Tools for swaging steel tube at 37°

Appareils pour le prémontage des olives des raccords
DIN 2353 - ISO 8434-1
Appareils pour l'évasement à 37° des tubes en acier.

FUNZIONAMENTO IDRAULICO
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Voormontage machine Op aanvraag leverbaar

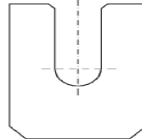
TN 285A

TABELLA ORIENTATIVA VALORI DI PRESSIONE ORIENTIERUNGSTAFEL ÜBER DRUCKWERTE			PRESSURE VALUE TABLE TABLEAU DES VALEURS DE PRESSION		
Serie Reihe Série Série	ØTubo e spessore Rohr Ø x Wandst Tube Ø x thickness Ø du tube x épaisseur mm.	Pressione di serraggio Spanndruck Tightening pressure Pression de serrage bars	Serie Reihe Série Série	ØTubo e spessore Rohr Ø x Wandst Tube Ø x thickness Ø du tube x épaisseur mm.	Pressione di serraggio Spanndruck Tightening pressure Pression de serrage bars
L	6 x 1	20	S	6 x 1,5	20
	8 x 1	30		8 x 1,5	30
	10 x 1	35		10 x 1,5	35
	12 x 1,5	35		12 x 2	35
	15 x 1,5	40		14 x 2	40
	18 x 1,5	60		16 x 2	55
	22 x 2	70		20 x 2,5	80
	28 x 2	80		25 x 2,5	105
	35 x 2	100		30 x 3	130
42 x 3	160	38 x 5	160		

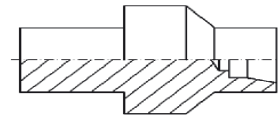
UTENSILI E CALIBRI - WERKZEUGE UND LEHREN - TOOLS AND GAUGES - OUTILS ET CALIBRES



TN 196



TN 286 A

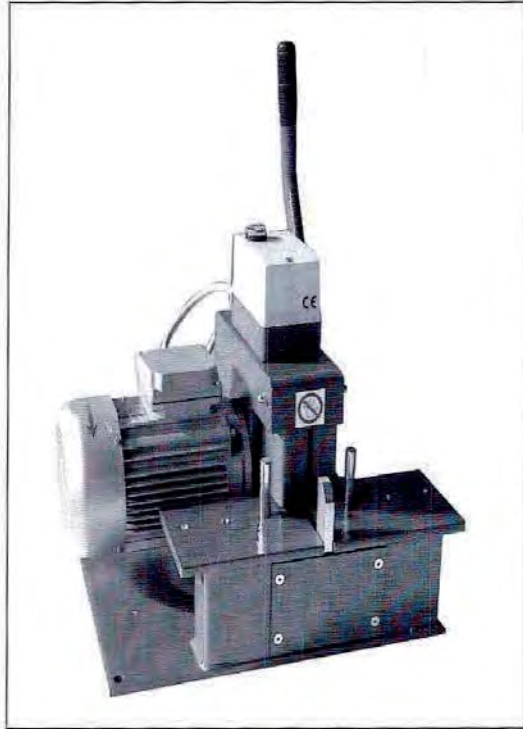


TN 287 A

Serie Reihe Série Série	Ø Tubo Rohr AD Tube O.D. Ø Tube d ₁	Simbolo di ordinazione - Bestell-Nr. - Part.No. - Références		
		Calibro conico - Kegellehre Tapered gauge - Calibre conique	Guida tubo - Rohrführung Tube guide - Guide tube	Forma conica - Kegelform Tapered form - Forme conique
L	6	TN 196 - 6 LS	TN 286 A - 6 L	TN 287 A - 6 L
	8	TN 196 - 8 LS	TN 286 A - 8 L	TN 287 A - 8 L
	10	TN 196 - 10 LS	TN 286 A - 10 L	TN 287 A - 10 L
	12	TN 196 - 12 LS	TN 286 A - 12 L	TN 287 A - 12 L
	15	TN 196 - 15 L	TN 286 A - 15 L	TN 287 A - 15 L
	18	TN 196 - 18 L	TN 286 A - 18 L	TN 287 A - 18 L
	22	TN 196 - 22 L	TN 286 A - 22 L	TN 287 A - 22 L
	28	TN 196 - 28 L	TN 286 A - 28 L	TN 287 A - 28 L
	35	TN 196 - 35 L	TN 286 A - 35 L	TN 287 A - 35 L
42	TN 196 - 42 L	TN 286 A - 42 L	TN 287 A - 42 L	
S	6	TN 196 - 6 S	TN 286 A - 6 S	TN 287 A - 6 S
	8	TN 196 - 8 S	TN 286 A - 8 S	TN 287 A - 8 S
	10	TN 196 - 10 S	TN 286 A - 10 S	TN 287 A - 10 S
	12	TN 196 - 12 S	TN 286 A - 12 S	TN 287 A - 12 S
	14	TN 196 - 14 S	TN 286 A - 14 S	TN 287 A - 14 S
	16	TN 196 - 16 S	TN 286 A - 16 S	TN 287 A - 16 S
	20	TN 196 - 20 S	TN 286 A - 20 S	TN 287 A - 20 S
	25	TN 196 - 25 S	TN 286 A - 25 S	TN 287 A - 25 S
	30	TN 196 - 30 S	TN 286 A - 30 S	TN 287 A - 30 S
38	TN 196 - 38 S	TN 286 A - 38 S	TN 287 A - 38 S	

HSP K 250

slangenafkortmachine



Artikelnummer

HSP K 250

Specificaties

- ➔ slangen
 - 1 en 2 staalinlagen tot 2"
 - 4 staalinlagen tot 1 1/2"
- ➔ electromotor 220/380V - 50 Hz - 1,5Kw
- ➔ 2850 omw./min.
- ➔ mes - staal HSS - Ø 250 mm

BY 06-22

Leidingbuigmachine

**Buigijzer voor het buigen van
Leiding van 6 tot 22mm**



HSP M

slangenschilmachine



Specificaties

- ➔ slangen t.e.m. Ø 1 1/4"
- ➔ elctromotor 220/380V - 50 Hz - 0,25 kW
- ➔ afmetingen 350 x 280 x 220
- ➔ gewicht 13,3 kg

Artikelnummer

HSP M 500 - 380

HSP M

schildoorn voor slangenschilmachine



Artikelnummer

slang

Artikelnummer		slang
		inch
HSP M 084 - 1	schillen buitenmantel	1/2
HSP M 104 - 1	schillen buitenmantel	5/8
HSP M 124	schillen binnenmantel	3/4
HSP M 124 - 1	schillen buitenmantel	3/4
HSP M 164	schillen binnenmantel	1
HSP M 164 - 1	schillen buitenmantel	1
HSP M 204	schillen binnenmantel	1 1/4
HSP M 204 - 1	schillen buitenmantel	1 1/4

Specificaties

- ➔ voor slangen met 1,2 en 4 staalinlagen

P16HP Finn Power pers

De P16HP handpers is een zeer geschikte machine voor montage van slangen ter plaatse. De pers is zeer handzaam en weegt niet meer dan 25kg. Slangen kunnen geperst worden tot 1" slang. De pers is zeer eenvoudig in de bediening. Als de persmaat bereikt is gaat het lampje branden. Ook kan er vrij eenvoudig een luchthydraulische bediening op aangesloten worden.



P16 HP

Standard Die Sets		
Code	Crimping diameter (mm)	L (mm)
16-10	10.0 - 12.0	55
16-12	12.0 - 14.0	55
16-14	14.0 - 16.0	55
16-16	16.0 - 19.0	55
16-19	19.0 - 23.0	55
16-23	23.0 - 27.0	55
16-27	27.0 - 31.0	65
16-31	31.0 - 38.0	65
MASTER DIES	39.0 - 45.0	

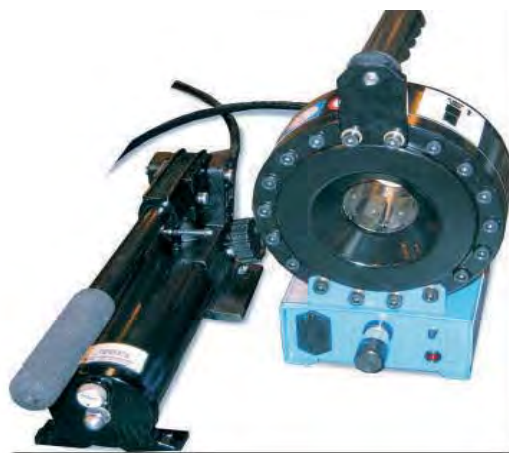
Crimping dia. 39.0 - 45.0 mm is crimped using master die.

Subject to change without notice.

Technical Specification	P16 HP	P16 AP
Hose size	1"	1"
Die type #	16	16
Max opening (mm) #1	+20	+20
Master die shoe length (mm)	64	64
Operation #2	manual	powerassist
Crimping force (kN)	955	955
Dimensions: length (mm)	331	337
width (mm)	385	402
height (mm)	271	271
Weight incl. oil (kg)	26	28

(1) see table for standard die set data
(2) min. crimping dia. of die set added by table value
(3) P16 AP operates with 7 bar 70"

P16HPZ



Standard Die Sets		
Code	Crimping diameter (mm)	L (mm)
16-10	10.0 - 12.0	55
16-12	12.0 - 14.0	55
16-14	14.0 - 16.0	55
16-16	16.0 - 19.0	55
16-19	19.0 - 23.0	55
16-23	23.0 - 27.0	55
16-27	27.0 - 31.0	65
16-31	31.0 - 38.0	65
MASTER DIES	39.0 - 45.0	

Crimping dia. 39.0 - 45.0 mm is crimped using master die.

Subject to change without notice.

Technical Specification	P16 HP
Hose size	1"
Die type #	16
Max opening (mm) #1	+20
Master die shoe length (mm)	64
Operation #2	manual
Crimping force (kN)	955
Dimensions: length (mm)	331
width (mm)	384
height (mm)	271
Weight incl. oil (kg)	26

(1) see table for standard die set data
(2) min. crimping dia. of die set added by table value
(3) P16 AP operates with 7 bar 70"

P20MS

20MS and 32MS crimping machines

Lillbacka Powerco has revolutionized the whole way of crimping by launching totally new, innovative crimping machine models. Finn-Power 20MS and 32MS crimping machines are pioneers with their sensational features.

LEARNING CONTROL

The main improvement is an *interactive MS control*, which can be taught the opening: set the desired opening and the machine will remember it and work semi-automatically.

ECONOMIC THINKING

New crimping machine models *save energy*: machine runs only when crimping is started and turns to the powersave mode after a set time.

ECO-FRIENDLY OPERATION

In addition to traditional machine oil, 20MS and 32MS machines can also be used with *rape seed oil*. New models also *run quietly*.



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Tel. +358 6 485 4444, Fax +358 6 485 4400
powerco@lillbacka.com
www.lillbacka.com/powerco



Technical features stay the same as in old models.

EXTREMELY DURABLE COVERS

The machine cover material is the same as in the car bumpers: it withstands little bumps and scratches and plastic is also rust-free.

ERGONOMIC CONSTRUCTION

Thanks to an entirely novel construction new models are easy to use both right and left handed and the feeding direction can be from front and back. Control device is embedded to the front cover allowing more working space for the operator. The *foot pedal* and *back stop device* are available as an option.

SERVICE FRIENDLINESS

20MS and 32MS allow easy access to the components. Due to that changing the oil and the filter is quick and easy. A special *Cylinder Protection Inserts* protect the cylinder from dirt and loose scrap.

P20MS

Finn-Power's P20 and P32 series of crimping machines are mid-range in terms of power, but compact from the point of view of space requirements.



P20

Finn-Power's successful P20 crimping machine ensures maximum operator ease and productivity, whatever the nature of the crimping task. Max. hose size is 1½".



P32

Although the Finn-Power P32 weighs only 178 kg, its 2000 kN force produces high-quality crimping power for years and years of manufacturing. Maximum hose size is 2".

What makes Finn-Power P20 and P32 crimping machines unique?

- * Precision, durability, force and ease of use
- * Ergonomic design
- * Availability for three alternative controller styles
- * User-friendly Quick Change Tool system

Standard die sets*		
Code	Crimping diameter (mm)	l. (mm)
20-10	10.0 - 12.0	55
20-12	12.0 - 14.0	55
20-14	14.0 - 16.0	55
20-16	16.0 - 19.0	55
20-19	19.0 - 23.0	55
20-23	23.0 - 27.0	55
20-27	27.0 - 31.0	70
20-31	31.0 - 36.0	70
20-36	36.0 - 41.0	75
20-41	41.0 - 47.0	75
20-47	47.0 - 54.0	85
20-54	54.0 - 61.0	85
32-10	10.0 - 12.0	55
32-12	12.0 - 14.0	55
32-14	14.0 - 16.0	55
32-16	16.0 - 19.0	55
32-19	19.0 - 22.0	55
32-22	22.0 - 26.0	70
32-26	26.0 - 30.0	70
32-30	30.0 - 34.0	70
32-34	34.0 - 39.0	75
32-39	39.0 - 45.0	75
32-45	45.0 - 51.0	90
32-51	51.0 - 57.0	90
32-57	57.0 - 63.0	100
32-63	63.0 - 69.0	110
32-69	69.0 - 75.0	110
32-74	74.0 - 80.0	110
32-78	78.0 - 87.0	110

Technical specifications	P20 MS / IS / VS		P32 MS / IS / VS	
Hose size	1½"		2"	
Crimping range Ø (mm)	4...61		4...87	
Die type (1)	20		32	
Max opening (mm) (2)	25		33	
Max die shoe length (mm)	80		80	
Motor (kW) (3)	3		4	
Standard voltage (V) (4)	230 or 400		230 or 400	
Crimping force (kN)	1370		2000	
Number of crimpings/hour (5)	850		850	
Noise level (dB(A))	71		71	
Protection class	IP54		IP54	
Overall dimensions				
length (mm)	597		597	
width (mm)	475		536	
height (mm)	609		630	
Weight without oil (kg)	130		178	
<p>(1) See table for standard die set data (2) This tabular value must be added to min. crimping dia. of die set (3) Single phase 1.5 kW (4) Single phase 230 V (5) Other voltages upon request (6) Theoretical with ½" hose & Ø 10 mm (7) Single phase 250 crimpings (P20) and 200 crimpings (P32) per hour</p> <p>Options: - mechanical back gauge - foot pedal (IS/VS models) - quick change tool and QC Tool base or die set rack - special die sets</p> <p>In addition to the standard dies, a wide range of special die sets for different diameter, length and form is available.</p>				

P20MS

QC-Tool Bases for new machines

The new general production machines, Finn-Power 20MS and 32MS have now their own Quick Change Tool bases. As before, QC-Tool bases include a Quick Change Tool and plastic sleeves for the storage of the die sets.

NEW QUICK CHANGE TOOL BASES

The QC-Tool Bases for Finn-Power 20MS and 32MS are **not compatible with older machines**.

QC-Tool Base for 20MS
Purchase number 704169

QC-Tool Base for 32MS
Purchase number 703801



QC-Tool Base for 32MS



QC-Tool Base for 20MS



OLD QC-TOOL BASES

NOTE! The QC-Tool Bases for older machines cannot be used with new models.

QC-Tool Base for P20 with sleeves for 12 die sets.
The purchase number is 415827

QC-Tool Base for P32 with sleeves for 16 die sets.
The purchase number is 692633

QC-Tool Base for P51 with sleeves for 16 die sets.
The purchase number is 692409

Overzicht testers

Testers en flowblokken zowel digitaal als analoog zijn leverbaar.





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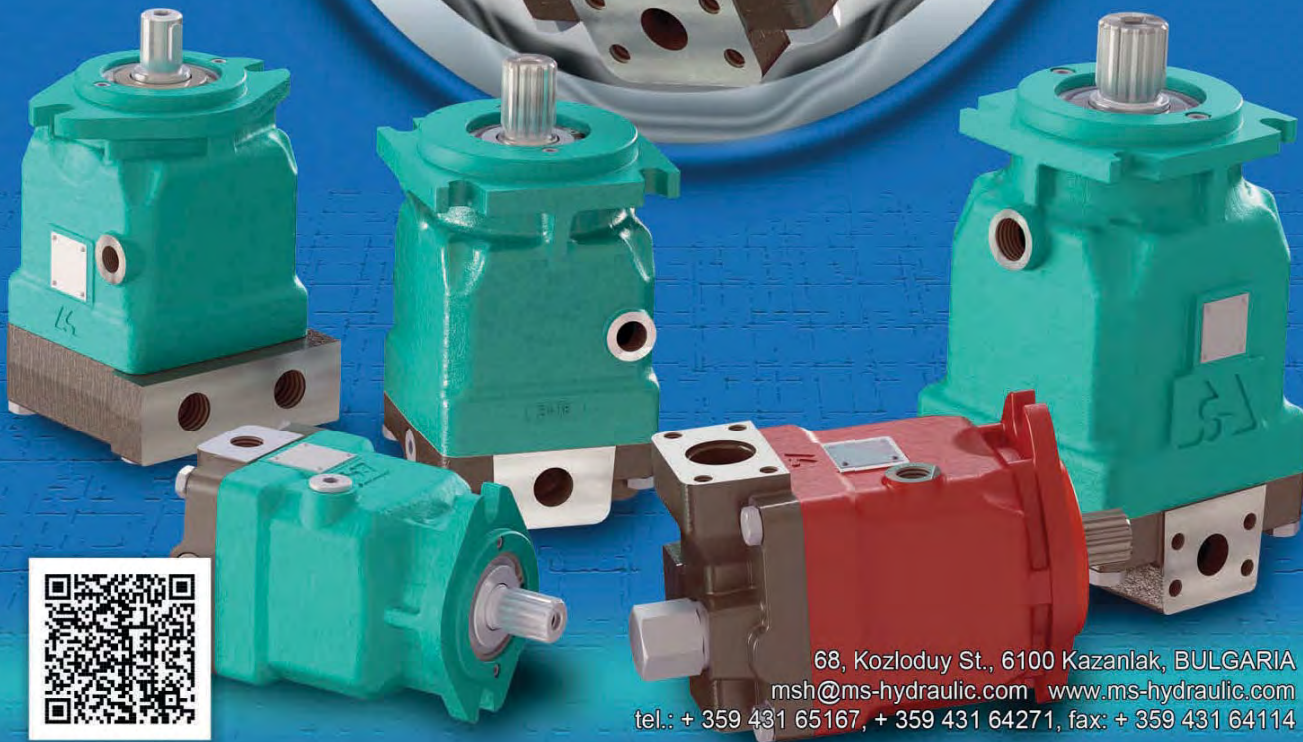
AXIAL PISTON MOTORS AND PUMPS

HEAVY DUTY FIXED DISPLACEMENT

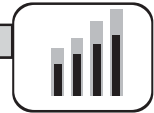
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Hydraulic motor MAP6227

Hydraulic motor MAP10039

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Hydraulic pump PAP6259

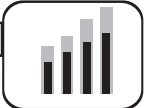
Shaft dimensions68

Valves, Special Features, Application, Installation information, Diagrams and Formulas.....73

Version history

Date	Page	Changed	Ver.
October 2018		Added series: MAP62 and MAPW62. Added displacements: 52, 58 and 62 PAP. Castings update.	2
April 2018		Minor fixes	1.4g
February 2017	4;8;10;11;12;13;14;15;16;18;19;20;23;25;27;29;30;35;39;43;45;50;55;56;60;61;63;64;65;68;69	Additional options: Twin Side option for MAP28 and MAP100; Shaft types DR and DO for MAP50 and PAP50; Improved Bearing option for MAP28; Shaft type CM for MAP28; speed sensor option for MAP28, MAP50, MAP100 and PAP50; addition valves for MAP28; port type 6 for MAP28; port type 9 for MAP28, MAP50 and MAP100. Correction of MAP50 ports. Change of the Specification Data of MAP28, MAP50, MAP100 and PAP50. Minor fixes.	1.4
July 2016		First official edition	1.3

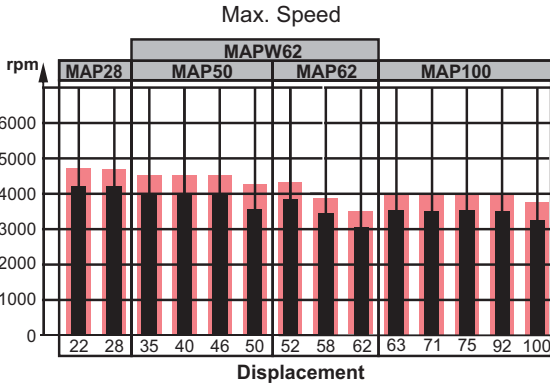
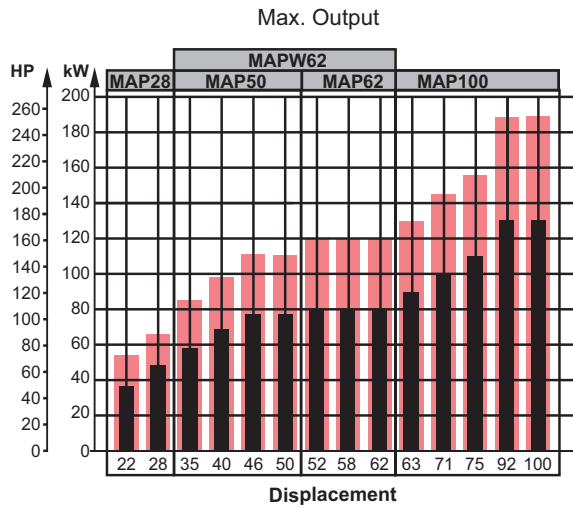
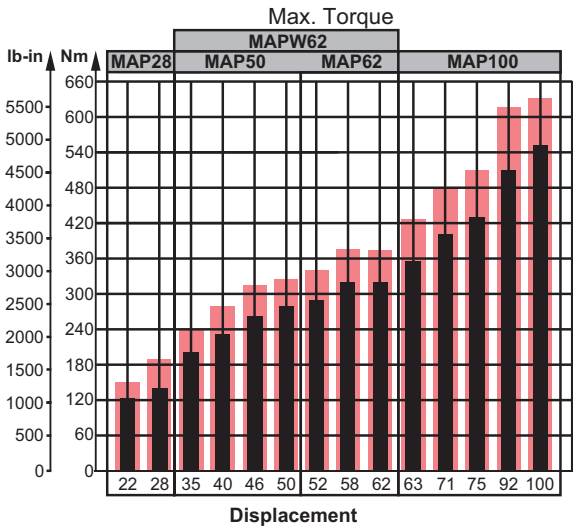
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SPECIFICATION DATA MOTORS TYPE MAP

Intermittent values

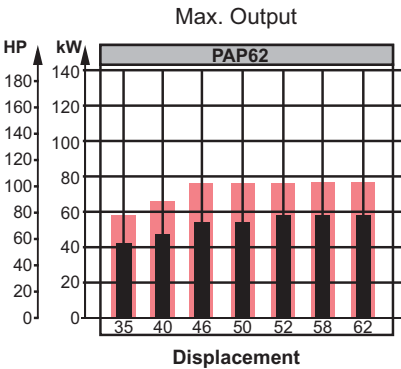
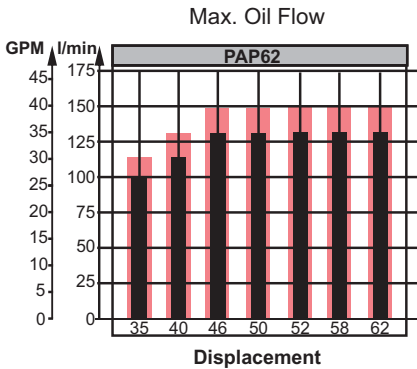
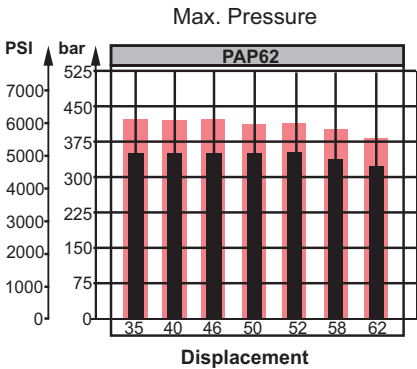
Continuous values



Specification Data Pumps Type PAP

Intermittent values

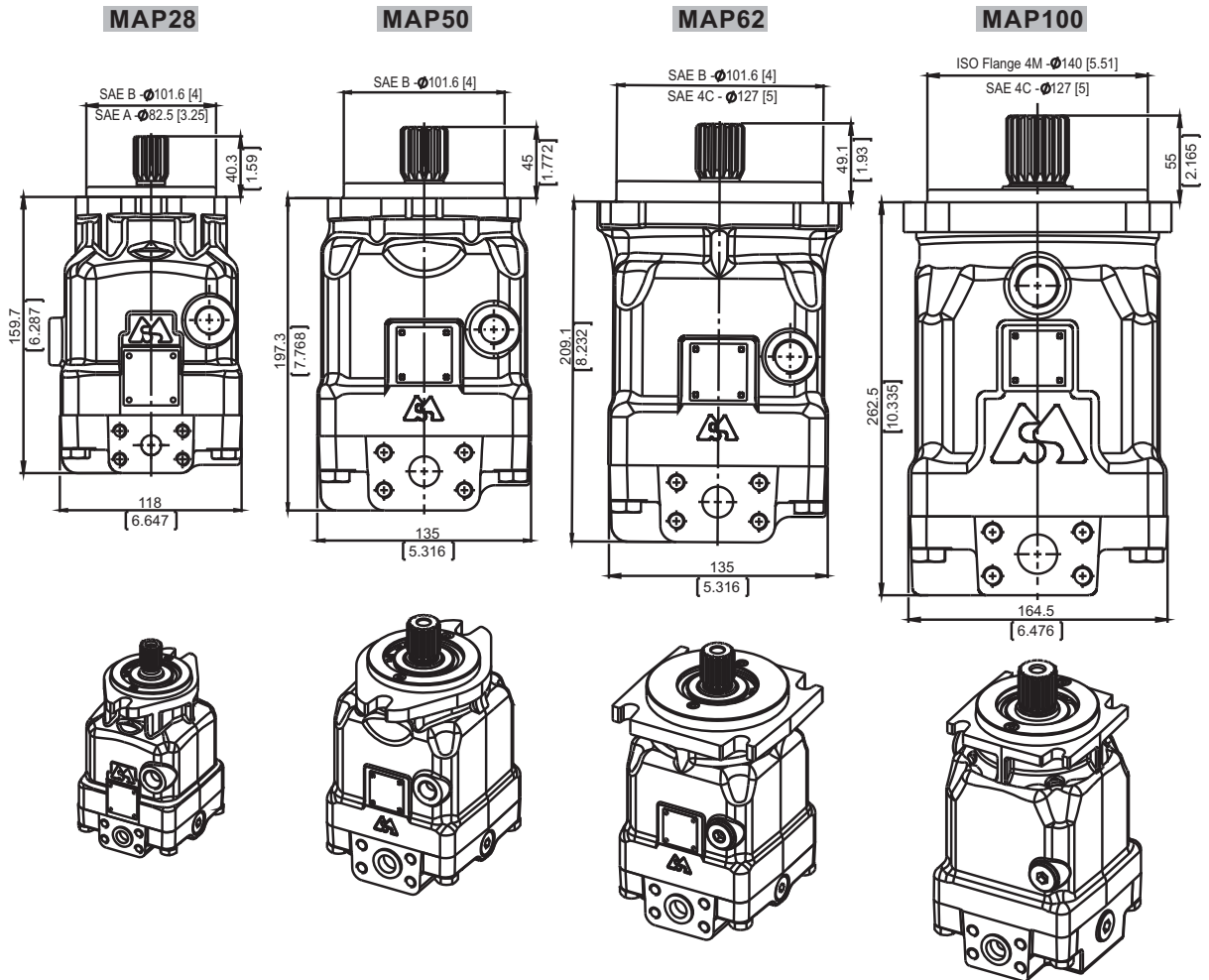
Continuous values





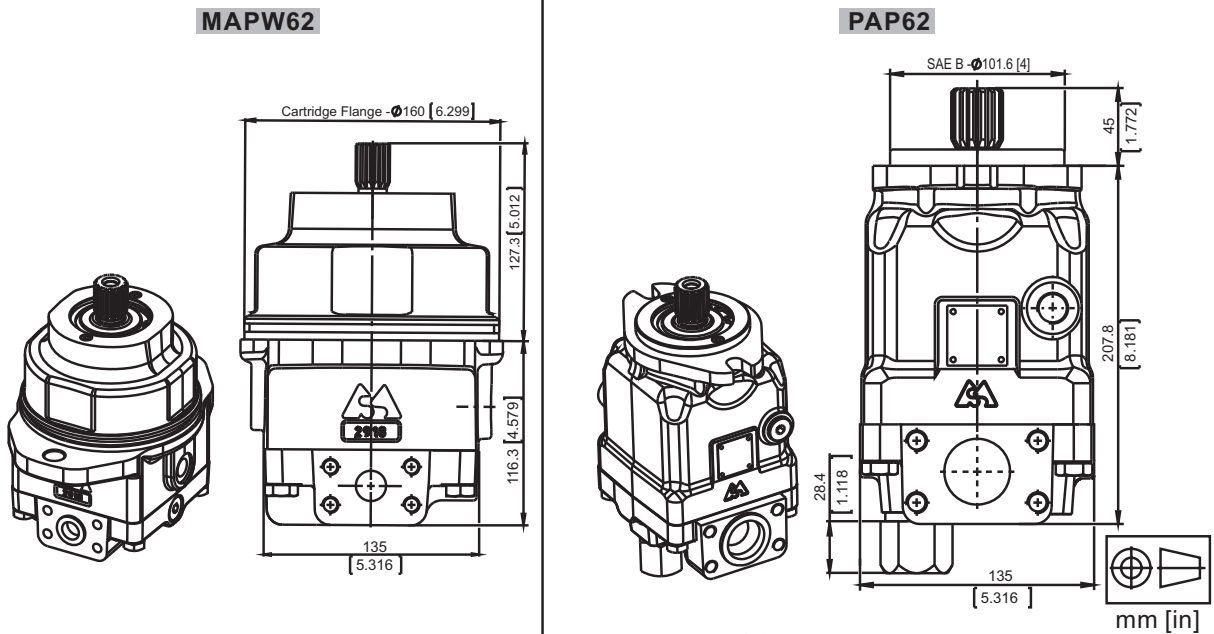
MOTOR DIMENSIONS

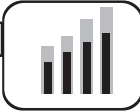
The bellow dimensions are for **comparison only**. The motors can obtain different flanges, shafts and end covers.



PUMP DIMENSIONS

The bellow dimensions are for **comparison only**. The pumps can obtain different shafts and end covers.





PORT, SHAFT AND FLANGE TYPES

Cross Table - Flange Types

MAP28	MAP50	MAP62	MAP100	MAPW62	PAP62	Type of flanges
x						A - 2-Bolt, SAE A; SD-82.5[3.25"];BC-106.35 [4.19"]; BD-13.5 [0.53"]
x	x	x			x	B - 2-Bolt, SAE B; SD-101.6[4"];BC-146 [5.748"]; BD-14.3 [0.563"]
		x	x			4C - 4-Bolt flange; SAE C; SD-127 [5"];BC-161.92 [6.375"]; BD-14.3 [0.563"]
			x			4M - 4-Bolt flange; ISO 3019-2; SD-140 [5.51"];BC-180 [7.09"]; BD-15 [0.59"]
				x		Cartage - 2-Bolt flange; Wheel flange cartage; SD-135[5.315"]; BC 155[6.102"]

Legend

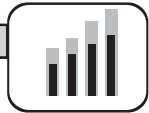
BC (Bolt Circle) - Center point of bolt holes
BD (Bolt Diameter) - Diameter of bolt holes
SD (Spigot Diameter) - Center Diameter

Cross Table - Shaft Types

MAP28	MAP50	MAP62	MAP100	MAPW62	PAP62	Type of shafts
x	x				x	SD ϕ 21.72 [0.855"] Spline SAE 13T 16/32 DP, M8 thread
x	x				x	GD ϕ 21.72 [0.855"] Spline SAE 13T 16/32 DP, 5/16-18 UNC thread
x	x	x			x	SF ϕ 24.9 [0.98"] Spline SAE 15T 16/32, M8 thread
x	x	x			x	GF ϕ 24.9 [0.98"] Spline SAE 15T 16/32, 3/8-16 UNC thread
	x	x		x	x	SH ϕ 29.6 [1.165"] Spline W30x2x30x14x9g DIN, M10 thread
	x	x			x	SK ϕ 31.75 [1.25"] Spline SAE 14T 12/24 DP, M10 thread
	x	x			x	GK ϕ 31.75 [1.25"] Spline SAE 14T 12/24 DP, 7/16-14UNC thread
	x	x			x	SP ϕ 34.5 [1.358"] Spline SAE 21T 16/32 DP, M12 thread
			x			SR ϕ 37.6 [1.48"] Spline SAE 23T 16/32 DP, M12 thread
			x			ST ϕ 39.6 [1.559"] Spline W40x2x30x18x9g DIN 5480, M12 thread
			x			GU ϕ 44.43 [1.749"] Spline SAE 13T 8/16 DP, 3/8-16 UNC thread
x	x				x	CK ϕ 22.2 [7/8"] Straight , M8 thread, Parallel key 1/4"x1/4"x1" BS46
x	x				x	MK ϕ 22.2 [7/8"] Straight , M8 thread, Parallel key 1/4"x1/4"x1 1/2" BS46
x	x	x			x	ML ϕ 25 [0.984"] Straight , M8 thread, Parallel key A8x7x25 DIN6885
x	x	x			x	CM ϕ 25.4 [1"] Straight , M8 thread, Parallel key 1/4"x1/4"x1" BS46
	x	x			x	DO ϕ 28.75 [1.125"] Straight , key 7.95[5/16"] , L31.7[1 1/4"] , 3/8-16 UNC thread
	x	x			x	CQ ϕ 30 [1.181"] Straight , M8 thread, Parallel key A8x7x32 DIN6885
	x	x			x	DR ϕ 31.75 [1.25"] Straight , key 7.95[5/16"] , L31.7[1 1/4"] , 3/8-16 UNC thread
	x	x			x	CS ϕ 32 [1.26"] Straight , M8 thread, Parallel key A10x8x45 DIN6885
			x			DU ϕ 38.1[1.5"] Straight , key 9.528[0.375"] , L38.1[1.5"] , 3/8-16 UNC thread
			x			CV ϕ 40 [1.575"] Straight , M12 thread, Parallel key A12x8x63 DIN6885
x	x				x	TD ϕ 22.22 [7/8"] Tapered 1:8 [125:1000], Parallel key 1/4"x1/4"x1", 5/8-18 UNF
	x	x			x	TH ϕ 25.4 [1"] Tapered 1:8 [125:1000], Parallel key 1/4"x 1/4"x1", 3/4-16 UNF
	x	x			x	KH ϕ 25.4 [1"] Tapered 1:8 [125:1000], Parallel key 1/4"x1/4"x1", M16x1.5 thread
			x			TN ϕ 31.75 [1.25"] Tapered 125:1000, key 5/16x5/16 L1 1/8, 1-12 UNF thread

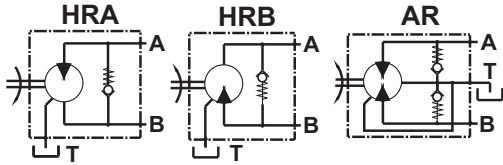
Cross Table - Port Types

PORTS SIZE - THREAD OPTION						Type of threads
MAP28	MAP50	MAP62	MAP100	MAPW62	PAP62	
default						2xISO 6162-2 DN13, metric, drain ports M18x1.5
	default	default		default		2xISO 6162-2 DN19, metric, drain ports M18x1.5
			default			2xISO 6162-2 DN25, metric, drain ports M27x2, rear drain ports M22x1.5
5						2xSAE 1/2" PSI6000, drain ports 3/4-16 UNF
	5	5		5		2xSAE 3/4" PSI6000, SAE, drain ports 7/8-14 UNF
			5			2xSAE 1", PSI6000, drain ports 1 1/8 UNF, rear drain port 7/8-14 UNF
2	6					2xG1/2, drain ports G1/2
6	2	2		2		2xG3/4, drain ports G1/2
			2			2xG1, drain ports G3/4, for rear drain port G1/2
3	7					2xM22x2, drain ports M22x2
	3	3		3		2xM27x2, drain ports M18x1.5
4	8					2x7/8-14 UNF Ports, drain ports 3/4-16 UNF
	4	4		4		2x1 1/8 -12 UN, drain ports 7/8-14 UNF
			4			2x1 1/8 -12 UN Ports, drain ports 1 1/8 -12 UN , rear drain port 7/8-14 UNF
					default	Inlet ISO 6162-1 DN38, Outlet ISO 6162-2 DN19, drain ports M18x1.5
					5	Inlet SAE J518 1 1/2 PSI3000, Outlet SAE J5183/4 PSI6000, drain ports 7/8-14 UNF
9						2xISO 6162-2 DN13, drain ports G1/2
	9	9		9		2xISO 6162-2 DN19, drain ports G1/2
			9			2xISO 6162-2 DN25, drain ports G3/4, rear drain port G1/2

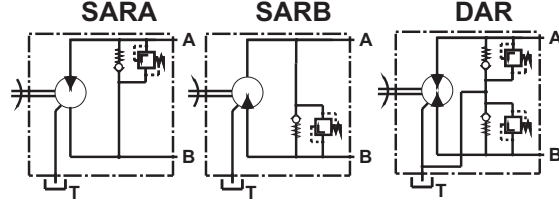


VALVE OPTIONS

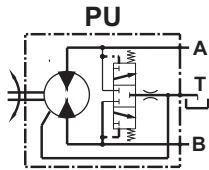
Anti-Cavitation Valve



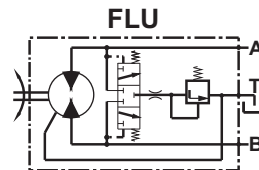
Combined Anti-Cavitation and Relief Valve



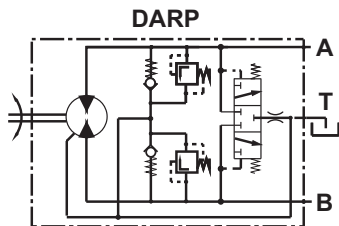
Purge Valve



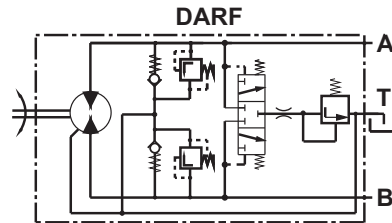
Flush Valve



Dual Anti-Cavitation, Relief and Purge Valve



Dual Anti-Cavitation, Relief and Flush Valve



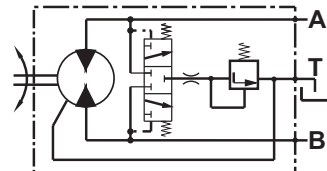
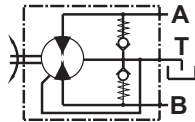
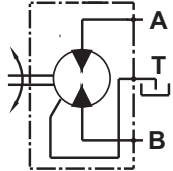
Cross Table - Valve Types

Type of valves	MAP28			MAP50			MAP62			MAP100			MAPW62		
	omit	T	E	omit	T	E	omit	T	E	omit	T	E	omit	T	E
HRA	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HRB	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
AR	x	x		x	x	x	x	x	x	x	x	x	x	x	x
SARA	x	x		x	x	x	x	x	x	x	x	x	x	x	x
SARB	x	x		x	x	x	x	x	x	x	x	x	x	x	x
DAR	x	x		x	x	x	x	x	x	x	x	x	x	x	x
PU	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
FLU	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
DARP		x		x	x		x	x		x	x	x	x	x	
DARF		x		x	x		x	x		x	x	x	x	x	



Hydraulic Motors Type MAP28

Heavy Duty Axial Piston Motors Fixed Displacement



open drain line is always required

APPLICATION

- » Agricultural machines
- » Road building machines
- » Mining machinery
- » Food industry machines
- » Swing drives
- » Hydraulic transmissions
- » Vibration machines
- » Fan drives
- » Special vehicles

OPTIONS

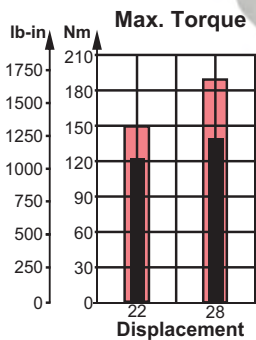
- » Flange options
- » Port options
- » Shaft options
- » High pressure ports
- » Integrated valves

ADVANTAGES

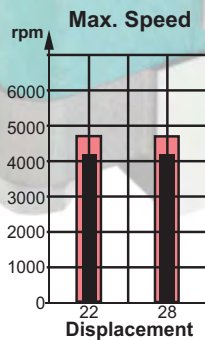
- » High starting torque
- » Smooth operation
- » Long service life
- » High power density

GENERAL

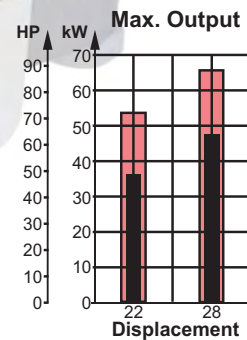
Displacement,	cm ³ /rev [in ³ /rev]	22.15÷28.47 [1.35÷1.74]
Max. Speed,	RPM	4200
Max. Torque,	Nm [lb-in]	159 [1407]
Max. Output,	kW [HP]	48 [64]
Max. Pressure Drop,	bar [PSI]	350 [5080]
Max. Oil Flow,	l/min [GPM]	120 [31.7]
Min. Speed,	RPM	500
Fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)	
Temperature Range,	°C [°F]	-40÷82 [-40÷180]
Optimal Viscosity Range,	mm ² /s [SUS]	12÷68 [66÷311]
Filtration	ISO code 18/16/13 (Min. recommended fluid filtration of 10 micron)	



Intermittent values

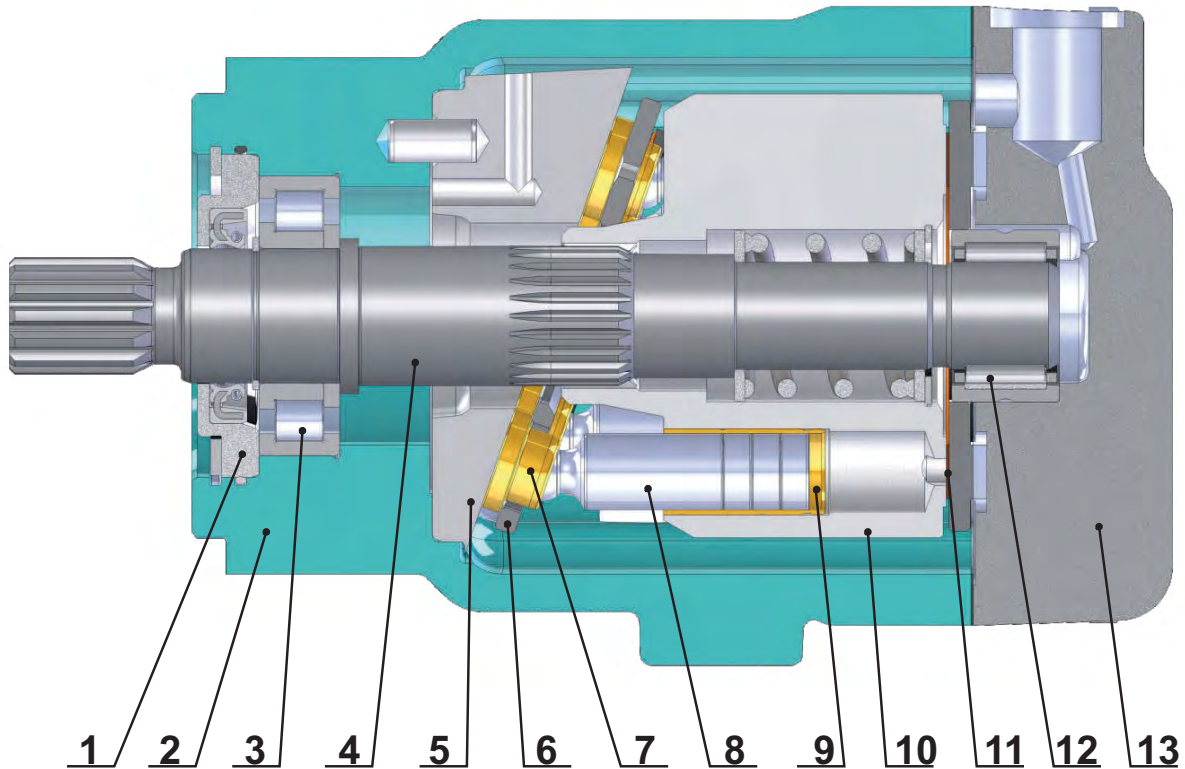


Continuous values





SECTION VIEW



1. Front cover
2. Cast iron body
3. Robust radial - axial roller bearing
4. Hardened shaft
5. Solid swash plate
6. Retainer plate
7. Improved piston shoes
8. Improved pistons
9. Brass bushings
10. Hardened steel cylinder block
11. Bimetal distributor
12. Needle bearing
13. Solid end cover

The main advantages of the heavy duty design of the MAP motors over the typical swash plate motors are the higher starting torque and the higher total efficiency. In regards to these two parameters, under normal working mode, the MAP is comparable to the bent axis motors. The advantages of the MAP over the bent axis motors are the higher reliability and the lower degree of pulsation and vibration during operation.



SPECIFICATION DATA

Type		MAP 22	MAP 28
Displacement, cm. ³ /rev. [in. ³ /rev.]		22.15 [1.35]	28.47 [1.74]
Max. Speed, [RPM]	Cont.	4200	4200
	Int.*	4700	4700
Max. Torque,*** Nm [lb-in]	Cont.	123 [1088]	159 [1407]
	Int.**	148 [1310]	190 [1682]
Output, kW [HP]	Cont.	37 [50]	48 [64]
	Int.**	54 [72]	70 [94]
Max. Pressure, bar [PSI]	Cont.	350 [5080]	350 [5080]
	Int.**	420 [6100]	420 [6100]
	Peak	450 [6527]	450 [6527]
Max. Oil Flow, l/min [GPM]	Cont.	93 [24.6]	120 [31.7]
	Int.*	104 [27.5]	134 [35.4]
Torque Constant ***** Nm/bar [lb-in/PSI]		0.32 [0.194]	0.41 [0.25]
Speed Constant ***** RPM/(l/min) [RPM/GPM]		42.9 [162.4]	33.4 [126.3]
Permissible Shaft Load (for standard bearing) max Axial**** N[lb]		Fa=1300 [292]	
	max Radial**** N[lb]	Fr=2200 [495]	
Min. Speed, [RPM]		500	
Max. Pressure in Drain Line, bar [PSI]		5 [70] open drain line is always required	
Weight, kg [lb]		10.79 [23.79] for SAE-A flange 11.50 [25.35] for SAE-B flange	

Peak pressure is the highest allowable pressure, may occur for max. 1% of every minute;

* Intermittent speed (flow): for pressure up to 150[2200] bar[PSI];

** Intermittent load: the permissible values may occur for max. 10% of motor lifetime;

*** Theoretical torque;

**** The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft.

***** The constant values are used for calculation of torque and speed with motor efficiencies $\eta_v=0.95$ and $\eta_{mh}=0.9$.

1. The recommended output power for continuous operations should not be exceeded.
2. Recommended filtration as per ISO 4406 cleanliness code 18/16/13 or better. This filtration corresponds to SAE AS 4059 8A/7B/7C. Nominal filtration - 10 micron or better.
3. Recommended a premium quality, anti-wear type mineral based hydraulic oil, HLP(DIN51524) or HM(ISO6743/4).
4. Recommended oil viscosity - 12...68 cSt or see page 81.
5. Recommended maximum system operating temperature - 82°[180°] C[F].
6. To ensure optimum life of the motor, fill it up with fluid prior to load it and run with moderate load and speed for about 10-15 minutes.

Hint: Motor Torque = Torque Constant * Pressure Drop

Rotation Speed = Speed Constant * Oil Flow

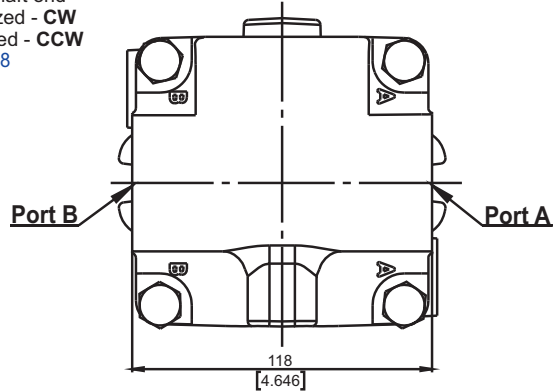
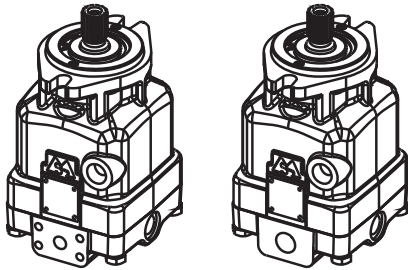
The constant values are approximate. Motor torque and rotation speed for a particular project are depending on the real operating conditions. For more detailed calculations please see efficiencies on next page and formulas on page 82.



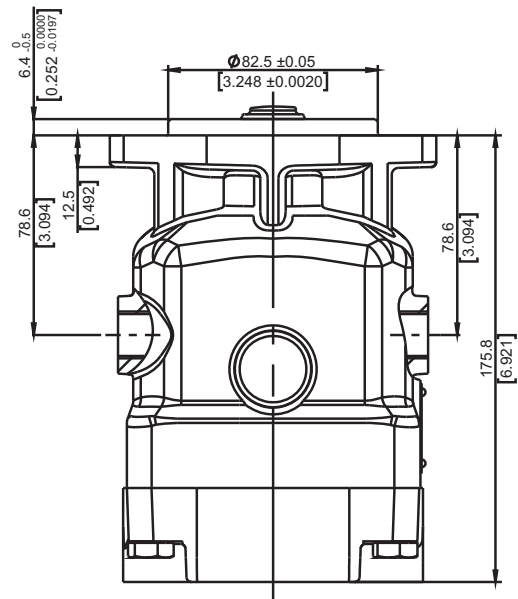
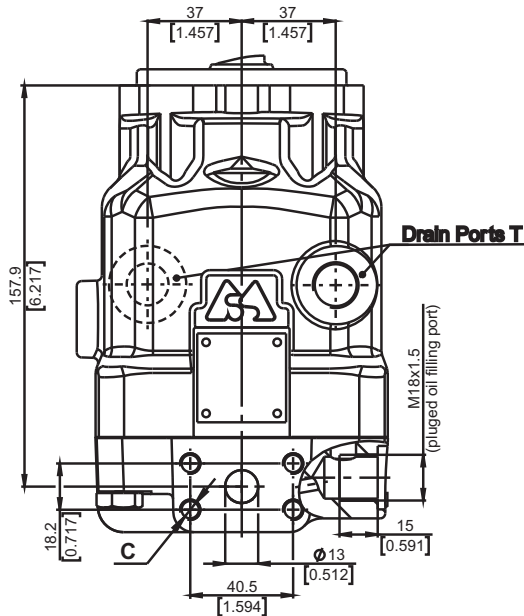
OVERALL DIMENSIONS AND PORTS

Side Ports - Default Mounting Flange - Type SAE-A

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

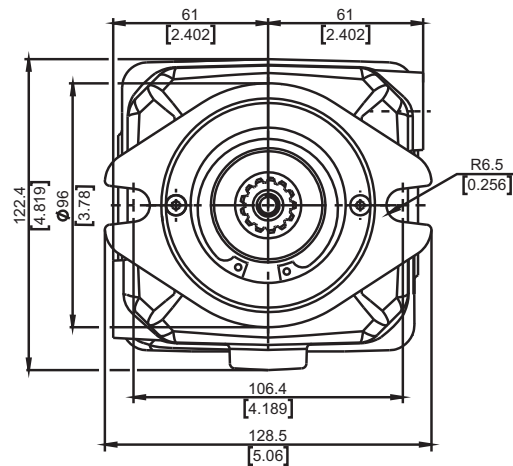
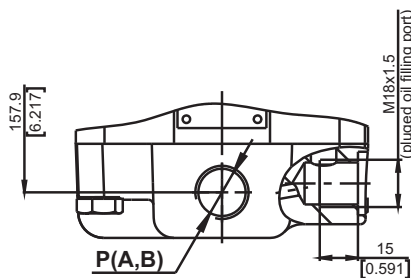


Side ports, port size default, 5 and 9



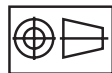
	Port Size		
	default	5	9
P _{A,B}	2xISO 6162-2 DN13	2xSAE J518 1/2" PSI6000	2xISO 6162-2 DN13
T	M18x1.5	3/4-16 UNF	G 1/2
C	8xM8	8x5/16-18 UNC	8xM8

Side ports, port size 2, 3, 4 and 6



	Port Size			
	2	3	4	6
P _{A,B}	2xG 1/2	2xM22x1.5	2x7/8-14UNF	2xG 3/4
T	G 1/2	M18x1.5	3/4-16UNF	G 1/2

Shaft Mounting
see page 13



mm [in]

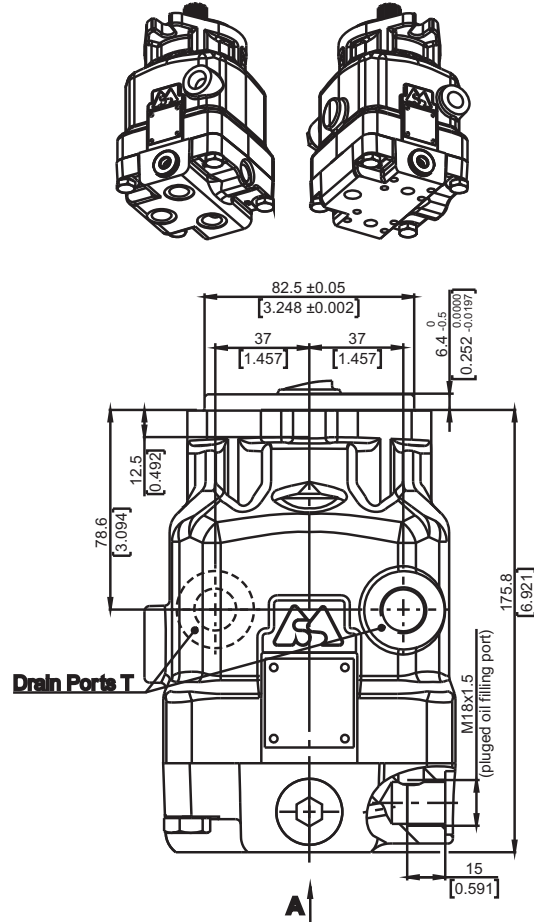
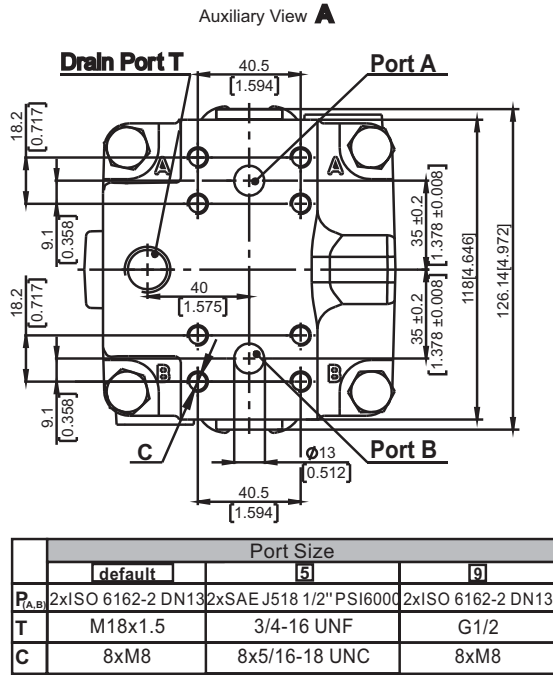


OVERALL DIMENSIONS AND PORTS

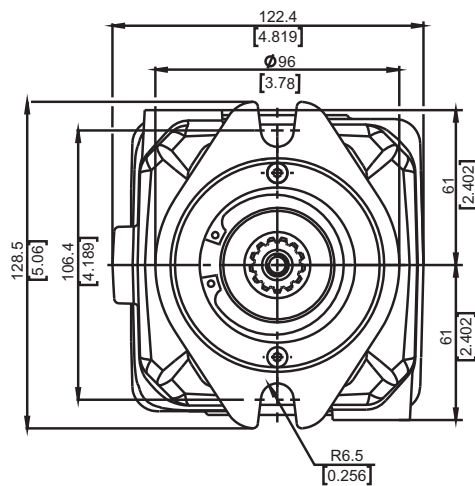
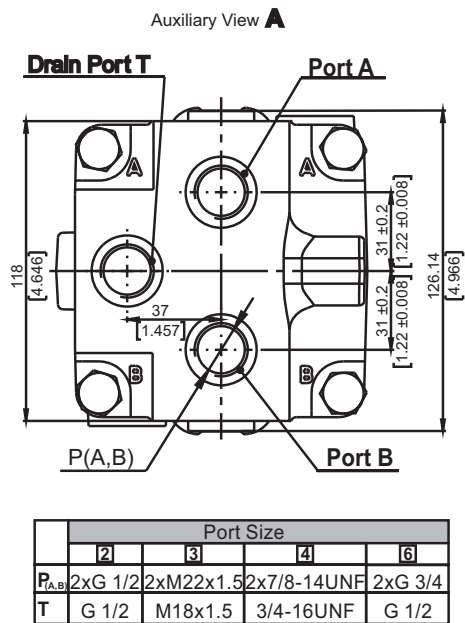
Rear Ports - Type E Mounting Flange - Type SAE-A

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

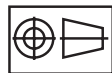
Rear ports E, port size default, 5 and 9



Rear ports E, port size 2, 3, 4 and 6



Shaft Mounting
see page 13



mm [in]



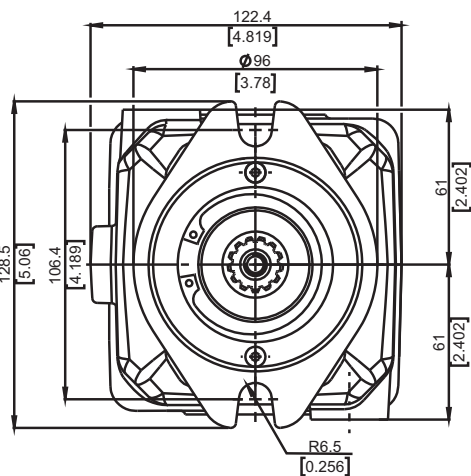
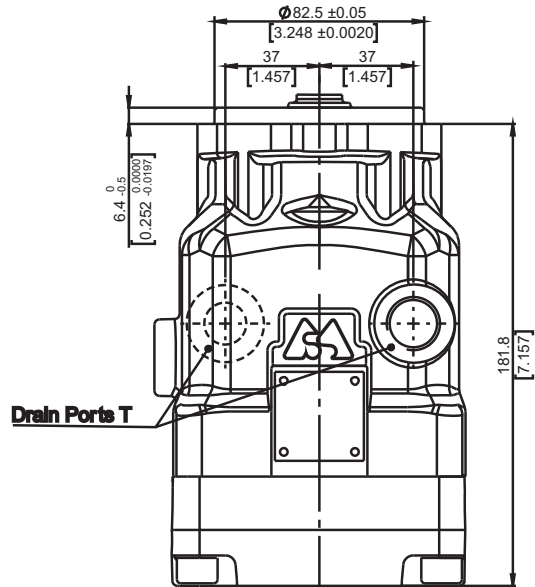
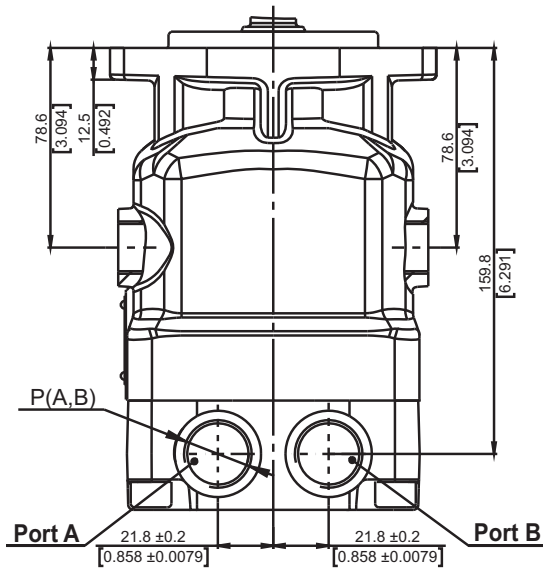
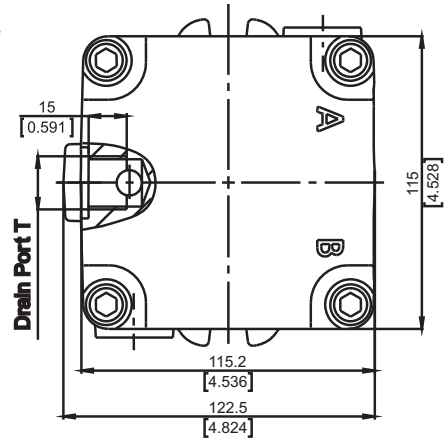
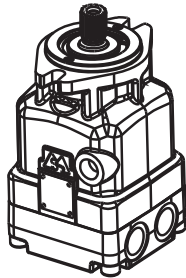
OVERALL DIMENSIONS AND PORTS

Twin Side Ports - Type T Mounting Flange - Type SAE-A

Twin side ports T, port size 2,3,4 and 6

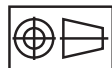
See the port sizes at the bottom of this page

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78



		Port Size			
		2	3	4	6
P _(A,B)		2xG 1/2	2xM22x1.5	2x7/8-14UNF	2xG 3/4
T		G 1/2	M18x1.5	3/4-16UNF	G 1/2

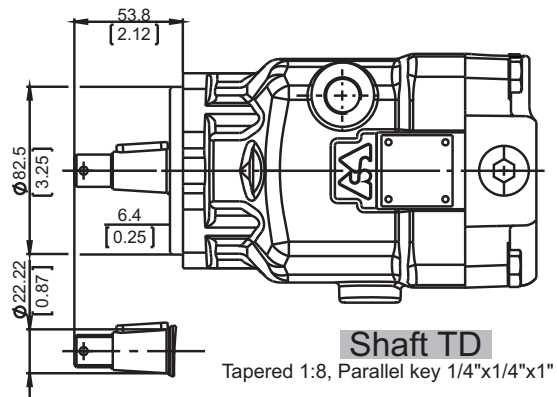
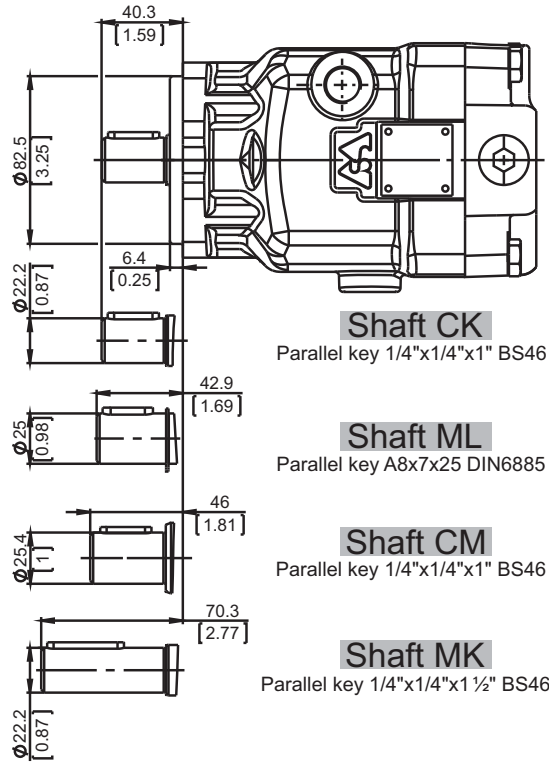
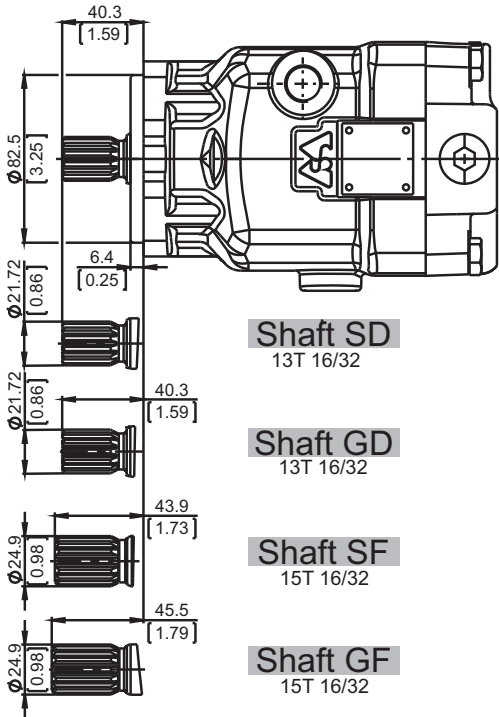
Shaft Mounting
see the next page



mm [in]



SHAFTS MOUNTING
Mounting Flange - Type **SAE-A**



Shaft Dimensions
See Page 68+72

PERMISSIBLE SHAFT LOAD			
Permissible shaft load		Standard bearing	Improved bearing
max Axial	N[lb]	Fa=1300 [292]	Fa=1600 [360]
max Radial	N[lb]	Fr=2200 [495]	Fr=3000 [674]

The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft (see page 78).

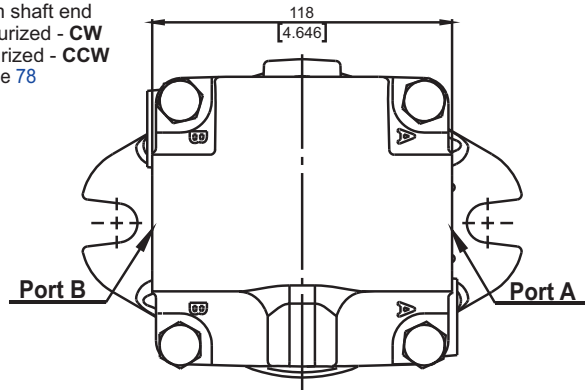
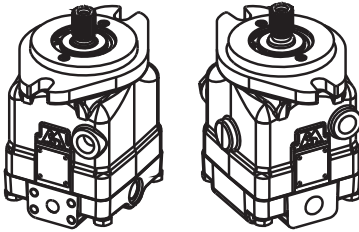
For more information, please, feel free to contact us.



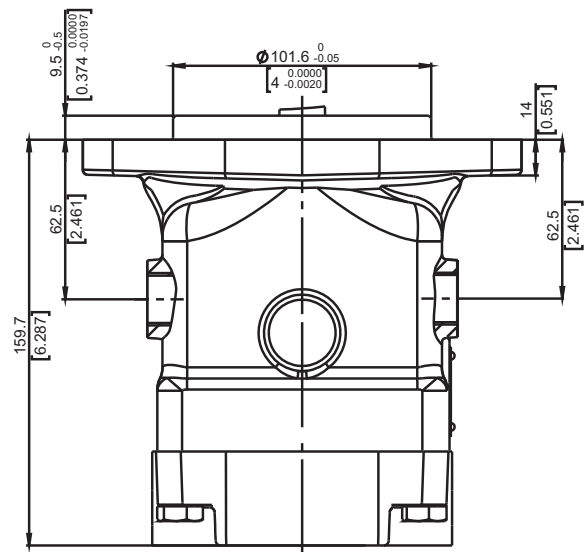
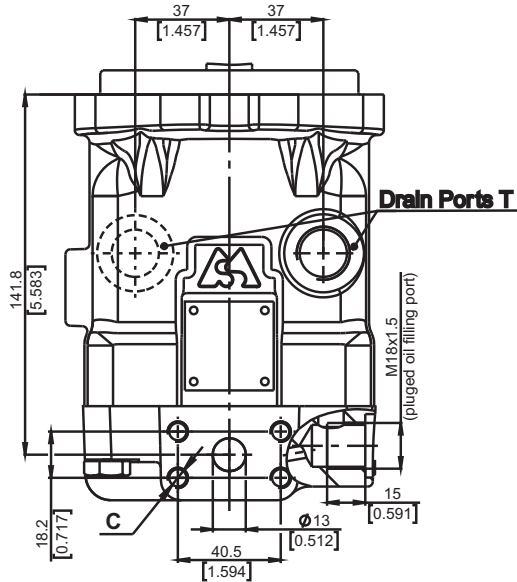
OVERALL DIMENSIONS AND PORTS

Side Ports - Default Mounting Flange - Type SAE-B

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

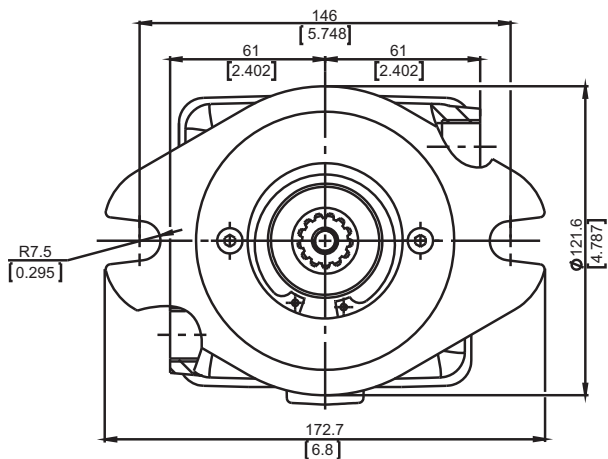
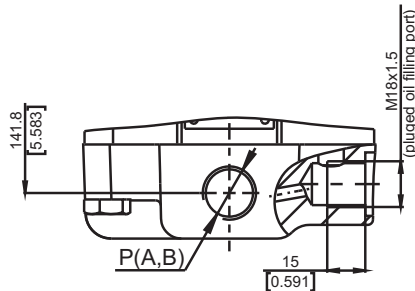


Side ports, port size default ,5 and 9



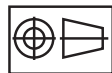
	Port Size		
	default	5	9
P _(A,B)	2xISO 6162-2 DN13	2xSAE J518 1/2" PSI6000	2xISO 6162-2 DN13
T	M18x1.5	3/4-16 UNF	G1/2
C	8xM8	8x5/16-18 UNC	8xM8

Side ports, port size 2, 3, 4 and 6



	Port Size			
	2	3	4	6
P _(A,B)	2xG 1/2	2xM22x1.5	2x7/8-14 UNF	2xG 3/4
T	G 1/2	M18x1.5	3/4-16 UNF	G 1/2

Shaft Mounting
see page 17



mm [in]

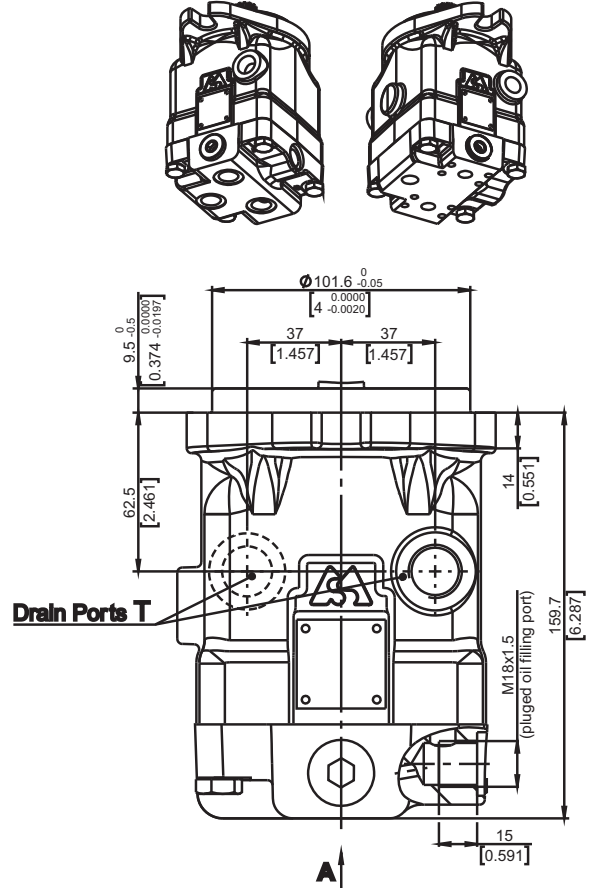
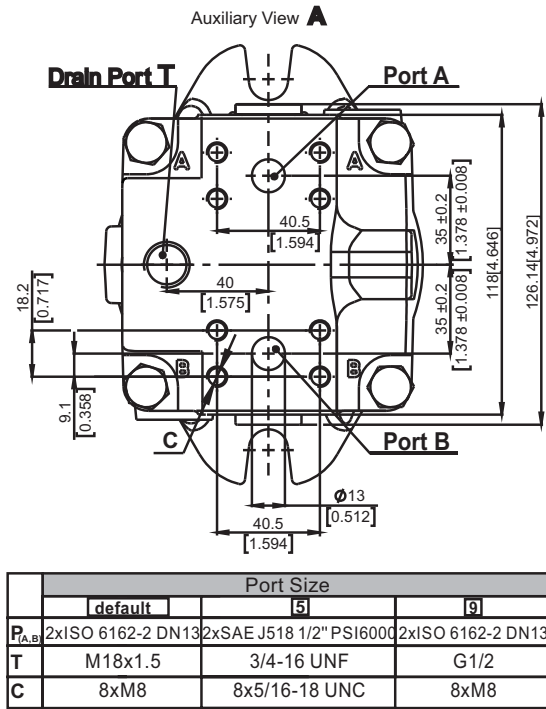


OVERALL DIMENSIONS AND PORTS

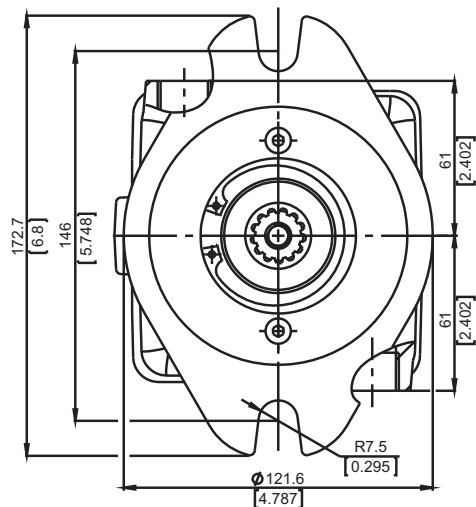
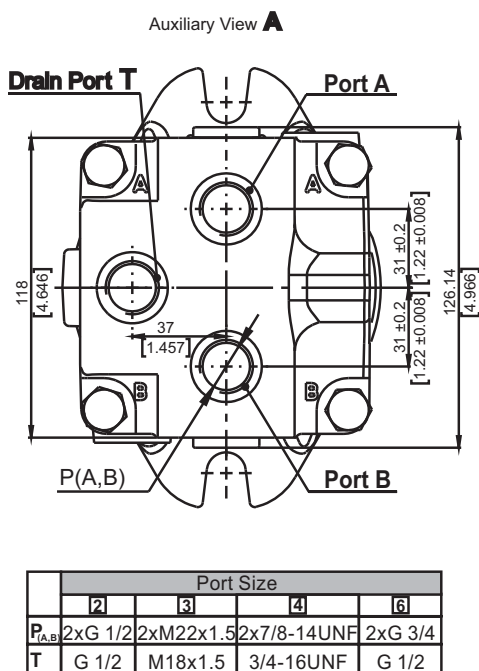
Rear Ports - Type E Mounting Flange - Type SAE-B

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

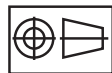
Rear ports E, port size default, 5 and 9



Rear ports E, port size 2, 3, 4 and 6



Shaft Mounting
see page 17



mm [in]



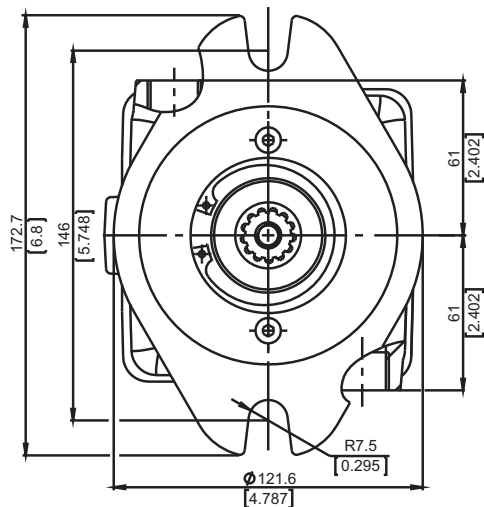
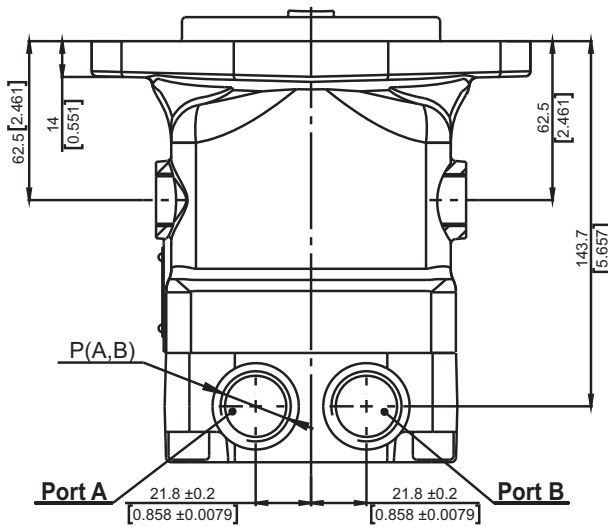
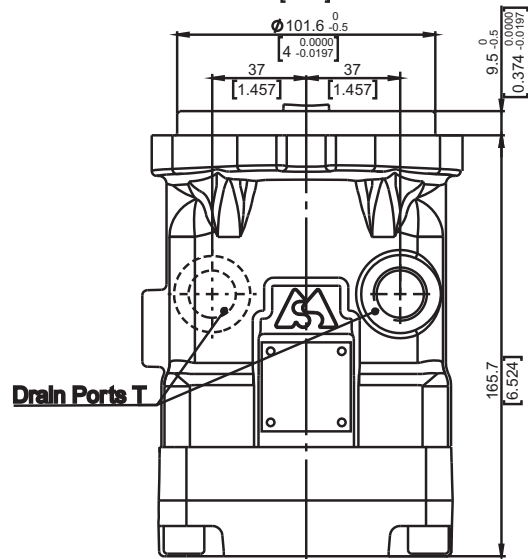
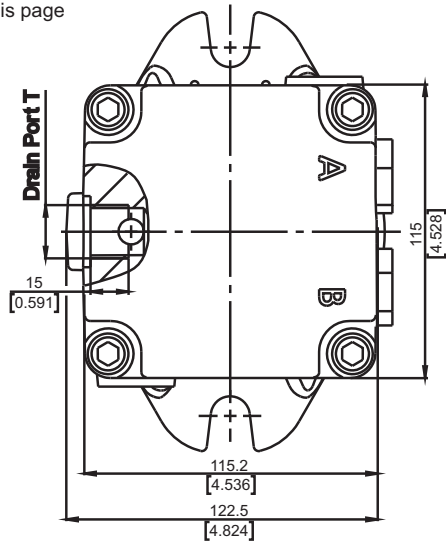
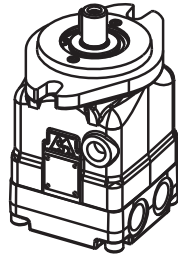
OVERALL DIMENSIONS AND PORTS

Twin Side Ports - Type T Mounting Flange - Type SAE-B

Twin side ports T, port size 2,3,4 and 6

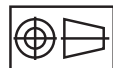
See the port sizes at the bottom of this page

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78



	Port Size			
	2	3	4	6
P(A,B)	2xG 1/2	2xM22x1.5	2x7/8-14UNF	2xG 3/4
T	G 1/2	M18x1.5	3/4-16UNF	G 1/2

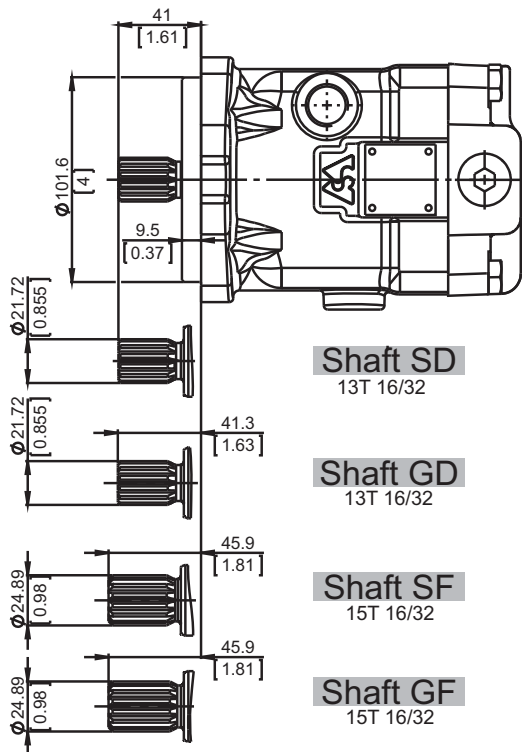
Shaft Mounting
see the next page



mm [in]



SHAFTS MOUNTING
Mounting Flange - Type **SAE-B**

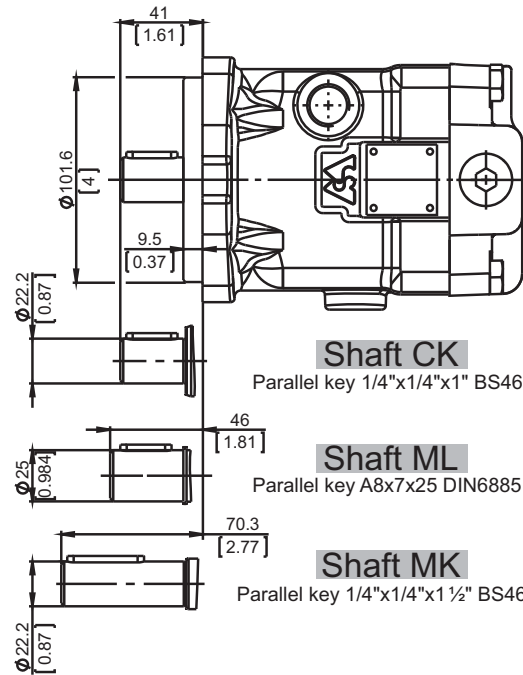


Shaft SD
13T 16/32

Shaft GD
13T 16/32

Shaft SF
15T 16/32

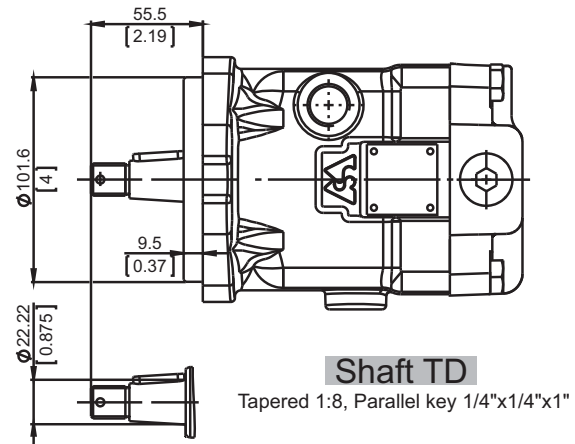
Shaft GF
15T 16/32



Shaft CK
Parallel key 1/4"x1/4"x1" BS46

Shaft ML
Parallel key A8x7x25 DIN6885

Shaft MK
Parallel key 1/4"x1/4"x1 1/2" BS46



Shaft TD
Tapered 1:8, Parallel key 1/4"x1/4"x1"

Shaft Dimensions
See Page 68+72

PERMISSIBLE SHAFT LOAD

Permissible shaft load		Standard bearing
max Axial	N[lb]	Fa=1300 [292]
max Radial	N[lb]	Fr=2200 [495]

The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft (see page 78).

For more information, please, feel free to contact us.



ORDERING CODE

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	14	14
M A P														[]

Pos.1 - Mounting Flange

- A** - 2-Bolt flange, SAE A, spigot dia. 82.5 [3.25"], BC 106.35 [4.19"], Bolt Dia. 13.5 [0.53"]
- B** - 2-Bolt flange, SAE B, spigot dia. 101.6 [4"], BC 146 [5.748"], Bolt Dia. 14.3 [0.563"]

Pos.2 - Port Type

- omit - Side ports on opposite sides
- T** - Twin (Two) side ports on one side
- E** - Rear ports

Pos.3 - Displacement Code

- 22** - 22.15 cm.³/rev. [1.35 in.³/rev.]
- 28** - 28.47 cm.³/rev. [1.74 in.³/rev.]

Pos.4 - Shaft Extensions**

- SD** - ø21.72 [0.855"] Spline SAE 13T 16/32 DP, M8 thread
- GD** - ø21.72 [0.855"] Spline SAE 13T 16/32 DP, 5/16-18 UNC thread
- SF** - ø24.9 [0.98"] Spline SAE 15T 16/32, M8 thread
- GF** - ø24.9 [0.98"] Spline SAE 15T 16/32, 3/8-16UNC thread
- CK** - ø22.2 [7/8"] Straight, M8 thread Parallel key 1/4"x1/4"x1" BS46
- MK** - ø22.2 [7/8"] Straight, M8 thread Parallel key 1/4"x1/4"x1 1/2" BS46
- ML** - ø25 [0.984"] Straight, M8 thread Parallel key A8x7x25 DIN6885
- CM** - ø25.4 [1"] Straight, M8 thread Parallel key 1/4"x1/4"x1" BS46
- TD** - ø22.22 [7/8"] Tapered 1:8 [125:1000], Parallel key 1/4"x1/4"x1", 5/8-18 UNF-2A

Shaft type CM is available only for Pos.5 option N

Pos.5 - Improved radial load

- omit - standard bearing
- N** - Improved bearing
Option N is available only for Pos.1 option A

Pos.6 - Port Size

- omit - 2xISO 6162-2 DN13, drain port M18x1.5
- 2** - 2xG1/2, drain ports G1/2
- 3** - 2xM22x2, drain ports M18x1.5
- 4** - 2x7/8-14 UNF Ports, drain ports 3/4-16 UNF
- 5** - 2xSAE 1/2" PSI6000, drain ports 3/4-16 UNF
- 6** - 2xG3/4, drain ports G1/2
- 9** - 2xISO 6162-2 DN13, drain port G1/2

Option omit;5 and 9 are not available for Pos.2 option T

We remain open to meet your special requirements upon request.

Pos.7 - Seal, Corrosion Resistant Seal Surface

- omit - NBR seal type material
- V** - FKM seal type material

Pos.8 - Integrated Valves

See page 74+75 for information about valves

- omit - None
- HR** - Single anti-cavitation valve
- AR** - Dual anti-cavitation valve
- PU** - Purge valve - default - 5±2 l/min.
- FLU** - Flush valve - default - 5±2 l/min at 20 bar.
- SAR** - Single anti-cavitation and relief valve
- DAR** - Dual anti-cavitation and relief valve
- DARP** - Dual anti-cavitation, relief and purge valve, default flow - 5±2 l/min.
- DARF** - Dual anti-cavitation, relief and flush valve, default flow - 5±2 l/min at 20 bar.

Option DAR, SAR, AR and HR are not available for Pos.2 option E
Option FLU are not available for Pos.2 option E combine with Pos.6 option 1 and 5
Option DARF and DARP are available only for Pos.2 option T

Pos.9 - Valve Ports for Single Valves

- omit - None
- A** - Port A
- B** - Port B

Pos.10 - Pressure Setting of Integrated Valves

- omit - None
- x** -

250	300*	350*
-----	------	------

* 300 and 350 bar options are available only for Pos.2 option T. for more information see page 74+75

Pos.11 - Flow Setting of Integrated Valves

- omit - None
- Lx** - For value - see page 74+75

Pos.12 - Special Features*

- omit - None
- R2S** - Speed Sensor Two Directional (see page 76)
- R** - Reverse Rotation (see page 78)

Pos.13 - Paint and Coating

- omit - No paint or coating
- P** - Painted
- PC** - Corrosion protected paint
- PS** - Special painted ***
- PCS** - Special corrosion protected paint***
If a painting option is required, the standard color is black-Alkyd-Styrenated Enamel, Black RAL 9005.
Other colors - on customer's request.

Pos.14 - Design Series

- omit - Factory specified

**The permissible output torque for shafts must not be exceeded!
***Non painted feeding surface

M A P B 2 8 S D 2

EXAMPLE

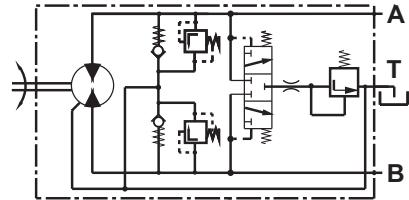
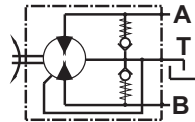
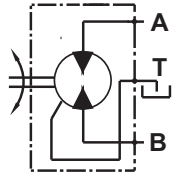
M A P A E 2 2 G D 4 P





Hydraulic Motors Type MAP50

Heavy Duty Axial Piston Motors Fixed Displacement



open drain line is always required

APPLICATION

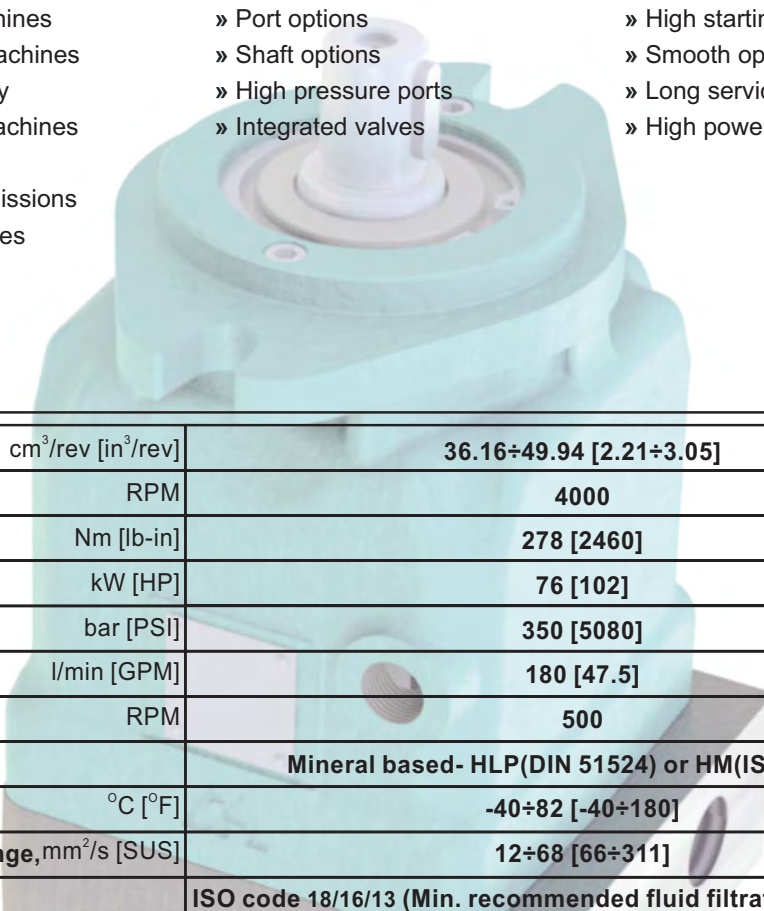
- » Agricultural machines
- » Road building machines
- » Mining machinery
- » Food industry machines
- » Swing drives
- » Hydraulic transmissions
- » Vibration machines
- » Fan drives
- » Special vehicles

OPTIONS

- » Port options
- » Shaft options
- » High pressure ports
- » Integrated valves

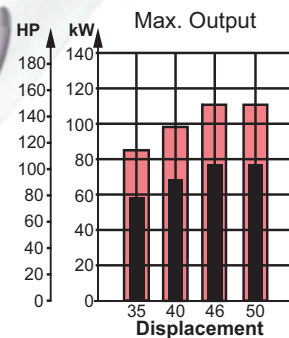
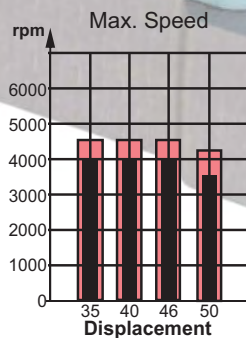
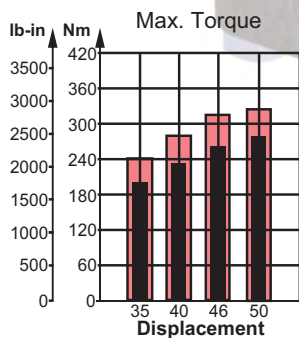
ADVANTAGES

- » High starting torque
- » Smooth operation
- » Long service life
- » High power density



GENERAL

Displacement,	cm ³ /rev [in ³ /rev]	36.16÷49.94 [2.21÷3.05]
Max. Speed,	RPM	4000
Max. Torque,	Nm [lb-in]	278 [2460]
Max. Output,	kW [HP]	76 [102]
Max. Pressure Drop,	bar [PSI]	350 [5080]
Max. Oil Flow,	l/min [GPM]	180 [47.5]
Min. Speed,	RPM	500
Fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)	
Temperature Range,	°C [°F]	-40÷82 [-40÷180]
Optimal Viscosity Range,	mm ² /s [SUS]	12÷68 [66÷311]
Filtration	ISO code 18/16/13 (Min. recommended fluid filtration of 10 micron)	

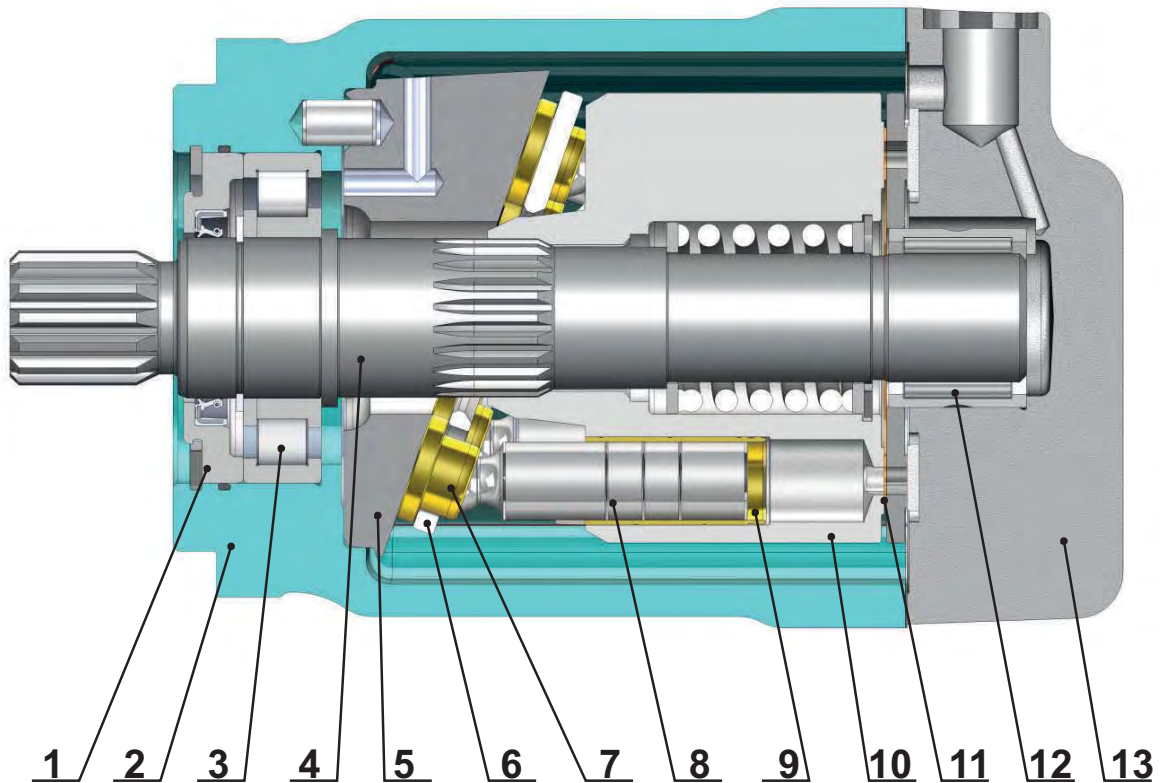


Intermittent values

Continuous values



SECTION VIEW



1. Front cover
2. Cast iron body
3. Robust radial - axial roller bearing
4. Hardened shaft
5. Solid swash plate
6. Retainer plate
7. Improved piston shoes
8. Improved pistons
9. Brass bushings
10. Hardened steel cylinder block
11. Bimetal distributor
12. Needle bearing
13. Solid end cover

The main advantages of the heavy duty design of the MAP motors over the typical swash plate motors are the higher starting torque and the higher total efficiency. In regards to these two parameters, under normal working mode, the MAP is comparable to the bent axis motors. The advantages of the MAP over the bent axis motors are the higher reliability and the lower degree of pulsation and vibration during operation.



SPECIFICATION DATA

Type		MAP 35	MAP 40	MAP 46	MAP 50
Displacement, cm.³/rev. [in.³/rev.]		36.16 [2.21]	41.59 [2.54]	47.13 [2.88]	49.94 [3.05]
Max. Speed, [RPM]	Cont.	4000	4000	4000	3600
	Int.*	4500	4500	4500	4200
Max. Torque,** Nm [lb-in]	Cont.	202 [1789]	232 [2053]	263 [2328]	278 [2460]
	Int.**	242 [2142]	278 [2460]	315 [2788]	326 [2885]
Output, kW [HP]	Cont.	58 [78]	67 [90]	76 [102]	76 [102]
	Int.**	84 [113]	97 [130]	110 [148]	110 [148]
Max. Pressure, bar [PSI]	Cont.	350 [5080]	350 [5080]	350 [5080]	350 [5080]
	Int.**	420 [6100]	420 [6100]	420 [6100]	410 [5950]
	Peak	450 [6527]	450 [6527]	450 [6527]	450 [6527]
Max. Oil Flow, l/min [GPM]	Cont.	145 [38.3]	167 [44.1]	189 [50]	180 [47.5]
	Int.*	163 [43.1]	187 [49.4]	212 [56]	210 [55.5]
Torque Constant *****		0.52	0.6	0.68	0.72
Nm/bar [lb-in/PSI]		[0.32]	[0.364]	[0.41]	[0.437]
Speed Constant *****		26.3	22.84	20.2	19.02
RPM/(l/min) [RPM/GPM]		[99.4]	[86.5]	[76.3]	[72]
Permissible Shaft Load					
max Axial**** N[lb]		Fa=2000 [450]			
max Radial**** N[lb]		Fr=3600 [810]			
Min. Speed, [RPM]		500			
Max. Pressure in		5 [70]			
Drain Line, bar [PSI]		open drain line is always required			
Weight, kg [lb]		17.65 [38.9]			

Peak pressure is the highest allowable pressure, may occur for max. 1% of every minute;

* Intermittent speed (flow): for pressure up to 150[2200] bar[PSI];

** Intermittent load: the permissible values may occur for max. 10% of motor lifetime;

*** Theoretical torque;

**** The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft.

***** The constant values are used for calculation of torque and speed with motor efficiencies $\eta_v=0.95$ and $\eta_{mh}=0.9$.

1. The recommended output power for continuous operations should not be exceeded.
2. Recommended filtration as per ISO 4406 cleanliness code 18/16/13 or better. This filtration corresponds to SAE AS 4059 8A/7B/7C. Nominal filtration - 10 micron or better.
3. Recommended a premium quality, anti-wear type mineral based hydraulic oil, HLP(DIN51524) or HM(ISO6743/4).
4. Recommended oil viscosity - 12...68 cSt or see page 81.
5. Recommended maximum system operating temperature - 82°[180°] C[F].
6. To ensure optimum life of the motor, fill it up with fluid prior to load it and run with moderate load and speed for about 10-15 minutes.

Hint: Motor Torque = Torque Constant * Pressure Drop

Rotation Speed = Speed Constant * Oil Flow

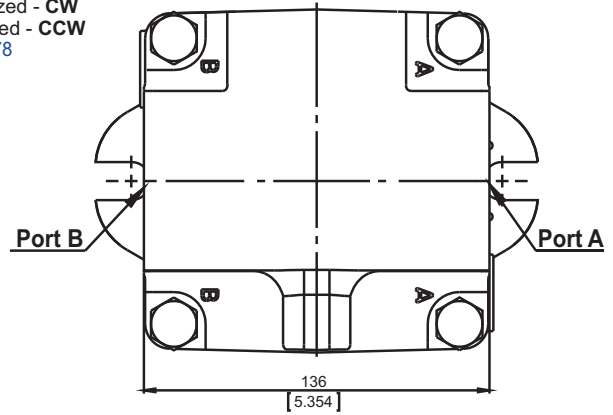
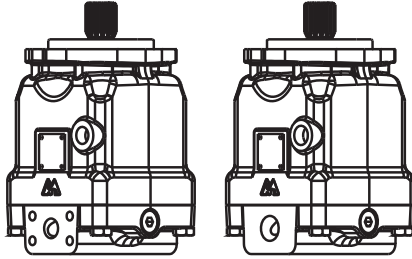
The constant values are approximate. Motor torque and rotation speed for a particular project are depending on the real operating conditions. For more detailed calculations please see efficiencies on next page and formulas on page 82.



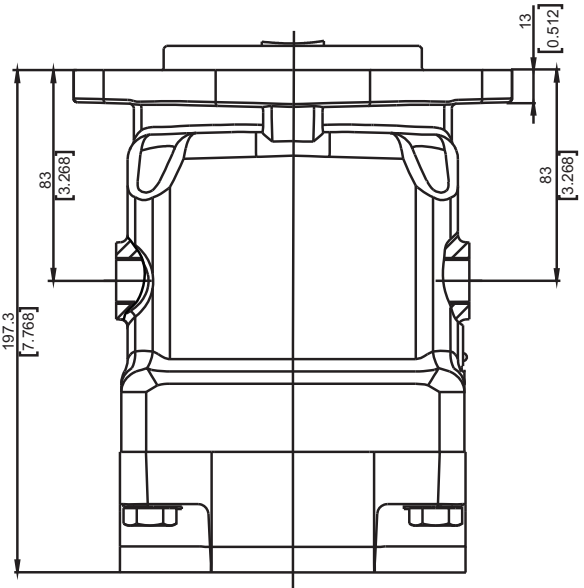
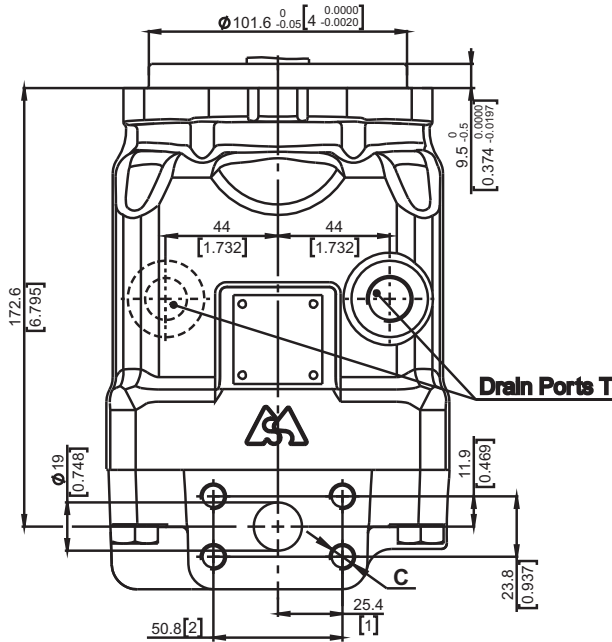
OVERALL DIMENSIONS AND PORTS

Side Ports - Default

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

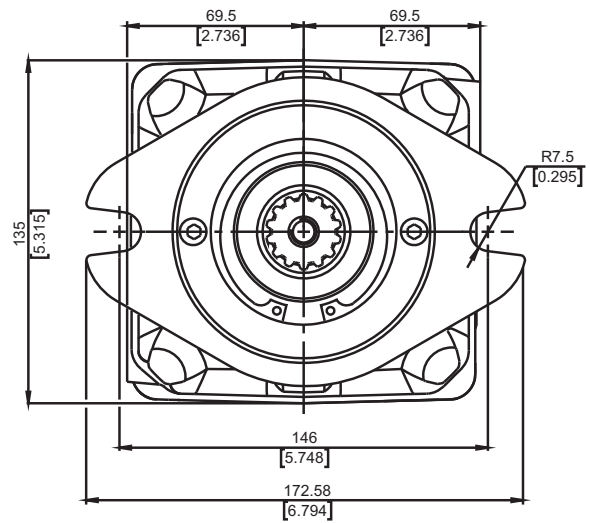
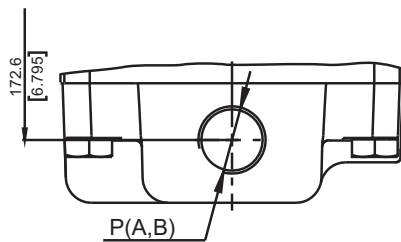


Side ports, port size default, 5 and 9



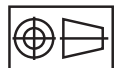
	Port Size		
	default	5	9
P _(A,B)	2xISO 6162-2 DN19	2xSAE J518 3/4" PSI6000	2xISO 6162-2 DN19
T	M18x1.5	7/8-14 UNF	G1/2
C	8xM10	8x3/8-16 UNC	8xM10

Side ports, port size 2,3 and 4



	Port Size		
	2	3	4
P _(A,B)	2xG 3/4	2xM27x2	2x1 1/16-12UN
T	G 1/2	M18x1.5	7/8-14UNF

Shaft Mounting
see page 25



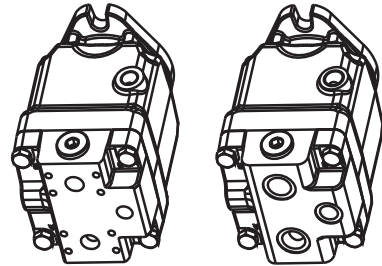
mm [in]



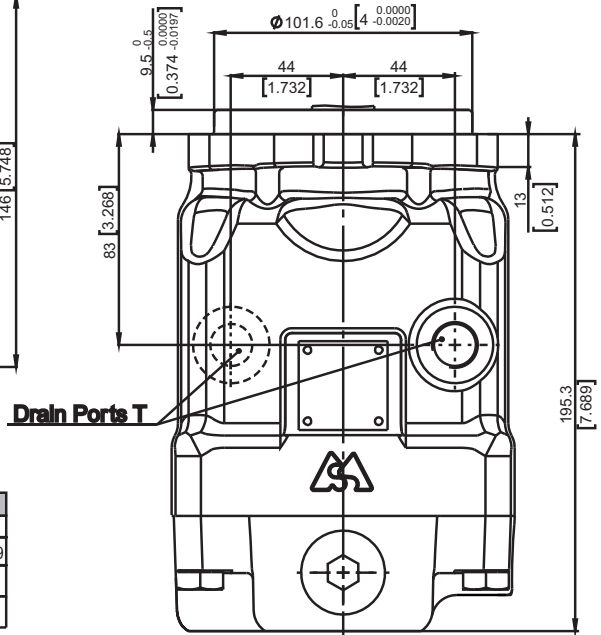
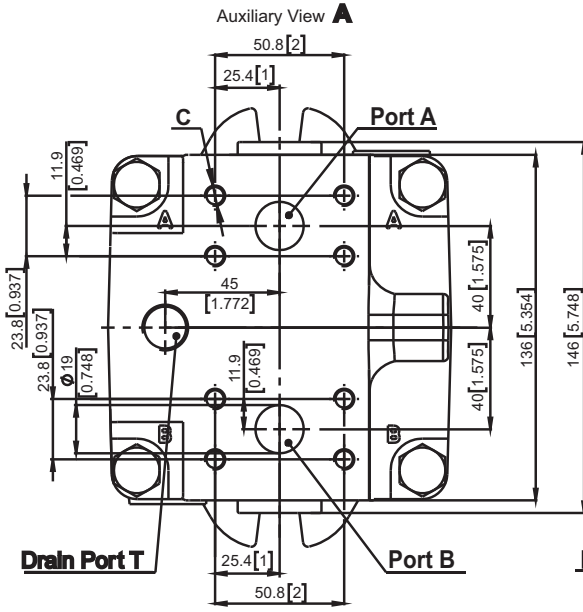
OVERALL DIMENSIONS AND PORTS

Rear Ports - Type E

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

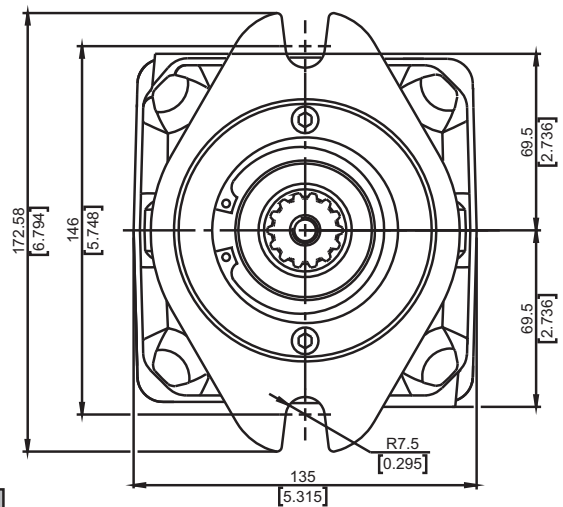
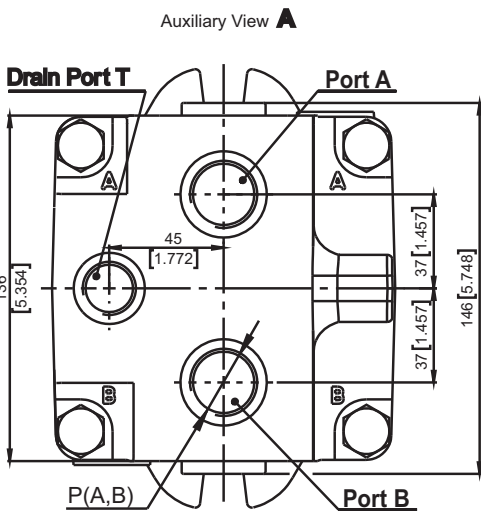


Rear ports E, port size default, 5 and 9



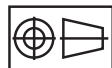
	Port Size		
	default	5	9
P _{A,B}	2xISO 6162-2 DN19	2xSAE J518 3/4" PSI6000	2xISO 6162-2 DN19
T	M18x1.5	7/8-14 UNF	G1/2
C	8xM10	8x3/8-16 UNC	8xM10

Rear ports E, port size 2,3,4,6,7 and 8



	Port Size						
	2	3	4	6	7	8	
P _{A,B}	2xG 3/4	2xM27x2	2x1 1/16-12UN	2xG 1/2	2xM22x1.5	2x7/8-14UNF	
T	G 1/2	M18x1.5	7/8-14UNF	G 1/2	M18x1.5	3/4-16UNF	

Shaft Mounting
see page 25



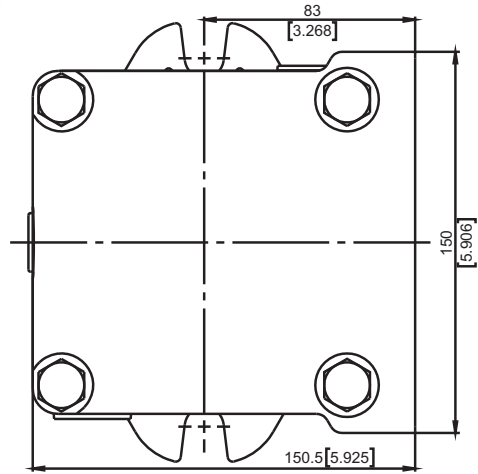
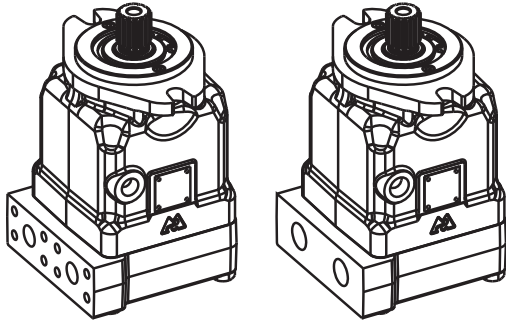
mm [in]



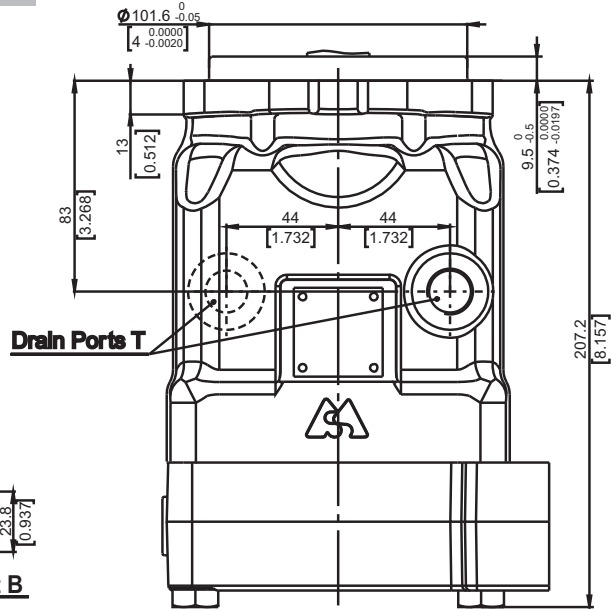
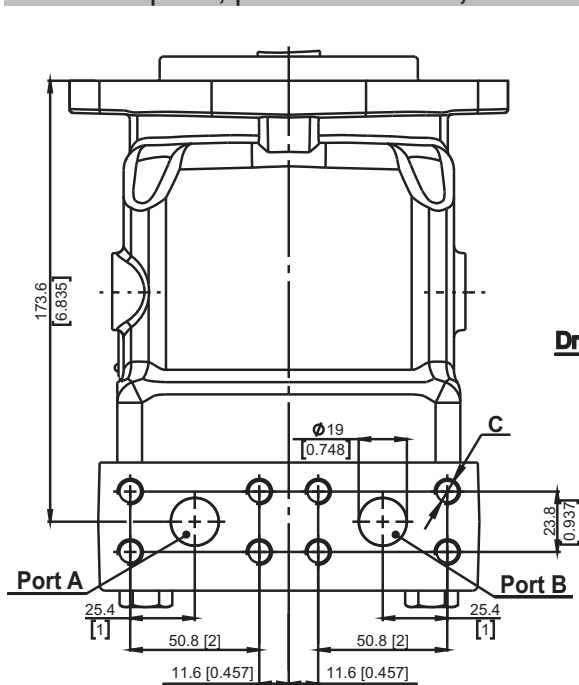
OVERALL DIMENSIONS AND PORTS

Twin Side Ports - Type T

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

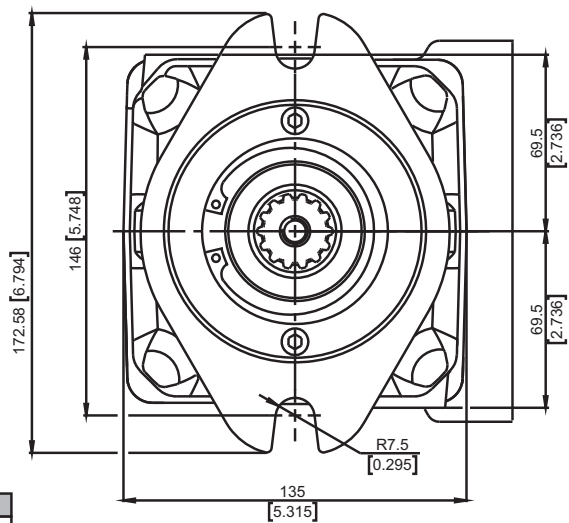
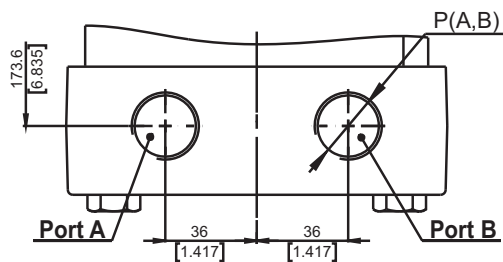


Twin side ports, port size default, 5 and 9



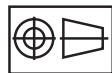
	Port Size		
	default	5	9
P _{A,B}	2xISO 6162-2 DN19	2xSAE J518 3/4" PSI6000	2xISO 6162-2 DN19
T	M18x1.5	7/8-14 UNF	G1/2
C	8xM10	8x3/8-16 UNC	8xM10

Twin side ports, port size 2,3,4,6,7 and 8



	Port Size							
	2	3	4	6	7	8		
P _{A,B}	2xG 3/4	2xM27x2	2x1 1/16-12UN	2xG 1/2	2xM22x1.5	2x7/8-14UNF		
T	G 1/2	M18x1.5	7/8-14UNF	G 1/2	M18x1.5	3/4-16UNF		

Shaft Mounting see next page

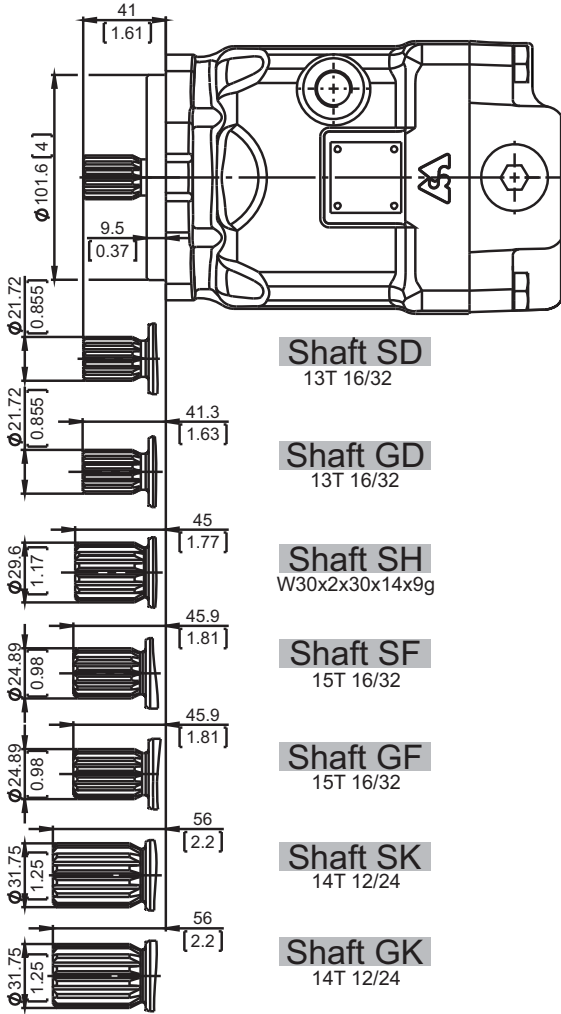


mm [in]



SHAFTS MOUNTING

Ports - Type **Default**, Type **E**, Type **T**



Shaft SD
13T 16/32

Shaft GD
13T 16/32

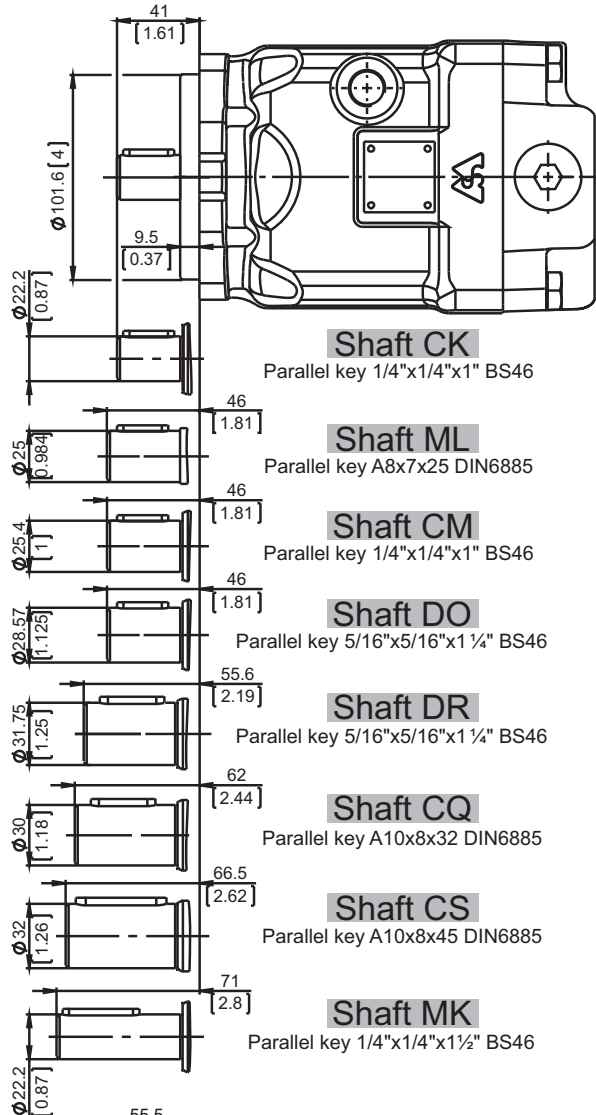
Shaft SH
W30x2x30x14x9g

Shaft SF
15T 16/32

Shaft GF
15T 16/32

Shaft SK
14T 12/24

Shaft GK
14T 12/24



Shaft CK
Parallel key 1/4"x1/4"x1" BS46

Shaft ML
Parallel key A8x7x25 DIN6885

Shaft CM
Parallel key 1/4"x1/4"x1" BS46

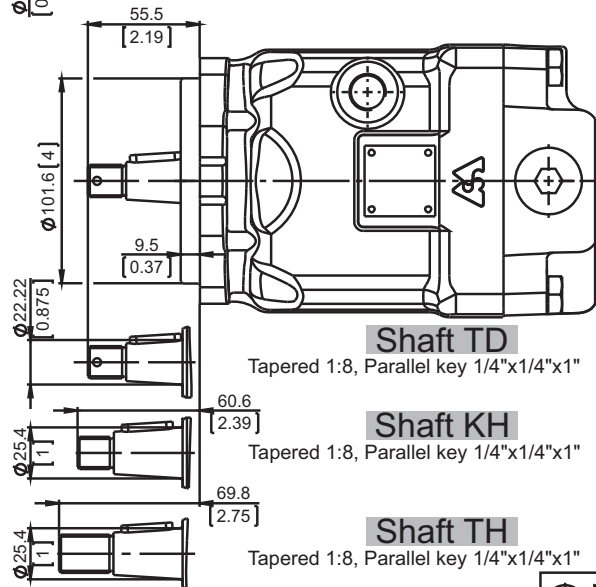
Shaft DO
Parallel key 5/16"x5/16"x1 1/4" BS46

Shaft DR
Parallel key 5/16"x5/16"x1 1/4" BS46

Shaft CQ
Parallel key A10x8x32 DIN6885

Shaft CS
Parallel key A10x8x45 DIN6885

Shaft MK
Parallel key 1/4"x1/4"x1 1/2" BS46



Shaft TD
Tapered 1:8, Parallel key 1/4"x1/4"x1"

Shaft KH
Tapered 1:8, Parallel key 1/4"x1/4"x1"

Shaft TH
Tapered 1:8, Parallel key 1/4"x1/4"x1"

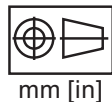
Shaft Dimensions
See Page 68+72

PERMISSIBLE SHAFT LOAD

Permissible shaft load		
max Axial	N[lb]	Fa=2000 [450]
max Radial	N[lb]	Fr=3600 [810]

The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft (see page 78).

For more information, please, feel free to contact us.





ORDERING CODE

1 2 3 4 5 6 7 8 9 10 11 12 13 13 13

M	A	P													[]
---	---	---	--	--	--	--	--	--	--	--	--	--	--	--	---	--	---

Pos.1 - Mounting Flange
B - SAE B - 2-Bolt flange
 spigot diam. 101.6 [4"] - BC 146 [5.75"]

Pos.2 - Port Type
 omit - Side ports on opposite sides
T - Twin (Two) side ports on one side
E - Rear ports

Pos.3 - Displacement Code
35 - 36.16 cm.³/rev. [2.21 in.³/rev.]
40 - 41.59 cm.³/rev. [2.54 in.³/rev.]
46 - 47.13 cm.³/rev. [2.88 in.³/rev.]
50 - 49.94 cm.³/rev. [3.05 in.³/rev.]

Pos.4 - Shaft Extensions**
SD - ø21.72 [0.855"] Spline SAE 13T 16/32 DP, M8
GD - ø21.72 [0.855"] Spline SAE 13T 16/32 DP, 5/16-18 UNC thread
SF - ø24.9 [0.98"] Spline SAE 15T 16/32, M8
GF - ø24.9 [0.98"] Spline SAE 15T 16/32, 3/8-16UNC
SH - ø29.6 [1.165"] Spline W30x2x30x14x9g,M10
SK - ø31.75 [1.25"] Spline SAE 14T 12/24 DP, M10
GK - ø31.75 [1.25"] Spline SAE 14T 12/24 DP, 7/16-14UNC thread
CK - ø22.2 [7/8"] Straight, M8 thread Parallel key 1/4"x1/4"x1" BS46
MK - ø22.2 [7/8"] Straight, M8 thread Parallel key 1/4"x1/4"x1 1/2" BS46
ML - ø25 [0.984"] Straight, M8 thread Parallel key A8x7x25 DIN6885
CM - ø25.4 [1"] Straight, M8 thread Parallel key 1/4"x1/4"x1" BS46
DO - ø28.75 [1.125"] Straight, 3/8-16UNC Parallel key 5/16"x5/16"x1 1/4" BS46
CQ - ø30 [1.181"] Straight, M8 thread Parallel key A8x7x32 DIN6885
DR - ø31.75 [1.25"] Straight, 3/8-16UNC Parallel key 5/16"x5/16"x1 1/4" BS46
CS - ø32 [1.26"] Straight, M8 thread Parallel key A10x8x45 DIN6885
TD - ø22.22 [7/8"] Tapered 1:8 [125:1000], Parallel key 1/4"x1/4"x1", 5/8-18 UNF
TH - ø25.4 [1"] Tapered 1:8 [125:1000], Parallel key 1/4"x1/4"x1", 3/4-16 UNF
KH - ø25.4 [1"] Tapered 1:8 [125:1000], Parallel key 1/4"x1/4"x1", M16x1.5

Pos.5 - Port Size
 omit - 2xISO 6162-2 DN19, drain port M18x1.5
2 - 2xG3/4, drain ports G1/2
3 - 2xM27x2, drain ports M18x1.5
4 - 2x1 1/16 -12 UN, drain ports 7/8-14 UNF
5 - 2xSAE 3/4" PSI6000, drain port 7/8-14 UNF
6 - 2xG1/2, drain ports G1/2
7 - 2xM22x1.5, drain ports M18x1.5
8 - 2x7/8-14 UNF Ports, drain ports 3/4-16 UNF
9 - 2xISO 6162-2 DN19, drain port G1/2
 Option 6;7 and 8 are not available for Pos.2 option omit

Pos.6 - Seal, Corrosion Resistant Seal Surface
 omit - NBR seal type material
V - FKM seal type material

Pos.7 - Integrated Valves
 See page 74+75 for information about valves
 omit - None
HR - Single anti-cavitation valve
AR - Dual anti-cavitation valve
PU - Purge valve - default - 6±2 l/min.
FLU - Flush valve - default - 6±2 l/min at 20 bar.
SAR - Single anti-cavitation and relief valve
DAR - Dual anti-cavitation and relief valve
DARP - Dual anti-cavitation, relief and purge valve, default flow - 6±2 l/min.
DARF - Dual anti-cavitation, relief and flush valve, default flow - 6±2 l/min at 20 bar.

Option DAR,DARF,DARP,SAR, AR and HR are not available for Pos.2 option E

Pos.8 - Valve's Port for Single Valves
 omit - None
A - Port A
B - Port B

Pos.9 - Pressure Setting of Integrated Valves
 omit - None
x -

250	300	350
-----	-----	-----

 for more information see page 74+75

Pos.10 - Flow Setting of Integrated Valves
 omit - None
Lx - For value - see page 74+75

Pos.11 - Special Features*
 omit - None
R2S - Speed Sensor Two Directional (see page 76)
R - Reverse Rotation (see page 78)

Pos.12 - Paint and Coating
 omit - No paint or coating
P - Painted
PC - Corrosion protected paint
PS - Special painted ***
PCS - Special corrosion protected paint***
 If a painting option is required, the standard color is black-Alkyd-Styrenated Enamel, Black RAL 9005. Other color by customer's request.

Pos.13 - Design Series
 omit - Factory specified
 **The permissible output torque for shafts must not be exceeded!
 ***Non painted feeding surface

EXAMPLE

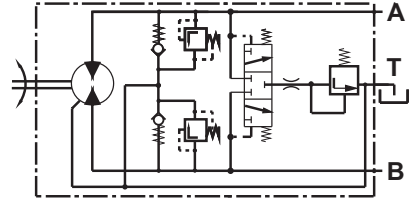
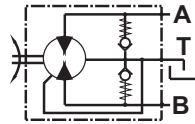
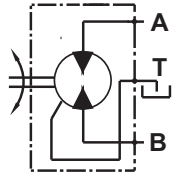
MAPBE40GD4P





Hydraulic Motors Type MAP62

Heavy Duty Axial Piston Motors Fixed Displacement



open drain line is always required

APPLICATION

- » Agricultural machines
- » Road building machines
- » Mining machinery
- » Food industry machines
- » Swing drives
- » Hydraulic transmissions
- » Vibration machines
- » Fan drives
- » Special vehicles

OPTIONS

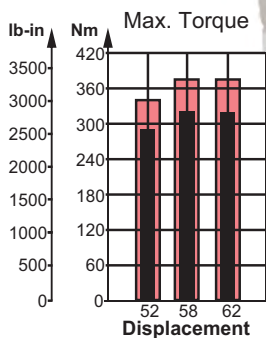
- » Port options
- » Shaft options
- » High pressure ports
- » Integrated valves

ADVANTAGES

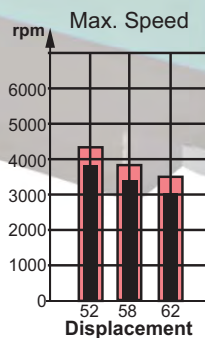
- » High starting torque
- » Smooth operation
- » Long service life
- » High power density

GENERAL

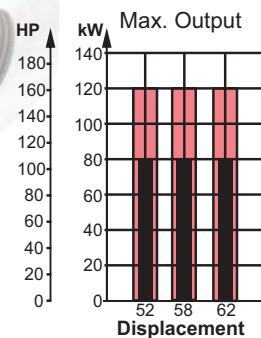
Displacement,	cm ³ /rev [in ³ /rev]	51.95÷62.4 [3.17÷3.81]
Max. Speed,	RPM	3850
Max. Torque,	Nm [lb-in]	318 [2814]
Max. Output,	kW [HP]	80 [107]
Max. Pressure Drop,	bar [PSI]	350 [5080]
Max. Oil Flow,	l/min [GPM]	200 [52.8]
Min. Speed,	RPM	500
Fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)	
Temperature Range,	°C [°F]	-40÷82 [-40÷180]
Optimal Viscosity Range,	mm ² /s [SUS]	12÷68 [66÷311]
Filtration	ISO code 18/16/13 (Min. recommended fluid filtration of 10 micron)	



Intermittent values

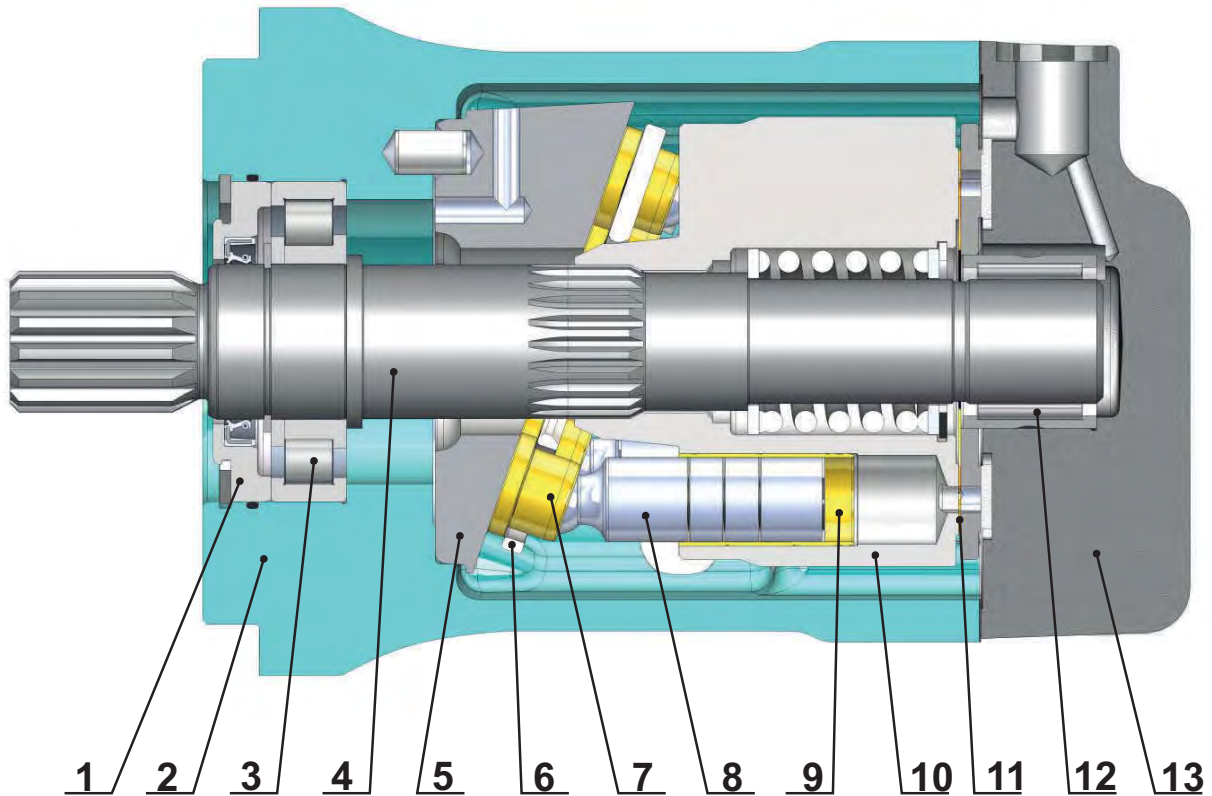


Continuous values





SECTION VIEW



1. Front cover
2. Cast iron body
3. Robust radial - axial roller bearing
4. Hardened shaft
5. Solid swash plate
6. Retainer plate
7. Improved piston shoes
8. Improved pistons
9. Brass bushings
10. Hardened steel cylinder block
11. Bimetal distributor
12. Needle bearing
13. Solid end cover

The main advantages of the heavy duty design of the MAP motors over the typical swash plate motors are the higher starting torque and the higher total efficiency. In regards to these two parameters, under normal working mode, the MAP is comparable to the bent axis motors. The advantages of the MAP over the bent axis motors are the higher reliability and the lower degree of pulsation and vibration during operation.



SPECIFICATION DATA

Type		MAP 52	MAP 58	MAP 62
Displacement, cm. ³ /rev. [in. ³ /rev.]		51.95 [3.17]	58.8 [3.59]	62.4 [3.81]
Max. Speed, [RPM]	Cont.	3850	3398	3050
	Int.*	4330	3823	3500
Max. Torque,** Nm [lb-in]	Cont.	290 [2566]	320 [2832]	318 [2814]
	Int.**	347 [3071]	375 [3320]	377 [3337]
Output, kW [HP]	Cont.	80 [107]	80 [107]	80 [107]
	Int.**	120 [161]	120 [161]	120 [161]
Max. Pressure, bar [PSI]	Cont.	350 [5080]	340 [4930]	320 [4640]
	Int.**	420 [6100]	400 [5800]	380 [5510]
	Peak	450 [6527]	440 [6381]	410 [5950]
Max. Oil Flow, l/min [GPM]	Cont.	200 [52.8]	200 [52.8]	190 [50]
	Int.*	225 [59.4]	225 [59.4]	215 [56.8]
Torque Constant Nm/bar [lb-in/PSI]	*****	0.75 [0.454]	0.85 [0.515]	0.9 [0.546]
Speed Constant RPM/(l/min) [RPM/GPM]	*****	18.28 [70.2]	16.13 [61.1]	15.23 [57.6]
Permissible Shaft Load max Axial**** N[lb]		Fa=2000 [450]		
max Radial**** N[lb]		Fr=3200 [720]		
Min. Speed, [RPM]		500		
Max. Pressure in Drain Line, bar [PSI]		5 [70] open drain line is always required		
Weight, kg [lb]		17.65 [38.9] for SAE-B flange; 19.8 [43.7] for SAE-4C flange		

Peak pressure is the highest allowable pressure, may occur for max. 1% of every minute;

* Intermittent speed (flow): for pressure up to 150[2200] bar[PSI];

** Intermittent load: the permissible values may occur for max. 10% of motor lifetime;

*** Theoretical torque;

**** The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft.

***** The constant values are used for calculation of torque and speed with motor efficiencies $\eta_v=0.95$ and $\eta_{mh}=0.9$.

1. The recommended output power for continuous operations should not be exceeded.
2. Recommended filtration as per ISO 4406 cleanliness code 18/16/13 or better. This filtration corresponds to SAE AS 4059 8A/7B/7C. Nominal filtration - 10 micron or better.
3. Recommended a premium quality, anti-wear type mineral based hydraulic oil, HLP(DIN51524) or HM(ISO6743/4).
4. Recommended oil viscosity - 12...68 cSt or see page 81.
5. Recommended maximum system operating temperature - 82°[180°] C[F].
6. To ensure optimum life of the motor, fill it up with fluid prior to load it and run with moderate load and speed for about 10-15 minutes.

Hint: Motor Torque = Torque Constant * Pressure Drop

Rotation Speed = Speed Constant * Oil Flow

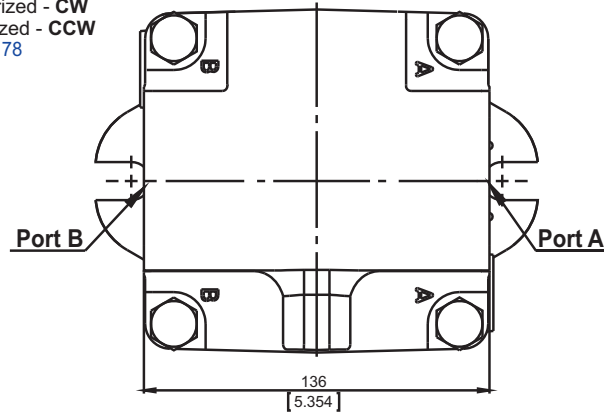
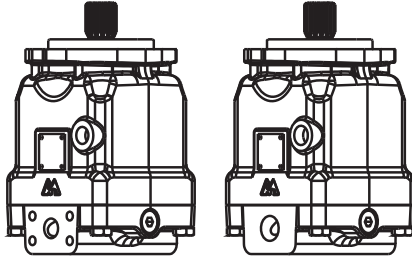
The constant values are approximate. Motor torque and rotation speed for a particular project are depending on the real operating conditions. For more detailed calculations please see efficiencies on next page and formulas on page 82.



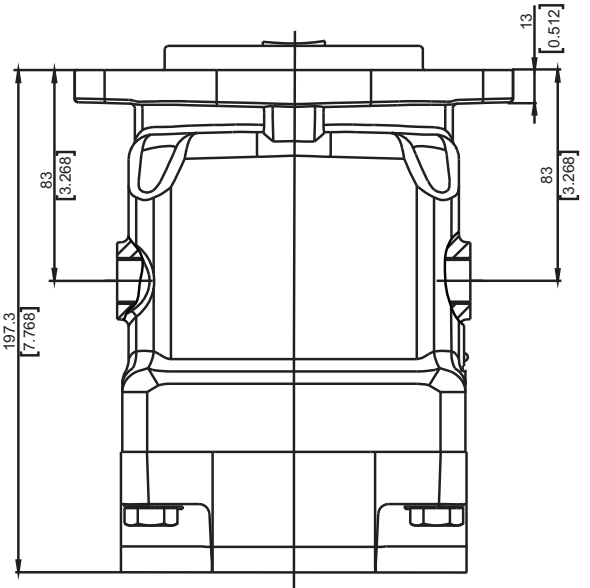
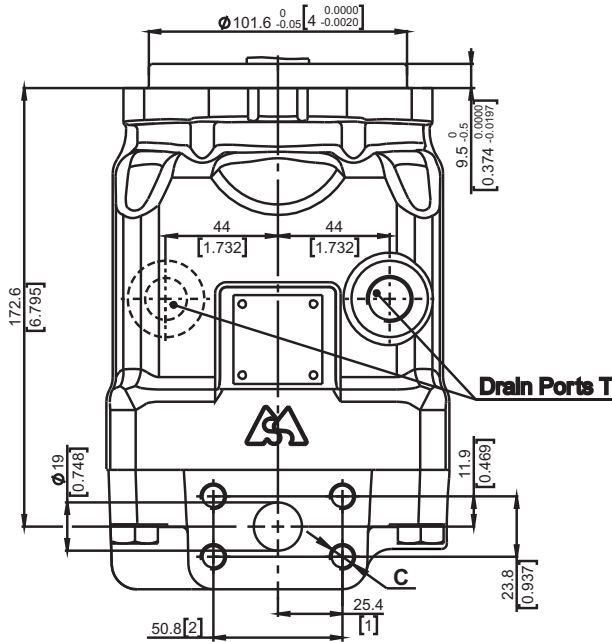
OVERALL DIMENSIONS AND PORTS

Side Ports - Default Mounting Flange-Type SAE-B

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

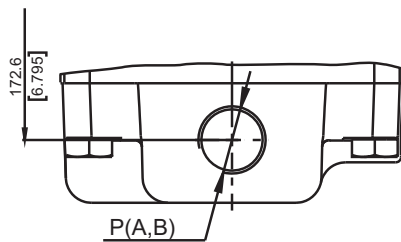


Side ports, port size default, 5 and 9

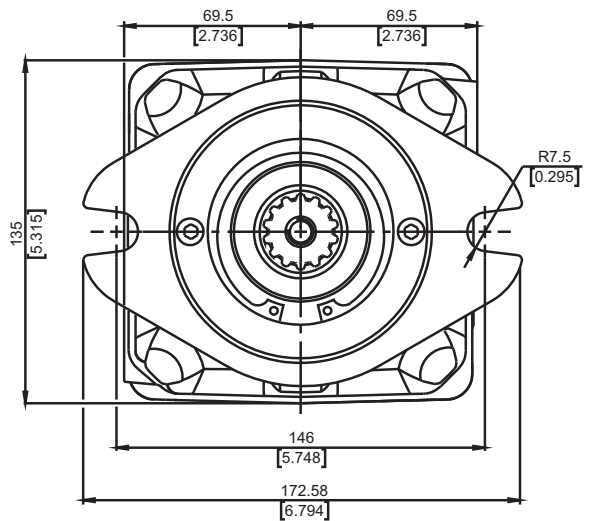


	Port Size		
	default	5	9
P _(A,B)	2xISO 6162-2 DN19	2xSAE J518 3/4" PSI6000	2xISO 6162-2 DN19
T	M18x1.5	7/8-14 UNF	G1/2
C	8xM10	8x3/8-16 UNC	8xM10

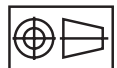
Side ports, port size 2,3 and 4



	Port Size		
	2	3	4
P _(A,B)	2xG 3/4	2xM27x2	2x1 1/16-12UN
T	G 1/2	M18x1.5	7/8-14UNF



Shaft Mounting
see page 34



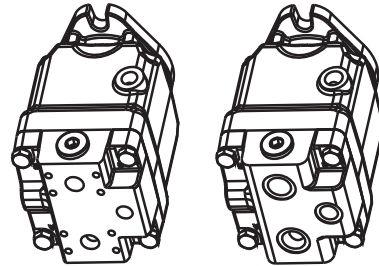
mm [in]



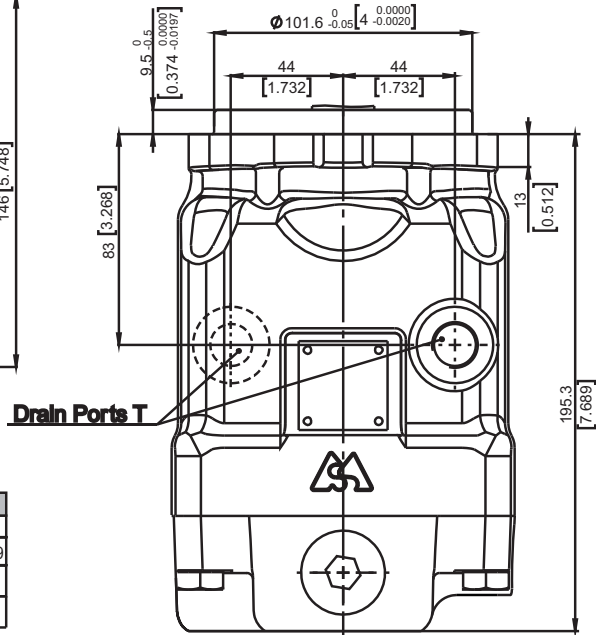
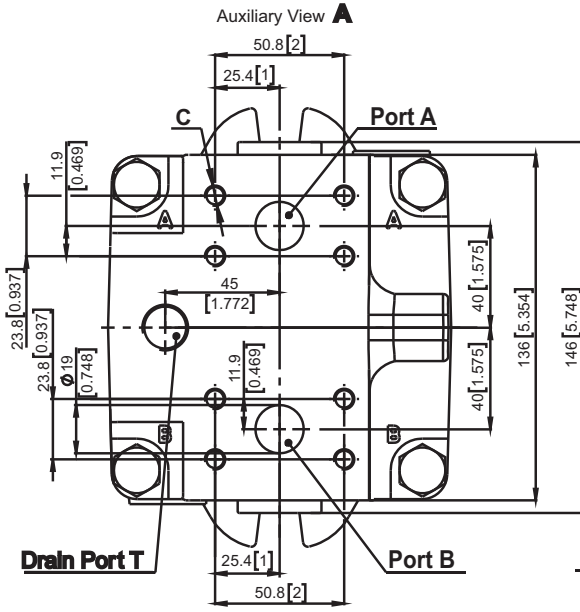
OVERALL DIMENSIONS AND PORTS

Rear Ports - Type E Mounting Flange-Type SAE-B

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

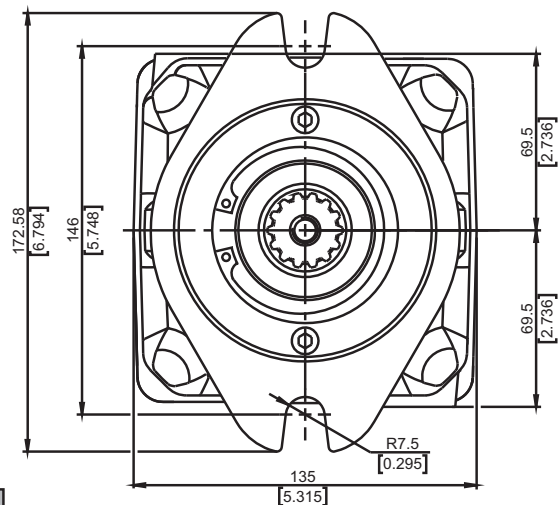
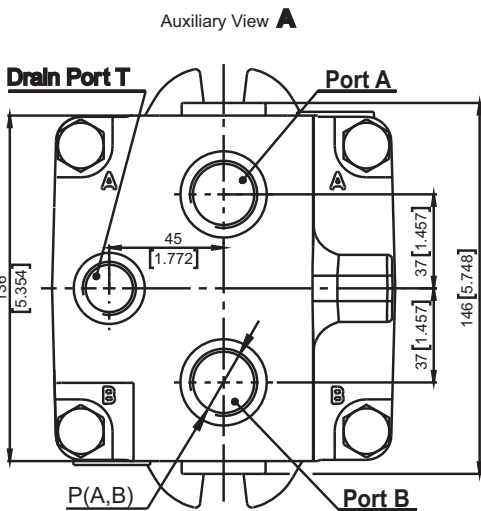


Rear ports E, port size default, 5 and 9



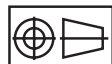
	Port Size		
	default	5	9
P _{A,B}	2xISO 6162-2 DN19	2xSAE J518 3/4" PSI6000	2xISO 6162-2 DN19
T	M18x1.5	7/8-14 UNF	G1/2
C	8xM10	8x3/8-16 UNC	8xM10

Rear ports E, port size 2,3,4,6,7 and 8



	Port Size						
	2	3	4	6	7	8	
P _{A,B}	2xG 3/4	2xM27x2	2x1 1/16-12UN	2xG 1/2	2xM22x1.5	2x7/8-14UNF	
T	G 1/2	M18x1.5	7/8-14UNF	G 1/2	M18x1.5	3/4-16UNF	

Shaft Mounting
see page 34



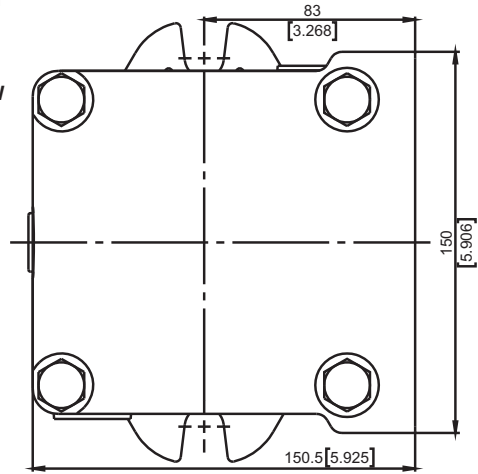
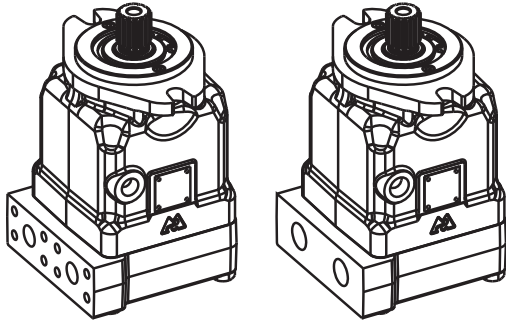
mm [in]



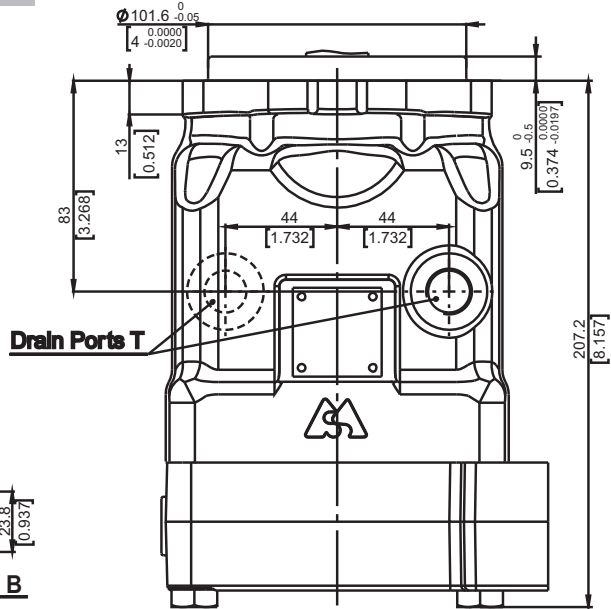
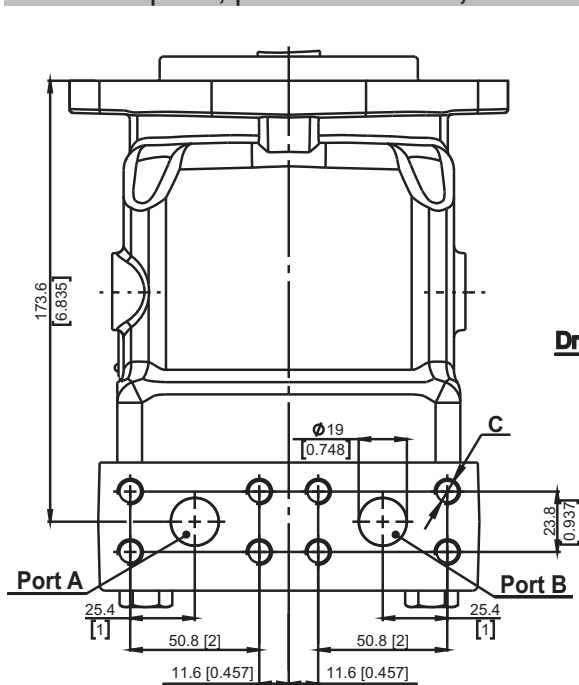
OVERALL DIMENSIONS AND PORTS

Twin Side Ports - Type T

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

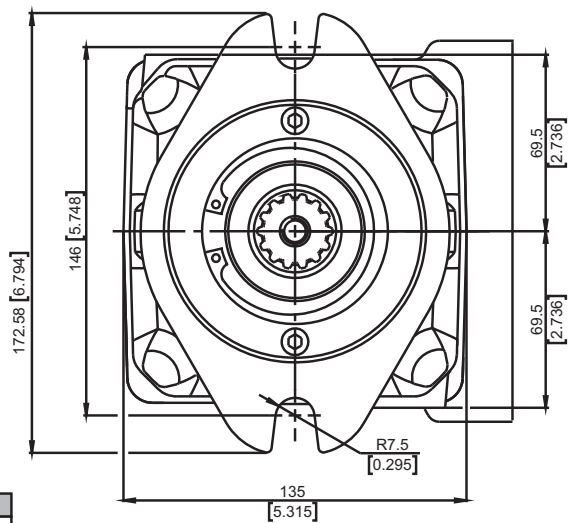
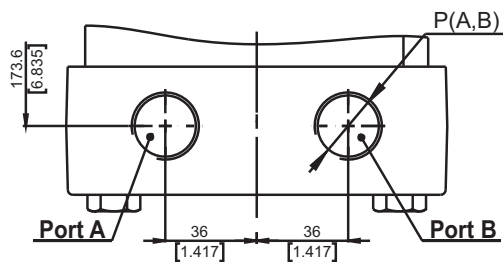


Twin side ports, port size default, 5 and 9



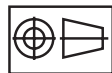
	Port Size		
	default	5	9
P _{A,B}	2xISO 6162-2 DN19	2xSAE J518 3/4" PSI6000	2xISO 6162-2 DN19
T	M18x1.5	7/8-14 UNF	G1/2
C	8xM10	8x3/8-16 UNC	8xM10

Twin side ports, port size 2,3,4,6,7 and 8



	Port Size							
	2	3	4	6	7	8		
P _{A,B}	2xG 3/4	2xM27x2	2x1 1/16-12UN	2xG 1/2	2xM22x1.5	2x7/8-14UNF		
T	G 1/2	M18x1.5	7/8-14UNF	G 1/2	M18x1.5	3/4-16UNF		

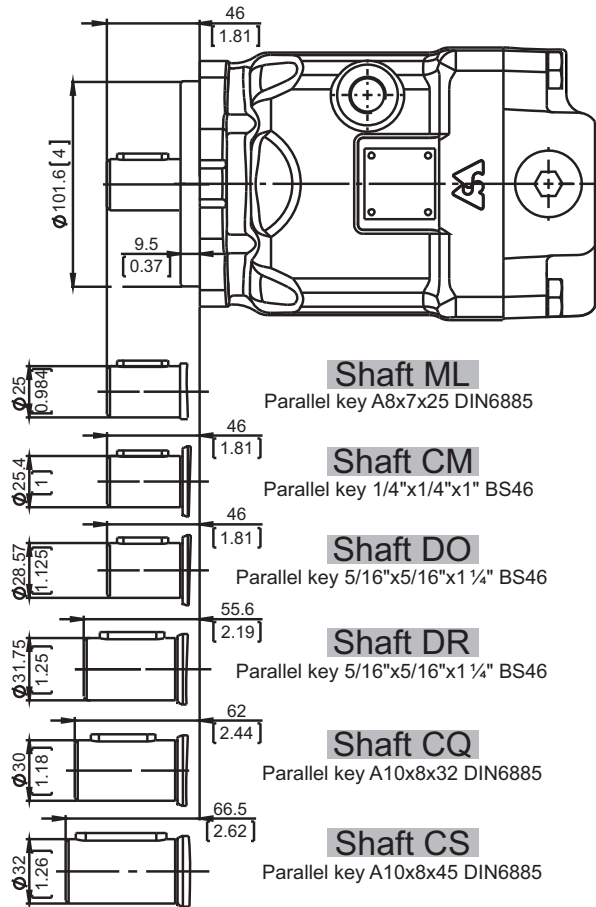
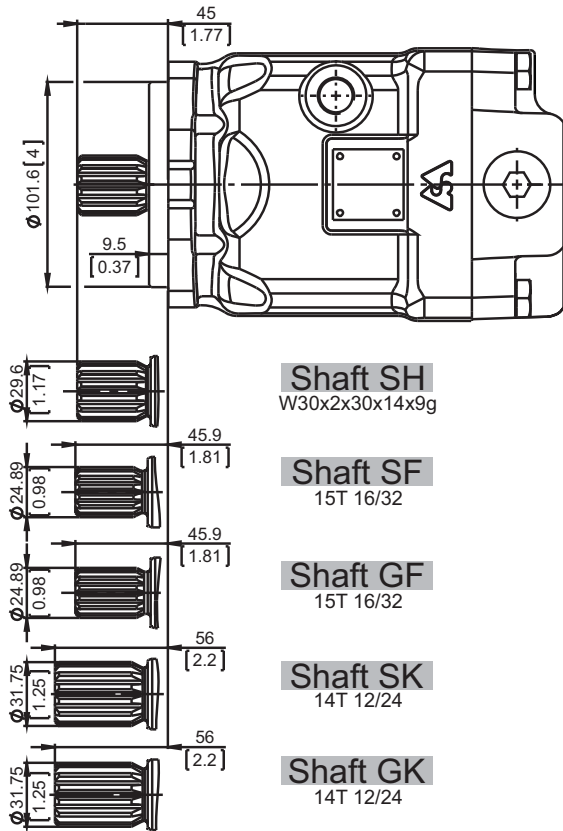
Shaft Mounting
see next page



mm [in]



SHAFTS MOUNTING
Mounting Flange - Type **SAE-B**



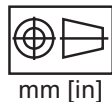
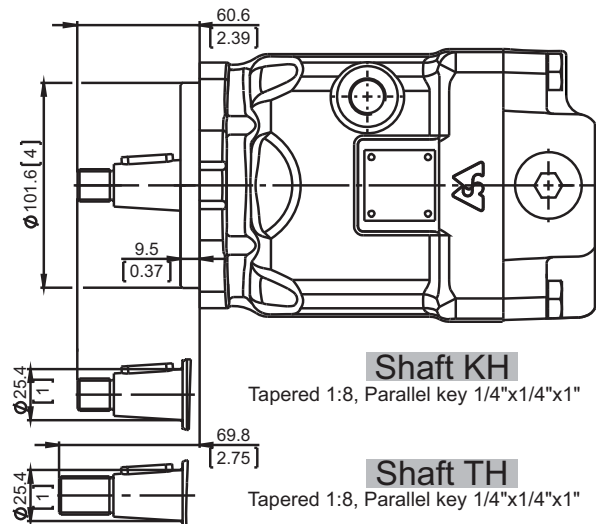
Shaft Dimensions
See Page 68÷72

PERMISSIBLE SHAFT LOAD

Permissible shaft load		
max Axial	N[lb]	Fa=2000 [450]
max Radial	N[lb]	Fr=3200 [720]

The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft (see page 78).

For more information, please, feel free to contact us.

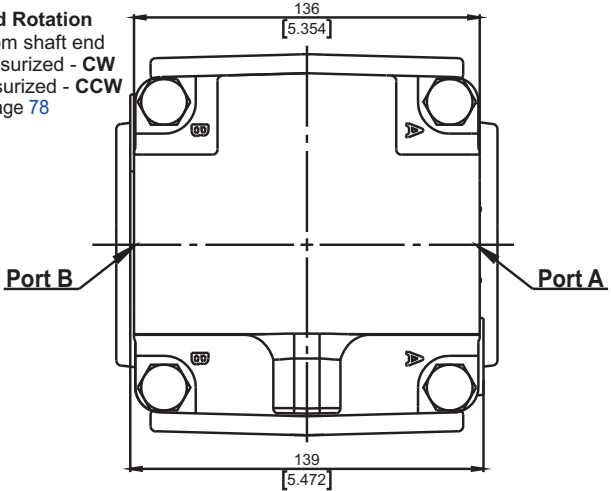
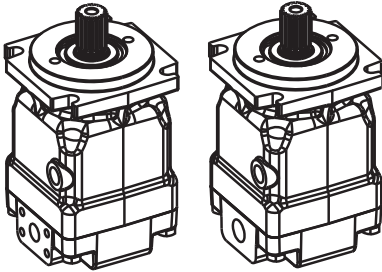




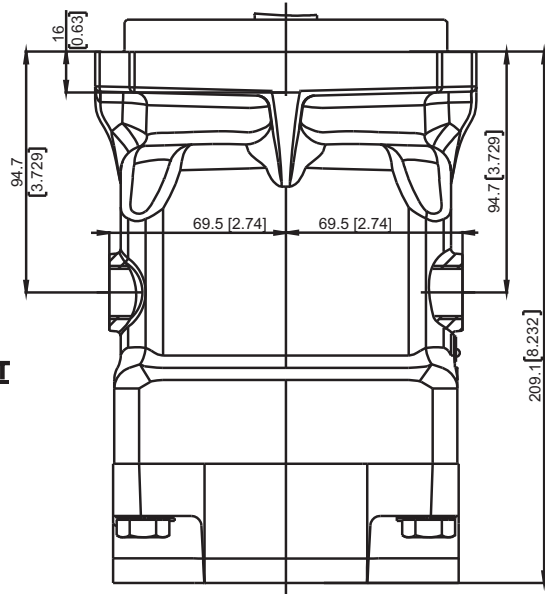
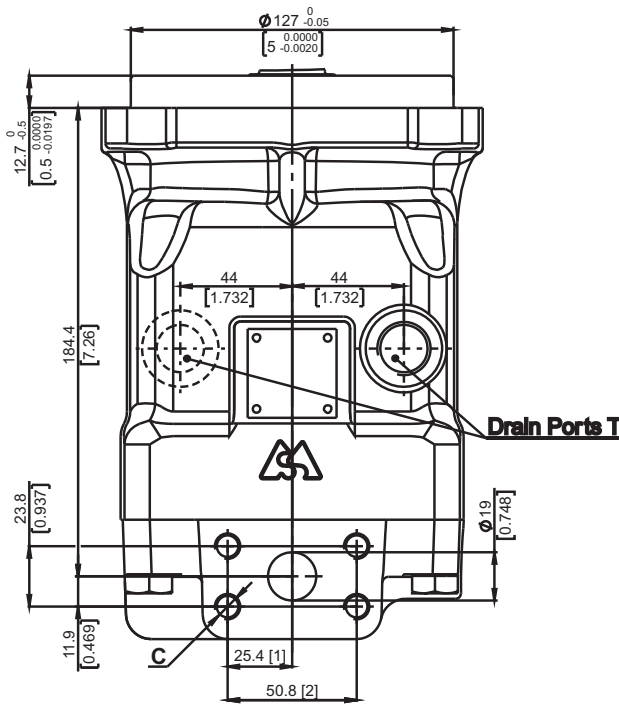
OVERALL DIMENSIONS AND PORTS

Side Ports - Default Mounting Flange Type - 4C

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

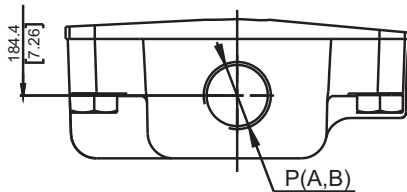


Side ports, port size default, 5 and 9

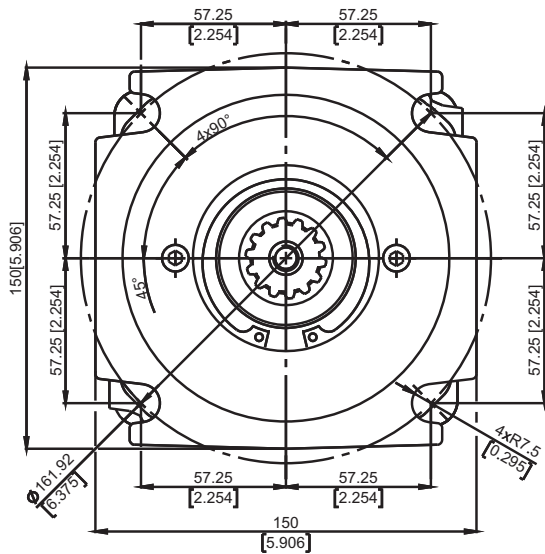


	Port Size		
	default	5	9
P _(A,B)	2xISO 6162-2 DN19	2xSAE J518 3/4" PSI6000	2xISO 6162-2 DN19
T	M18x1.5	7/8-14 UNF	G1/2
C	8xM10	8x3/8-16 UNC	8xM10

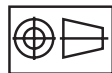
Side ports, port size 2,3 and 4



	Port Size		
	2	3	4
P _(A,B)	2xG 3/4	2xM27x2	2x1 1/16-12UN
T	G 1/2	M18x1.5	7/8-14UNF



Shaft Mounting
see page 37



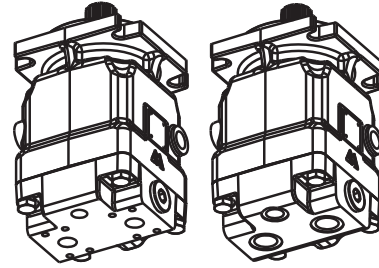
mm [in]



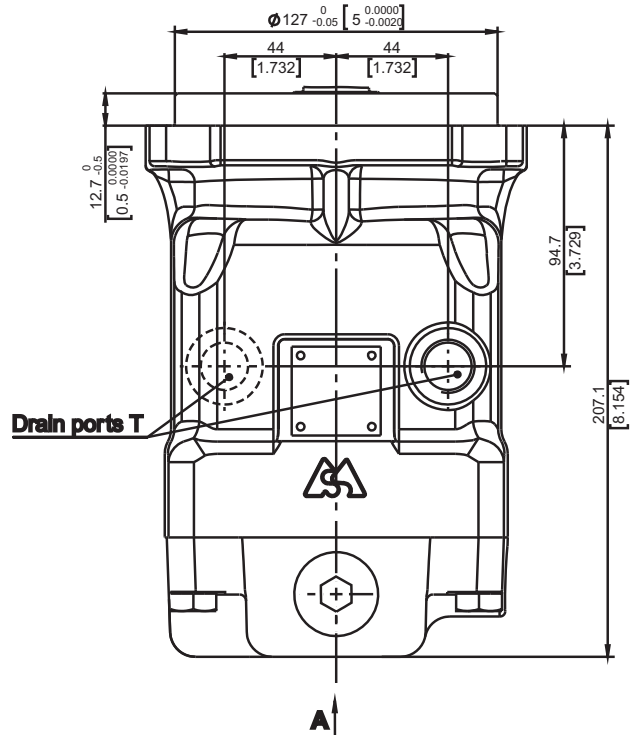
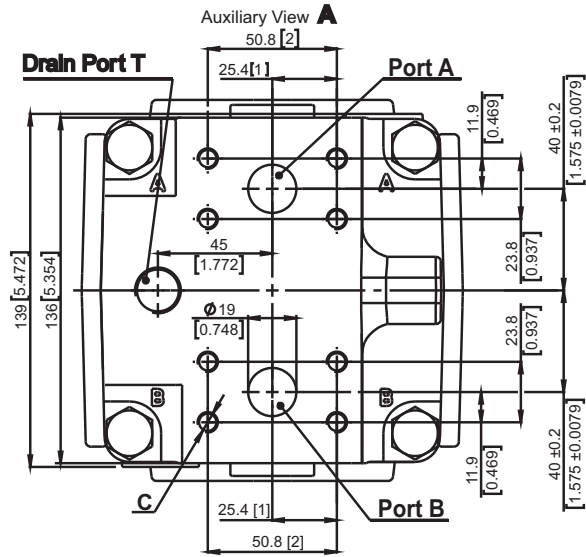
OVERALL DIMENSIONS AND PORTS

Rear Ports - Default Mounting Flange Type - 4C

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

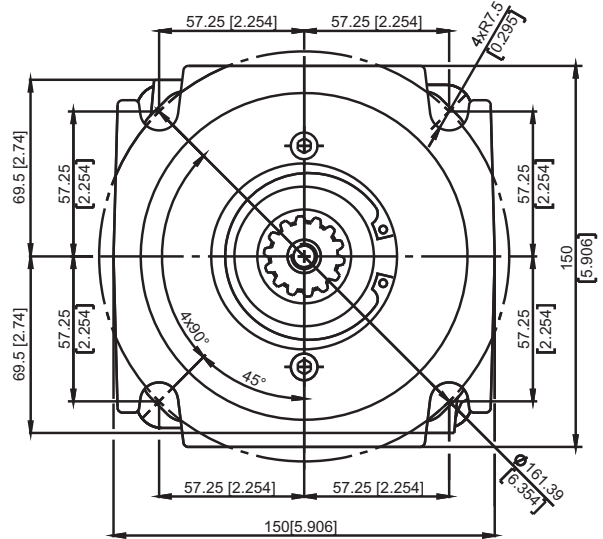
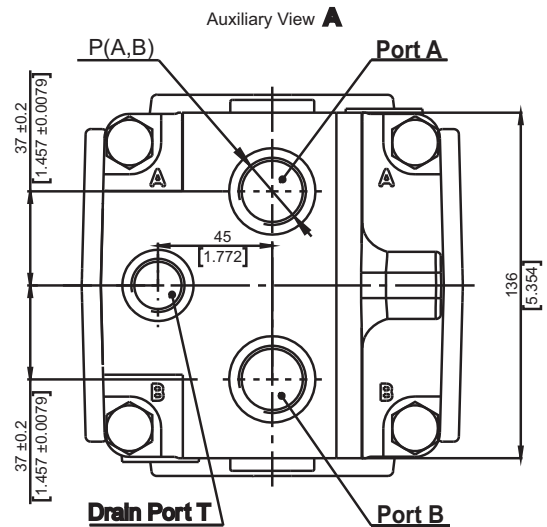


Rear ports, port size default, 5 and 9



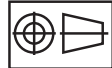
	Port Size		
	default	5	9
P _{A,B}	2xISO 6162-2 DN19	2xSAE J518 3/4" PSI6000	2xISO 6162-2 DN19
T	M18x1.5	7/8-14 UNF	G1/2
C	8xM10	8x3/8-16 UNC	8xM10

Rear ports, port size 2,3,4,6,7 and 8



	Port Size						
	2	3	4	6	7	8	
P _{A,B}	2xG 3/4	2xM27x2	2x1 ¹ / ₁₆ -12UN	2xG 1/2	2xM22x1.5	2x7/8-14UNF	
T	G 1/2	M18x1.5	7/8-14UNF	G 1/2	M18x1.5	3/4-16UNF	

Shaft Mounting
see page 37



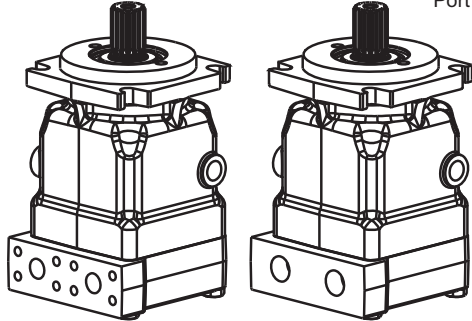
mm [in]



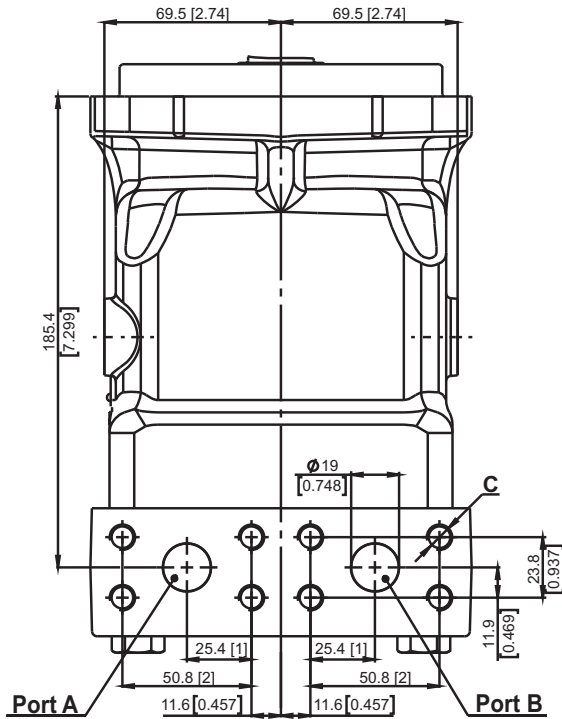
OVERALL DIMENSIONS AND PORTS

Twin Ports - Default Mounting Flange Type - 4C

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

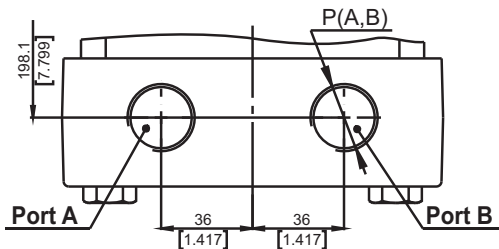


Twin ports, port size default, 5 and 9

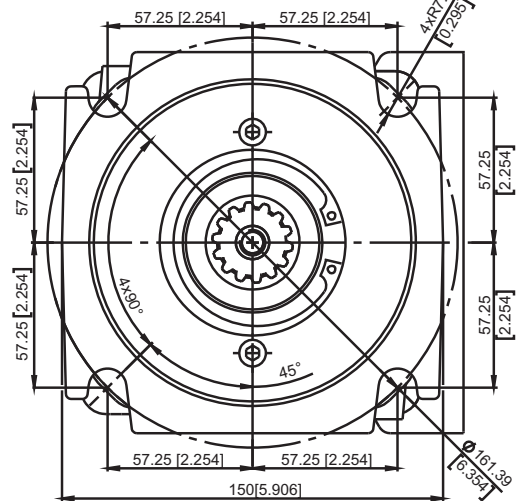
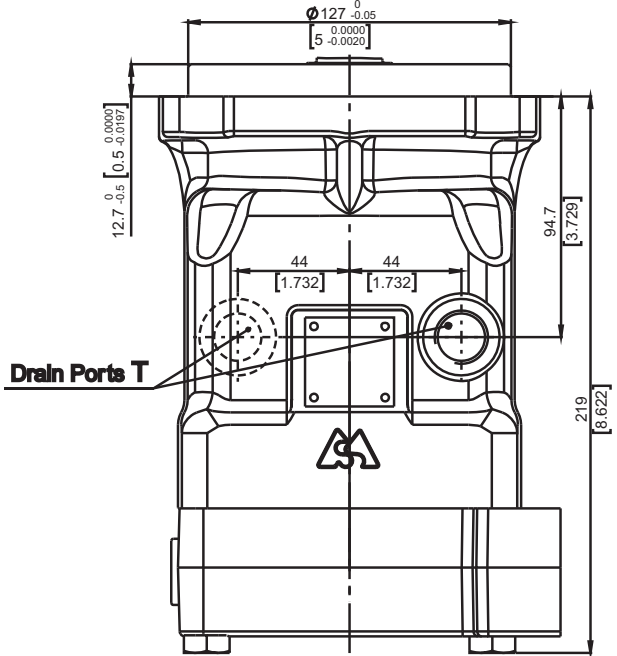
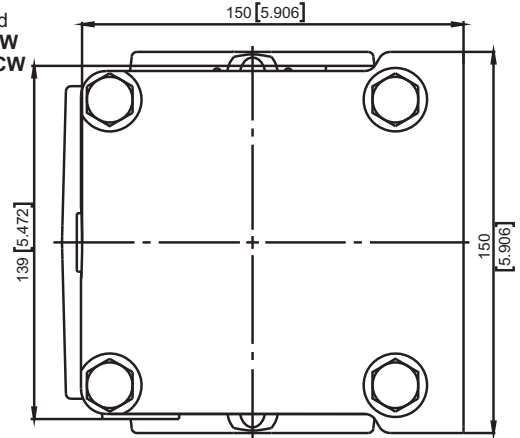


	Port Size		
	default	5	9
P _{A,B}	2xISO 6162-2 DN19	2xSAE J518 3/4" PSI6000	2xISO 6162-2 DN19
T	M18x1.5	7/8-14 UNF	G1/2
C	8xM10	8x3/8-16 UNC	8xM10

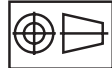
Twin ports, port size 2,3,4,6,7 and 8



	Port Size						
	2	3	4	6	7	8	
P _{A,B}	2xG 3/4	2xM27x2	2x1 1/16-12UN	2xG 1/2	2xM22x1.5	2x7/8-14UNF	
T	G 1/2	M18x1.5	7/8-14UNF	G 1/2	M18x1.5	3/4-16UNF	



Shaft Mounting
see page 37

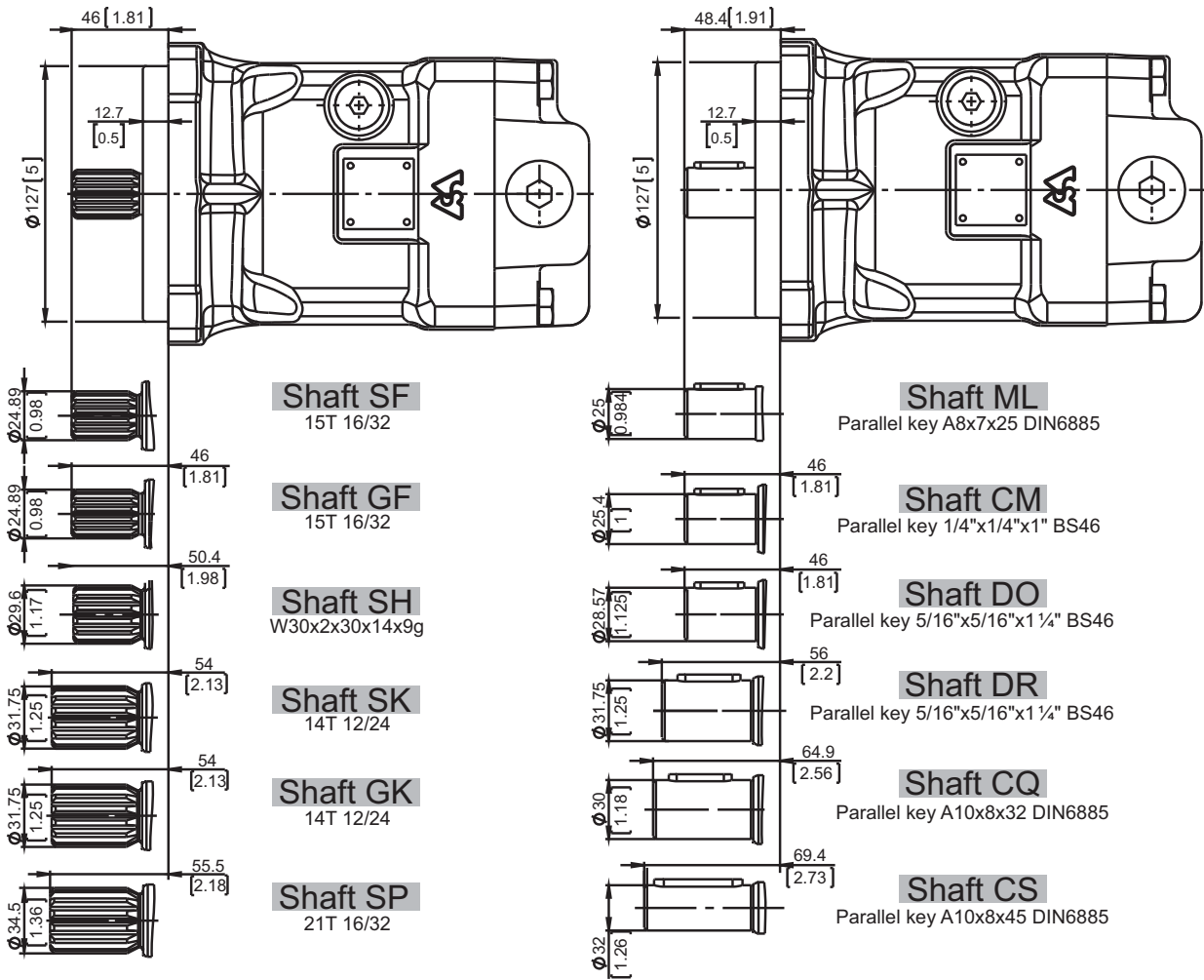


mm [in]



SHAFTS MOUNTING

Mounting Flange - Type - 4C



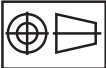
Shaft Dimensions
See Page 68÷72

PERMISSIBLE SHAFT LOAD

Permissible shaft load		
max Axial	N[lb]	Fa=2000 [450]
max Radial	N[lb]	Fr=3200 [720]

The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft (see page 78).

For more information, please, feel free to contact us.



mm [in]



ORDERING CODE

	1	2	3	4	5	6	7	8	9	10	11	12	13	13	13
M A P													[]

Pos.1 - Mounting Flange

- B** - SAE B - 2-Bolt flange
spigot diam. 101.6 [4"] - BC 146 [5.75"]
- 4C** - SAE C - 4-Bolt flange
spigot diam. 127 [5"] - BC 161.92 [6.375"]

Pos.2 - Port Type

- omit - Side ports on opposite sides
- T** - Twin (Two) side ports on one side
- E** - Rear ports

Pos.3 - Displacement Code

- 52** - 51.95 cm.³/rev. [3.17 in.³/rev.]
- 58** - 58.8 cm.³/rev. [3.59 in.³/rev.]
- 62** - 62.4 cm.³/rev. [3.81 in.³/rev.]

Pos.4 - Shaft Extensions**

- SF** - ø24.9 [0.98"] Spline SAE 15T 16/32, M8
- GF** - ø24.9 [0.98"] Spline SAE 15T 16/32, 3/8-16UNC
- SH** - ø29.6 [1.165"] Spline W30x2x30x14x9g,M10
- SK** - ø31.75 [1.25"] Spline SAE 14T 12/24 DP, M10
- GK** - ø31.75 [1.25"] Spline SAE 14T 12/24 DP, 7/16-14UNC thread
- SP** - ø34.5 [1.358"] Spline SAE 21T 16/32 DP, M12
- ML** - ø25 [0.984"] Straight, M8 thread
Parallel key A8x7x25 DIN6885
- CM** - ø25.4 [1"] Straight, M8 thread
Parallel key 1/4"x1/4"x1" BS46
- DO** - ø28.75 [1.125"] Straight, 3/8-16UNC
Parallel key 5/16"x5/16"x1 1/4" BS46
- CQ** - ø30 [1.181"] Straight, M8 thread
Parallel key A8x7x32 DIN6885
- DR** - ø31.75 [1.25"] Straight, 3/8-16UNC
Parallel key 5/16"x5/16"x1 1/4" BS46
- CS** - ø32 [1.26"] Straight, M8 thread

Pos.5 - Ports

- omit - 2xISO 6162-2 DN19, drain port M18x1.5
- 2** - 2xG3/4, drain ports G1/2
- 3** - 2xM27x2, drain ports M18x1.5
- 4** - 2x1 1/16 -12 UN, drain ports 7/8-14 UNF
- 5** - 2xSAE 3/4" PSI6000, drain port 7/8-14 UNF
- 6** - 2xG1/2, drain ports G1/2
- 7** - 2xM22x1.5, drain ports M18x1.5
- 8** - 2x7/8-14 UNF Ports, drain ports 3/4-16 UNF
- 9** - 2xISO 6162-2 DN19, drain port G1/2
Option 6;7 and 8 are not available for Pos.2 option omit

Pos.6 - Seal, Corrosion Resistant Seal Surface

- omit - NBR seal type material
- V** - FKM seal type material

Pos.7 - Integrated Valves

- See page 74+75 for information about valves
- omit - None
- HR** - Single anti-cavitation valve
- AR** - Dual anti-cavitation valve
- PU** - Purge valve -default - 6±2 l/min.
- FLU** - Flush valve - default - 6±2 l/min at 20 bar.
- SAR** - Single anti-cavitation and relief valve
- DAR** - Dual anti-cavitation and relief valve
- DARP** - Dual anti-cavitation, relief and purge valve, default flow - 6±2 l/min.
- DARF** - Dual anti-cavitation, relief and flush valve, default flow - 6±2 l/min at 20 bar.

Option DAR,DARF,DARP,SAR, AR and HR are not available for Pos.2 option E

Pos.8 - Valve's Port for Single Valves

- omit - None
- A** - Port A
- B** - Port B

Pos.9 - Pressure Setting of Integrated Valves

- omit - None
 - x** -

250	300	350
-----	-----	-----
- for more information see page 74+75

Pos.10 - Flow Setting of Integrated Valves

- omit - None
- Lx** - For value - see page 74+75

Pos.11 - Special Features*

- omit - None
- R2S** - Speed Sensor Two Directional (see page 76)
- R** - Reverse Rotation (see page 78)

Pos.12 - Paint and Coating

- omit - No paint or coating
- P** - Painted
- PC** - Corrosion protected paint
- PS** - Special painted ***
- PCS** - Special corrosion protected paint***
If a painting option is required, the standard color is black-Alkyd-Styrenated Enamel, Black RAL 9005.
Other color by customer's request.

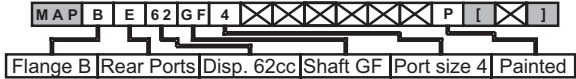
Pos.13 - Design Series

- omit - Factory specified

**The permissible output torque for shafts must not be exceeded!
***Non painted feeding surface

EXAMPLE

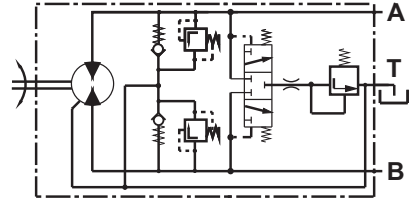
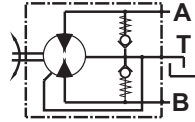
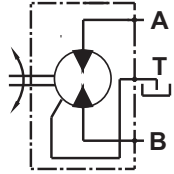
M A P B E 62 G F 4 P





Hydraulic Motors Type MAP100

Heavy Duty Axial Piston Motors Fixed Displacement



open drain line is always required

APPLICATION

- » Agricultural machines
- » Road building machines
- » Mining machinery
- » Food industry machines
- » Swing drives
- » Hydraulic transmissions
- » Vibration machines
- » Fan drives
- » Special vehicles

OPTIONS

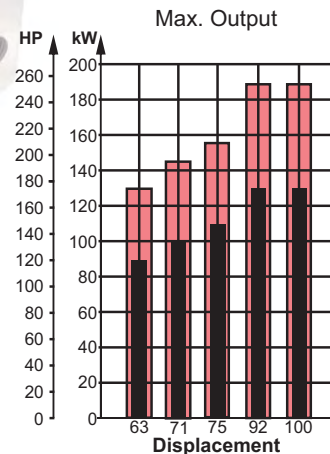
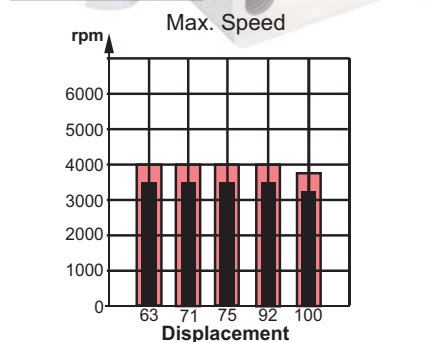
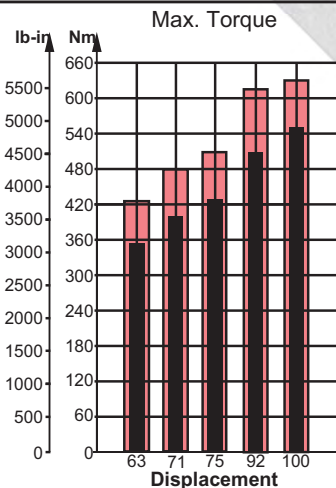
- » Flange options
- » Port options
- » Shaft options
- » High pressure ports
- » Integrated valves

ADVANTAGES

- » High starting torque
- » Smooth operation
- » Long service life
- » High power density

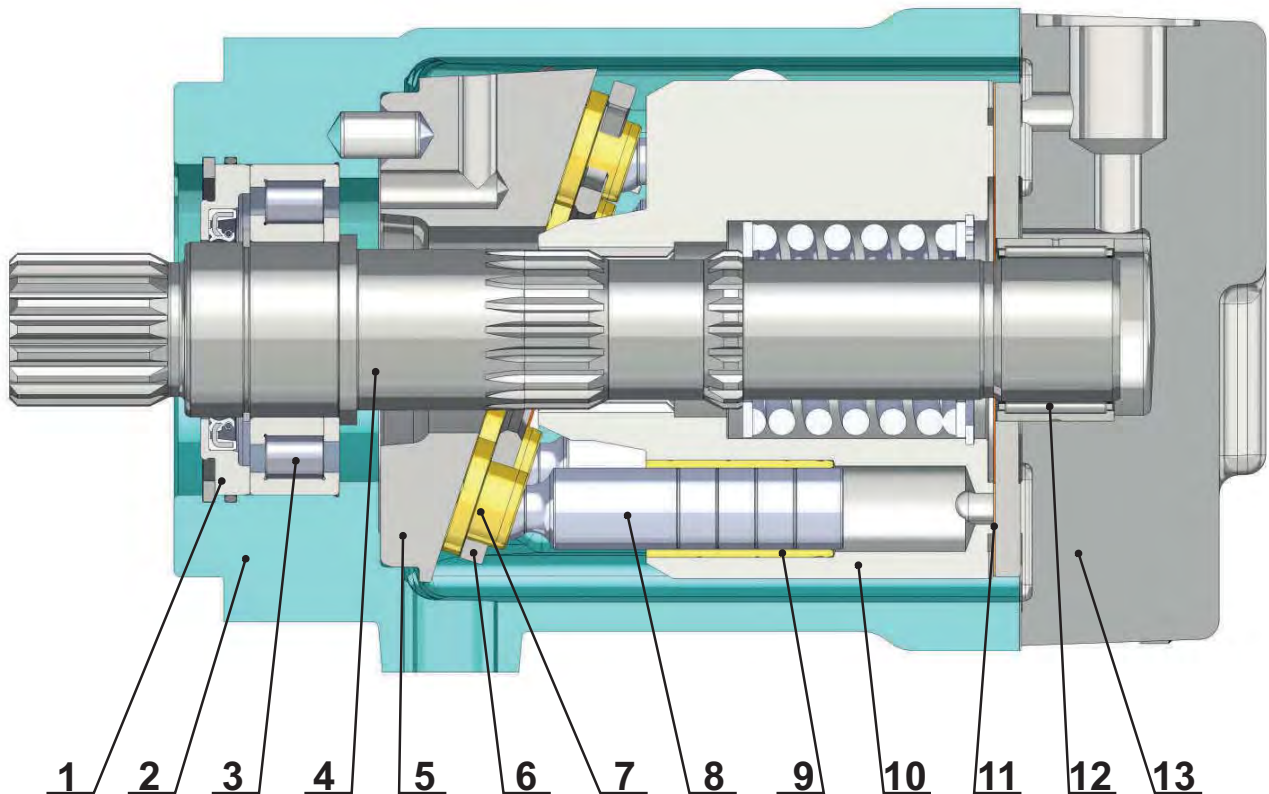
GENERAL

Displacement,	cm ³ /rev [in ³ /rev]	63.58÷98.75 [3.88÷6.03]
Max. Speed,	RPM	3500
Max. Torque,	Nm [lb-in]	550 [4870]
Max. Output,	kW [HP]	130 [174]
Max. Pressure Drop,	bar [PSI]	350 [5080]
Max. Oil Flow,	l/min [GPM]	326 [86.1]
Min. Speed,	RPM	500
Fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)	
Temperature Range,	°C [°F]	-40÷82 [-40÷180]
Optimal Viscosity Range, mm ² /s [SUS]	12÷68 [66÷311]	
Filtration	ISO code 18/16/13 (Min. recommended fluid filtration of 10 micron)	





SECTION VIEW



1. Front cover
2. Cast iron body
3. Robust radial - axial roller bearing
4. Hardened shaft
5. Solid swash plate
6. Retainer plate
7. Improved piston shoes
8. Improved pistons
9. Brass bushings
10. Hardened steel cylinder block
11. Bimetal distributor
12. Needle bearing
13. Solid end cover

The main advantages of the heavy duty design of the MAP motors over the typical swash plate motors are the higher starting torque and the higher total efficiency. In regards to these two parameters, under normal working mode, the MAP is comparable to the bent axis motors. The advantages of the MAP over the bent axis motors are the higher reliability and the lower degree of pulsation and vibration during operation.



SPECIFICATION DATA

Type		MAP 63	MAP 71	MAP 75	MAP 92	MAP 100
Displacement, cm.³/rev. [in.³/rev.]		63.58	71.5	76.84	93.18	98.75
		[3.88]	[4.36]	[4.69]	[5.69]	[6.03]
Max. Speed, [RPM]	Cont.	3500	3500	3500	3500	3240
	Int.*	4000	4000	4000	4000	3750
Max. Torque,** Nm [lb-in]	Cont.	354 [3133]	398 [3523]	428 [3788]	514 [4549]	550 [4870]
	Int.**	425 [3762]	478 [4230]	514 [4549]	616 [5452]	645 [5710]
Output, kW [HP]	Cont.	89 [120]	100 [134]	108 [145]	130 [174]	130 [174]
	Int.**	129 [173]	145 [195]	156 [209]	188 [252]	188 [252]
Max. Pressure, bar [PSI]	Cont.	350 [5080]	350 [5080]	350 [5080]	350 [5080]	350 [5080]
	Int.**	420 [6100]	420 [6100]	420 [6100]	420 [6100]	410 [5950]
	Peak	450 [6527]	450 [6527]	450 [6527]	450 [6527]	450 [6527]
Max. Oil Flow, l/min [GPM]	Cont.	223 [58.9]	250 [66]	269 [71.1]	326 [86.1]	320 [84.5]
	Int.*	255 [67.4]	286 [75.6]	308 [81.4]	373 [98.5]	370 [97.7]
Torque Constant ***** Nm/bar [lb-in/PSI]		0.91	1.03	1.1	1.32	1.42
		[0.56]	[0.63]	[0.67]	[0.81]	[0.87]
Speed Constants ***** RPM/(l/min) [RPM/GPM]		14.94	13.3	12.36	10.2	9.62
		[56.56]	[50.3]	[46.8]	[38.6]	[36.42]
Permissible Shaft Load	max Axial**** N[lb]	Fa=2500 [562]				
	max Radial**** N[lb]	Fr=4500 [1010]				
Min. Speed, [RPM]	500					
Max. Pressure in Drain Line, bar [PSI]	5 [70] open drain line is always required					
Weight, kg [lb]	34.3 [75.62] for SAE-4C flange; 35.3 [77.82] for SAE-4M flange					

Peak pressure is the highest allowable pressure, may occur for max. 1% of every minute;

* Intermittent speed (flow): for pressure up to 150[2200] bar[PSI];

** Intermittent load: the permissible values may occur for max. 10% of motor lifetime;

*** Theoretical torque;

**** The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft.

***** The constant values are used for calculation of torque and speed with motor efficiencies $\eta_v=0.95$ and $\eta_{mh}=0.9$.

1. The recommended output power for continuous operations should not be exceeded.
2. Recommended filtration as per ISO 4406 cleanliness code 18/16/13 or better. This filtration corresponds to SAE AS 4059 8A/7B/7C. Nominal filtration - 10 micron or better.
3. Recommended a premium quality, anti-wear type mineral based hydraulic oil, HLP(DIN51524) or HM(ISO6743/4).
4. Recommended oil viscosity - 12...68 cSt or see page 81.
5. Recommended maximum system operating temperature - 82°[180°] C[F].
6. To ensure optimum life of the motor, fill it up with fluid prior to load it and run with moderate load and speed for about 10-15 minutes.

Hint: Motor Torque = Torque Constant * Pressure Drop

Rotation Speed = Speed Constant * Oil Flow

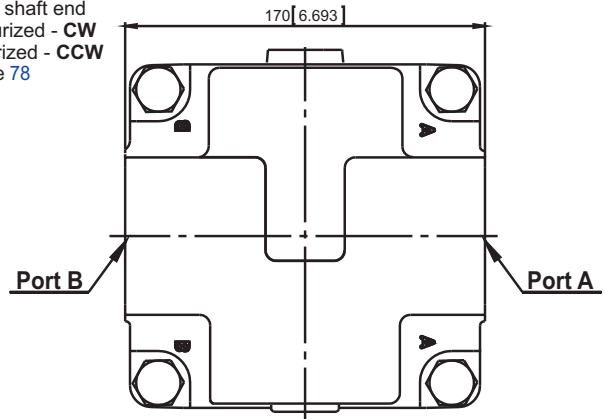
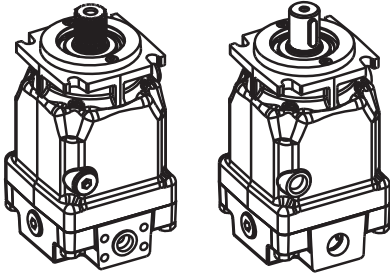
The constant values are approximate. Motor torque and rotation speed for a particular project are depending on the real operating conditions. For more detailed calculations please see efficiencies on next page and formulas on page 82.



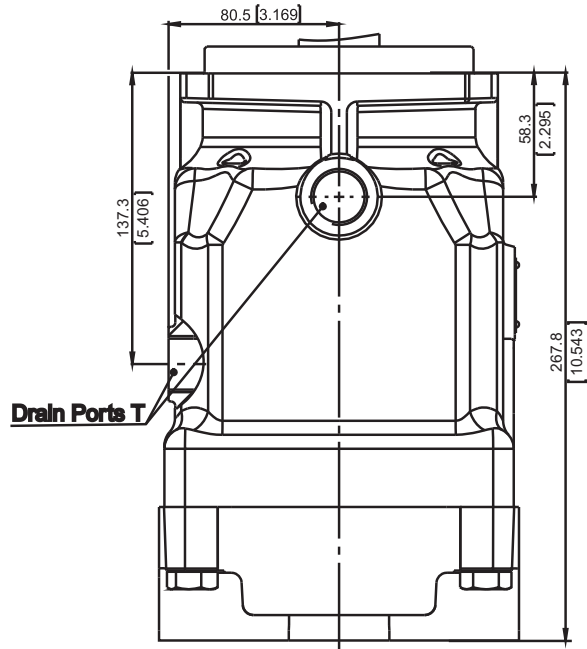
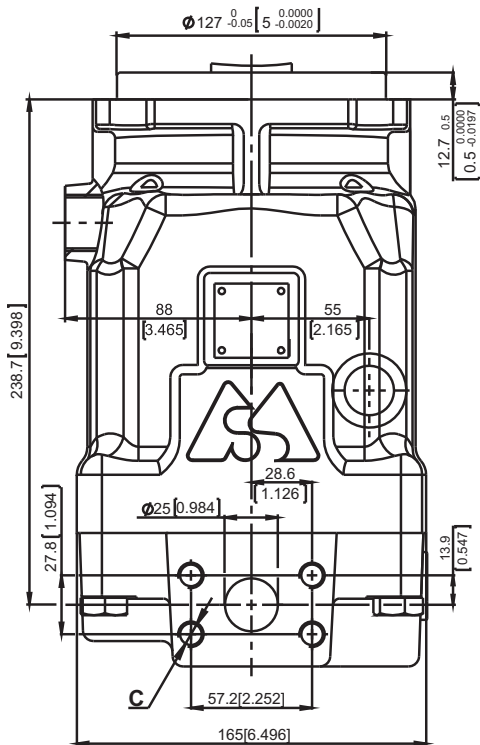
OVERALL DIMENSIONS AND PORTS

Side Ports - Default Mounting Flange - Type SAE-4C

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

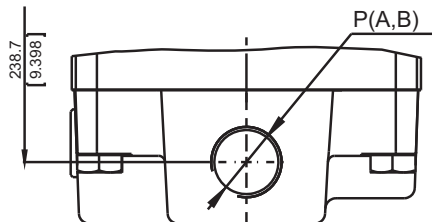


Side ports, port size default, 5 and 9

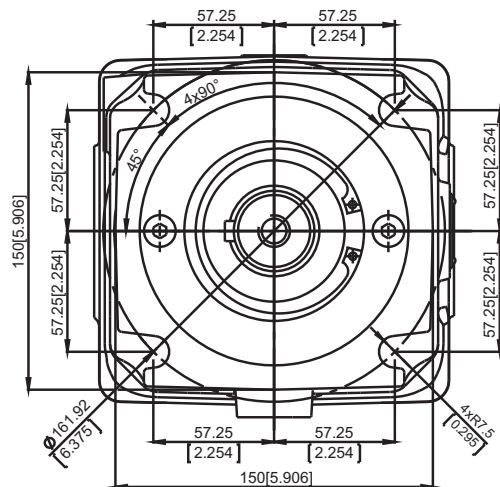


	Port Size		
	default	5	9
P _(A,B)	2xISO 6162-2 DN25	2xSAE J518 1" PSI6000	2xISO 6162-2 DN25
T	M27x2	1 1/16-12 UN	G 3/4
C	8xM12	8x7/16-14 UNC	8xM12

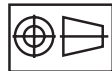
Side ports, port size 2 and 4



	Port Size	
	2	4
P _(A,B)	2xG 1	2x1 1/16-12UN
T	G 3/4	1 1/16-12UN



Shaft Mounting
see page 45



mm [in]

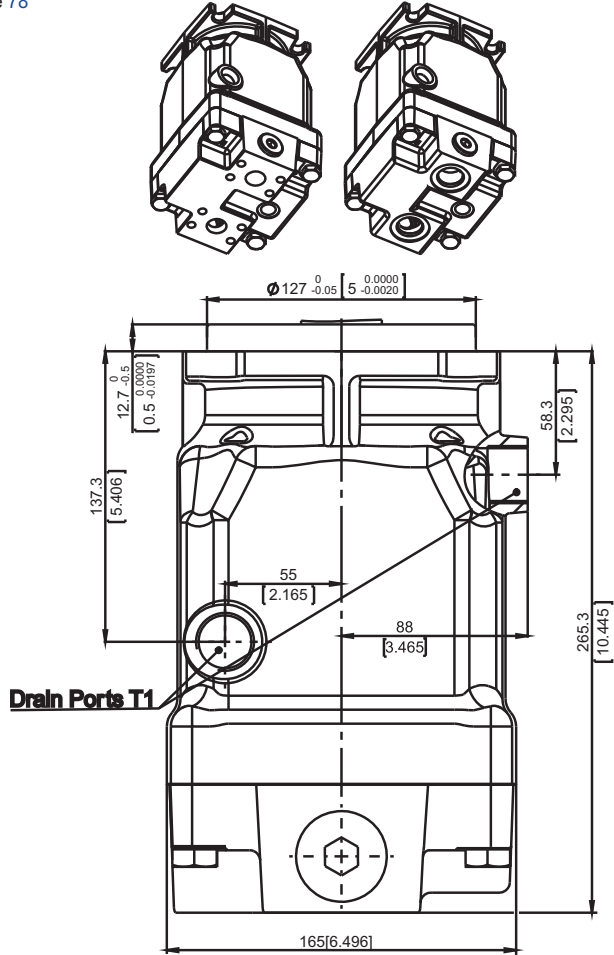
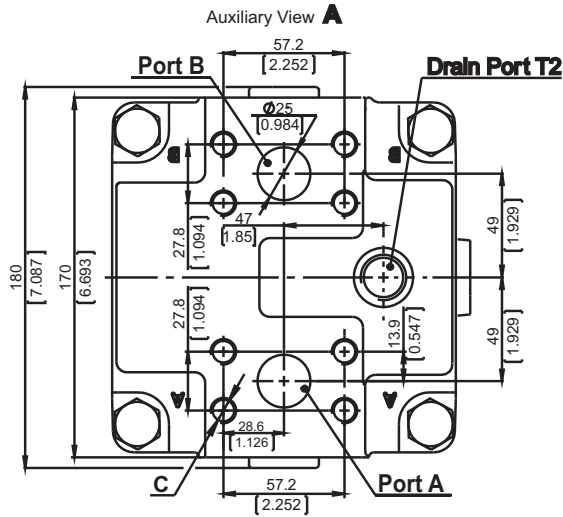


OVERALL DIMENSIONS AND PORTS

Rear Ports - Type E Mounting Flange - Type SAE-4C

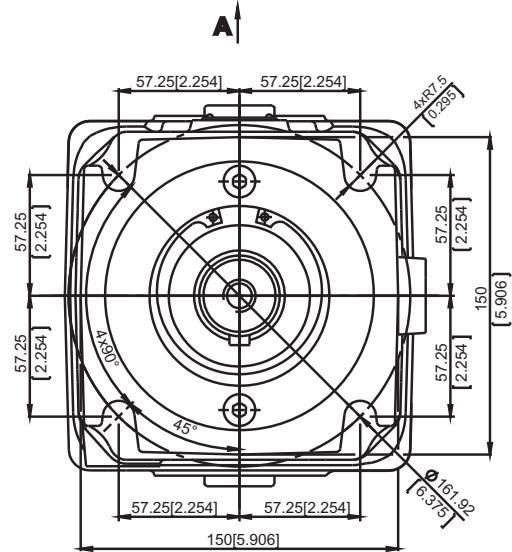
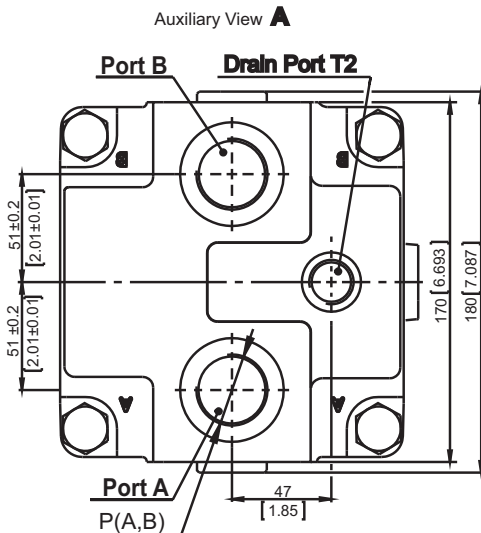
Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

Rear ports, port size default, 5 and 9



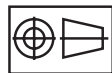
	Port Size		
	default	5	9
P _{A,B}	2xISO 6162-2 DN25	2xSAE J518 1" PSI6000	2xISO 6162-2 DN25
T1	M27x2	1 1/16-12 UN	G 3/4
T2	M22x1.5	7/8-14 UNF	G 1/2
C	8xM12	8x7/16-14 UNC	8xM12

Rear ports, port size 2 and 4



	Port Size	
	2	4
P _{A,B}	2xG 1	2x1 5/16-12UN
T1	G 3/4	1 1/16-12UN
T2	G 1/2	7/8 - 14 UNF

Shaft Mounting
see page 45



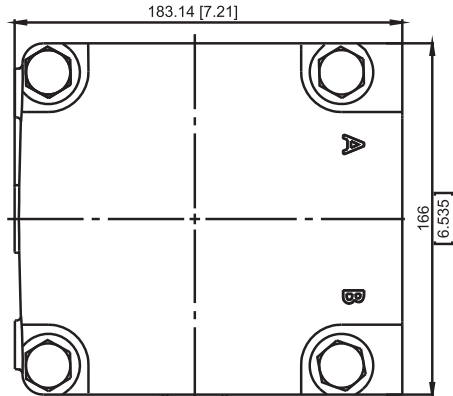
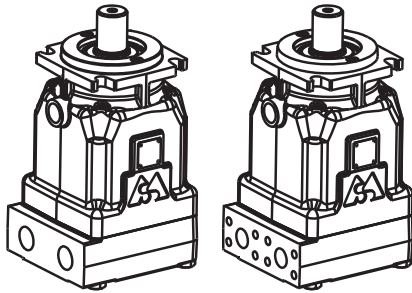
mm [in]



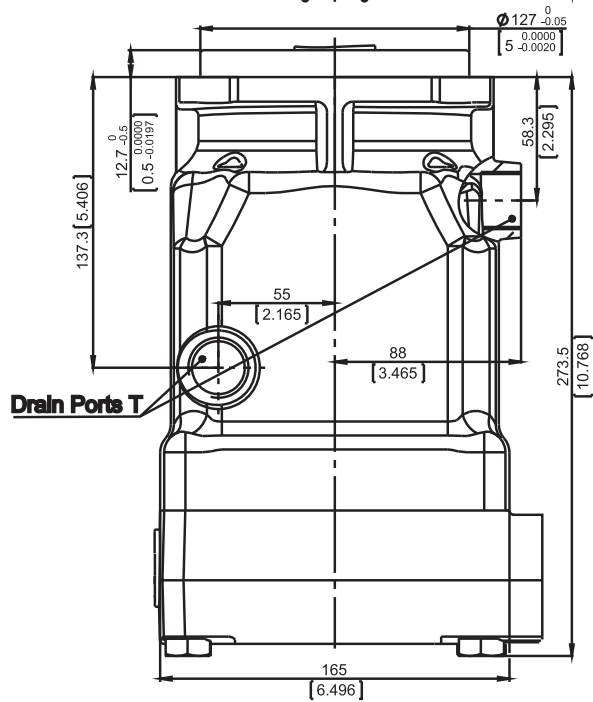
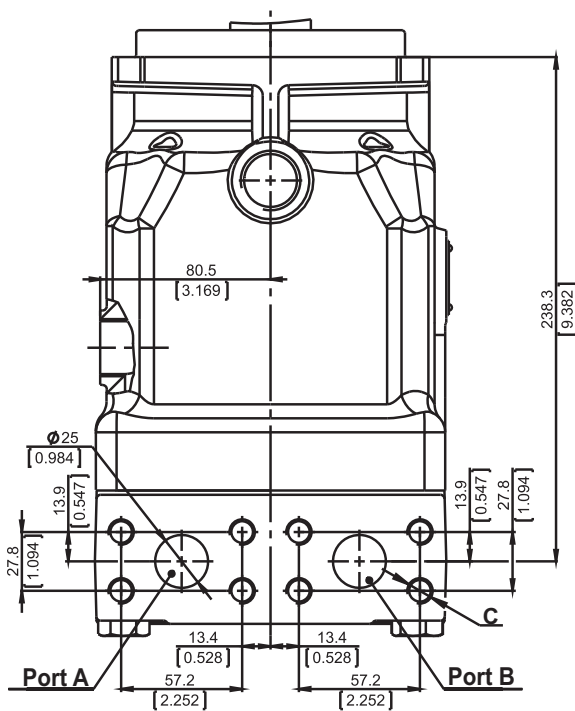
OVERALL DIMENSIONS AND PORTS

Twin Side Ports - Type T Mounting Flange - Type SAE-4C

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78



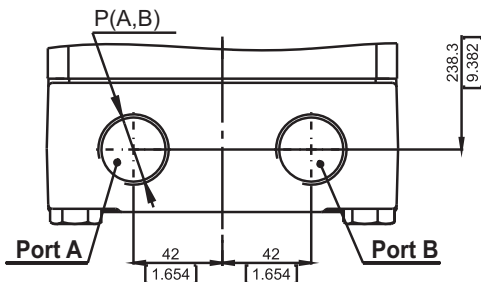
Twin side ports, port size default, 5 and 9



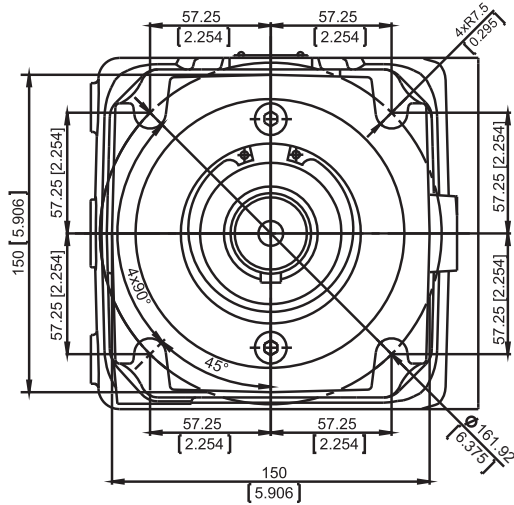
Drain Ports T

Port Size			
	default	5	9
P _{A,B}	2xISO 6162-2 DN25	2xSAE J518 1" PSI6000	2xISO 6162-2 DN25
T	M27x2	1 1/16-12 UN	G 3/4
C	8xM12	8x7/16-14 UNC	8xM12

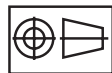
Twin side ports, port size 2 and 4



Port Size		
	2	4
P _{A,B}	2xG 1	2x1 5/16-12UN
T	G 3/4	1 1/16-12UN



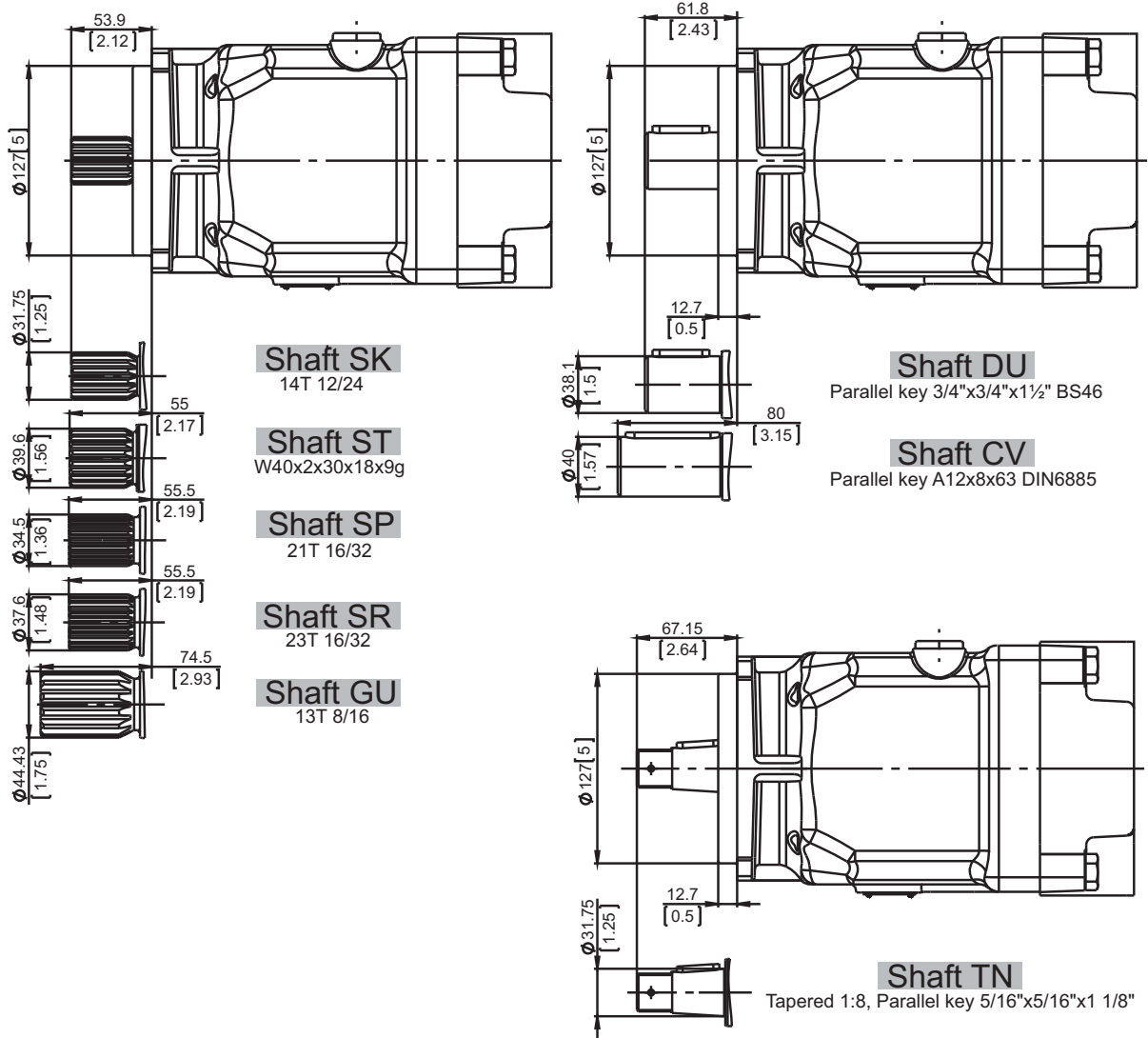
Shaft Mounting
see page 45



mm [in]



SHAFTS MOUNTING
Flange - Type 4C



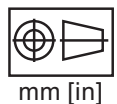
Shaft Dimensions
See Page 68+72

PERMISSIBLE SHAFT LOAD

Permissible shaft load		
max Axial	N[lb]	Fa=2500 [562]
max Radial	N[lb]	Fr=4500 [1010]

The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft (see page 78).

For more information, please, feel free to contact us.



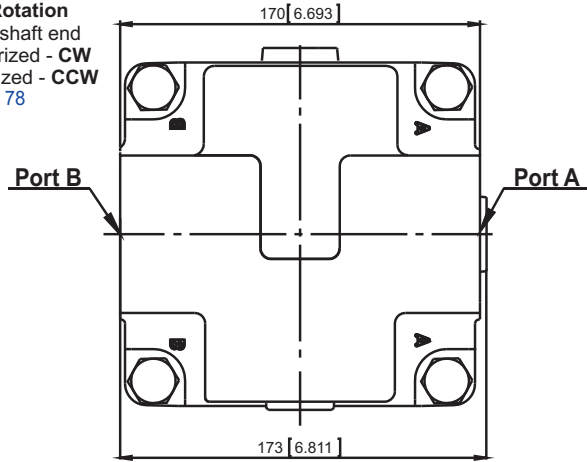
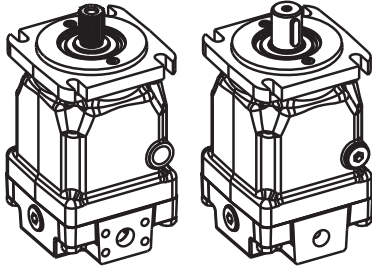
mm [in]



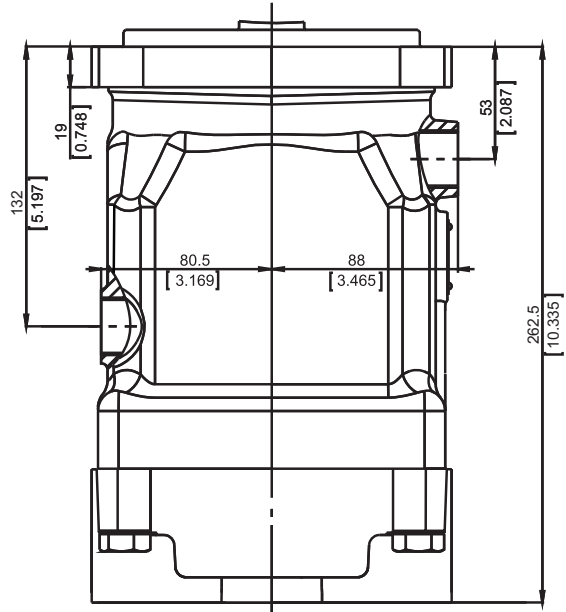
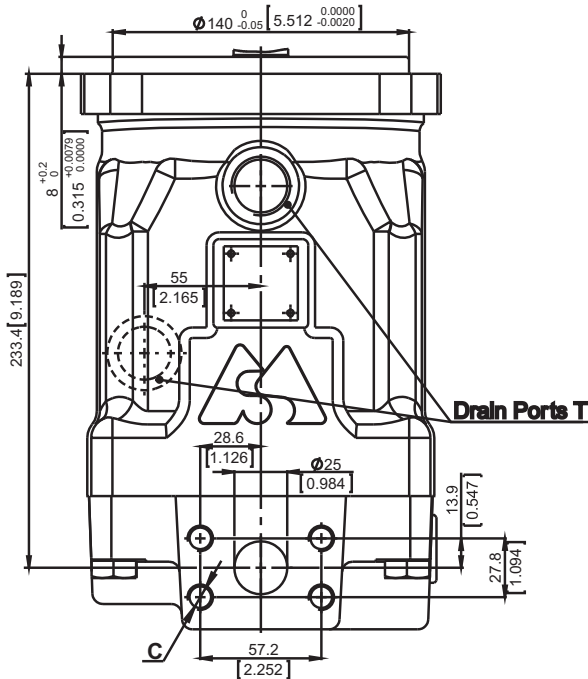
OVERALL DIMENSIONS AND PORTS

Side Ports - Default Mounting Flange - Type SAE-4M

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

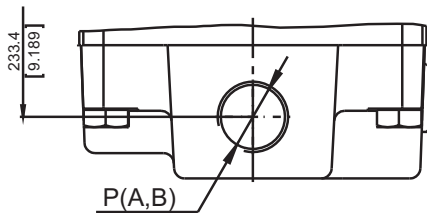


Side ports, port size default, 5 and 9

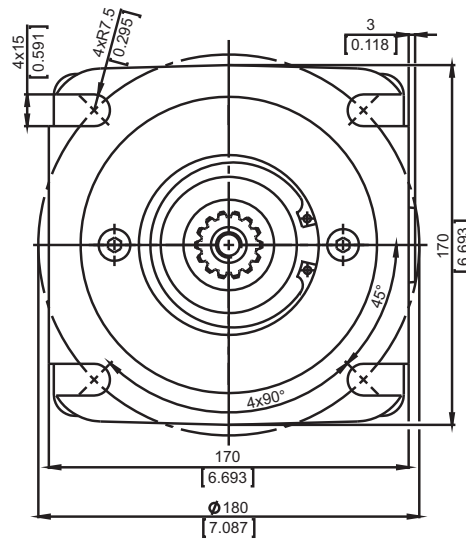


	Port Size		
	default	5	9
P _{A,B}	2xISO 6162-2 DN25	2xSAE J518 1" PSI6000	2xISO 6162-2 DN25
T	M27x2	1 1/16-12 UN	G 3/4
C	8xM12	8x7/16-14 UNC	8xM12

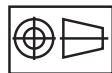
Side ports, port size 2 and 4



	Port Size	
	2	4
P _{A,B}	2xG 1	2x1 5/16-12UN
T	G 3/4	1 1/16-12UN



Shaft Mounting
see page 49



mm [in]

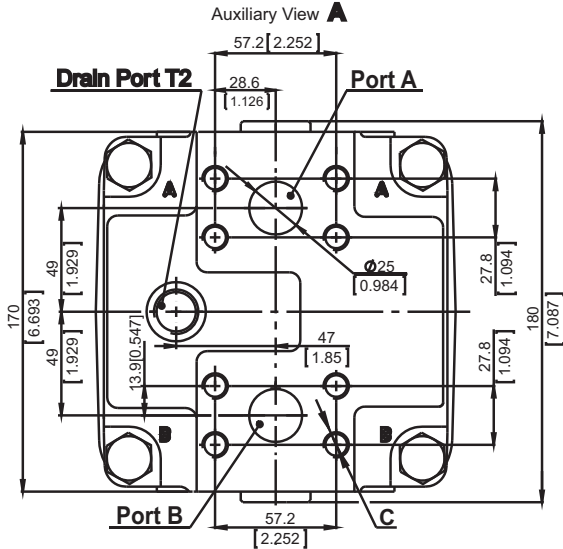


OVERALL DIMENSIONS AND PORTS

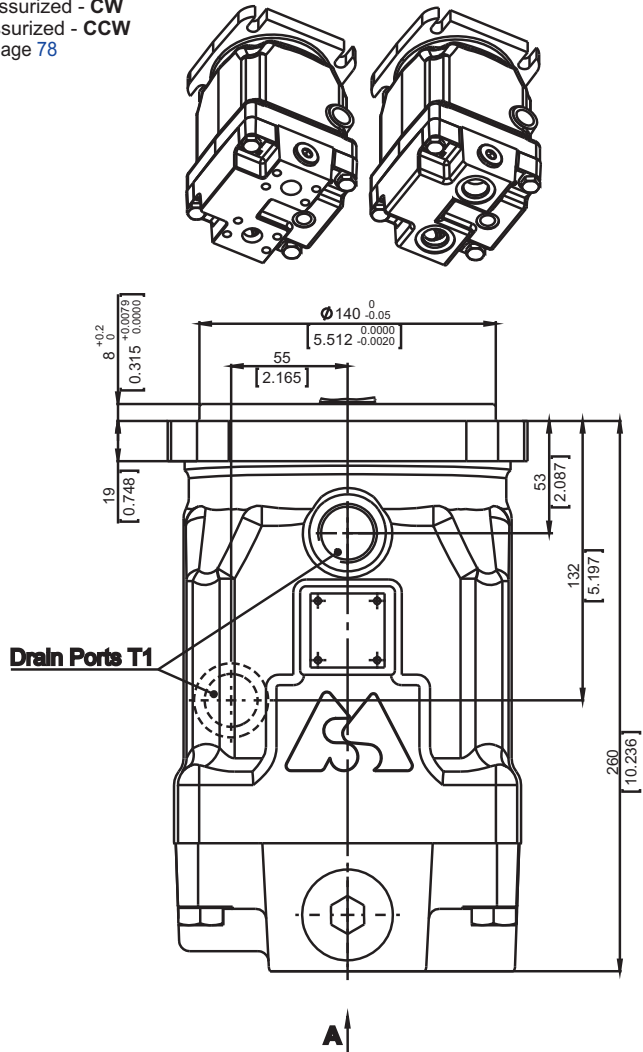
Rear Ports - Type E Mounting Flange - Type SAE-4M

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

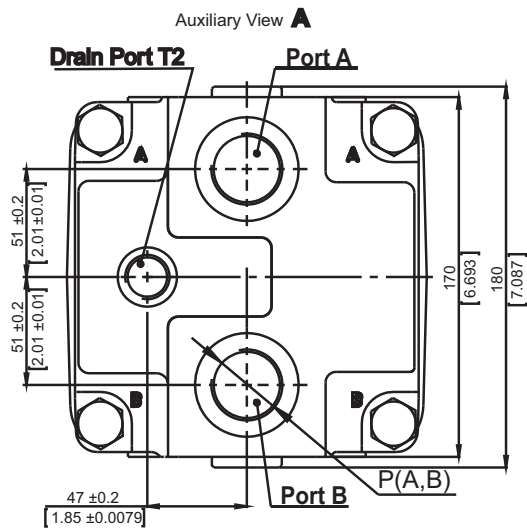
Rear ports, port size default, 5 and 9



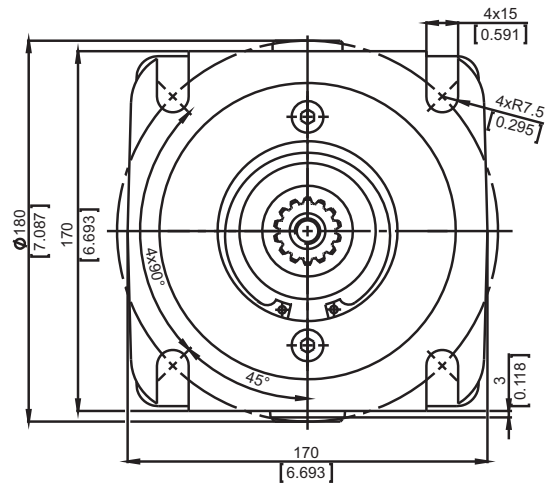
	Port Size		
	default	5	9
P _{A,B}	2xISO 6162-2 DN25	2xSAE J518 1" PSI6000	2xISO 6162-2 DN25
T1	M27x2	1 1/16 -12 UN	G 3/4
T2	M22x1.5	7/8-14 UNF	G 1/2
C	8xM12	8x7/16-14 UNC	8xM12



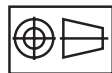
Rear ports, port size 2 and 4



	Port Size	
	2	4
P _{A,B}	2xG 1	2x1 5/16-12UN
T1	G 3/4	1 1/16-12UN
T2	G 1/2	7/8 - 14 UNF



Shaft Mounting
see page 49

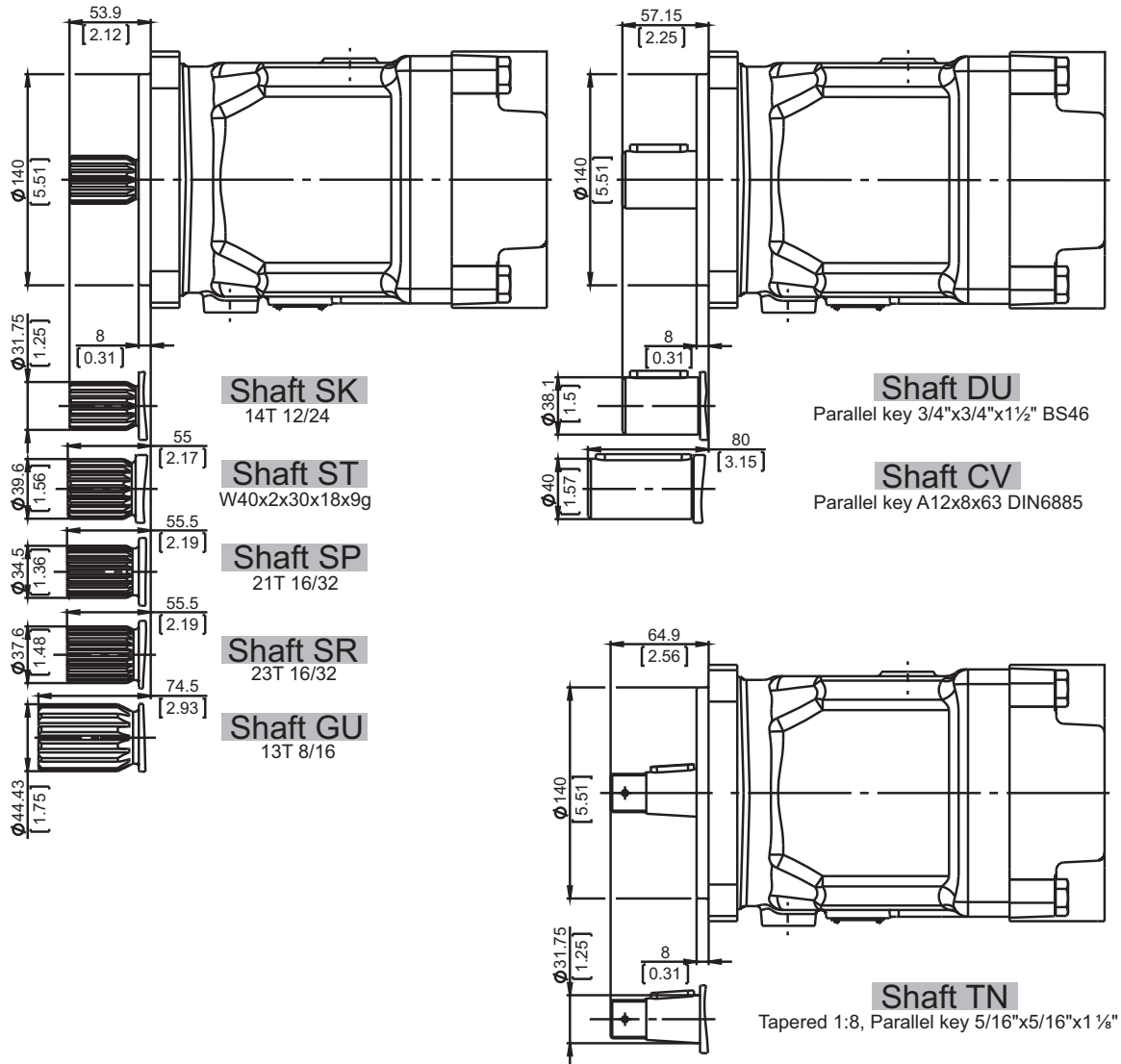


mm [in]



SHAFTS MOUNTING

Flange - Type 4M



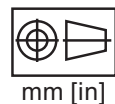
Shaft Dimensions
See Page 68÷72

PERMISSIBLE SHAFT LOAD

Permissible shaft load		
max Axial	N[lb]	Fa=2500 [562]
max Radial	N[lb]	Fr=4500 [1010]

The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft (see page 78).

For more information, please, feel free to contact us.

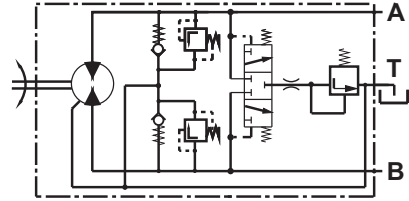
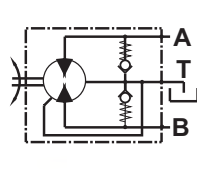
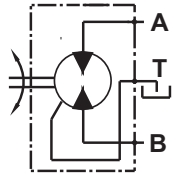


mm [in]



Hydraulic Motors Type MAPW62

Heavy Duty Axial Piston Motors Fixed Displacement



open drain line is always required

APPLICATION

- » Agricultural machines
- » Road building machines
- » Mining machinery
- » Food industry machines
- » Swing drives
- » Hydraulic transmissions
- » Vibration machines
- » Fan drives
- » Special vehicles

OPTIONS

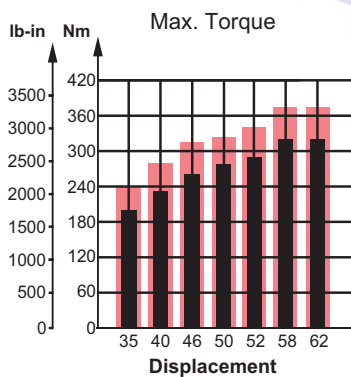
- » Port options
- » Shaft options
- » High pressure ports
- » Integrated valves

ADVANTAGES

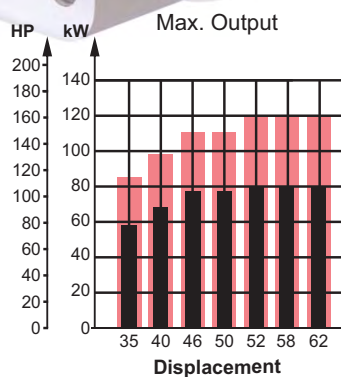
- » High starting torque
- » Smooth operation
- » Long service life
- » High power density

GENERAL

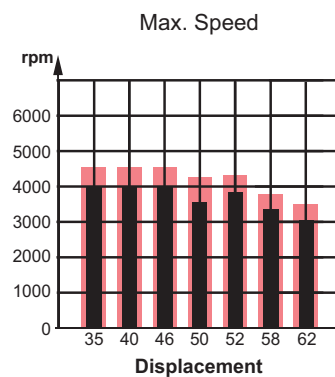
Displacement,	cm ³ /rev [in ³ /rev]	36.16÷62.4 [2.21÷3.81]
Max. Speed,	RPM	4000
Max. Torque,	Nm [lb-in]	318 [2814]
Max. Output,	kW [HP]	80 [107]
Max. Pressure Drop,	bar [PSI]	350 [5080]
Max. Oil Flow,	l/min [GPM]	200 [52.8]
Min. Speed,	RPM	500
Fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)	
Temperature Range,	°C [°F]	-40÷82 [-40÷180]
Optimal Viscosity Range, mm ² /s [SUS]	12÷68 [66÷311]	
Filtration	ISO code 18/16/13 (Min. recommended fluid filtration of 10 micron)	



Intermittent values

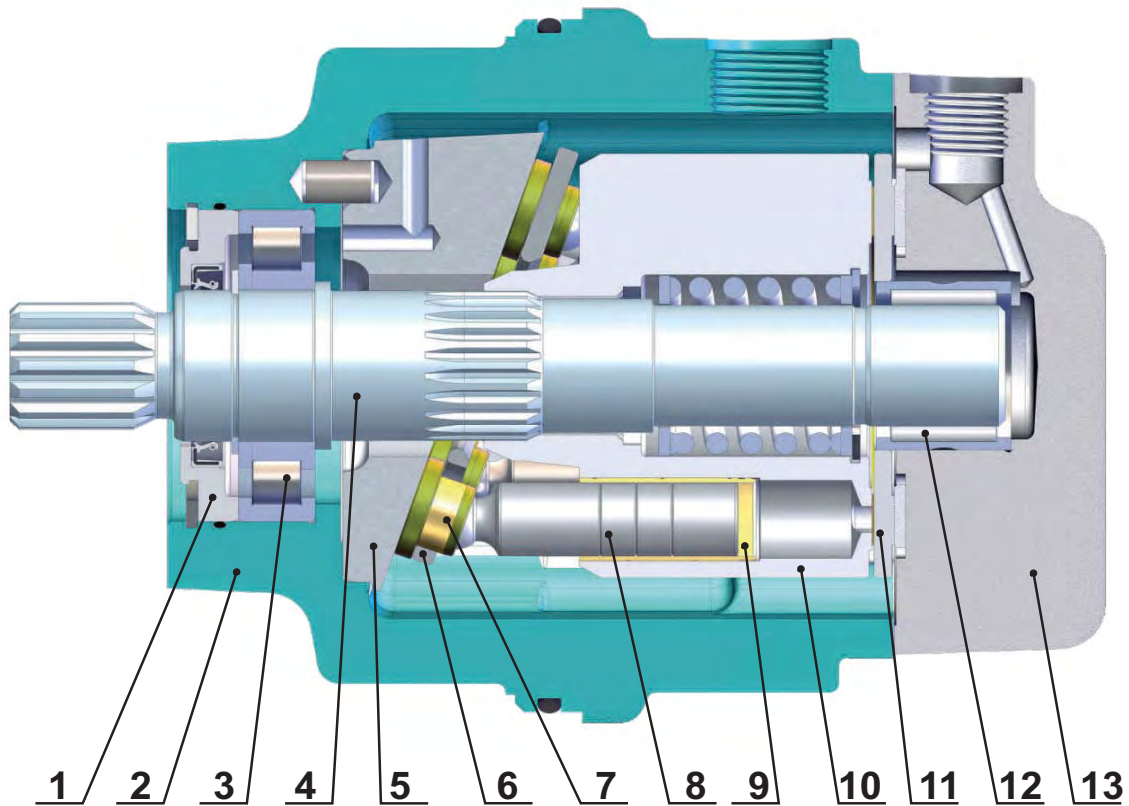


Continuous values





SECTION VIEW



1. Front cover
2. Cast iron body
3. Robust radial - axial roller bearing
4. Hardened shaft
5. Solid swash plate
6. Retainer plate
7. Improved piston shoes
8. Improved pistons
9. Brass bushings
10. Hardened steel cylinder block
11. Bimetal distributor
12. Needle bearing
13. Solid end cover

The main advantages of the heavy duty design of the MAPW motors over the typical swash plate motors are the higher starting torque and the higher total efficiency. In regards to these two parameters, under normal working mode, the MAP is comparable to the bent axis motors. The advantages of the MAP over the bent axis motors are the higher reliability and the lower degree of pulsation and vibration during operation.



SPECIFICATION DATA

Type	MAPW 35	MAPW 40	MAPW 46	MAPW 50	MAPW 52	MAPW 58	MAPW 62
Displacement, cm.³/rev. [in.³/rev.]	36.16 [2.21]	41.59 [2.54]	47.13 [2.88]	49.94 [3.05]	51.95 [3.17]	58.8 [3.59]	62.4 [3.81]
Max. Speed, [RPM]	Cont.	4000	4000	4000	3600	3850	3050
	Int.*	4500	4500	4500	4200	4330	3500
Max. Torque,** Nm [lb-in]	Cont.	202 [1789]	232 [2053]	263 [2328]	278 [2460]	290 [2566]	318 [2814]
	Int.**	242 [2142]	278 [2460]	315 [2788]	326 [2885]	347 [3071]	375 [3320]
Output, kW [HP]	Cont.	58 [78]	67 [90]	76 [102]	76 [102]	80 [107]	80 [107]
	Int.**	84 [113]	97 [130]	110 [148]	110 [148]	120 [161]	120 [161]
Max. Pressure, bar [PSI]	Cont.	350 [5080]	350 [5080]	350 [5080]	350 [5080]	350 [5080]	320 [4640]
	Int.**	420 [6100]	420 [6100]	420 [6100]	410 [5950]	420 [6100]	380 [5510]
	Peak	450 [6527]	450 [6527]	450 [6527]	450 [6527]	450 [6527]	410 [5950]
Max. Oil Flow, l/min [GPM]	Cont.	145 [38.3]	167 [44.1]	189 [50]	180 [47.5]	200 [52.8]	190 [50]
	Int.*	163 [43.1]	187 [49.4]	212 [56]	210 [55.5]	225 [59.4]	215 [56.8]
Torque Constant ***** Nm/bar [lb-in/PSI]	0.52 [0.32]	0.6 [0.364]	0.68 [0.41]	0.72 [0.437]	0.75 [0.454]	0.85 [0.515]	0.9 [0.546]
Speed Constant ***** RPM/(l/min) [RPM/GPM]	26.3 [99.4]	22.84 [86.5]	20.2 [76.3]	19.02 [72]	18.28 [70.2]	16.13 [61.1]	15.23 [57.6]
Permissible Shaft Load							
max Axial**** N[lb]	Fa=2000 [450]						
max Radial**** N[lb]	Fr=3600 [810]						
Min. Speed, [RPM]	500						
Max. Pressure in Drain Line, bar [PSI]	5 [70] open drain line is always required						
Weight, kg [lb]	19.65 [43.3]						

Peak pressure is the highest allowable pressure, may occur for max. 1% of every minute;

* Intermittent speed (flow): for pressure up to 150[2200] bar[PSI];

** Intermittent load: the permissible values may occur for max. 10% of motor lifetime;

*** Theoretical torque;

**** The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft.

***** The constant values are used for calculation of torque and speed with motor efficiencies $\eta_v=0.95$ and $\eta_{mh}=0.9$.

1. The recommended output power for continuous operations should not be exceeded.
2. Recommended filtration as per ISO 4406 cleanliness code 18/16/13 or better. This filtration corresponds to SAE AS 4059 8A/7B/7C. Nominal filtration - 10 micron or better.
3. Recommended a premium quality, anti-wear type mineral based hydraulic oil, HLP(DIN51524) or HM(ISO6743/4).
4. Recommended oil viscosity - 12...68 cSt or see page 81.
5. Recommended maximum system operating temperature - 82°[180°] C[F].
6. To ensure optimum life of the motor, fill it up with fluid prior to load it and run with moderate load and speed for about 10-15 minutes.

Hint: Motor Torque = Torque Constant * Pressure Drop

Rotation Speed = Speed Constant * Oil Flow

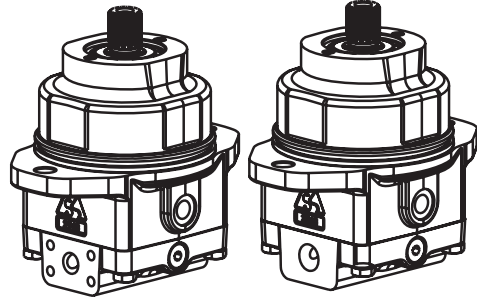
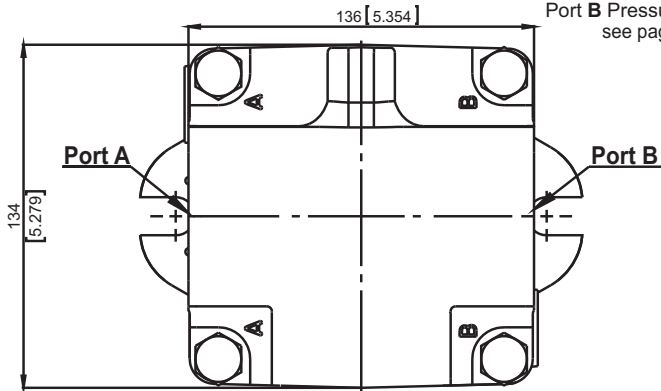
The constant values are approximate. Motor torque and rotation speed for a particular project are depending on the real operating conditions. For more detailed calculations please see efficiencies on next page and formulas on page 82.



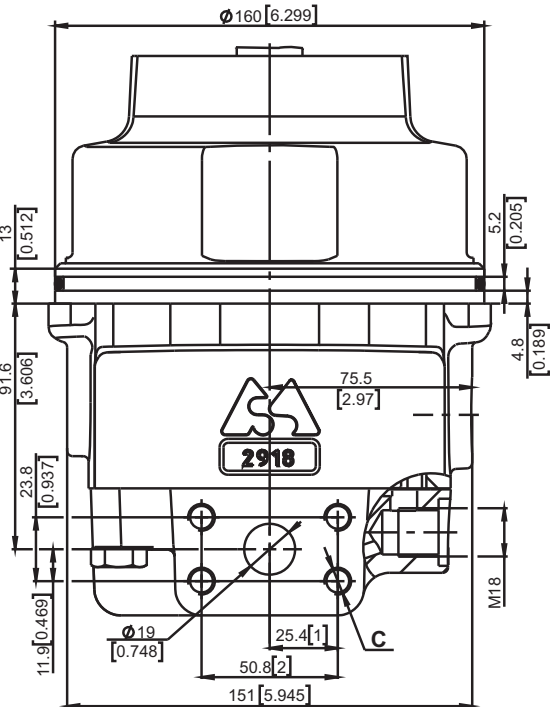
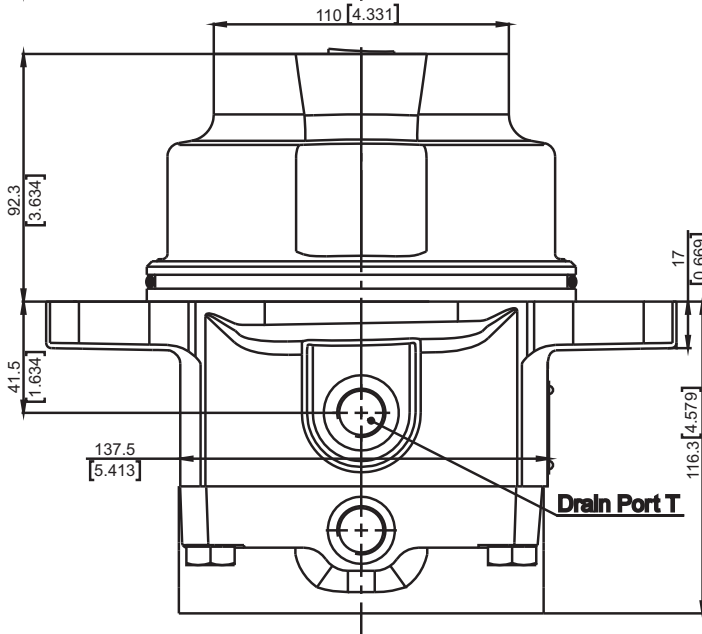
OVERALL DIMENSIONS AND PORTS

Side Ports - Default Mounting Flange-Type Cartage

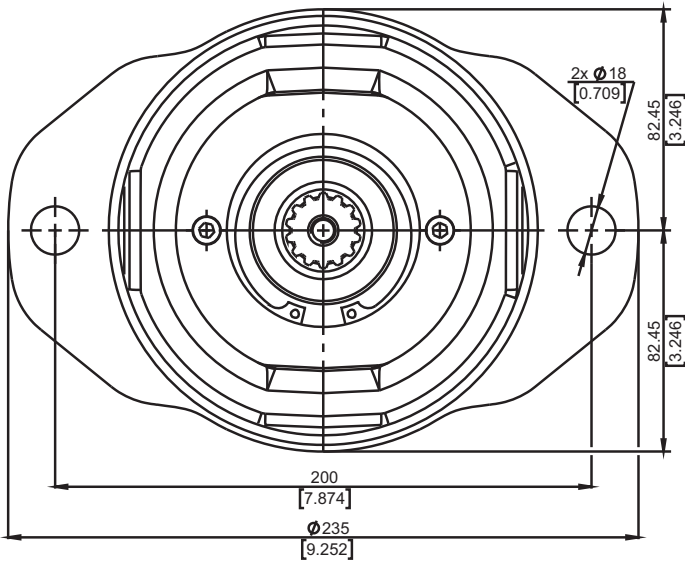
Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78



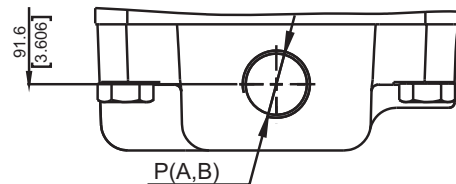
Side ports, port size default ,5and 9



	Port Size		
	default	5	9
P _(A,B)	2xISO 6162-2 DN19	2xSAE J518 3/4 PSI6000	2xISO 6162-2 DN19
T	M18x1.5	7/8-14 UNF	G1/2
C	8xM10	8x3/8-16 UNC	8xM10

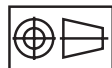


Side ports, port size 2 ,3 and 4



	Port Size		
	2	3	4
P _(A,B)	2xG 3/4	2xM27x2	2x1 1/16-12UN
T	G 1/2	M18x1.5	7/8-14UNF

Shaft Mounting
see page 57

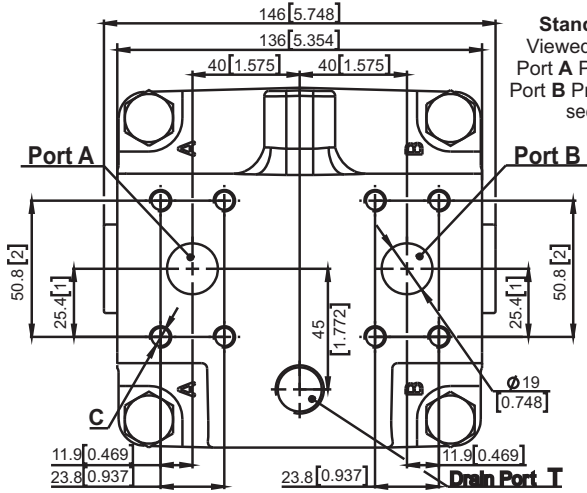


mm [in]

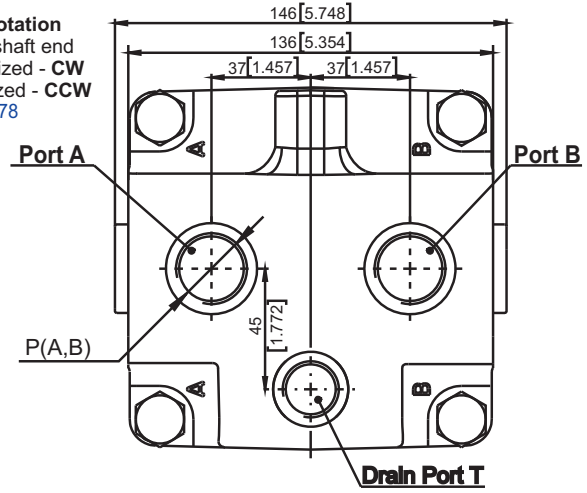


OVERALL DIMENSIONS AND PORTS

View without body, port size default, 5 and 9 **Rear Ports - Type E** View without body, port size 2, 3 and 4

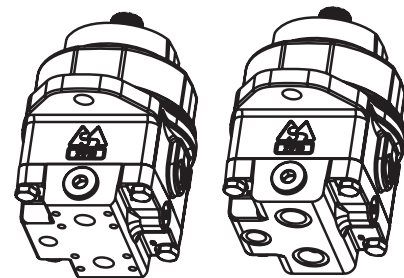
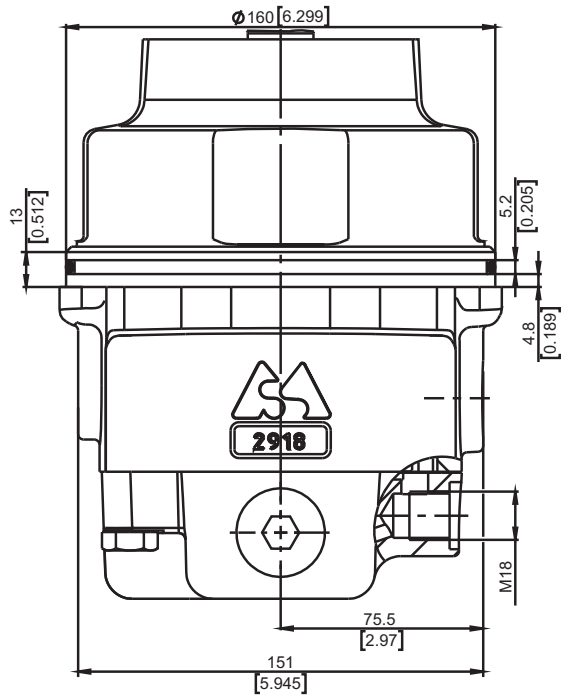
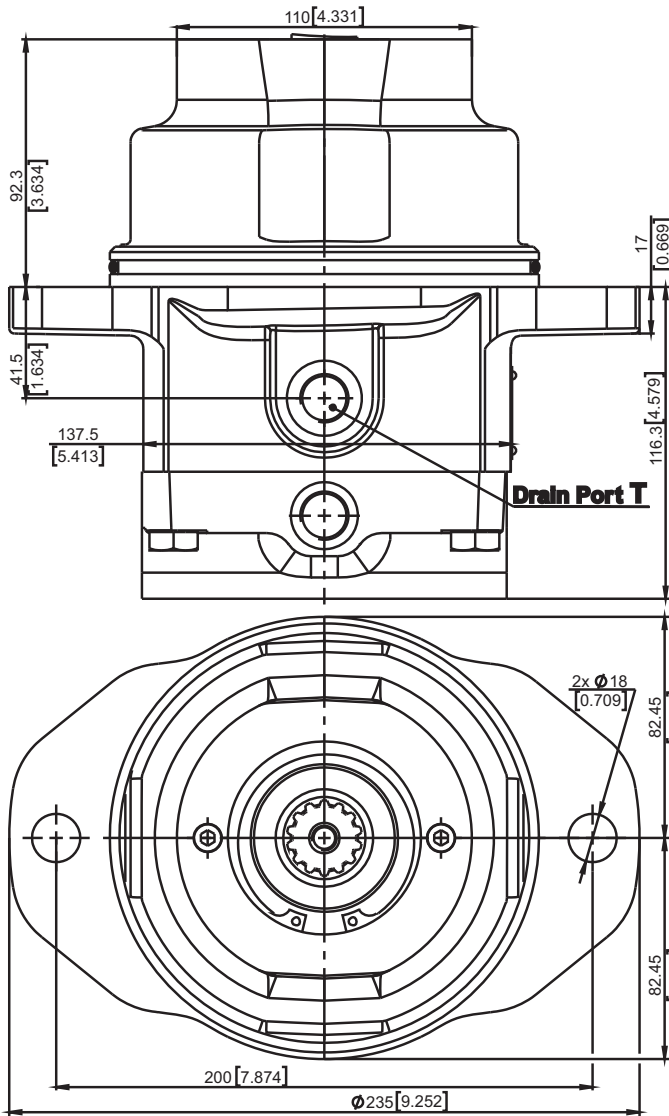


Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

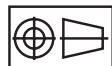


	Port Size		
	default	5	9
P _{A,B}	2xISO 6162-2 DN19	2xSAE J518 3/4 PSI6000	2xISO 6162-2 DN19
T	M18x1.5	7/8-14 UNF	G1/2
C	8xM10	8x3/8-16 UNC	8xM10

	Port Size		
	2	3	4
P _{A,B}	2xG 3/4	2xM27x2	2x1 1/16-12UN
T	G 1/2	M18x1.5	7/8-14UNF



Shaft Mounting
see page 57



mm [in]

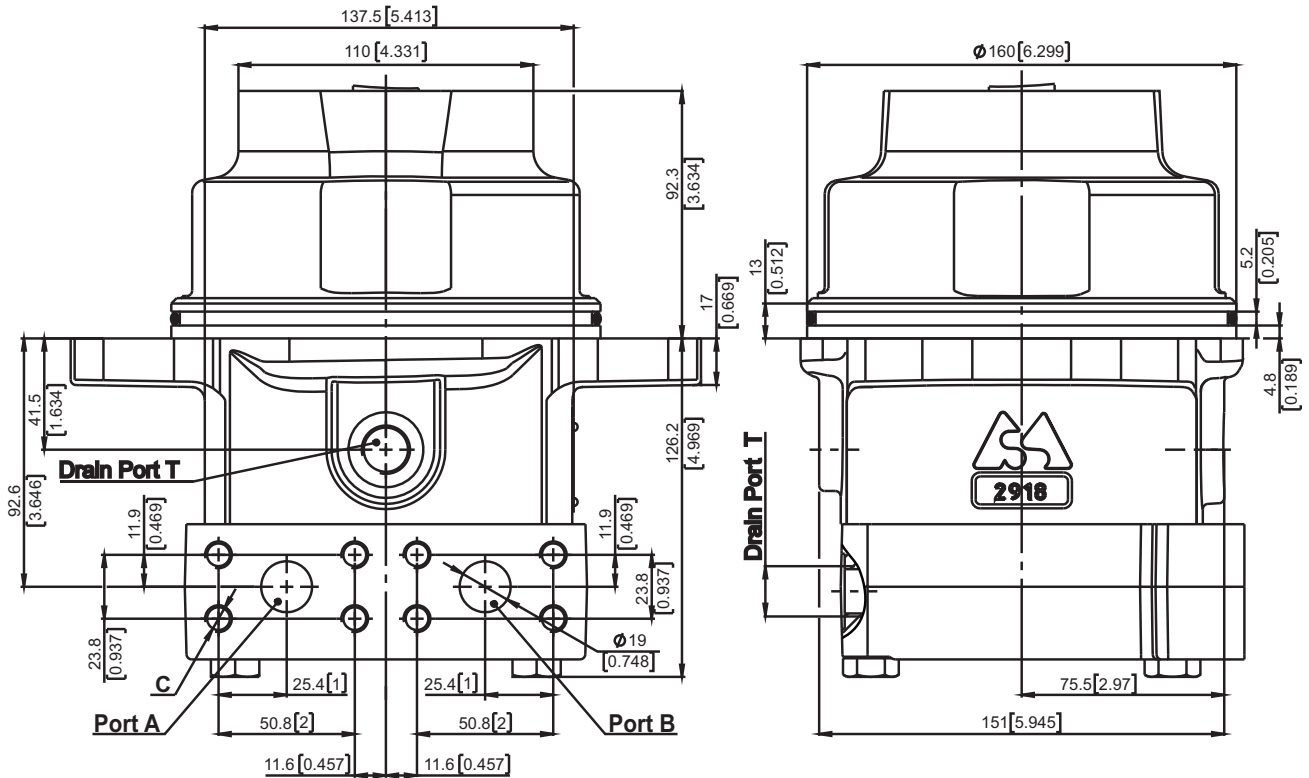


OVERALL DIMENSIONS AND PORTS

Twin Side Ports - Type T

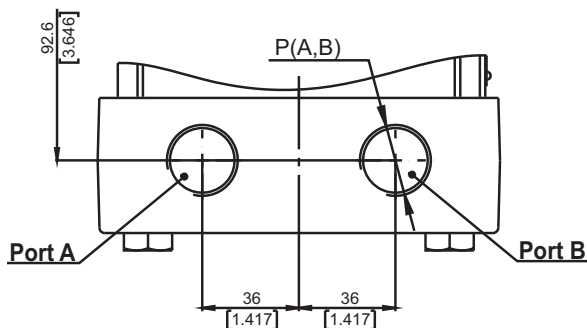
Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW
see page 78

Twin side ports, port size **default**, 5 and 9

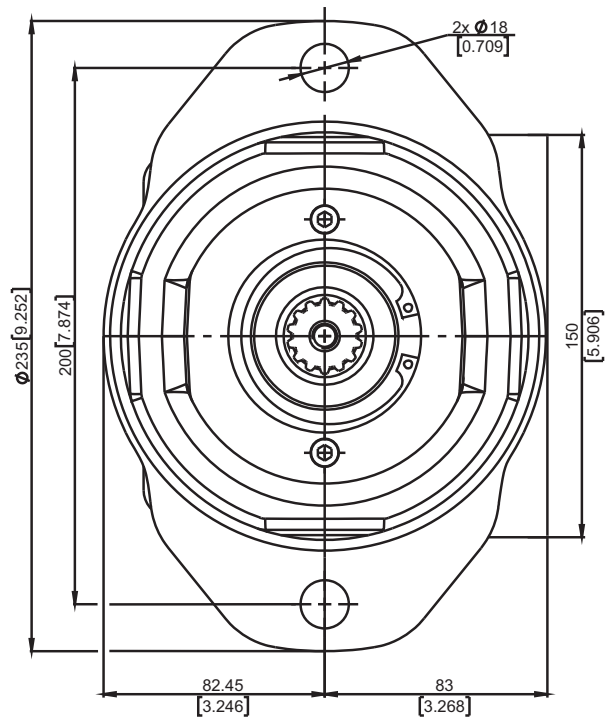


	Port Size		
	default	5	9
P _{A,B}	2xISO 6162-2 DN19	2xSAE J518 3/4 PSI6000	2xISO 6162-2 DN19
T	M18x1.5	7/8-14 UNF	G1/2
C	8xM10	8x3/8-16 UNC	8xM10

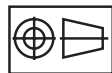
Twin side ports, port size **2**, 3 and 4



	Port Size		
	2	3	4
P _{A,B}	2xG 3/4	2xM27x2	2x1 ¹ / ₁₆ -12UN
T	G 1/2	M18x1.5	7/8-14UNF



Shaft Mounting
see page 57

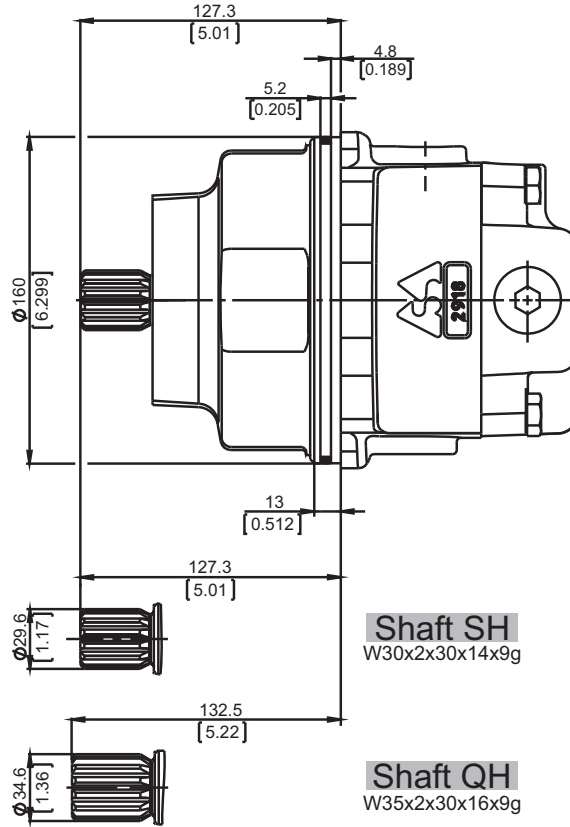


mm [in]



SHAFTS MOUNTING

Flange - Type Cartage



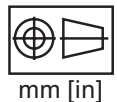
Shaft Dimensions
See Page 68÷72

PERMISSIBLE SHAFT LOAD

Permissible shaft load		
max Axial	N[lb]	Fa=2500 [562]
max Radial	N[lb]	Fr=4500 [1010]

The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft (see page 78).

For more information, please, feel free to contact us.



mm [in]



ORDERING CODE

	1	2	3	4	5	6	7	8	9	10	11	12	13	13	13
M A P W													[]

Pos.1 - Mounting Flange

T - Wheel flange, cartage - 2 bolt flange spigot diam. 160 [6.3"] -BC 200 [7.87"]

Pos.2 - Port Type

omit - Side ports on opposite sides
T - Twin (Two) side ports on one side
E - Rear ports

Pos.3 - Displacement Code

35 - 36.16 cm.³/rev. [2.21 in.³/rev.]
40 - 41.59 cm.³/rev. [2.54 in.³/rev.]
46 - 47.13 cm.³/rev. [2.88 in.³/rev.]
50 - 49.94 cm.³/rev. [3.05 in.³/rev.]
52 - 51.95 cm.³/rev. [3.17 in.³/rev.]
58 - 58.8 cm.³/rev. [3.59 in.³/rev.]
62 - 62.4 cm.³/rev. [3.81 in.³/rev.]

Pos.4 - Shaft Extensions**

SH - ø29.6 [1.165"] Spline W30x2x30x14x9g, M10
QH - ø34.6 [1.36"] Spline W35x2x30x16x9g, M12

Pos.5 - Port Size

omit - 2xISO 6162-2 DN19, drain port M18x1.5
2 - 2xG3/4, drain ports G1/2
3 - 2xM27x2, drain ports M18x1.5
4 - 2x1 1/16 -12 UN, drain ports 7/8-14 UNF
5 - 2xSAE 3/4" PSI6000, drain port 7/8-14 UNF
9 - 2xISO 6162-2 DN19, drain port G1/2

Pos.6 - Seal, Corrosion Resistant Seal Surface

omit - NBR seal type material
V - FKM seal type material

Pos.7 - Integrated Valves

See page 74+75 for information about valves
omit - None
HR - Single anti-cavitation valve
AR - Dual anti-cavitation valve
PU - Purge valve - default - 6±2 l/min.
FLU - Flush valve - default - 6±2 l/min at 20 bar.
SAR - Single anti-cavitation and relief valve
DAR - Dual anti-cavitation and relief valve
DARP - Dual anti-cavitation, relief and purge valve, default flow - 6±2 l/min
DARF - Dual anti-cavitation, relief and flush valve, default flow - 6±2 l/min at 20 bar.

Pos.8 - Valve's Port for Single Valves

omit - None
A - Port A
B - Port B

Pos.9 - Pressure Setting of Integrated Valves

omit - None
x -

250	300	350
-----	-----	-----

for more information see page 74+75

Pos.10 - Flow Setting of Integrated Valves

omit - None
Lx - For value - see page 74+75

Pos.11 - Special Features*

omit - None
R2S - Speed Sensor Two Directional (see page 76)
R - Reverse Rotation (see page 78)

Pos.12 - Paint and Coating

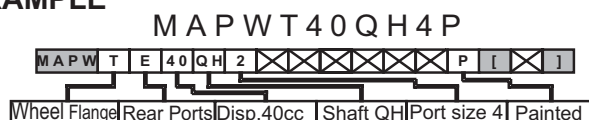
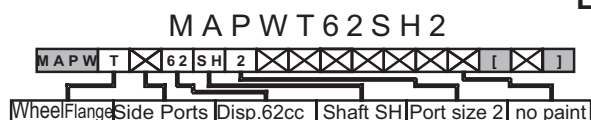
omit - No paint or coating
P - Painted
PC - Corrosion protected paint
PS - Special painted ***
PCS - Special corrosion protected paint***
If a painting option is required, the standard color is black-Alkyd-Styrenated Enamel, Black RAL 9005. Other color by customer's request.

Pos.13 - Design Series

omit - Factory specified

**The permissible output torque for shafts must not be exceeded!
***Non painted feeding surface

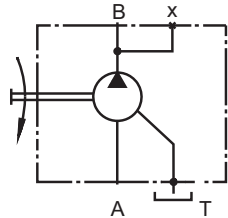
EXAMPLE





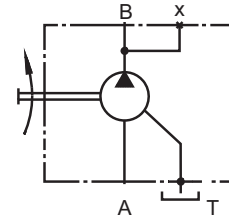
Hydraulic Pumps Type PAP62

Heavy Duty Axial Piston Pumps Fixed Displacement for open loop circuit



Symbols

- B Outlet port
- A Inlet port
- T Drain port



open drain line is always required

APPLICATION

- » Open loop circuit
- » Agricultural machines
- » Road building machines
- » Mining machinery
- » Food industry machines
- » Special vehicles

OPTIONS

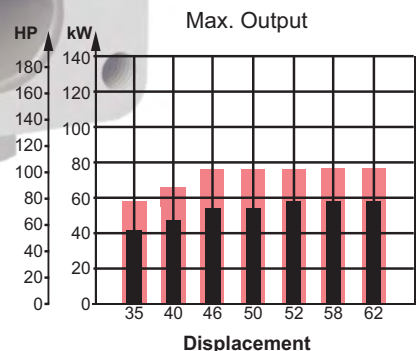
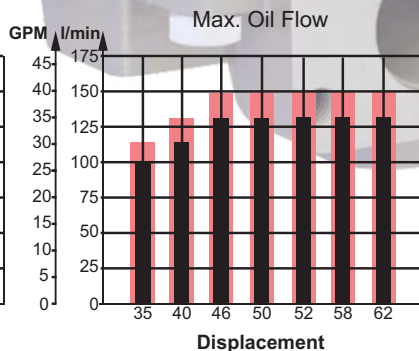
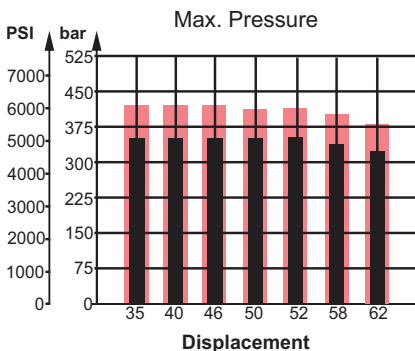
- » Port options
- » Shaft options
- » High pressure ports

ADVANTAGES

- » Low noise
- » Low pulsation
- » Long service life
- » High power density

GENERAL

Displacement,	cm ³ /rev [in ³ /rev]	36.16÷62.4 [2.21÷3.81]
Max. Driving Speed,	RPM	2800
Max. Driving Torque,	Nm [lb-in]	318 [2814]
Max. Output,	kW [HP]	56 [77.8]
Max. Pressure,	bar [PSI]	350 [5080]
Max. Oil Flow,	l/min [GPM]	132 [35]
Min. Driving Speed,	RPM	500
Fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)	
Temperature Range,	°C [°F]	-40÷82 [-40÷180]
Optimal Viscosity Range,mm ² /s [SUS]	12÷68 [66÷311]	
Filtration	ISO code 18/16/13 (Min. recommended fluid filtration of 10 micron)	

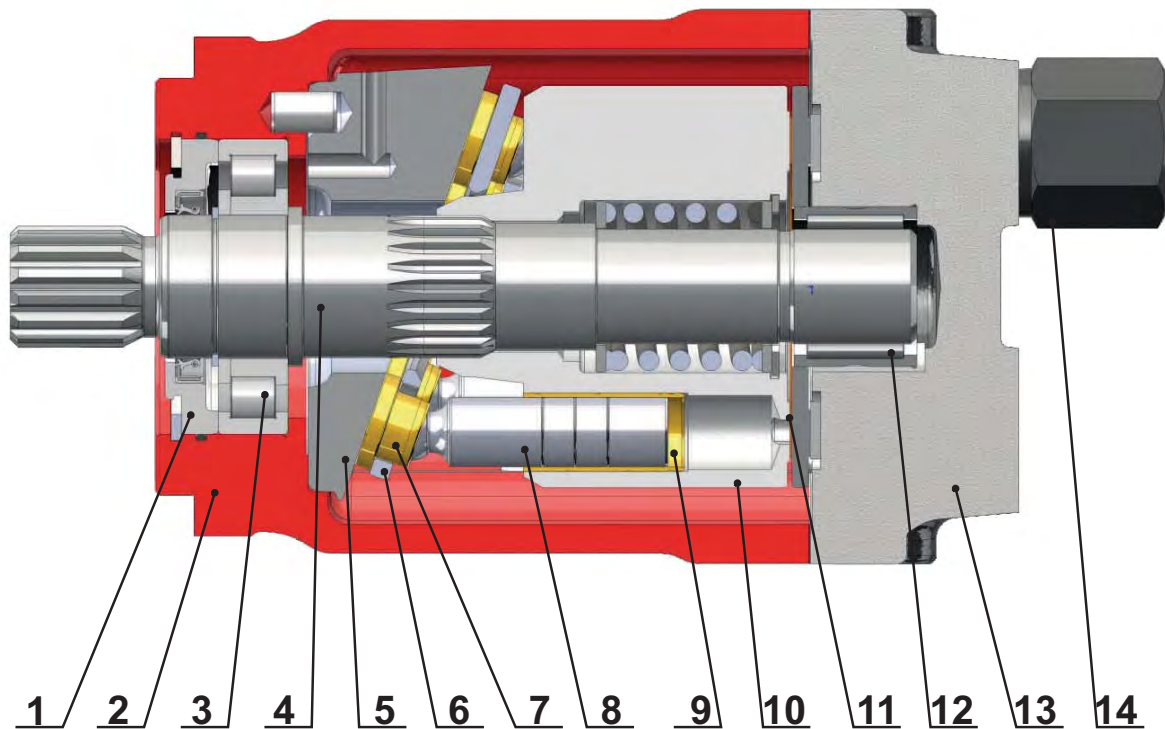


Intermittent values

Continuous values



SECTION VIEW



1. Front cover
2. Cast iron body
3. Robust radial - axial roller bearing
4. Hardened shaft
5. Solid swash plate
6. Retainer plate
7. Improved piston shoes
8. Improved pistons
9. Brass bushings
10. Hardened steel cylinder block
11. Bimetal distributor
12. Needle bearing
13. Solid end cover
14. Part of hydraulic system helps reduces pump noise and vibration

The main advantages of the heavy duty swash plate PAP pumps design over the typical pumps are:

- Special hydraulic system reducing the levels of noise and vibration created by the pump.
- Lower pulsations during operation.

In comparison with the bent axis and the gear pumps, the swash plate type is in general considered to have higher reliability.

SPECIFICATION DATA



Type		PAP 35	PAP 40	PAP 46	PAP 50	PAP 52	PAP 58	PAP 62
Displacement, cm. ³ /rev. [in. ³ /rev.]		36.16 [2.21]	41.59 [2.54]	47.13 [2.88]	49.94 [3.05]	51.95 [3.17]	58.8 [3.59]	62.4 [3.81]
	Max. Driving Speed, Cont. [RPM]	2800	2800	2800	2500	2400	2130	2000
	Int.*	3150	3150	3150	2800	2700	2390	2250
Max. Driving Torque,*** Nm [lb-in]	Cont.	202 [1789]	232 [2053]	263 [2328]	278 [2460]	290 [2566]	320 [2832]	318 [2814]
	Int.**	242 [2142]	278 [2460]	315 [2788]	326 [2885]	347 [3071]	375 [3320]	377 [3337]
Output, kW [HP]	Cont.	41 [55]	47 [63]	54 [72.5]	54 [72.5]	58 [77.8]	58 [77.8]	58 [77.8]
	Int.**	58 [78]	67 [90]	77 [198]	77 [198]	77 [198]	77 [198]	77 [198]
Max. Pressure, bar [PSI]	Cont.	350 [5080]	350 [5080]	350 [5080]	350 [5080]	350 [5080]	340 [4930]	320 [4640]
	Int.**	420 [6100]	420 [6100]	420 [6100]	410 [5950]	420 [6100]	400 [5800]	380 [5510]
	Peak	450 [6527]	450 [6527]	450 [6527]	450 [6527]	450 [6527]	440 [6381]	410 [5950]
Max. Oil Flow, l/min [GPM]	Cont.	100 [26.4]	116 [30]	132 [34.9]	132 [34.9]	132 [34.9]	132 [34.9]	132 [34.9]
	Int.*	114 [30]	131 [35]	148 [39]	148 [39]	148 [39]	148 [39]	148 [39]
Permissible Shaft Load max Axial**** N[lb]		Fa=2000 [450]						
	max Radial**** N[lb]	Fr=3600 [810]						
Min. Speed, [RPM]		500						
Max. Pressure in Drain Line, bar [PSI]		5 [70] open drain line is always required						
Weight, kg [lb]		18.14 [40]						

Peak pressure is the highest allowable pressure, may occur for max. 1% of every minute;

* Intermittent speed (flow): for pressure up to 150[2200] bar[PSI];

** Intermittent load: the permissible values may occur for max. 10% of pump lifetime;

*** Theoretical torque;

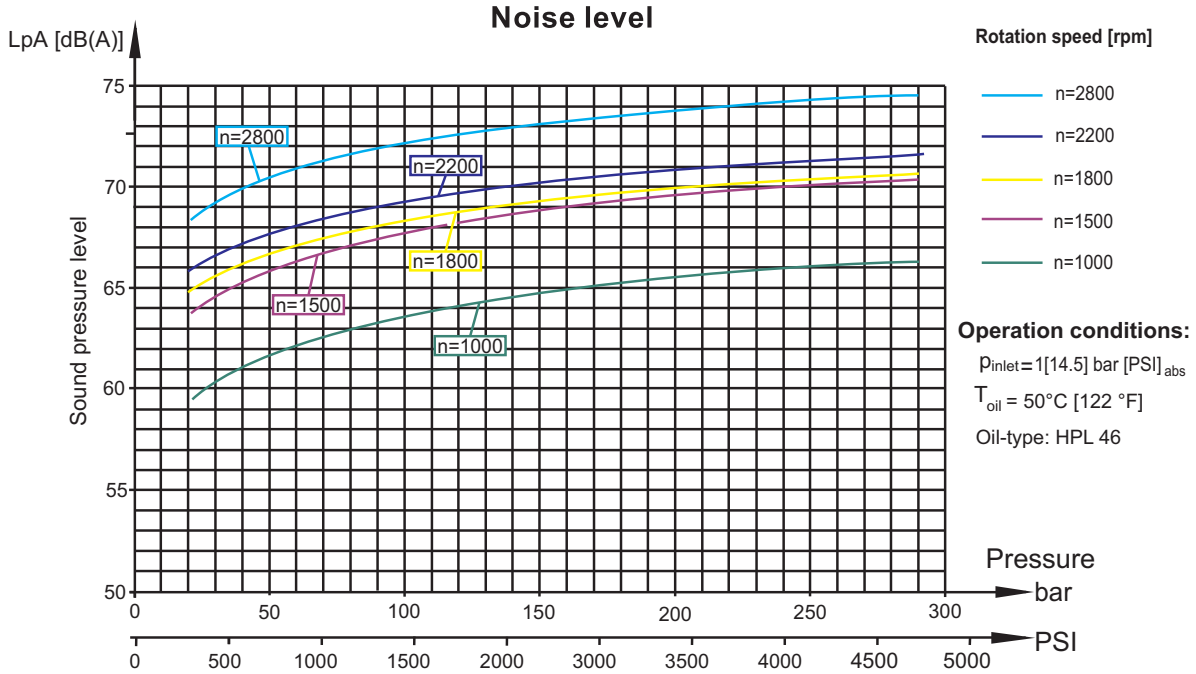
**** The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft.

1. The recommended output power for continuous operations should not be exceeded.
2. Recommended filtration as per ISO 4406 cleanliness code 18/16/13 or better. This filtration corresponds to SAE AS 4059 8A/7B/7C. Nominal filtration - 10 micron or better.
3. Recommended a premium quality, anti-wear type mineral based hydraulic oil, HLP(DIN51524) or HM(ISO6743/4).
4. Recommended oil viscosity - 12...68 cSt or see page 81.
5. Recommended maximum system operating temperature - 82°[180°] C[F].
6. To ensure optimum life of the pump, fill it up with fluid prior to load it and run with moderate load and speed for about 10-15 minutes.

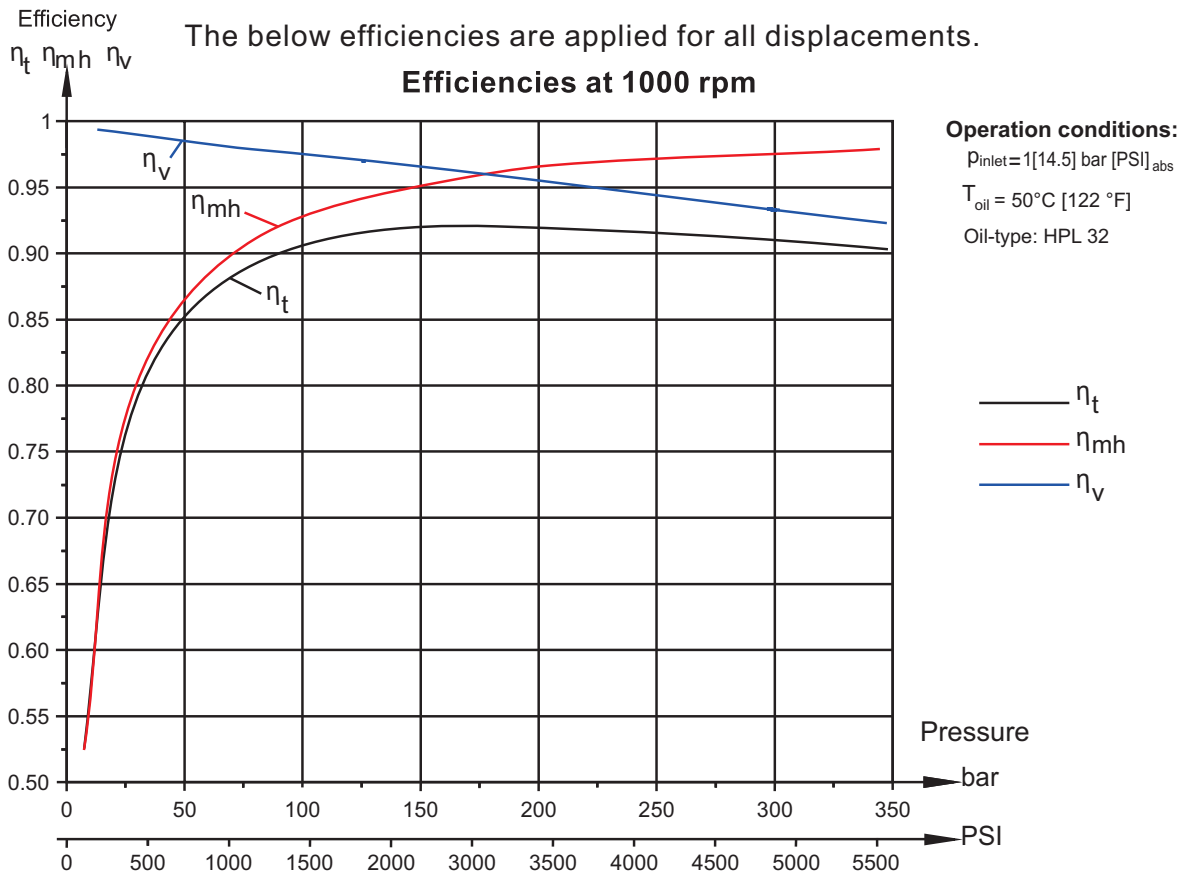


FUNCTION DIAGRAMS

Sound pressure level (noise) is measured in acoustic chamber according to DIN 45635 Part 1 and Part 26. These diagram is applied for all displacements.



The sound pressure level for a particular pump may vary $\pm 2 \text{ dB(A)}$ compared to what is shown in the diagram.



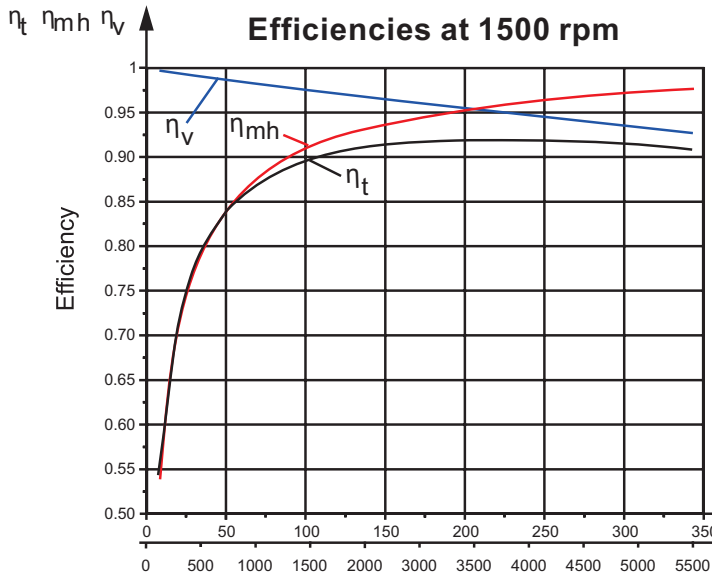
The pump size, pressure, torque, speed of rotation and flow rate required for a specific application can be calculated using the formulas on page 82

Efficiencies for a particular pump may vary from the shown in the diagram depending on the operating conditions.



FUNCTION DIAGRAMS

Efficiencies at 1500 rpm



Operation conditions:

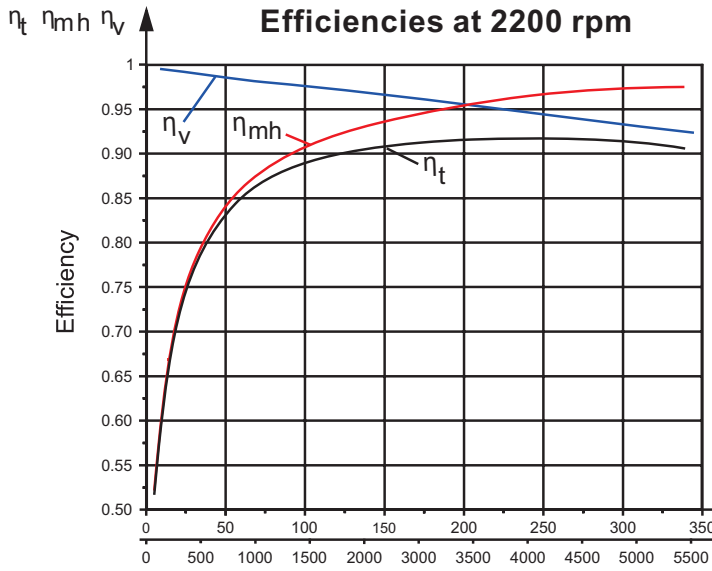
$P_{inlet} = 1 [14.5] \text{ bar [PSI]}_{abs}$

$T_{oil} = 50^\circ\text{C} [122^\circ\text{F}]$

Oil-type: HPL 32

- η_t
- η_{mh}
- η_v

Efficiencies at 2200 rpm



Operation conditions:

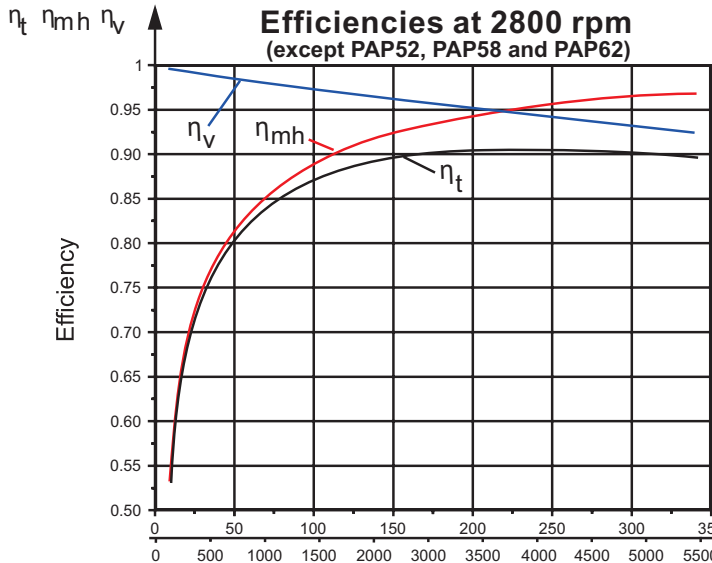
$P_{inlet} = 1 [14.5] \text{ bar [PSI]}_{abs}$

$T_{oil} = 50^\circ\text{C} [122^\circ\text{F}]$

Oil-type: HPL 32

- η_t
- η_{mh}
- η_v

Efficiencies at 2800 rpm
(except PAP52, PAP58 and PAP62)



Operation conditions:

$P_{inlet} = 1 [14.5] \text{ bar [PSI]}_{abs}$

$T_{oil} = 50^\circ\text{C} [122^\circ\text{F}]$

Oil-type: HPL 32

- η_t
- η_{mh}
- η_v

The pump size, pressure, torque, speed of rotation and flow rate required for a specific application can be calculated using the formulas on page 82

Efficiencies for a particular pump may vary from the shown in the diagram depending on the operating conditions.

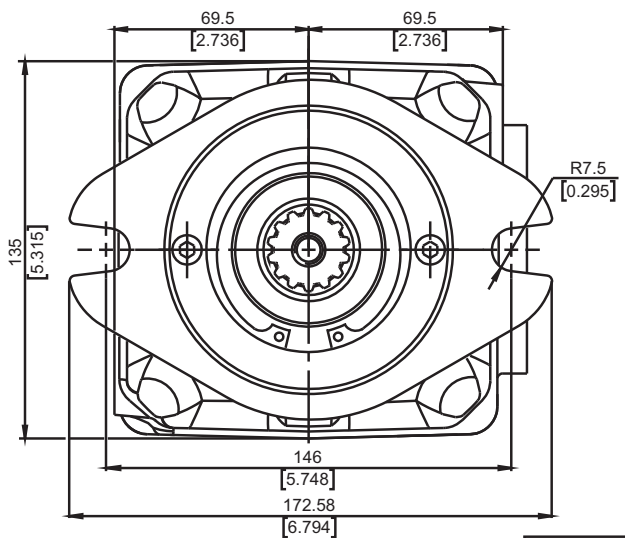
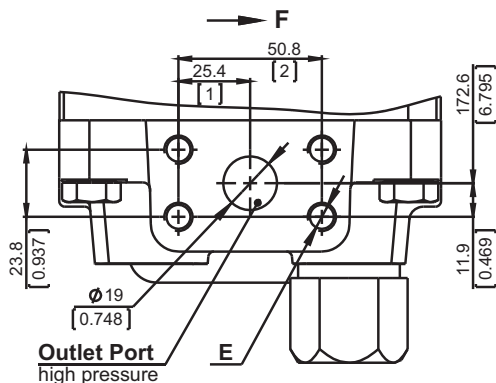
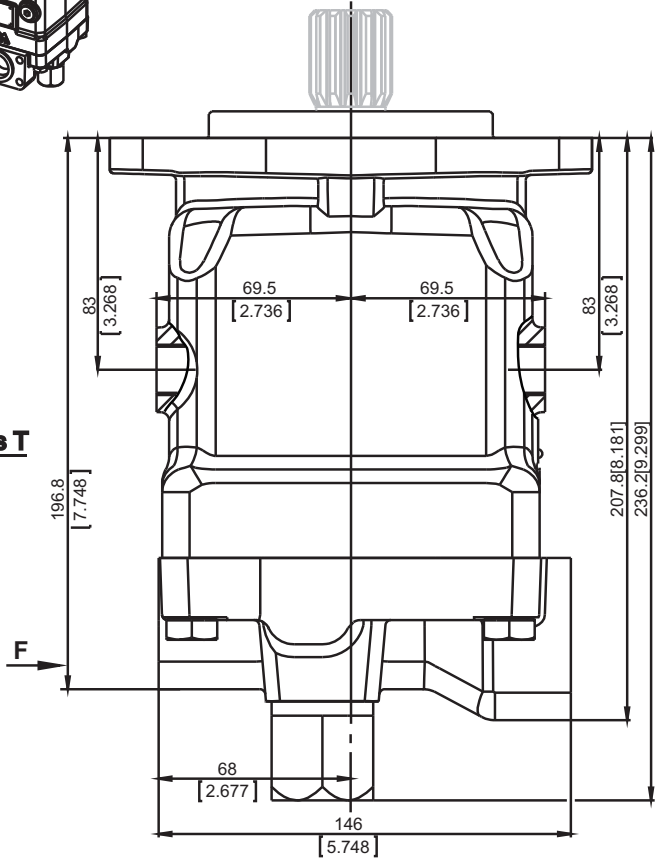
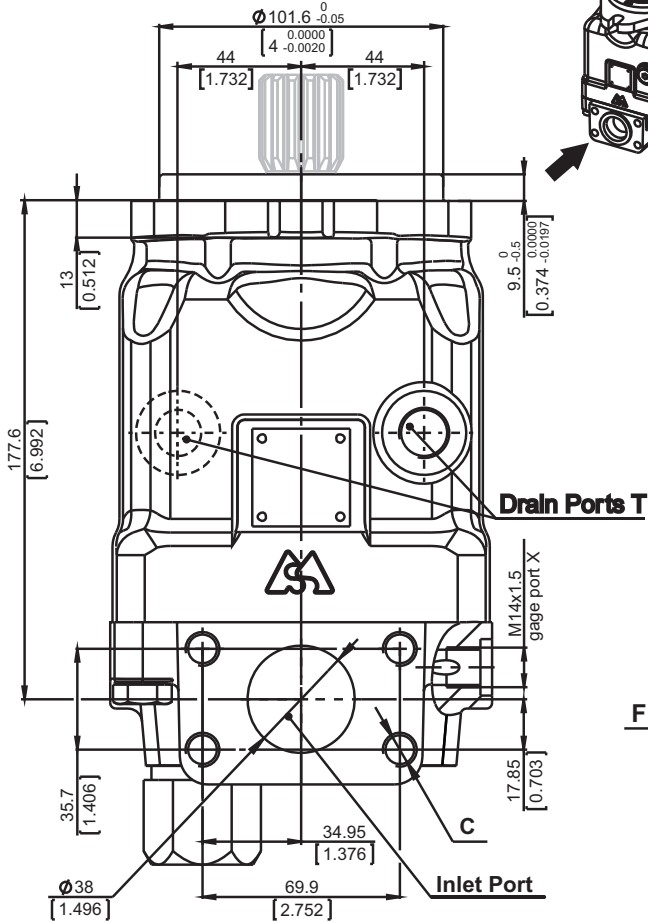
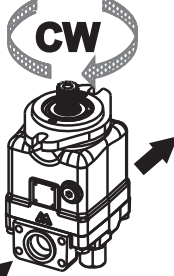
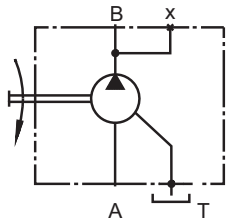


OVERALL DIMENSIONS AND PORTS

Direction of Rotation **CW**(Right)

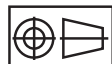
Port sizes **default** and **5**

See the port sizes at the bottom of this page



	Port Size	
	default	5
Inlet	ISO 6162-1 DN38	SAE J518 1 1/2 PSI3000
Outlet	ISO 6162-2 DN19	SAE J518 3/4 PSI6000
T	M18x1.5	7/8-14 UNF
C	4xM12	4x1/2-13 UNC
E	4xM10	4x3/8-16 UNC

Shaft Mounting
see page 66



mm [in]

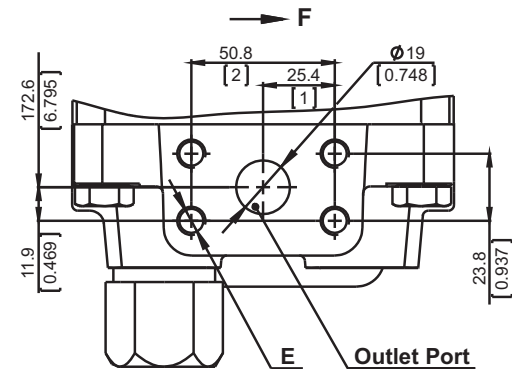
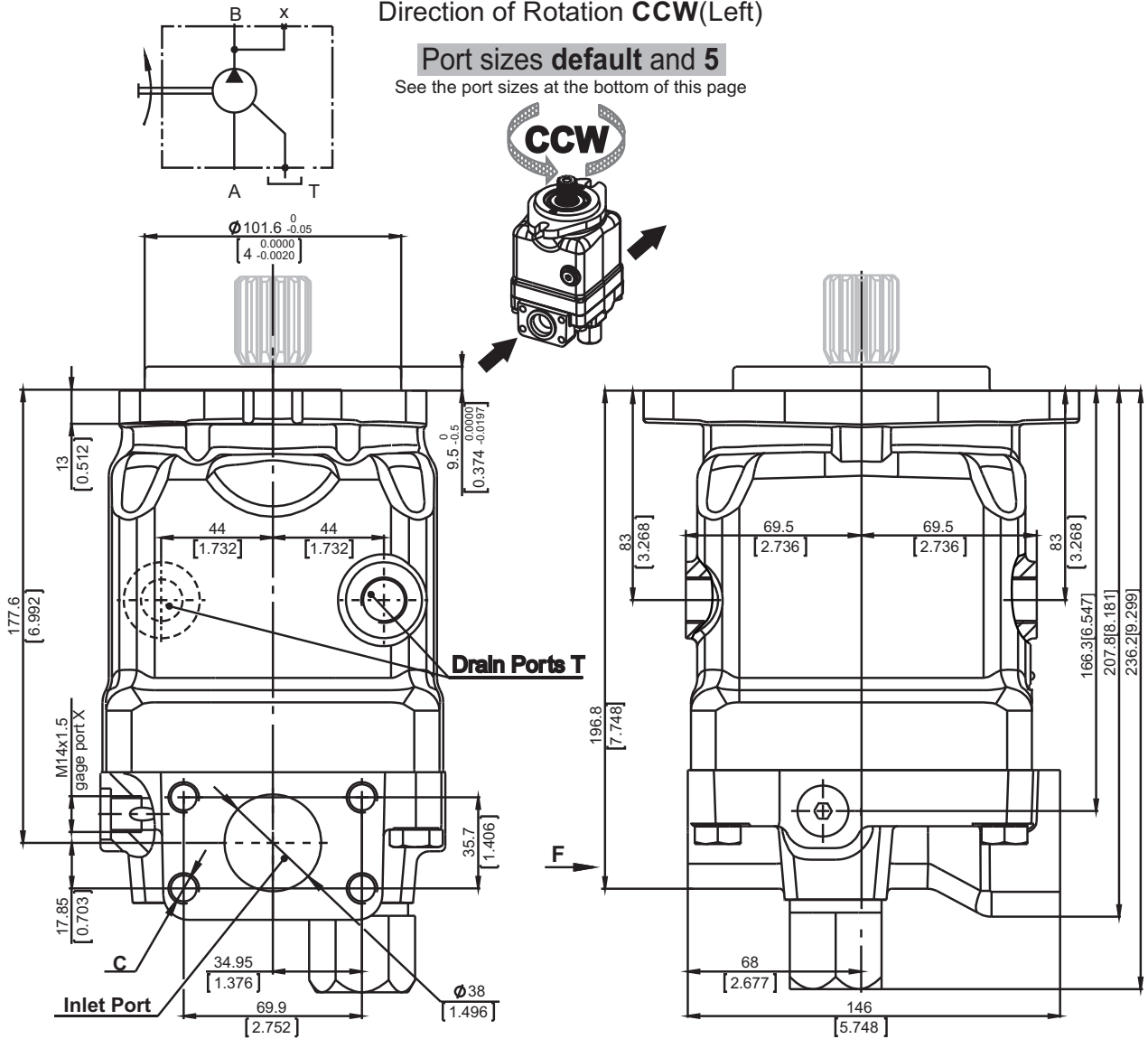


OVERALL DIMENSIONS AND PORTS

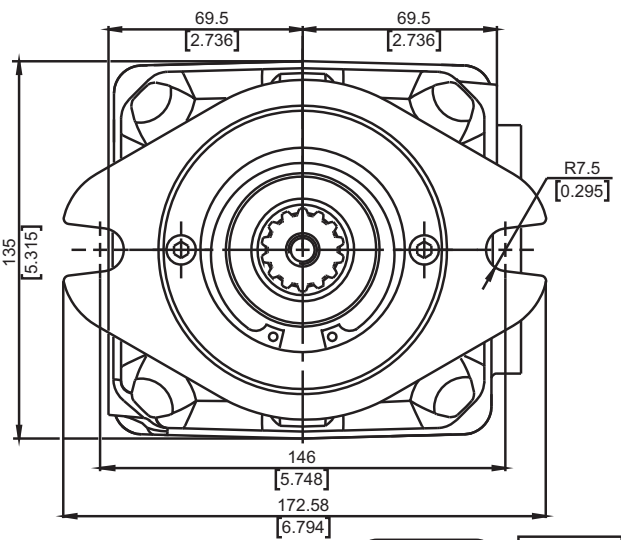
Direction of Rotation **CCW**(Left)

Port sizes **default** and **5**

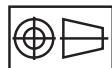
See the port sizes at the bottom of this page



	Port Size	
	default	5
Inlet	ISO 6162-1 DN38	SAE J518 1½ PSI3000
Outlet	ISO 6162-2 DN19	SAE J518 ¾ PSI6000
T	M18x1.5	7/8-14 UNF
C	4xM12	4x1/2-13 UNC
E	4xM10	4x3/8-16 UNC



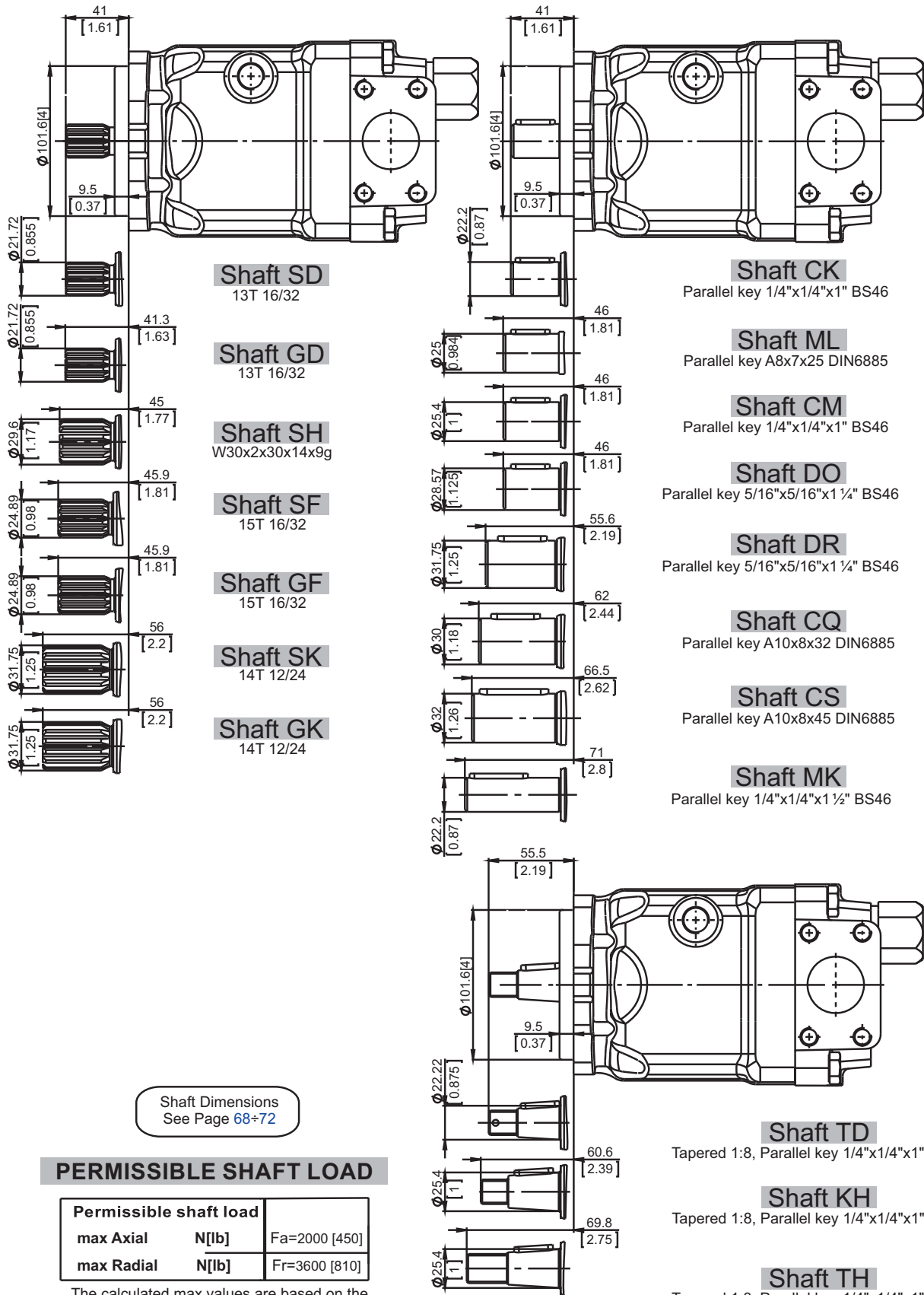
Shaft Mounting
see next page



mm [in]



SHAFTS MOUNTING



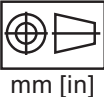
Shaft Dimensions
See Page 68÷72

PERMISSIBLE SHAFT LOAD

Permissible shaft load		
max Axial	N[lb]	Fa=2000 [450]
max Radial	N[lb]	Fr=3600 [810]

The calculated max values are based on the optimal direction of the forces Fr, Fa and optimal position of the shaft (see page 78).

For more information, please, feel free to contact us.





ORDERING CODE

	1	2	3	4	5	6	7	8	9	9	9
P	A	P							[]

Pos.1 - Mounting Flange

B - SAE B - 2-Bolt flange
spigot diam. 101.6 [4"] - BC 146 [5.75"]

Pos.2 - Displacement Code

- 35** - 36.16 cm.³/rev. [2.21 in.³/rev.]
- 40** - 41.59 cm.³/rev. [2.54 in.³/rev.]
- 46** - 47.13 cm.³/rev. [2.88 in.³/rev.]
- 50** - 49.94 cm.³/rev. [3.05 in.³/rev.]
- 52** - 51.95 cm.³/rev. [3.17 in.³/rev.]
- 58** - 58.8 cm.³/rev. [3.59 in.³/rev.]
- 62** - 62.4 cm.³/rev. [3.81 in.³/rev.]

Pos.3 - Direction of Rotation

- R** - CW, Right direction
- L** - CCW, Left direction

Pos.4 - Shaft Extensions**

- SD** - ø21.72 [0.855"] Spline SAE 13T 16/32 DP, M8
- GD** - ø21.72 [0.855"] Spline SAE 13T 16/32 DP, 5/16-18 UNC thread
- SF** - ø24.9 [0.98"] Spline SAE 15T 16/32, M8
- GF** - ø24.9 [0.98"] Spline SAE 15T 16/32, 3/8-16UNC
- SH** - ø29.6 [1.165"] Spline W30x2x30x14x9g DIN, M10 thread
- SK** - ø31.75 [1.25"] Spline SAE 14T 12/24 DP, M10
- GK** - ø31.75 [1.25"] Spline SAE 14T 12/24 DP, 7/16-14UNC thread
- CK** - ø22.2 [7/8"] Straight, M8 thread
Parallel key 1/4"x1/4"x1" BS46
- MK** - ø22.2 [7/8"] Straight, M8 thread
Parallel key 1/4"x1/4"x1½" BS46
- ML** - ø25 [0.984"] Straight, M8 thread
Parallel key A8x7x25 DIN6885
- CM** - ø25.4 [1"] Straight, M8 thread
Parallel key 1/4"x1/4"x1" BS46
- DO** - ø28.75 [1.125"] Straight, 3/8-16UNC
Parallel key 5/16"x5/16"x1¼" BS46
- CQ** - ø30 [1.181"] Straight, M8 thread
Parallel key A8x7x32 DIN6885
- DR** - ø31.75 [1.25"] Straight, 3/8-16UNC
Parallel key 5/16"x5/16"x1¼" BS46
- CS** - ø32 [1.26"] Straight, M8 thread
Parallel key A10x8x45 DIN6885
- TD** - ø22.22 [7/8"] Tapered 1:8 [125:1000],
Parallel key 1/4"x1/4"x1", 5/8-18 UNF
- TH** - ø25.4 [1"] Tapered 1:8 [125:1000],
Parallel key 1/4"x1/4"x1", 3/4-16 UNF
- KH** - ø25.4 [1"] Tapered 1:8 [125:1000],
Parallel key 1/4"x1/4"x1", M16x1.5

Pos.5 - Port Size

- omit - Inlet ISO 6162-1 DN38, Outlet ISO 6162-2 DN19, metric thread, drain ports M18x1.5
- 5** - Inlet SAE J518 1½" PSI3000, Outlet SAEJ518 3/4" PSI6000, sae thread, drain 7/8-14 UNF

Pos.6 - Seal, Corrosion Resistant Seal Surface

- omit - NBR seal type material
- V** - FKM seal type material

Pos.7 - Special Features* see page 77

- omit - None
- R2S** - Speed Sensor Two Directional

Pos.8 - Paint and Coating

- omit - No paint or coating
- PS** - Painted ***
- PCS** - Painted corrosion protected paint***

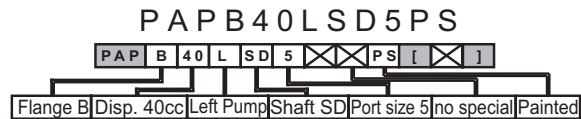
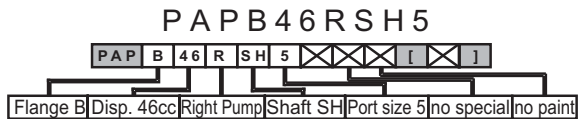
If a painting option is required, the standard color is black-Alkyd-Styrenated Enamel, Black RAL 9005. Other color by customer's request.

Pos.9 - Design Series

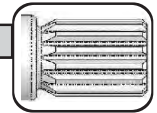
- omit - Factory specified

**The permissible output torque for shafts must not be exceeded!
***Non painted feeding surface

EXAMPLE

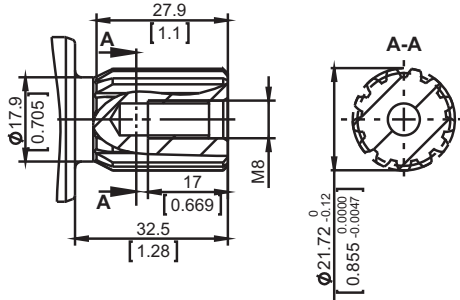


SHAFT TYPES AND DIMENSIONS



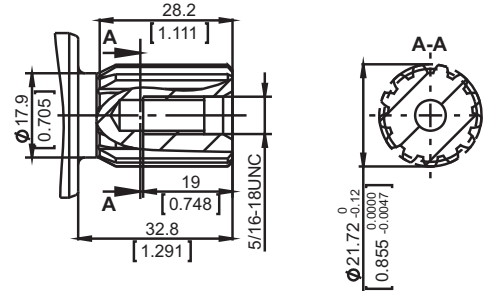
SD

$\phi 21.72$ [0.855], M8 thread
13T 16/32 DP splined ANSI B92.1-1970
Max. torque 220 Nm [1950 lb-in]



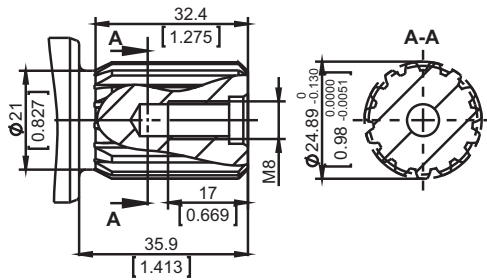
GD

$\phi 21.72$ [0.855], 5/16-18 UNC thread
13T 16/32 DP splined ANSI B92.1-1970
Max. torque 220 Nm [1950 lb-in]



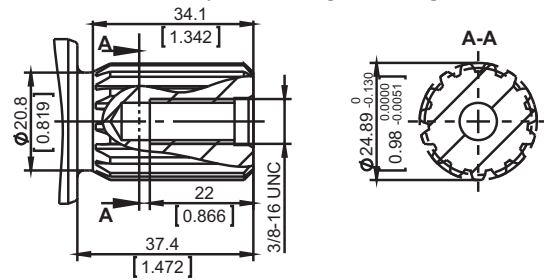
SF

$\phi 24.89$ [0.98], M8 thread
15T 16/32 DP splined ANSI B92.1-1970
Max. torque 360 Nm [3180 lb-in]



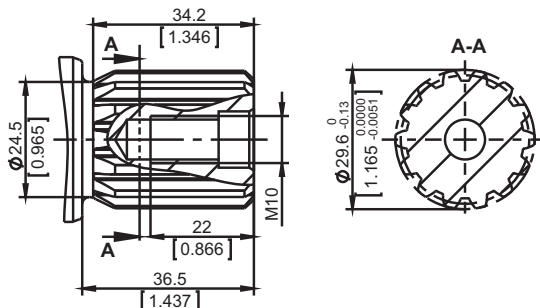
GF

$\phi 24.89$ [0.98], 3/8-16 UNC thread
15T 16/32 DP splined ANSI B92.1-1970
Max. torque 360 Nm [3180 lb-in]



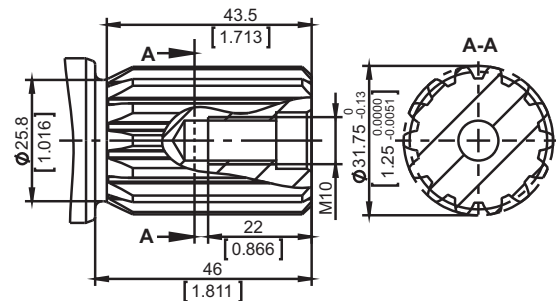
SH

$\phi 29.6$ [1.165], M10 thread
W30x2x30x14x9g splined DIN 5480
Max. torque 600 Nm [5310 lb-in]

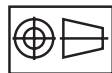


SK

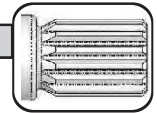
$\phi 31.75$ [1.25], M10 thread
14T 12/24 DP splined ANSI B92.1-1970
Max. torque 600 Nm [5310 lb-in]



The required max. torque
must not be exceeded



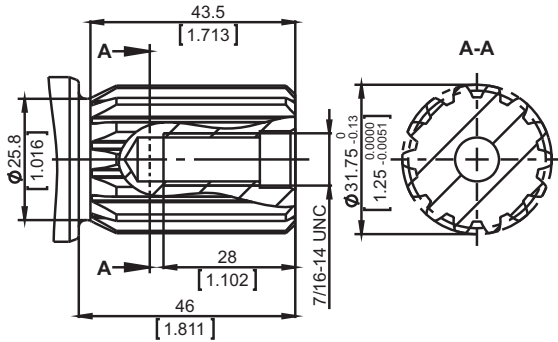
mm [in]



SHAFT TYPES AND DIMENSIONS

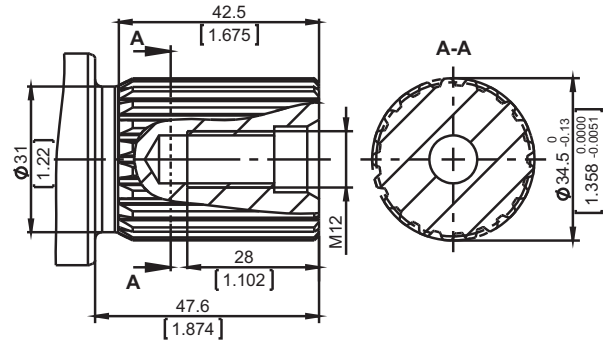
GK

$\phi 31.75$ [1.25], 7/16-14 UNC thread
 14T 12/24 DP splined ANSI B92.1-1970
 Max. torque 600 Nm [5310 lb-in]



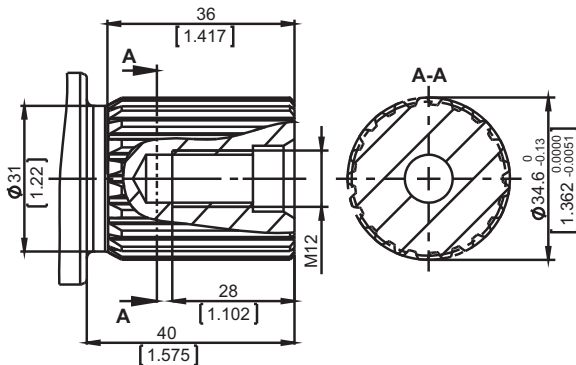
SP

$\phi 34.5$ [1.358], M12 thread
 21T 16/32 DP splined ANSI B92.1-1970
 Max. torque 1085 Nm [9600 lb-in]



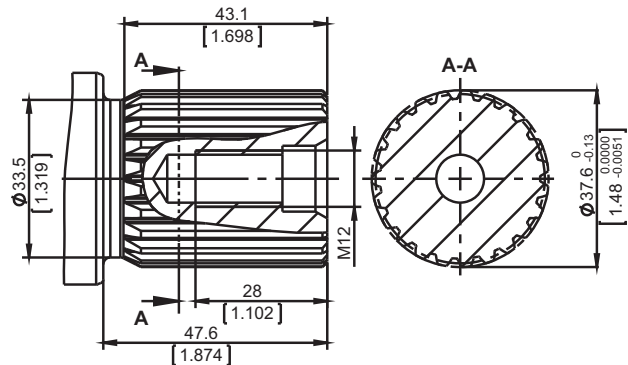
QH

$\phi 34.6$ [1.36], M12 thread
 W35x2x30x16x9g splined DIN 5480
 Max. torque 1085 Nm [9600 lb-in]



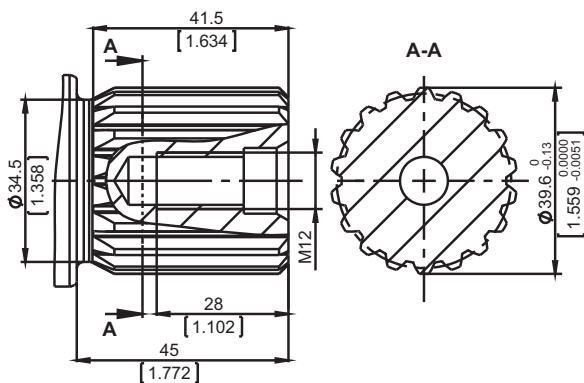
SR

$\phi 37.6$ [1.5], M12 thread
 23T 16/32 DP splined ANSI B92.1-1970
 Max. torque 1300 Nm [11500 lb-in]



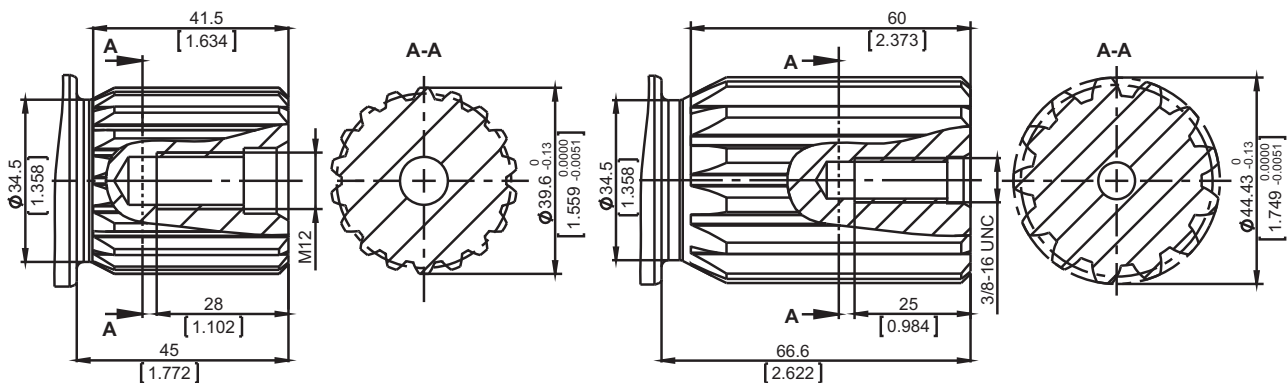
ST

$\phi 39.6$ [1.559], M12 thread
 W40x2x30x18x9g splined DIN 5480
 Max. torque 1400 Nm [12400 lb-in]

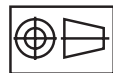


GU

$\phi 44.43$ [1.75], 3/8-16 UNC thread
 13T 8/16 DP splined ANSI B92.1-1970
 Max. torque 2000 Nm [17700 lb-in]



The required max. torque
 must not be exceeded

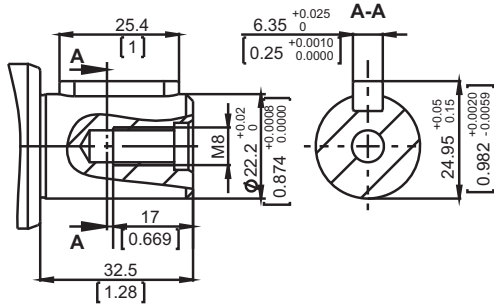


mm [in]

SHAFT TYPES AND DIMENSIONS

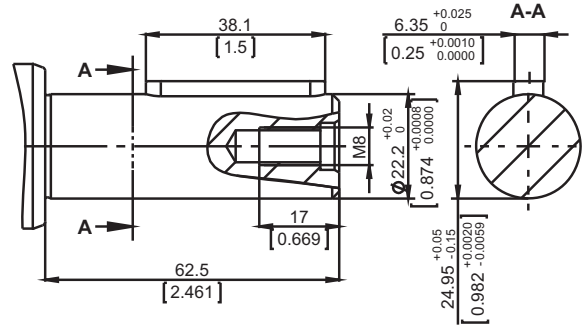
CK

$\phi 22.2$ [7/8] straight, M8 thread
Parallel key $1/4 \times 1/4 \times 1$ " BS46
Max. torque 180 Nm [1600 lb-in]



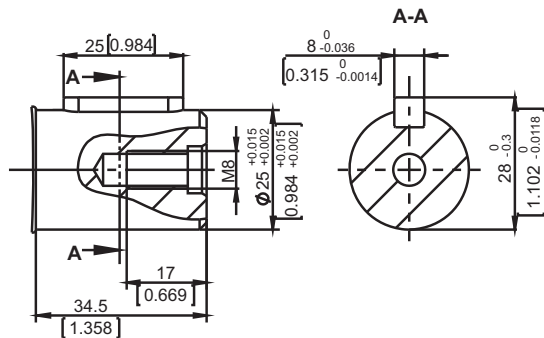
MK

$\phi 22.2$ [7/8] straight, M8 thread
Parallel key $1/4 \times 1/4 \times 1\frac{1}{2}$ " BS46
Max. torque 180 Nm [1600 lb-in]



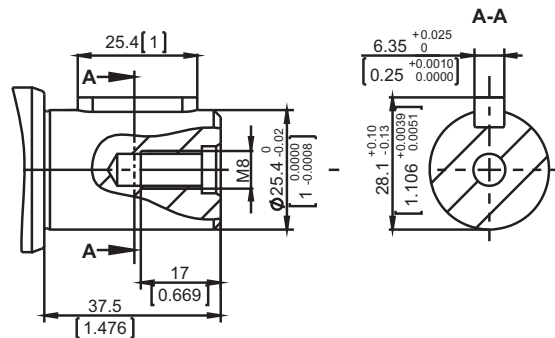
ML

$\phi 25$ [0.984] straight, M8 thread
Parallel key $A8 \times 7 \times 25$ DIN6885
Max. torque 250 Nm [2210 lb-in]



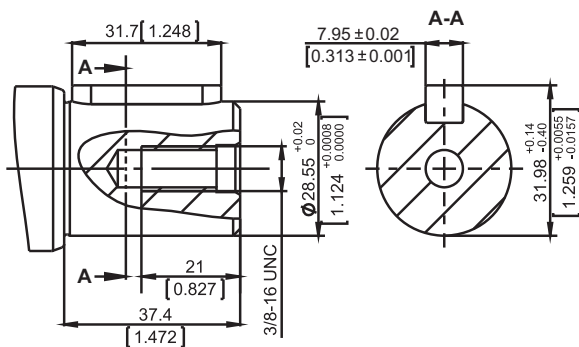
CM

$\phi 25.4$ [1] straight, M8 thread
Parallel key $1/4 \times 1/4 \times 1$ " BS46
Max. torque 250 Nm [2210 lb-in]



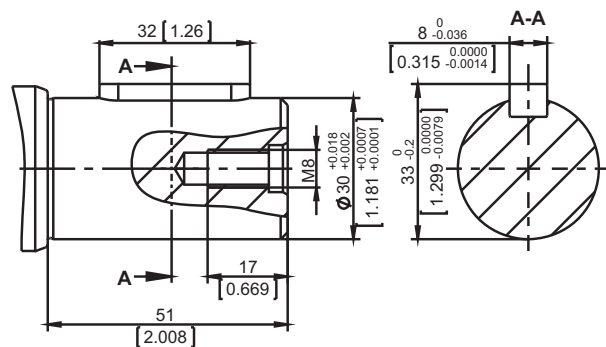
DO

$\phi 28.55$ [1.125] straight, 3/8-16 UNC thread
Parallel key $5/16 \times 5/16 \times 1\frac{1}{4}$ "
Max. torque 280 Nm [2480 lb-in]

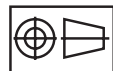


CQ

$\phi 30$ [1.181] straight, M8 thread
Parallel key $A8 \times 7 \times 32$ DIN6885
Max. torque 300 Nm [2655 lb-in]



The required max. torque
must not be exceeded

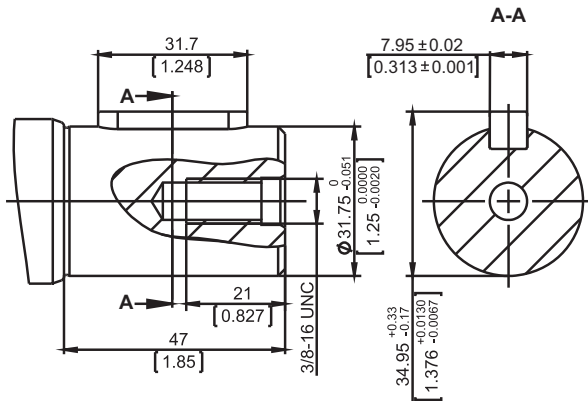


mm [in]

SHAFT TYPES AND DIMENSIONS

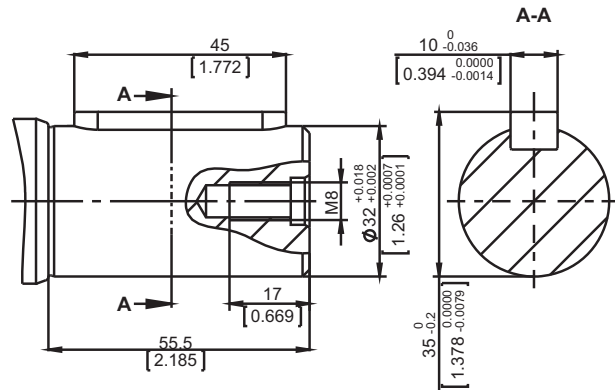
DR

$\varnothing 31.75$ [1.25] straight, 3/8-16 UNC thread
Parallel key $5/16 \times 5/16 \times 1/4$ "
Max. torque 770 Nm [6815 lb-in]



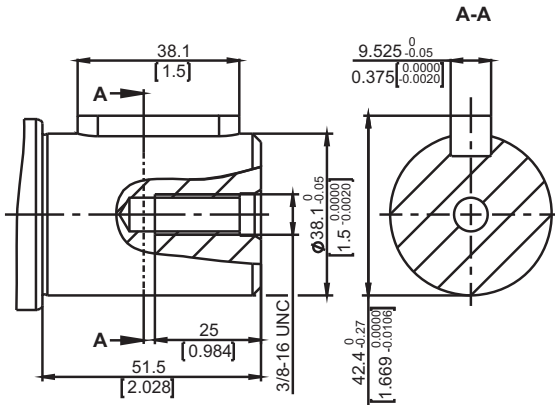
CS

$\varnothing 32$ [1.26] straight, M8 thread
Parallel key $A10 \times 8 \times 45$ DIN6885
Max. torque 565 Nm [5000 lb-in]



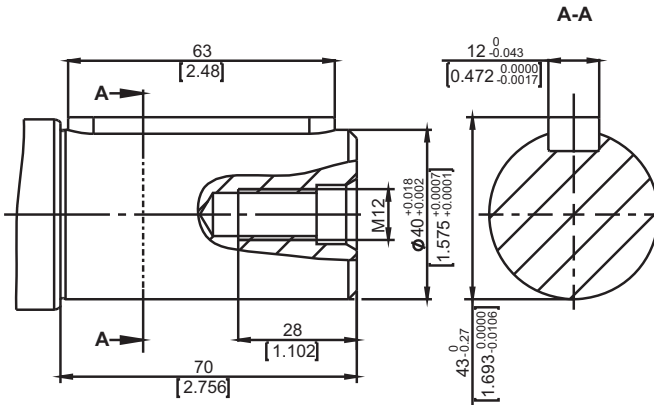
DU

$\varnothing 38.1$ [1.5] straight, 3/8-16 UNC thread
Parallel key $3/4 \times 3/4 \times 1/2$ " BS46
Max. torque 1000 Nm [8850 lb-in]

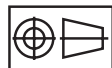


CV

$\varnothing 40$ [1.575] straight, M12 thread
Parallel key $A12 \times 8 \times 63$ DIN6885
Max. torque 1100 Nm [9735 lb-in]



The required max. torque
must not be exceeded



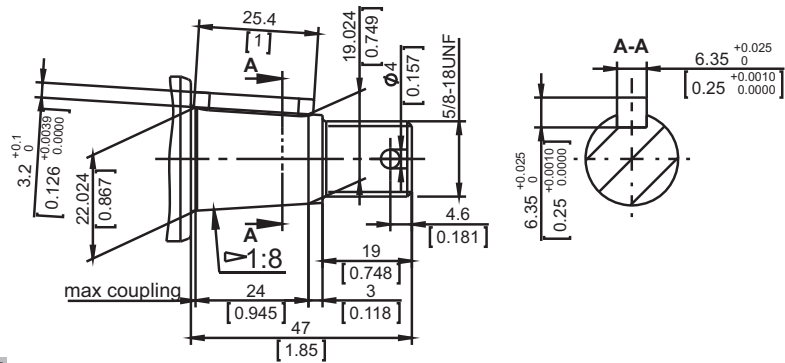
mm [in]

SHAFT TYPES AND DIMENSIONS



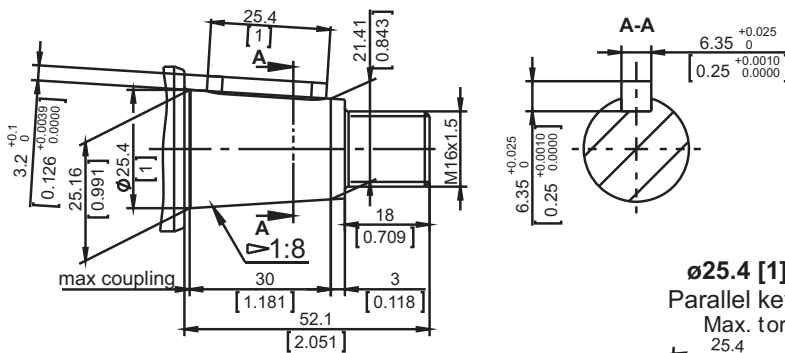
TD

$\varnothing 22.22$ [7/8] Tapered 1:8 [125:1000],
Parallel key 1/4"x1/4"x1", 5/8-18 UNF
Max. torque 220 Nm [1950 lb-in]



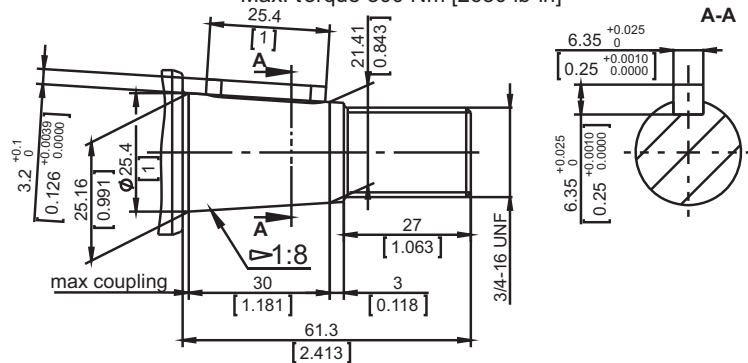
KH

$\varnothing 25.4$ [1] Tapered 1:8 [125:1000],
Parallel key 1/4"x1/4"x1", M16x1.5
Max. torque 300 Nm [2650 lb-in]



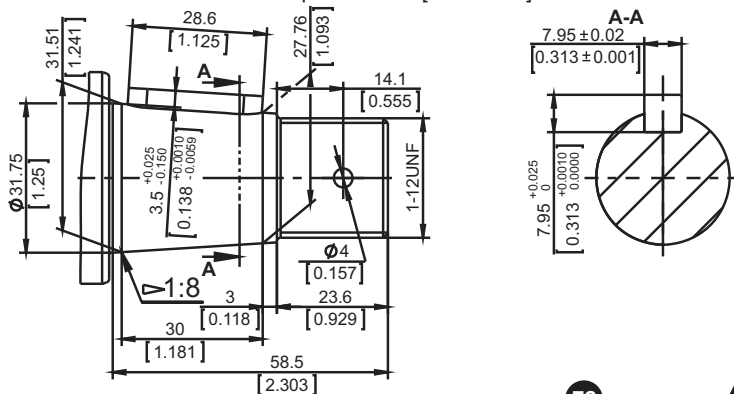
TH

$\varnothing 25.4$ [1] Tapered 1:8 [125:1000],
Parallel key 1/4"x1/4"x1", 3/4-16 UNF
Max. torque 300 Nm [2650 lb-in]

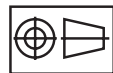


TN

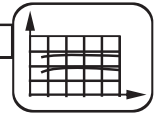
$\varnothing 31.75$ [1 1/4] Tapered 1:8 [125:1000],
Parallel key 5/16"x5/16"x1 1/8", 1-12 UNF
Max. torque 500 Nm [4425 lb-in]



The required max. torque
must not be exceeded



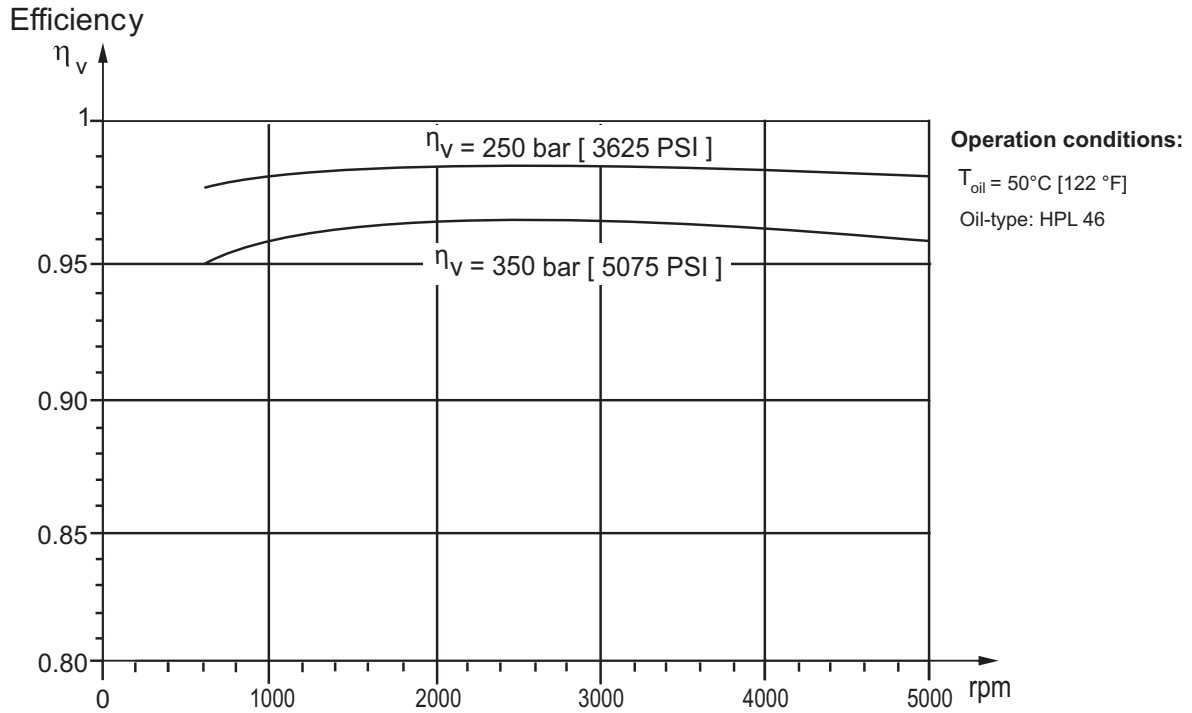
mm [in]



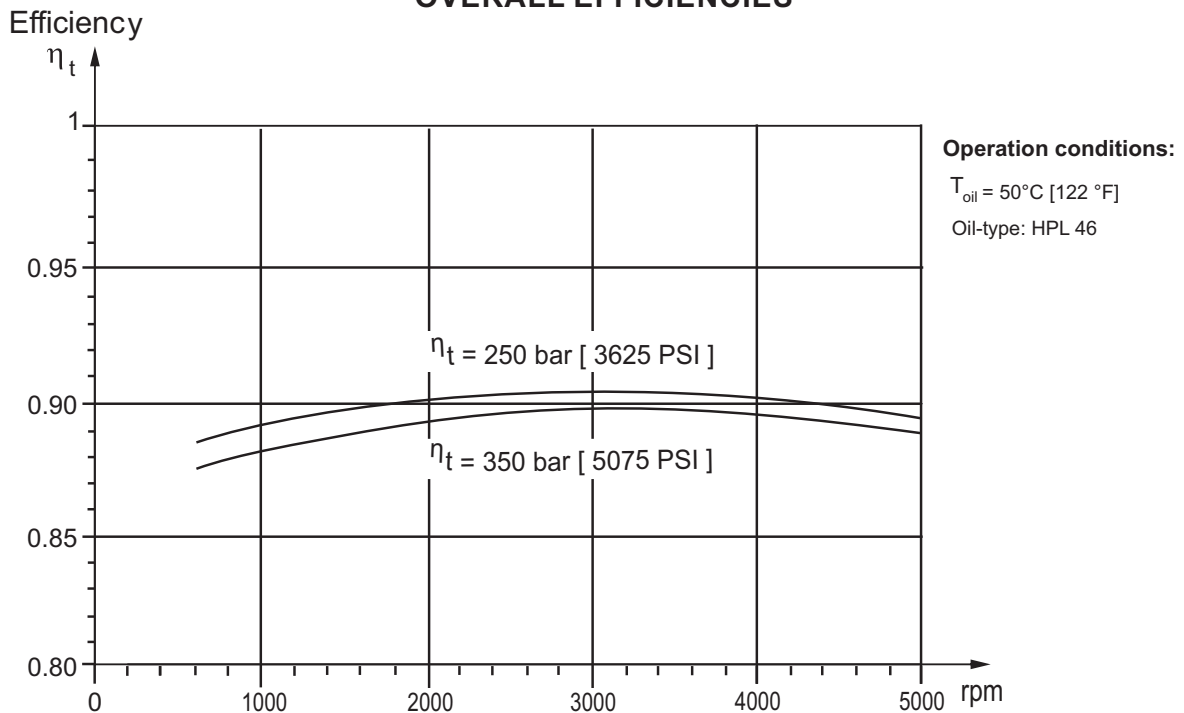
MOTOR FUNCTION DIAGRAMS

The below efficiencies are applied for all motor displacements.

VOLUMETRIC EFFICIENCIES



OVERALL EFFICIENCIES



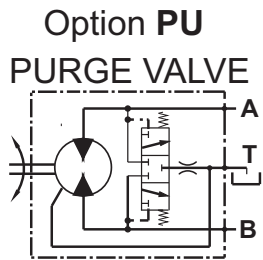
The motor size, pressure, torque, speed of rotation and flow rate required for a specific application can be calculated using the formulas on page 82

Efficiencies for a particular motor may vary from the shown in the diagram depending on the operating conditions.

VALVE OPTIONS



The overall dimensions of the motor with integrated valves could vary compared to the standard motors.



- Mainly used in open loop circuit;
- Used for cooling purpose or oil cleanliness requirements;
- Flow rate by **default** :

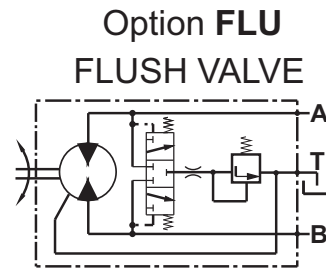
Motors	MAP28	MAP50	MAP62	MAP100	MAPW62
default	5±2 l/min	6±2 l/min	6±2 l/min	7±2 l/min	6±2 l/min

- For other options, please see Flow Setting of ordering code, considering the following possible values:

Flow setting → flow rate

EXAMPLE

MAPB50SH2PU purge valve flow rate 6±2 l/min
 MAPB50SH2PUL3.5 purge valve flow rate 3.5±1 l/min
 MAPB50SH2PUL5.5 purge valve flow rate 5.5±1 l/min



- Mainly used in close loop circuit;
- The valve is a combination between a purge valve and check valve;
- Flow rate by **default**

Motors	MAP28	MAP50	MAP62	MAP100	MAPW62
default	5±2 l/min	6±2 l/min	6±2 l/min	7±2 l/min	6±2 l/min

and charge (opening) pressure 16 bar with 20 bar feed pressure for close loop circuit;

- For other options, please see Pressure Setting and Flow Setting of ordering code, considering the following possible values:

Pressure setting → pressure
 Flow setting → flow rate

EXAMPLE

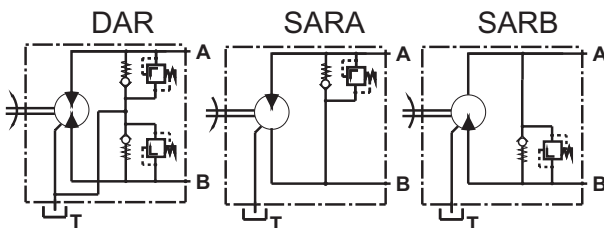
MAPB50SH2FLU flow rate 6±2 l/min,
 charge pressure 16 bar
 MAPB50SH2FLU10L5.5 flow rate 5.5±1 l/min,
 charge pressure 10 bar
 MAPB50SH2FLUL3.5 flow rate 3.5±1 l/min,
 charge pressure 16 bar

Option DAR, SARA, SARB

Combined Anti-Cavitation and Relief Valve

- Anti-cavitation check valve is used for applications such as Fan drive control;

- Pressure relief valves prevent excessive pressures in the high pressure loop.



Please, consider the following possible values:

Pressure setting → pressure

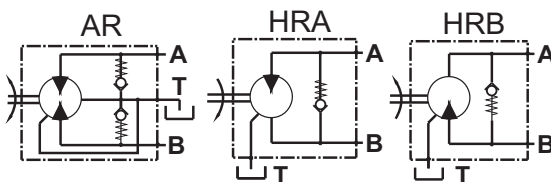
EXAMPLE

MAPB50SH2DAR350
 Double Anti-Cavitation and Relief Valve, relief valve setting 350 bar
 MAPB50SH2SARA250
 Single Anti-Cavitation and Relief Valve, relief valve setting 250 bar
 The valve is placed on port A
 MAPB50SH2SARB300
 Single Anti-Cavitation and Relief Valve, relief valve setting 300 bar
 The valve is placed on port B

Option AR, HRA, HRB

Anti-Cavitation Valve

- Anti-cavitation check valve is used for applications such as Fan drive control.



EXAMPLE

MAPB50SH2AR
 Double Anti-Cavitation Valve
 MAPB50SH2HRA
 Single Anti-Cavitation Valve, the valve is placed on port A
 MAPB50SH2HRB
 Single Anti-Cavitation Valve, the valve is placed on port B

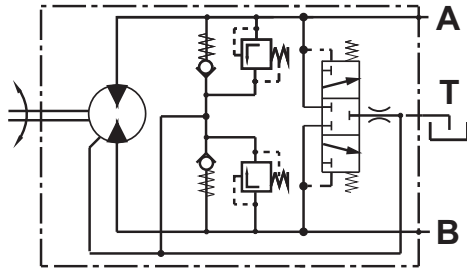


VALVE OPTIONS

The overall dimensions of the motor with integrated valves could vary compared to the standard motors.

Option DARP

Dual Anti-Cavitation, Relief and Purge Valve



- Mainly used in open loop circuit;
- The valve is a combination between a dual anti-cavitation, relief and purge valve;
- Purge Valve is used for cooling purpose or cleanliness requirements;
- Anti-Cavitation Check Valve is used for applications such as Fan drive control;
- Pressure relief valves prevent excessive pressures in the high pressure loop;
- Please, consider the following possible values for pressure set of the relief valve:

Pressure setting → pressure

- Flow rate of purge valve by **default**

Motors	MAP28	MAP50	MAP62	MAP100	MAPW62
default	5±2 l/min	6±2 l/min	6±2 l/min	7±2 l/min	6±2 l/min

The possible values are as follow:

Flow setting → flow rate

EXAMPLE

M A P B 5 0 S H 2 D A R P 3 5 0

Double Anti-Cavitation, Relief and Purge Valve, relief valve setting 350 bar, purge valve flow rate 6±2 l/min

M A P B 5 0 S H 2 D A R P 2 5 0 L 3 . 5

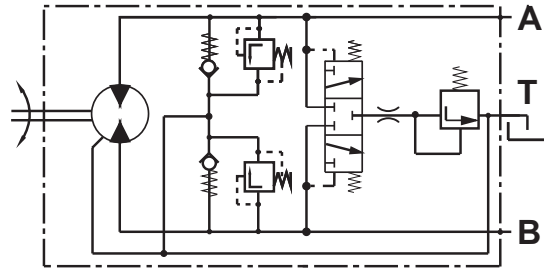
Double Anti-Cavitation, Relief and Purge Valve, relief valve setting is 250 bar, purge valve flow rate 3.5±1 l/min

M A P B 5 0 S H 2 D A R P 3 0 0 L 5 . 5

Double Anti-Cavitation, Relief and Purge Valve, relief valve setting 300 bar, purge valve flow rate 5.5±1 l/min

Option DARF

Dual Anti-Cavitation, Relief and Flush Valve



- Mainly used in close loop circuit;
- The valve is a combination between a dual anti-cavitation, relief and flush valve;
- Flush valve is used for cooling purpose or cleanliness requirements;
- Anti-Cavitation Check valve is used for applications such as Fan drive control;
- Pressure Relief Valves prevent excessive pressures in the high pressure loop;
- Please, consider the following possible values for pressure set of the relief valve:

Pressure setting → pressure

- Flow rate of flush valve by **default**

Motors	MAP28	MAP50	MAP62	MAP100	MAPW62
default	5±2 l/min	6±2 l/min	6±2 l/min	7±2 l/min	6±2 l/min

and charge pressure 16 bar with 20 bar feed pressure for close loop circuit. The possible values are as follow:

Flow setting → flow rate

- Other values for charge pressure are possible. Please see Pressure Setting. Example: For charge pressure 10 bar the options are as follow:

Pressure setting

Relief valve opening pressure Flush valve opening pressure (charge pressure)

EXAMPLE

M A P B 5 0 S H 2 D A R F 3 5 0

Double Anti-Cavitation, Relief and Flush Valve, relief valve setting 350 bar flush valve charge pressure 16 bar, flush valve flow rate 6±2 l/min

M A P B 5 0 S H 2 D A R F 3 5 0 - 1 0

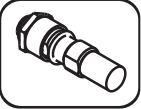
Double Anti-Cavitation, Relief and Flush Valve, relief valve setting 350 bar flush valve charge pressure 10 bar, flush valve flow rate is 6±2 l/min

M A P B 5 0 S H 2 D A R F 2 5 0 L 3 . 5

Double Anti-Cavitation, Relief and Flush Valve, relief valve setting 250 bar flush valve charge pressure 16 bar, flush valve flow rate is 3.5±1 l/min

M A P B 5 0 S H 2 D A R F 3 0 0 - 1 0 L 5 . 5

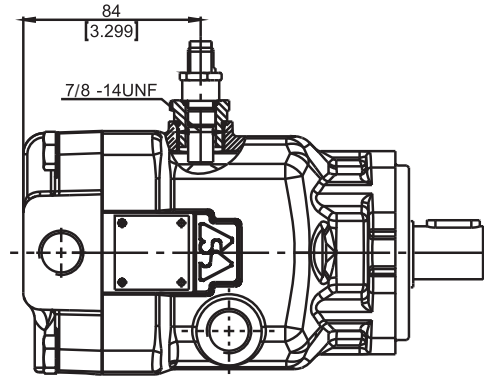
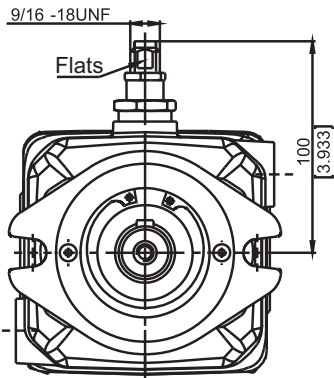
Double Anti-Cavitation, Relief and Flush Valve, relief valve setting 300 bar flush valve charge pressure 10 bar, flush valve flow rate 5.5±1 l/min



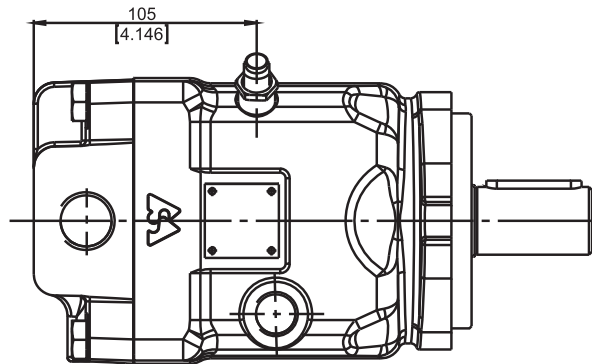
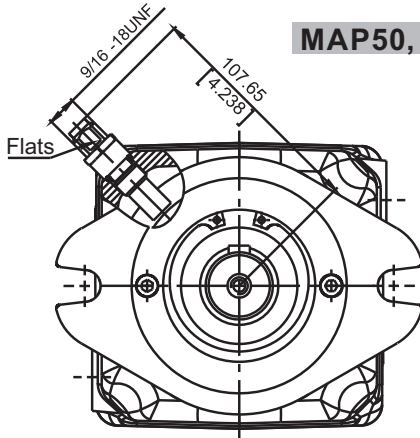
SPEED SENSORS

MOUNTING DIMENSIONS

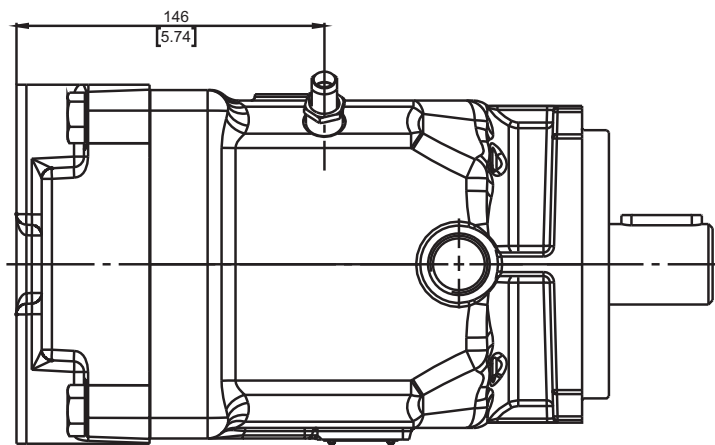
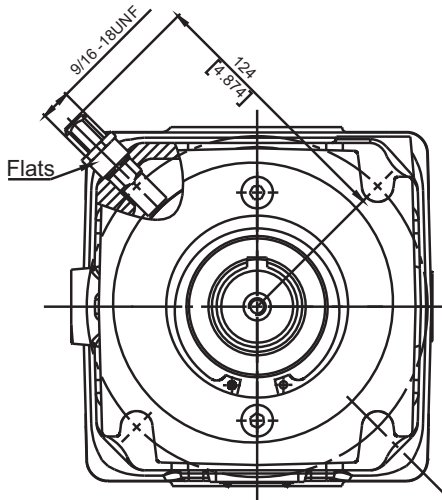
MAP28



MAP50, MAP62, MAPW62 and PAP62



MAP100

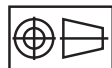


INSTALLATION

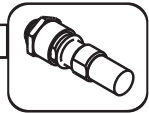


1. Remove the plug.
2. Screw in the (CW) sensor by hand until the bottom end gently touches the speed ring.
3. Unscrew (CCW) sensor 1/4 turn. Continue unscrewing until the flats are perpendicular to motor or pump shaft center line (tolerance 20° to 30° is acceptable). Do not unscrew the sensor more than 3/4 of a turn from the touching.
4. Using the 1/2 inch wrench to hold the sensor, tighten the lock nut to 10⁵[115] Nm [lb-in]. with an 1 1/16 inch hew wrench.

NOTE: The speed sensor is not fitted at the factory, but is supplied in plastic bag with the motor. For installation see enclosed insructions.



mm [in]



SPEED SENSORS

TECHNICAL DATA OF THE SPEED SENSOR

TECHNICAL DATA

Power supply 4.5 ... 30 VDC
 Power consumption < 15 mA without load
 Pin connector universal /PUSH-PULL/
 4P Delphi Connector DJ3042-2.5-21
 Output measurements Speed, Direction
 Output maximum current 100 mA
 Resident output voltage 1.5 V with 100 mA of the output
 0.5 V without load of the output
 Frequency range 0 ... 15 000 Hz
 Degree of protection IP 67
 Temperature -40 ... + 100 °C
 Humidity 0 ... 95% RH

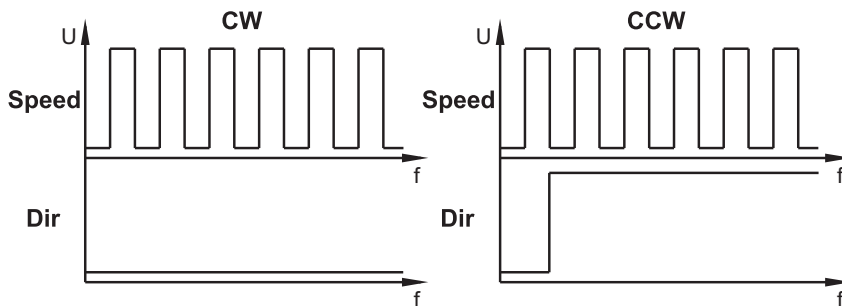
OUTPUT PULSES

per revolution

Motor Type	MAP28	MAP50	MAP100
Output Pulses	42	50	65

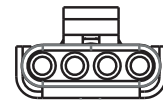
Pump Type	PAP50
Output Pulses	50

OUTPUT DIAGRAMS



PIN CONNECTOR

4 pin Delphi Connector

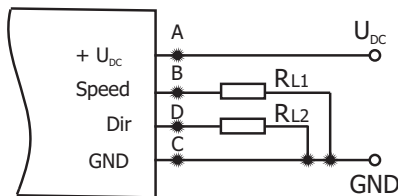


Pin	Connection	Cable Output
A	Power+	Red
B	Speed	White
C	Ground	Black
D	Direction	Green

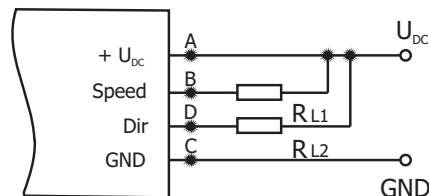
WIRING DIAGRAMS

Sensor could be in use for both type of connections - PNP or NPN

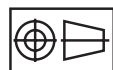
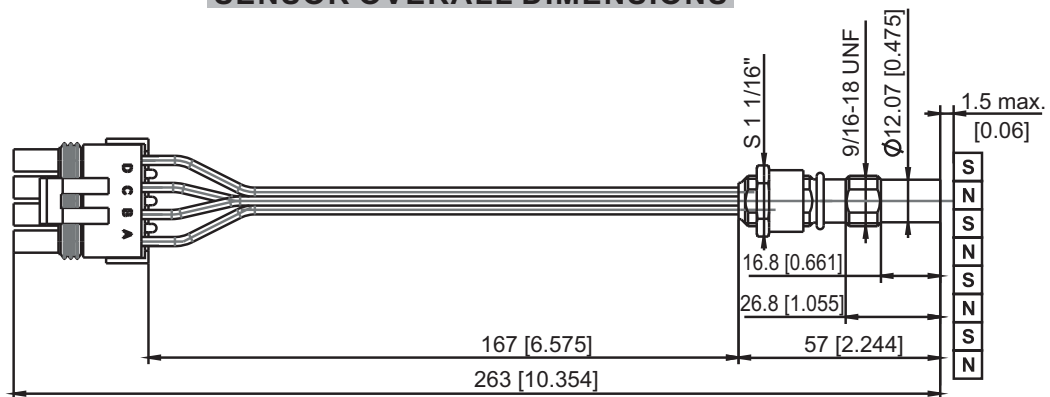
PNP



NPN



SENSOR OVERALL DIMENSIONS



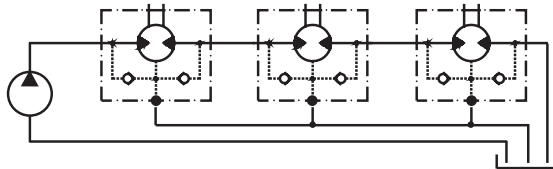
mm [in]



INSTALLATION

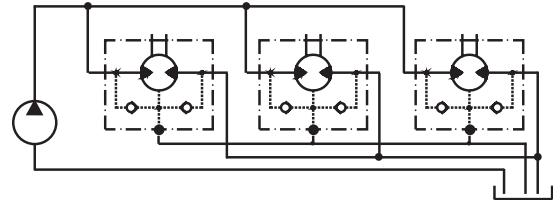
TYPE OF CONNECTION

Series connection
not recommended



open drain line is always required

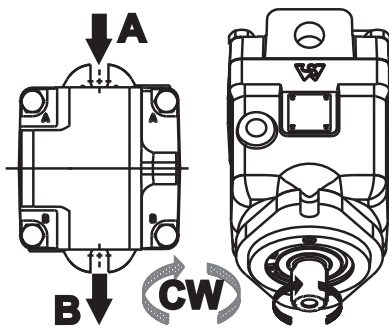
Parallel connection
recommended



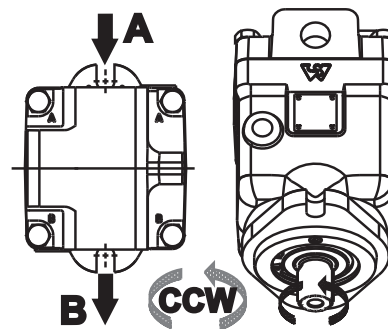
open drain line is always required

DIRECTION OF ROTATION

Standard Rotation
Viewed from shaft end
Port A Pressurized - CW
Port B Pressurized - CCW



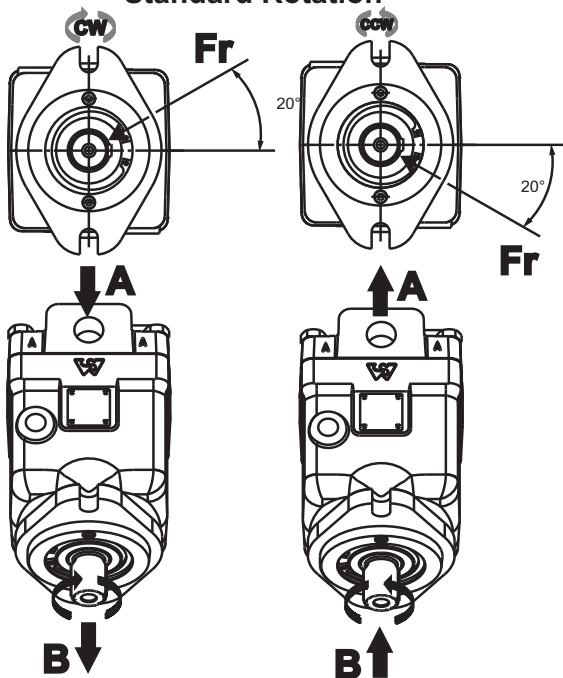
Reverse Rotation
Viewed from shaft end
Port A Pressurized - CCW
Port B Pressurized - CW



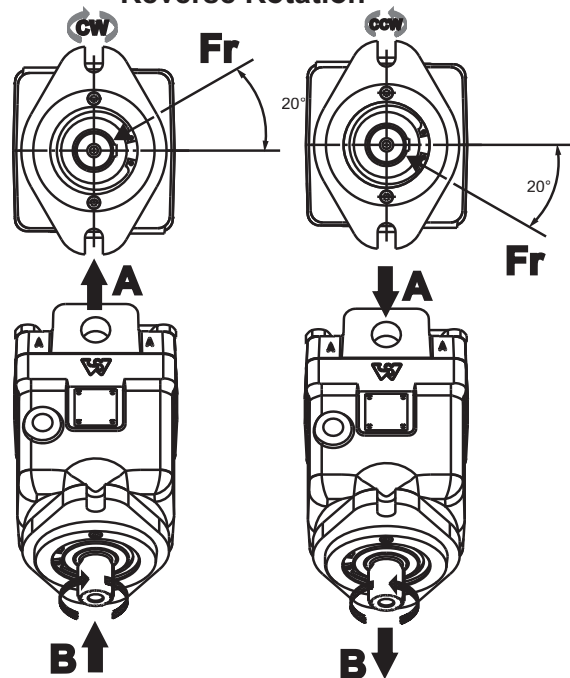
BEST POSITION FOR APPLYING RADIAL LOAD

Optimal position for applying radial load depending on the direction of rotation

Standard Rotation



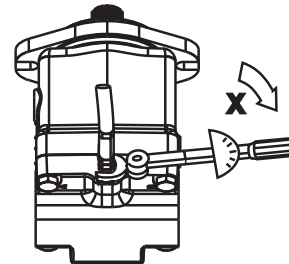
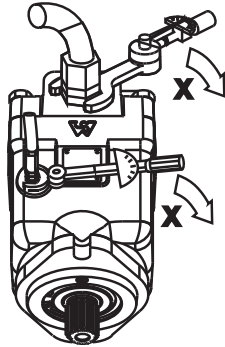
Reverse Rotation

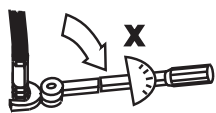
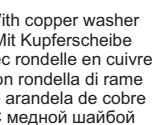
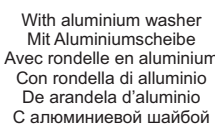
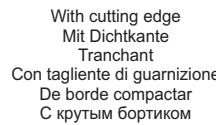
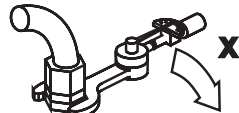




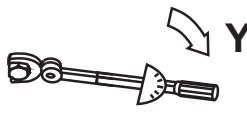
INSTALLATION

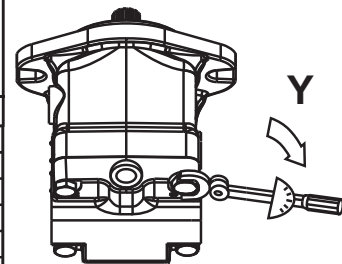
Recommended max. tightening torque X for metal plugs and orifice



Screwed connection Anschlussart Raccord Tipo di collegamento Especie de unir Присоединительные резьбы	 <p>Max. Tightening Torque X, daNm [lb-in] Max. Anzugsmoment X, daNm [lb-in] Couple de serrage maxi X, daNm [lb-in] Momento di serraggio max. X, daNm [lb-in] Momento d'apretadura max. X, daNm [lb-in] Момент затяжки X, daNm [lb-in]</p>			
	 <p>With copper washer Mit Kupferscheibe Avec rondelle en cuivre Con rondella di rame De arandela de cobre С медной шайбой</p>	 <p>With aluminium washer Mit Aluminiumscheibe Avec rondelle en aluminium Con rondella di alluminio De arandela d'aluminio С алюминиевой шайбой</p>	 <p>With cutting edge Mit Dichtkante Tranchant Con tagliente di guarnizione De borde compactar С крутым бортиком</p>	 <p>With "O" ring Mit "O" Ring Avec joint torique Con "O"-anello De "O"-anillo С резиновым кольцом</p>
M 8	1.6 [150]	1 [88.5]	2 [180]	
M 10	3.2 [300]	1 [88.5]	2 [180]	
M 12	3.5 [310]	3 [265]	4 [360]	
M14x1.5	4 [360]	3 [265]	4 [360]	3 [265]
M16x1.5	5 [450]	5 [450]	6 [550]	5 [450]
M18x1.5	6 [550]	5 [450]	6 [550]	5 [450]
M20x1.5	8 [710]	8 [700]	10 [885]	8 [700]
M22x1.5	10 [900]	8 [700]	10 [885]	8 [700]
M24x1.5	12 [1070]	10 [885]	10 [885]	10 [885]
M27x2	16 [1420]	13 [1150]	10 [885]	10 [885]
G 1/4	4 [360]	3 [265]	4 [360]	2 [180]
G 3/8	5 [450]	5 [450]	6 [550]	2 [180]
G 1/2	8 [710]	8 [700]	10 [885]	3 [265]
G 3/4	16 [1420]	13 [1150]	16 [1400]	5 [450]
G 1	20 [1800]	20 [1770]	25 [2200]	8 [700]
1/8 - 14(UNF)	2.5 [230]			0.7 [62]
3/8-24(16)UNF(UNC)	3 [270]			1.5 [130]
7/16-20(16)UNF	3.5 [310]			2 [180]
9/16-18 UNF	4 [360]			2 [180]
9/16-20 UNF	5 [450]			3.5 [310]
3/4 - 16 UNF	6 [550]			6 [550]
7/8 - 14(16)UNF	10 [900]			7 [620]
1 1/16 - 12 UN	16 [1420]			9 [800]
1 5/16 - 12 UN	20 [1800]			16 [1400]
1/2 - 14 NPTF				3 [265]
1/4 - 18 NPTF				3 [265]

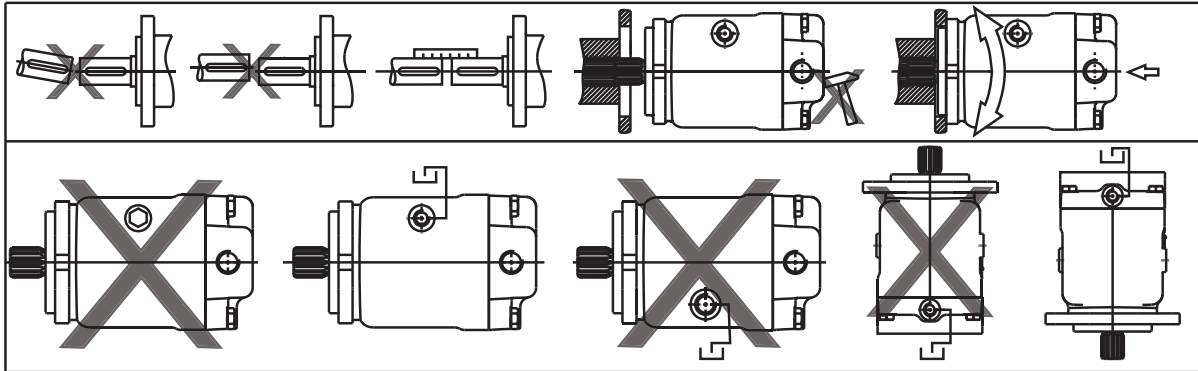
Recommended max. tightening torque Y for screws and bolts

Motor Type	 <p>Max. Tightening Torque Y, daNm [lb-in] Max. Anzugsmoment Y, daNm [lb-in] Couple de serrage maxi Y, daNm [lb-in] Momento di serraggio max. Y, daNm [lb-in] Momento d'apretadura max. Y, daNm [lb-in] Момент затяжки Y, daNm [lb-in]</p>					
	End Cover - Body		Axial Piston Group - Body		Axial Piston Group	
	Bolt	daNm [lb-in]	Screw	daNm [lb-in]	Screw	daNm [lb-in]
MAPA28	M10 - 12.9	7[620]	M4 - 12.9	0.4[40]	M5 - 12.9	0.6[60]
MAPB28	M10 - 12.9	7[620]	M5 - 12.9	0.6[60]	M5 - 12.9	0.6[60]
MAP50	M12 - 12.9	10[890]	M6 - 12.9	1.3[120]	M6 - 12.9	1.3[120]
MAP62	M12 - 12.9	10[890]	M6 - 12.9	1.3[120]	M6 - 12.9	1.3[120]
MAP100	M14 - 12.9	13[1160]	M8 - 12.9	3.5[310]	M6 - 12.9	1.3[120]
MAPW62	M12 - 12.9	10[890]	M6 - 12.9	1.3[120]	M6 - 12.9	1.3[120]
PAP62	M12 - 12.9	10[890]	M6 - 12.9	1.3[120]	M6 - 12.9	1.3[120]



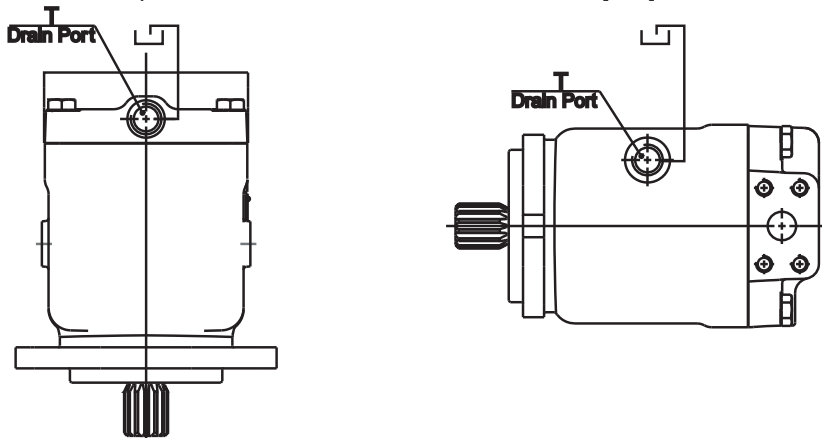


At start-up and during operation the motor(pump) housing has to be filled up with hydraulic fluid. Start-up has to be carried out at low or moderate speed and without load (for example 1000 rpm and pressure 50[725] bar [PSI]) till the motor(pump) and the hydraulic scheme are filled up with oil. Generally the start-up needs 10-15 minutes to finish. The leakage oil in the housing has to be discharged to the tank through the highest positioned drain port T. The max. pressure in the drain line is 5 [70] bar [PSI].



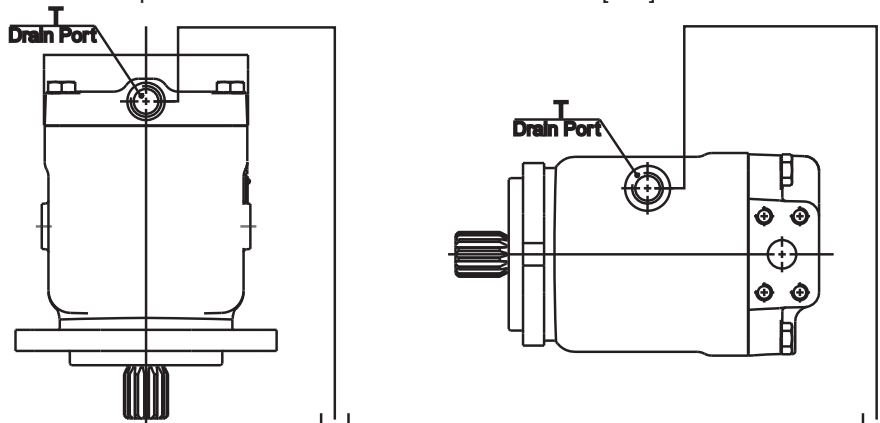
Installation below the tank level (recommended)

- Fill up the axial piston motor(pump) before the start-up through the highest positioned drain port T.
- Operate the motor(pump) at low speed till the motor system is completely filled up.
- The minimum immersion depth of the drain line in the tank is 200 mm [8 in] relative to the minimum oil level in the tank.



Installation on top of the tank level

- Fill up the axial piston motor(pump) before the start-up through the highest positioned drain port T.
- Operate the motor(pump) at low speed till the motor system is completely filled up.
- The minimum immersion depth of the drain line in the tank is 200 mm [8 in] relative to the minimum oil level in the tank.

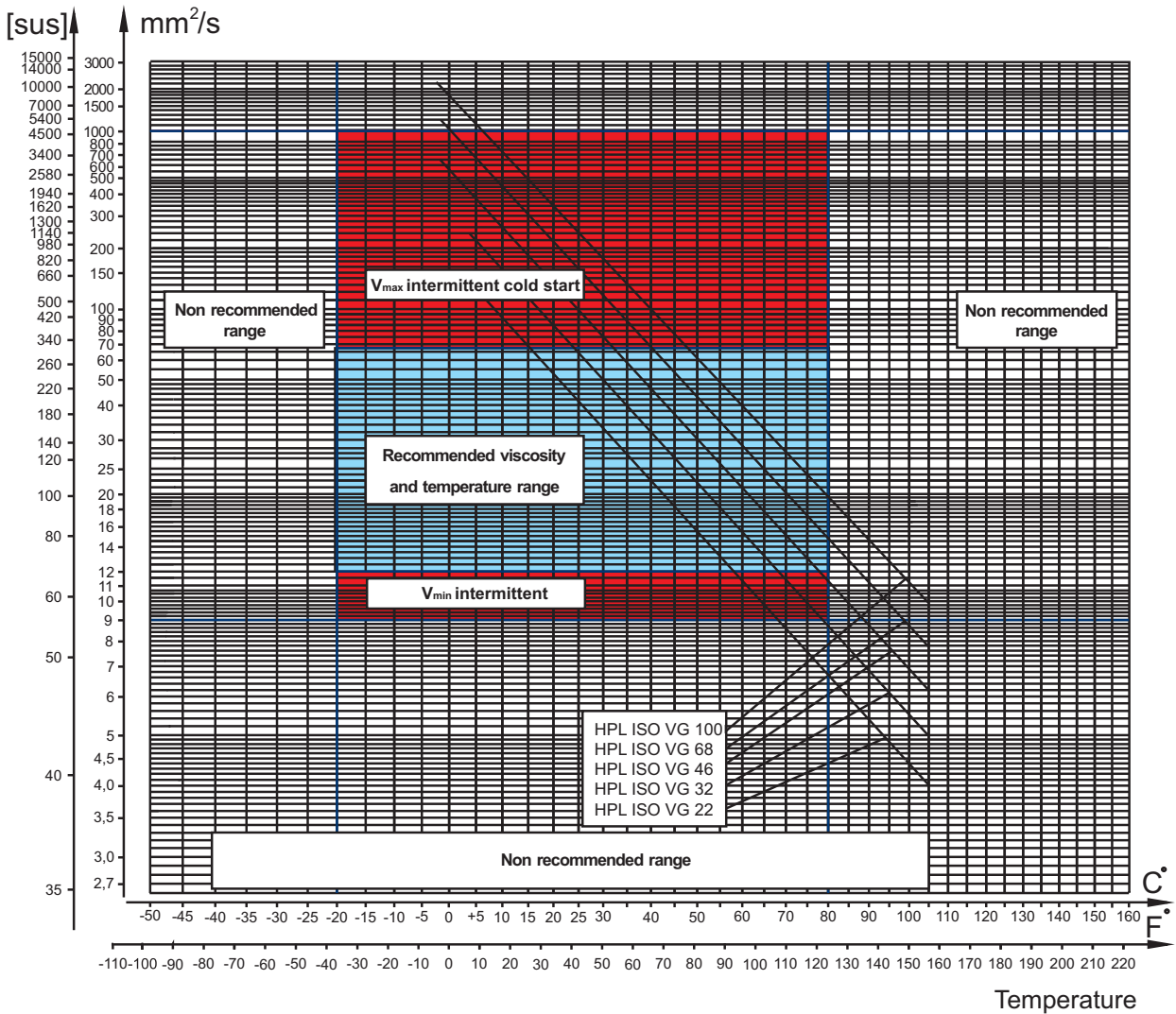




FLUID VISCOSITY LIMITS

In order to obtain optimum efficiency and service life, we recommend to select the operating viscosity (at operating temperature) within the range shown on diagram below.

Kinematic viscosity



The above - shown viscosity characteristics are for reference only. Please, check the actual viscosity with the manufacturer of the fluid.

BASIC FORMULAS

The motor(pump) size, pressure and flow required for a specific application can be calculated using the formulas below.

Metric System		Inch System	
Efficiency	$\eta_t = \eta_{mh} \cdot \eta_v$ $\eta_{mh} = \frac{\eta_t}{\eta_v}$ $\eta_v = \frac{\eta_t}{\eta_{mh}}$	Efficiency	$\eta_t = \eta_{mh} \cdot \eta_v$ $\eta_{mh} = \frac{\eta_t}{\eta_v}$ $\eta_v = \frac{\eta_t}{\eta_{mh}}$
Input flow (for Motor)	$Q = \frac{Vg \cdot n}{1000 \cdot \eta_v}$ [l/min]	Input flow (for Motor)	$Q = \frac{Vg \cdot n}{231 \cdot \eta_v}$ [GPM]
Output torque (for Motor)	$M = \frac{Vg \cdot \Delta p \cdot \eta_{mh}}{62,8}$ or $M = \Delta p \cdot T_{con.}$ [Nm]	Output torque (for Motor)	$M = \frac{Vg \cdot \Delta p \cdot \eta_{mh}}{2 \cdot \pi}$ or $M = \Delta p \cdot T_{con.}$ [lb-in]
Output power (for Motor)	$P = \frac{M \cdot n}{9550} = \frac{Q \cdot \Delta p \cdot \eta_t}{60}$ [kW]	Output power (for Motor)	$P = \frac{Vg \cdot n \cdot \Delta p \cdot \eta_t}{396000}$ [hp]
Speed (for Motor)	$n = \frac{Q \cdot 1000 \cdot \eta_v}{Vg}$ or $n = Q \cdot N_{con.}$ [min ⁻¹]	Speed (for Motor)	$n = \frac{Q \cdot 231 \cdot \eta_v}{Vg}$ or $n = Q \cdot N_{con.}$ [min ⁻¹]
Output flow (for pump)	$Q = \frac{Vg \cdot n \cdot \eta_v}{1000}$ [l/min]	Output flow (for pump)	$Q = \frac{Vg \cdot n \cdot \eta_v}{231}$ [GPM]
Driving torque (for pump)	$M = \frac{Vg \cdot \Delta p}{62,8 \cdot \eta_{mh}}$ [Nm]	Driving torque (for pump)	$M = \frac{Vg \cdot \Delta p}{2 \cdot \pi \cdot \eta_{mh}}$ [lb-in]
Input power (for pump)	$P = \frac{M \cdot n}{9550} = \frac{Q \cdot \Delta p}{60 \cdot \eta_t}$ [kW]	Input power (for pump)	$P = \frac{Vg \cdot n \cdot \Delta p}{396000 \cdot \eta_t}$ [hp]
Legend:	Legend:	Legend:	Legend:
Vg = Displacement per rev.	[cm ³]	Vg = Displacement per rev.	[in ³]
Δp = p _{HP} - p _{LP}	[bar]	Δp = p _{HP} - p _{LP}	[PSI]
p _{HP} = High pressure	[bar]	p _{HP} = High pressure	[PSI]
p _{LP} = Low pressure	[bar]	p _{LP} = Low pressure	[PSI]
n = Rotation speed	[RPM]	n = Rotation speed	[RPM]
Q = Oil flow	[l/min]	Q = Oil flow	[GPM]
T _{con.} = Toque constant	[Nm/bar]	T _{con.} = Toque constant	[lb-in/PSI]
N _{con.} = Speed constant	[RPM/(l/min)]	N _{con.} = Speed constant	[RPM/GPM]
η _v = Volumetric efficiency		η _v = Volumetric efficiency	
η _{mh} = Mechanical-hydraulic efficiency		η _{mh} = Mechanical-hydraulic efficiency	
η _t = Overall efficiency		η _t = Overall efficiency	

Depending on the results of the load calculations, the most appropriate type of motor from the catalogue is selected.

Table 1

Rolling resistance coefficient In case of rubber tire rolling on different surfaces			
Surface	ρ	Surface	ρ
Concrete- faultless	0.010	Macadam- bad	0.037
Concrete- good	0.015	Snow- 5 cm	0.025
Concrete- bad	0.020	Snow- 10 cm	0.037
Asphalt- faultless	0.012	Polluted covering- smooth	0.025
Asphalt- good	0.017	Polluted covering- sandy	0.040
Asphalt- bad	0.022	Mud	0.037÷0.150
Macadam- faultless	0.015	Sand- Gravel	0.060÷0.150
Macadam- good	0.022	Sand- loose	0.160÷0.300

APPLICATION FORMULAS

1. Motor speed: n, RPM

$$n = \frac{2,65 \cdot v_{km} \cdot i}{R_m} \quad n = \frac{168 \cdot v_{mi} \cdot i}{R_n}$$

v_{km} - vehicle speed [km/h]
 v_{mi} - vehicle speed [mil/h]
 R_m - wheel rolling radius [m]
 R_n - wheel rolling radius [in]
i- gear ratio between motor and wheels.
 If no gearbox, use $i=1$.

2. Rolling resistance: RR, daN [lbs]

The resistance force resulted in wheels contact with different surfaces:

$$RR = G \cdot \rho$$

G- total weight loaded on vehicle, daN [lbs];
ρ- rolling resistance coefficient (Table 1).

3. Grade resistance: GR, daN [lbs]

$$GR = G \cdot (\sin \alpha + \rho \cdot \cos \alpha)$$

α- gradient negotiation angle (Table 2)

Table 2

Grade %	α Degrees	Grade %	α Degrees
1%	0° 35'	12%	6° 5'
2%	1° 9'	15%	8° 31'
5%	2° 51'	20%	11° 19'
6%	3° 26'	25%	14° 3'
8%	4° 35'	32%	18°
10%	5° 43'	60%	31°

Table 3

Surface	Frictional factor f
Steel on steel	0.15 ÷ 0.20
Rubber tire on polluted surface	0.5 ÷ 0.7
Rubber tire on asphalt	0.8 ÷ 1.0
Rubber tire on concrete	0.8 ÷ 1.0
Rubber tire on grass	0.4

4. Acceleration force: FA, daN [lbs]

Force **FA** necessary for acceleration from 0 to maximum speed **v** and time **t** can be calculated with a formula:

$$FA = \frac{v_{km} \cdot G}{3,6 \cdot t} \text{ [daN]} \quad FA = \frac{v_{mi} \cdot G}{22 \cdot t} \text{ [lbs]}$$

FA- acceleration force, daN [lbs]
t- time, [s]

5. Tractive effort: DP, daN [lbs]

Tractive effort **DP** is the additional force of trailer. This value will be established as follows:
 -acc.to constructor's assessment;
 -as calculating forces in items 2, 3 and 4 of trailer. The calculated sum corresponds to the tractive effort requested.

6. Total tractive effort: TE, daN [lbs]

Total tractive effort **TE** is total effort necessary for vehicle motion; that the sum of forces calculated in items from 2 to 5 and increased with 10 % because of air resistance.

$$TE = 1,1 \cdot (RR + GR + FA + DP)$$

RR- force required to overcome the rolling resistance;
GR- force required to slope upwards;
FA- force required to accelerate (acceleration force);
DP- additional tractive effort (trailer).

7. Motor Torque moment: M, daNm [in-lb]

Necessary torque moment for every hydraulic motor:

$$M = \frac{TE \cdot R_m [R_n]}{N \cdot i \cdot \eta_M}$$

N- motor numbers;
 η_M - mechanical gear efficiency (if it is available).

8. Cohesion between tire and road covering: M_w, daNm [in-lb]

$$M_w = \frac{G_w \cdot f \cdot R_m [R_n]}{i \cdot \eta_M}$$

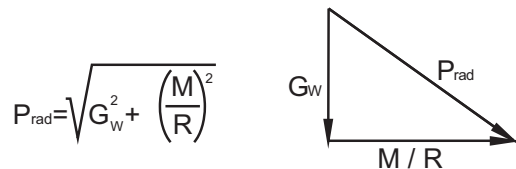
To avoid wheel slipping, the following condition should be observed $M_w > M$

f - frictional factor;
G_w- total weight over the wheels, daN [lbs].

9. Radial motor loading: P_{rad}, daN [lbs]

When the motor is used for motion with a ring or gear mounted directly on the motor shaft, the total radial load of the motor shaft **P_{rad}** is the sum of the motion force and the weight force acting on the ring .

G_w - Weight held by wheel;
P_{rad} - Total radial loading of motor shaft;
M/R- Motion force.



$$P_{rad} = \sqrt{G_w^2 + \left(\frac{M}{R}\right)^2}$$

Depending on the results of the load calculations, the most appropriate type of motor from the catalogue is selected.

WARRANTY

M+S Hydraulic warrants, that its products, supplied directly to original equipment manufacturer, authorized distributor or other customer, will be free of defects in material or workmanship at the time of shipment from M+S Hydraulic and will conform to the products technical documentation (drawings and specifications) under sale agreement with Buyer.

This warranty will apply only to defects appearing within applicable Warranty period, mentioned below. If Buyer notifies M+S Hydraulic within the Warranty period about any such defects, M+S, at its sole option will replace or repair the defective products or their parts found by M+S Hydraulic to be defective in material or workmanship.

THE FOREGOING LIMITED WARRANTY IS AVAILABLE ONLY IF "M+S HYDRAULIC" IS PROMPTLY NOTIFIED IN WRITTEN OF THE ALLEGED DEFECT AND DOES NOT COVER FAILURE TO FUNCTION CAUSED BY DAMAGE TO THE PRODUCT, IMPROPER INSTALLATION, UNREASONABLE USE OR ABUSE OF THE PRODUCT, FAILURE TO PROVIDE OR USE OF IMPROPER MAINTENANCE OR USUAL, DEGRADATION OF THE PRODUCT DUE TO PHYSICAL ENVIRONMENTS OF AN USUAL NATURE. THE FOREGOING REMEDIES ARE THE SOLE AND EXCLUSIVE REMEDIES AVAILABLE TO CUSTOMER. To facilitate the inspection, M+S Hydraulic may require return of the product/part, which Buyer claims to be defective.

M+S Hydraulic shall not be liable for labor costs or any other expenses incurred during the disassembling or reinstalling of the product/part.

In case the claimed products are returned to M+S Hydraulic in bad condition: dirty, disassembled, with damaged or missing parts during transportation, the warranty will be considered as not applicable and the products will not be liable to repair.

Warranty periods

New products: The Warranty period is limited to 24 consecutive months (2 years) from the date of production of the product.

Repaired products: If the product is repaired in M+S Hydraulic during its warranty period, the warranty period of the repaired item shall continue for the balance of original Warranty period or for a period equal to 50% of the original new product Warranty period, whichever is later.

Spare parts: The Warranty period for Spare parts is 12 consecutive months (1 year) from the dispatch date of such parts from M+S Hydraulic.

LIMITATION OF LIABILITY M+S Hydraulic's liability for claim of any kind, for loss or damage arising out of, connected with or resulting from an order, or from the performance or branch thereof, or from the design, manufacture, sale delivery, operation or use of any of its products shall be limited to, at M+S 's sole option, replacement, repair of any defective product or the issuance of a credit to Customer against any future purchases. Cash refunds will not be made under any circumstances and Customer will not be entitled to recover any damages of any kind against M+S Hydraulic, including but not limited to incidental or consequential damages, whether direct or indirect, known or unknown, foreseen or unforeseen.

HES HYDRAULIC ELEMENTS AND SYSTEMS OVERVIEW



Hydraulic Elements and Systems PLC is a public stock company located in the town of Yambol, South-East Bulgaria. The factory has a long history and traditions in the design and manufacture of hydraulic cylinders. The product range includes Piston cylinders, Telescopic cylinders, Plunger cylinders and Rack cylinders.

M+S HYDRAULIC OVERVIEW



M+S Hydraulic is a leading manufacturer of Hydraulic Motors, Hydrostatic Steering Units and accessories, Hydraulic brakes Motor-brakes and Valve Blocks in Europe and all over the world.

The main advantage of our company is that we offer hydraulic solutions to the specific needs of the customers meeting their technical requirements thanks to the various product's options. M+S Hydraulic commodities are guaranteed with after-sales services, technical support and warranty period of 24 months.

M+S Hydraulic has an enlarging world-wide distributors' network. The company has Agency contracts and Consignment agreements with more than 35 companies in the world. We have the know-how to develop solutions for productivity and efficiency on every continent.

DEVOTED TO THE QUALITY



HYDRAULIC REDUCERS
HYDRAULISCHE GETRIEBE
RÉDUCTEURS HYDRAULIQUES

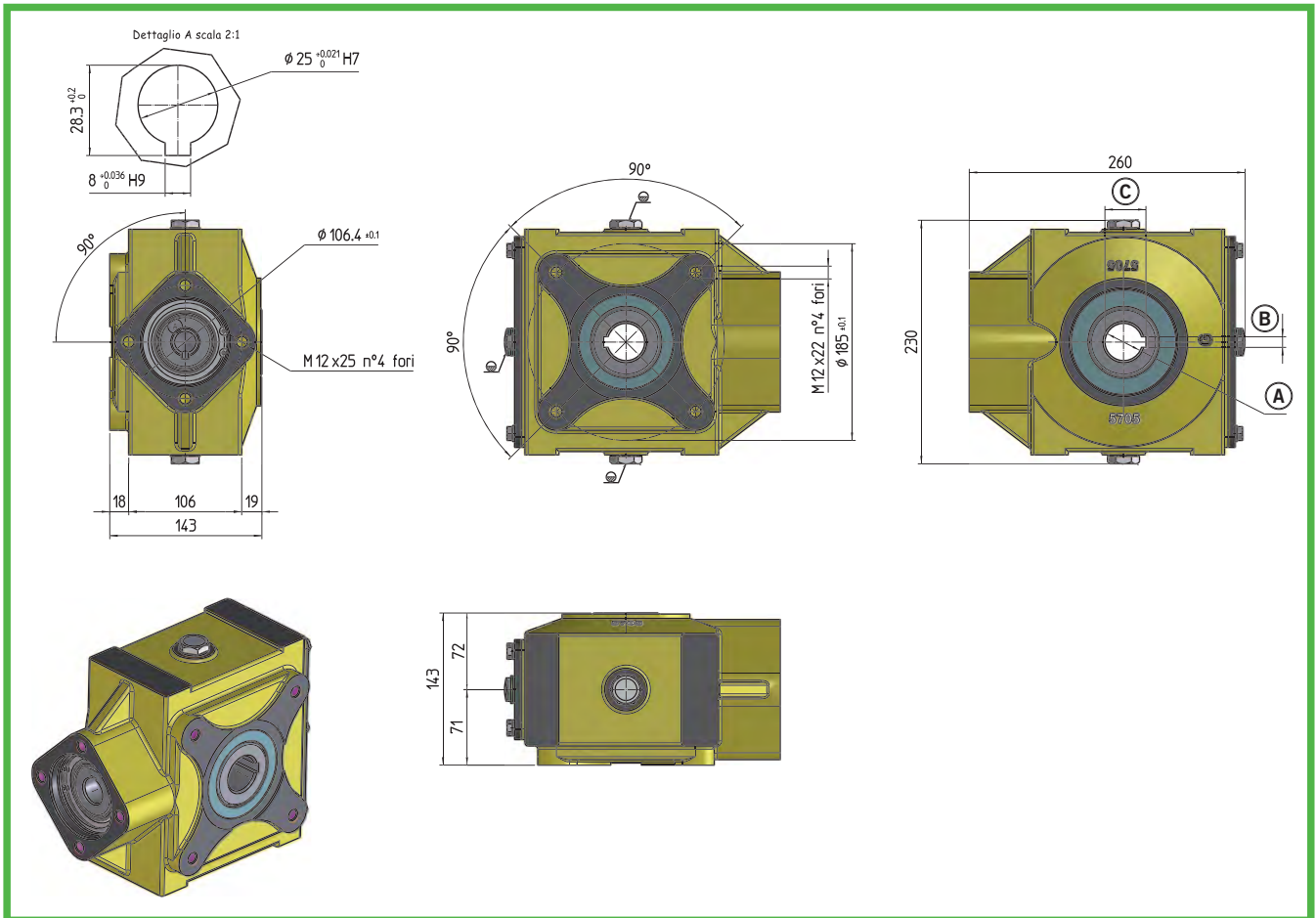


09 GB-D-F

Hydraulic reducer
 Hydraulische Getriebe
 Réducteur hydraulique



5705



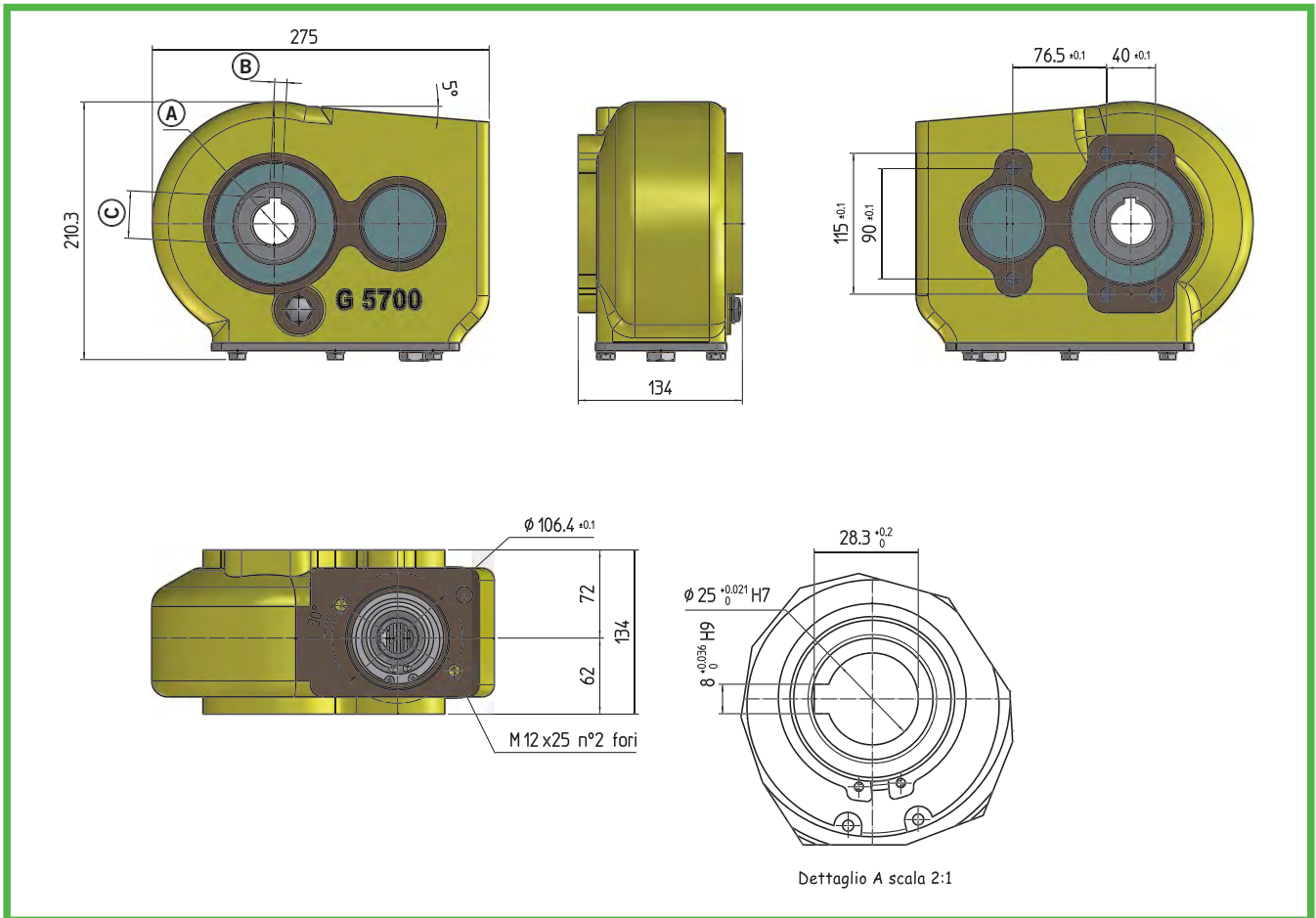
Ratio Kraftübersetzung Rapport	Exit torque Drehmoment Couple N·m	Weight Kg Gewicht Kg Poids Kg	Lubrication Schmierung Graissage	Usage temperature Verwendungstemperatur Temperature de utilisation
1/4	1200	18	ESSO GEAR OIL CE80W90	- 20° / + 80°

A	B	C
Ø 35	10	38.6
Ø 40	12	43.3

Hydraulic reducer
 Hydraulische Getriebe
 Réducteur hydraulique



5700



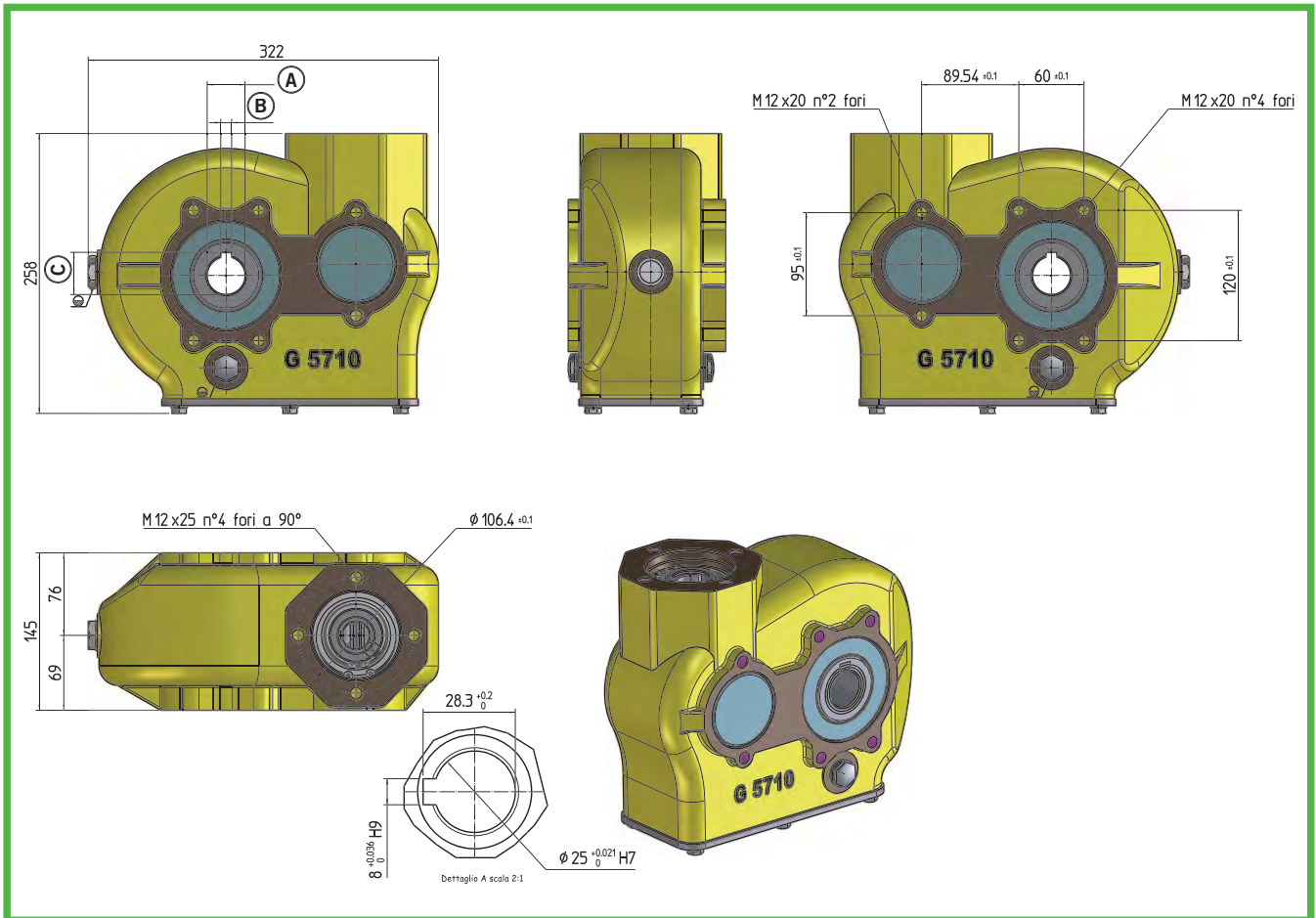
Ratio Kraftübersetzung Rapport	Exit torque Drehmoment Couple N·m	Weight Kg Gewicht Kg Poids Kg	Lubrication Schmierung Graissage	Usage temperature Verwendungstemperatur Temperature de utilisation
1/8,15	1500	30	ESSO GEAR OIL CE80W90	- 20° / + 80°

A	B	C
Ø 35	10	38.6
Ø 40	12	43.3

Hydraulic reducer
 Hydraulische Getriebe
 Réducteur hydraulique



5710



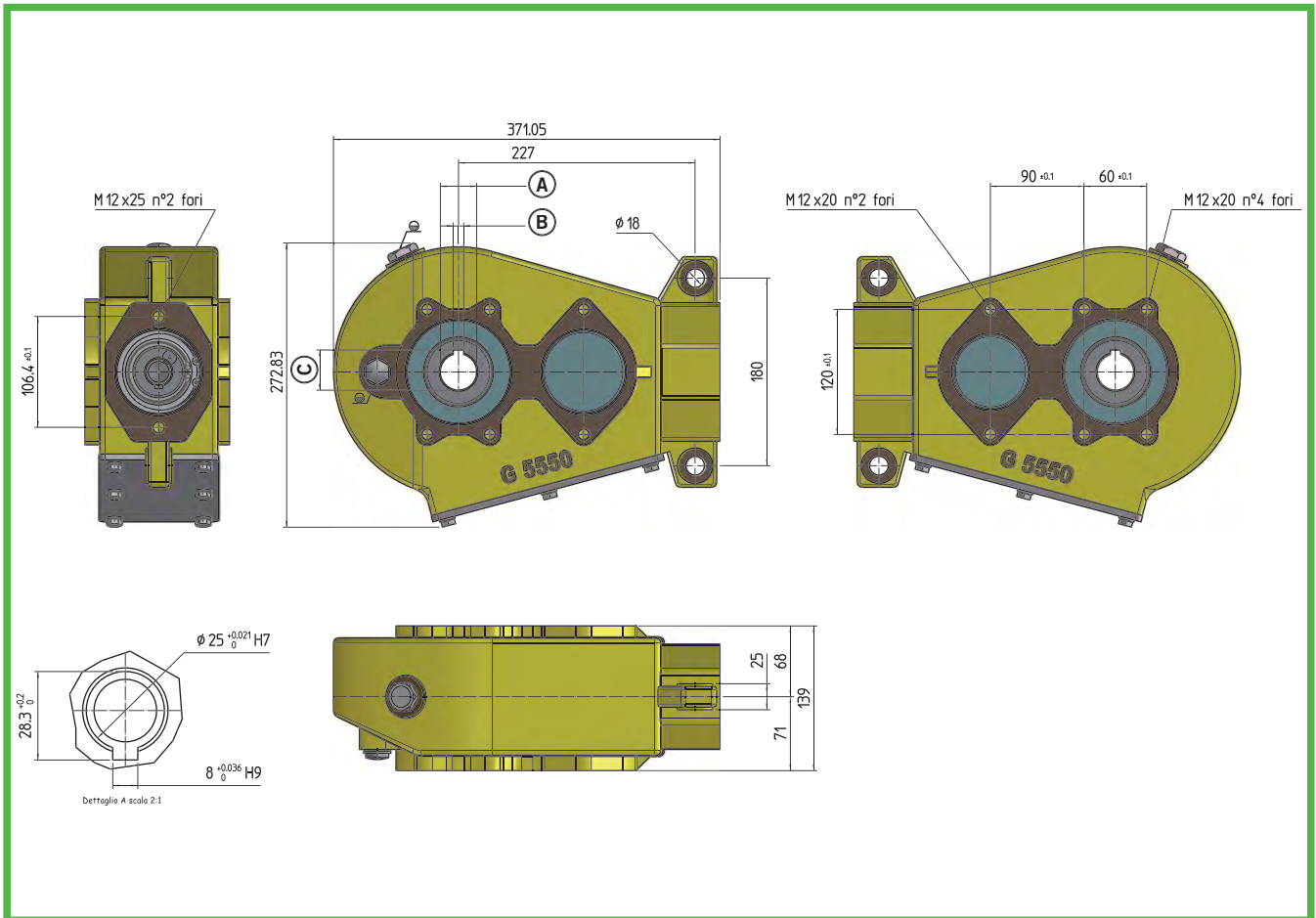
Ratio Kraftübersetzung Rapport	Exit torque Drehmoment Couple N·m	Weight Kg Gewicht Kg Poids Kg	Lubrication Schmierung Graissage	Usage temperature Verwendungstemperatur Temperature de utilisation
1/10,2	1900	28	ESSO GEAR OIL CE80W90	- 20° / + 80°

A	B	C
Ø 35	10	38.6
Ø 40	12	43.3
Ø 45	12	48.8

Hydraulic reducer
 Hydraulische Getriebe
 Réducteur hydraulique



5550



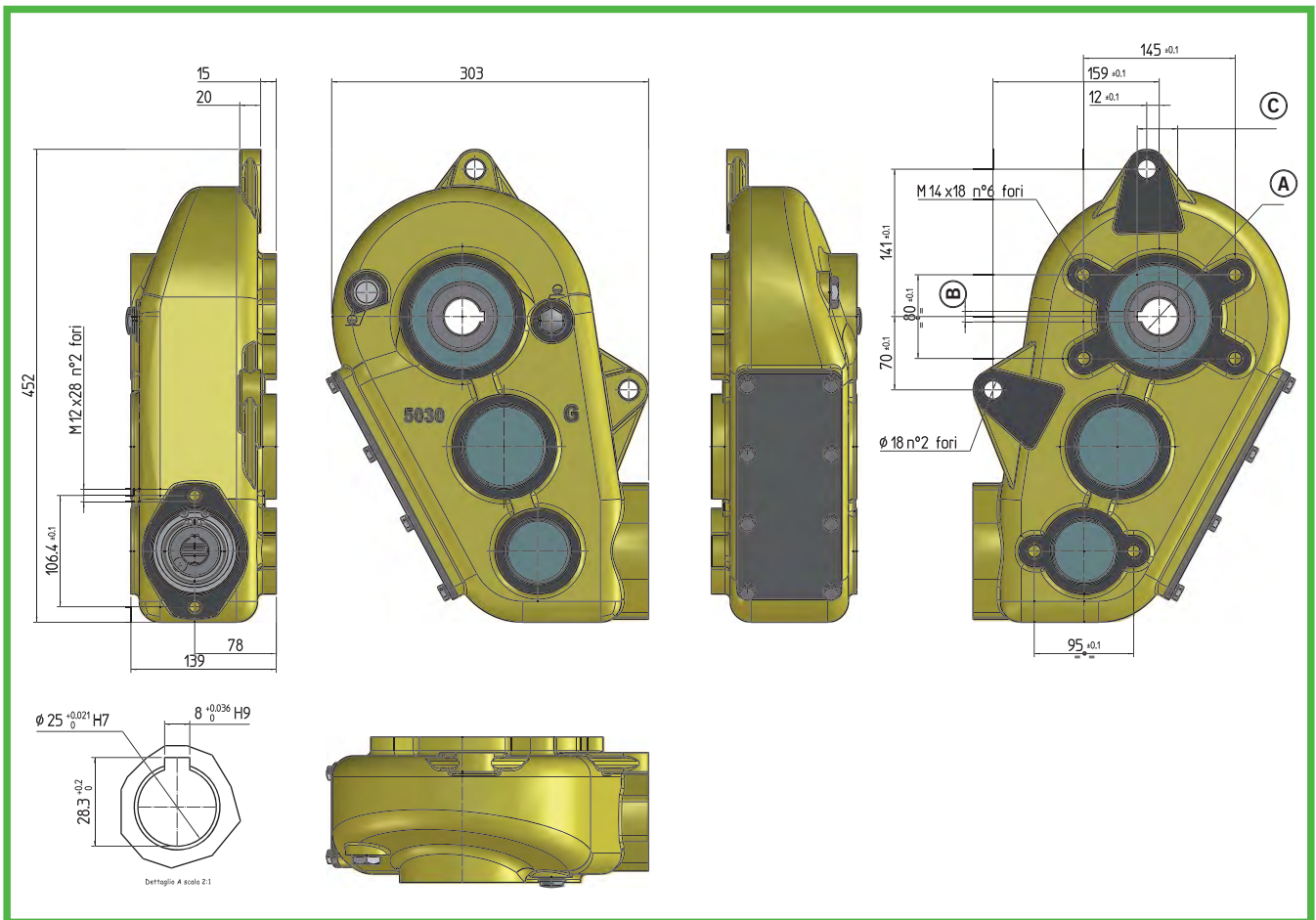
Ratio Kraftübersetzung Rapport	Exit torque Drehmoment Couple N·m	Weight Kg Gewicht Kg Poids Kg	Lubrication Schmierung Graissage	Usage temperature Verwendungstemperatur Temperature de utilisation
1/16,43	2000	28	ESSO GEAR OIL CE80W90	- 20° / + 80°

A	B	C
Ø 35	10	38.6
Ø 40	12	43.3
Ø 45	12	48.8

Hydraulic reducer
 Hydraulische Getriebe
 Réducteur hydraulique



5030



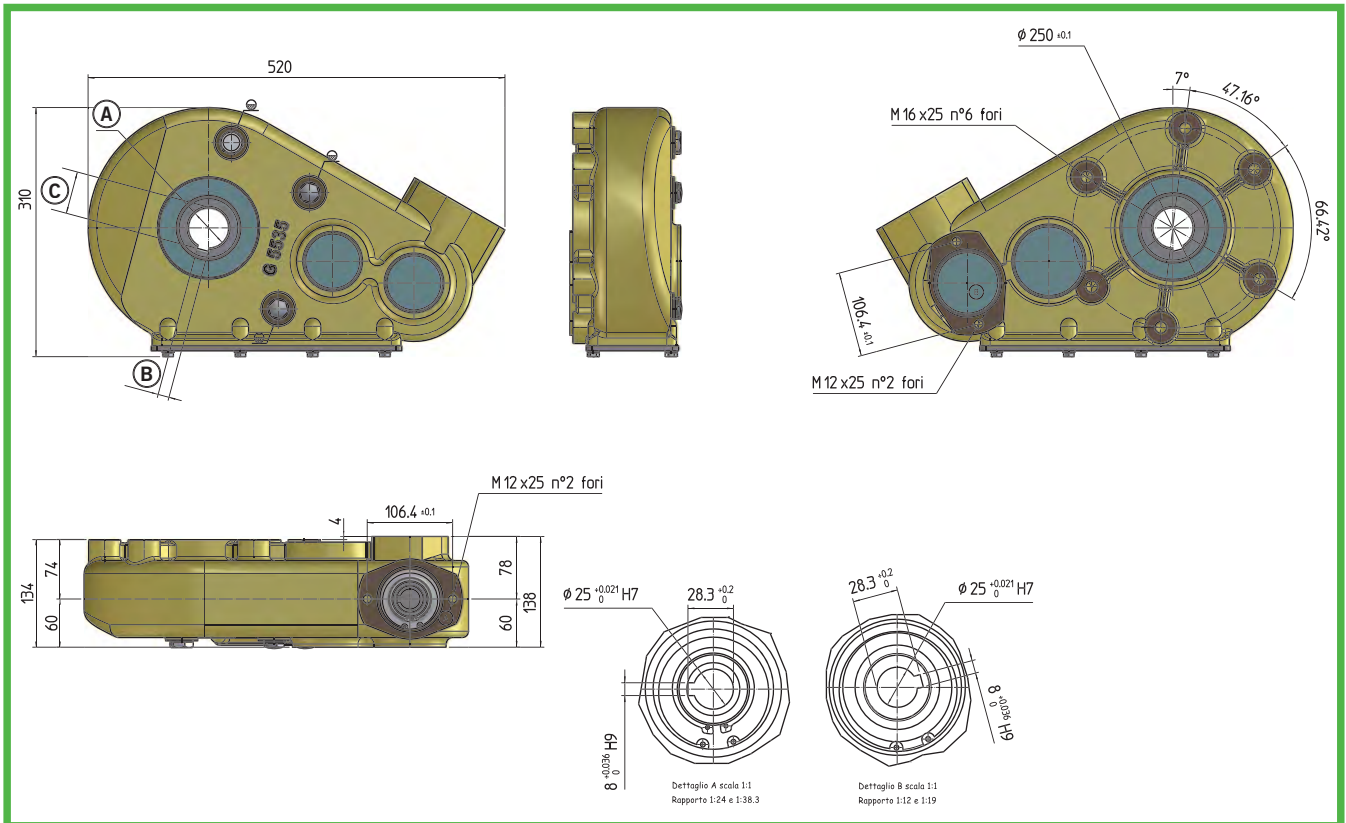
Ratio Kraftübersetzung Rapport	Exit torque Drehmoment Couple N·m	Weight Kg Gewicht Kg Poids Kg	Lubrication Schmierung Graissage	Usage temperature Verwendungstemperatur Temperature de utilisation
1/29,5	3000	37	ESSO GEAR OIL CE80W90	- 20° / + 80°

A	B	C
Ø 35	10	38.6
Ø 40	12	43.3
Ø 45	12	48.8

Hydraulic reducer
 Hydraulische Getriebe
 Réducteur hydraulique



5535



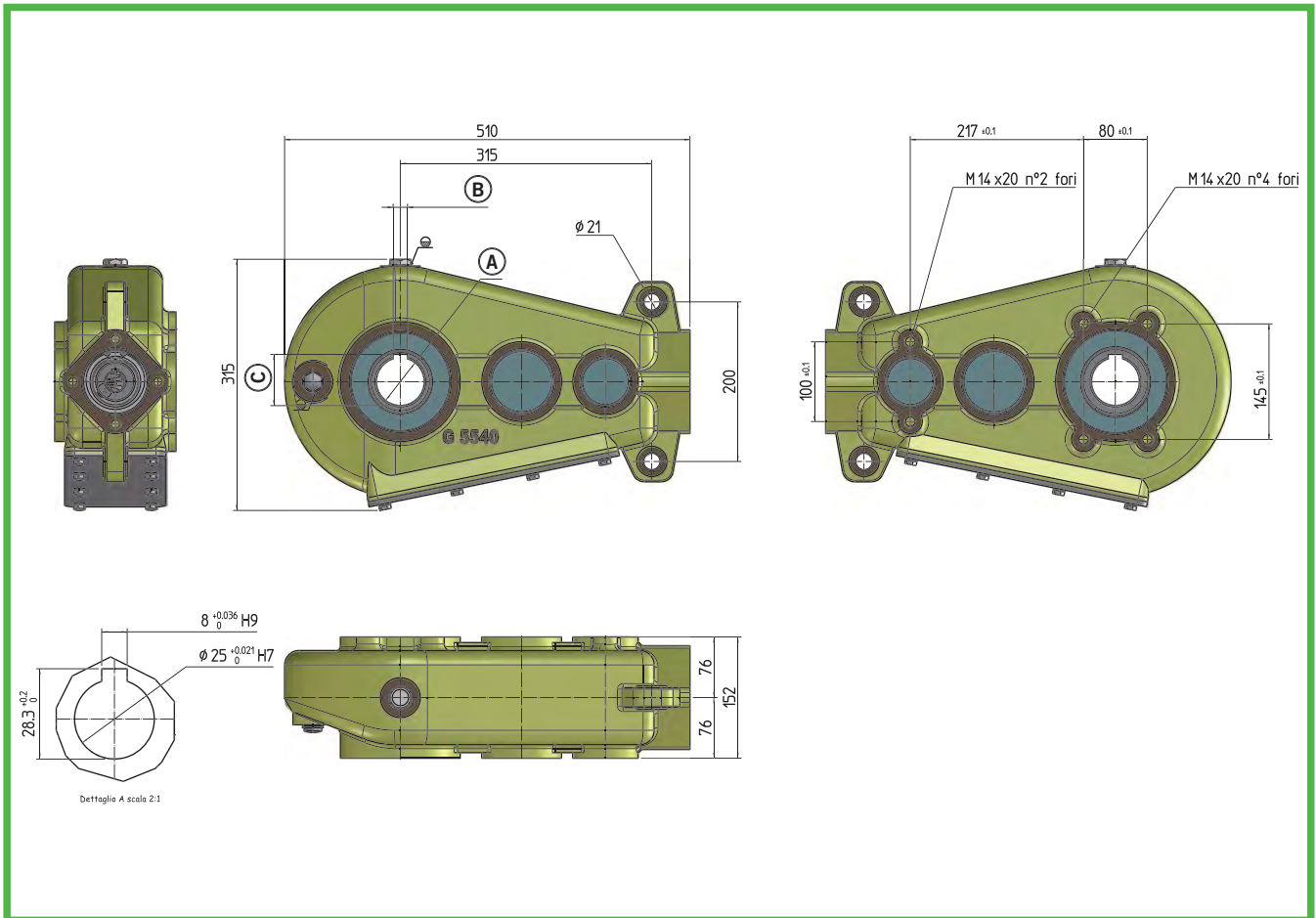
Ratio Kraftübersetzung Rapport	Exit torque Drehmoment Couple N·m	Weight Kg Gewicht Kg Poids Kg	Lubrication Schmierung Graissage	Usage temperature Verwendungstemperatur Temperature de utilisation
1/12,1	3000	44	ESSO GEAR OIL CE80W90	- 20° / + 80°
1/19,1	3000	46	ESSO GEAR OIL CE80W90	- 20° / + 80°
1/24,3	3000	47	ESSO GEAR OIL CE80W90	- 20° / + 80°
1/38,3	3000	49	ESSO GEAR OIL CE80W90	- 20° / + 80°

A	B	C
Ø 45	14	48.8
Ø 50	14	53.2
Ø 60	18	64.4

Hydraulic reducer
 Hydraulische Getriebe
 Réducteur hydraulique



5540



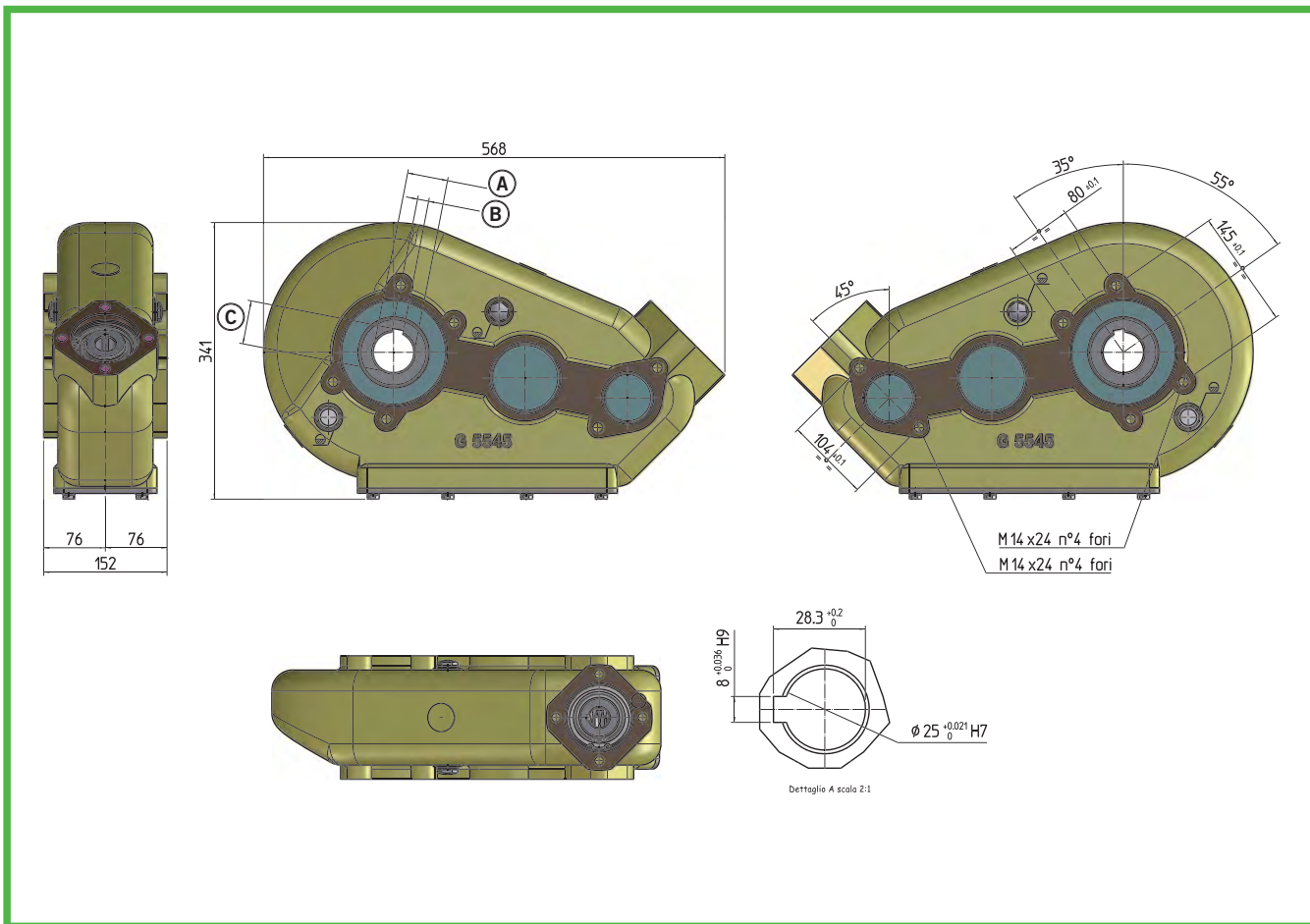
Ratio Kraftübersetzung Rapport	Exit torque Drehmoment Couple N·m	Weight Kg Gewicht Kg Poids Kg	Lubrication Schmierung Graissage	Usage temperature Verwendungstemperatur Temperature de utilisation
1/35,36	4000	57	ESSO GEAR OIL CE80W90	- 20° / + 80°

A	B	C
Ø 50	14	53.8
Ø 55	16	59.3
Ø 60	18	64.4

Hydraulic reducer
 Hydraulische Getriebe
 Réducteur hydraulique



5545



Ratio <i>Kraftübersetzung</i> Rapport	Exit torque <i>Drehmoment</i> Couple N·m	Weight Kg <i>Gewicht Kg</i> Poids Kg	Lubrication <i>Schmierung</i> Graissage	Usage temperature <i>Verwendungstemperatur</i> Temperature de utilisation
1/43,6	5000	55	ESSO GEAR OIL CE80W90	- 20° / + 80°

A	B	C
Ø 50	14	53.8
Ø 55	16	59.3
Ø 60	18	64.4

