

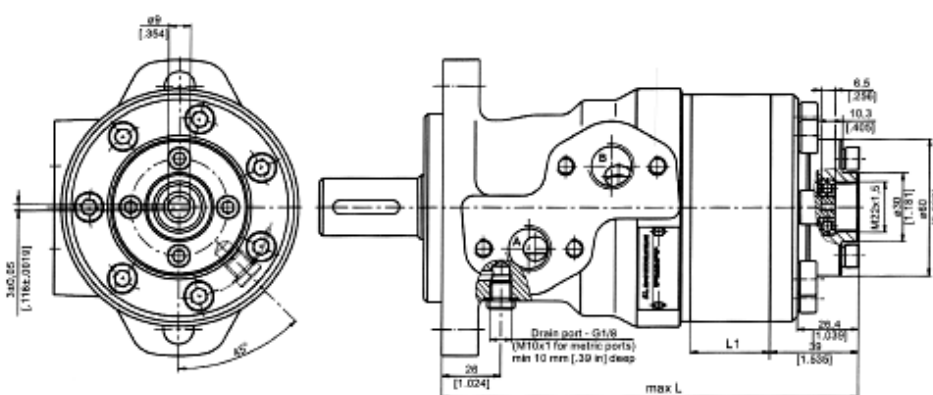
MR...T

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]



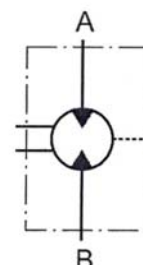
Let op !! Radiale en axiale krachten aan de tacho as moeten ten alle tijden worden voorkomen. Maximale torque aan de tacho as 0.1 daNm (.885 lb-in)
 Maximale continue retour druk zonder lekleiding is 20 bar (290 PSI)

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

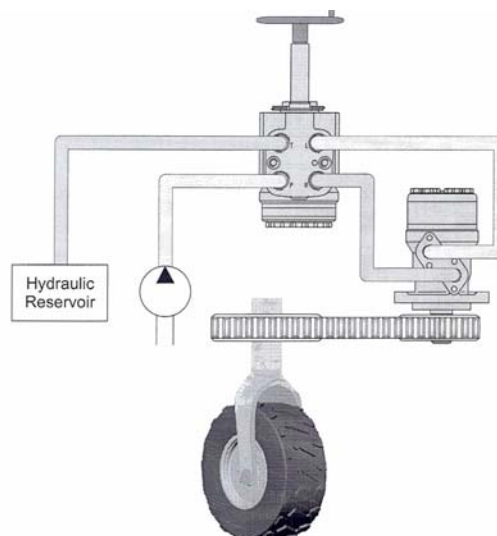
Orbitmotor

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.

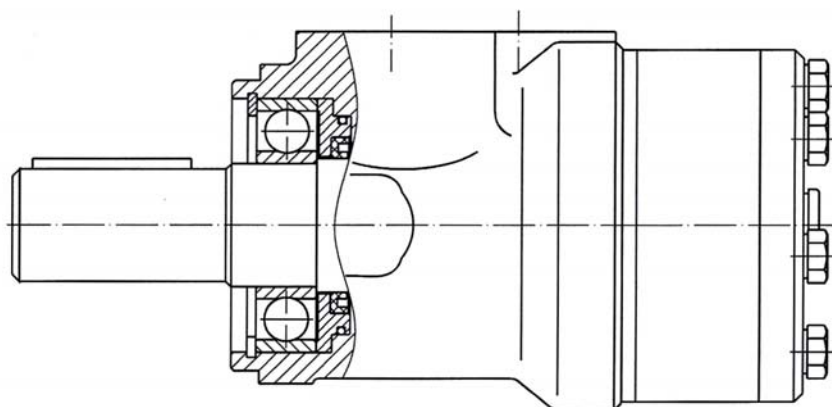
Code	Displacement cm³/rev [in³/rev]	Max. Speed [RPM]	Max. Torque daNm [lb-in]				Max. Output kW [HP]				Max. Pressure Drop, bar [PSI]				Max. Oil Flow, lpm [GPM]
			C, CO shafts		SH, SA shafts		C, CO shafts		SH, SA shafts		C, CO shafts		SH, SA shafts		
			cont.	int*	cont.	int*	cont.	int*	cont.	int*	cont.	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.

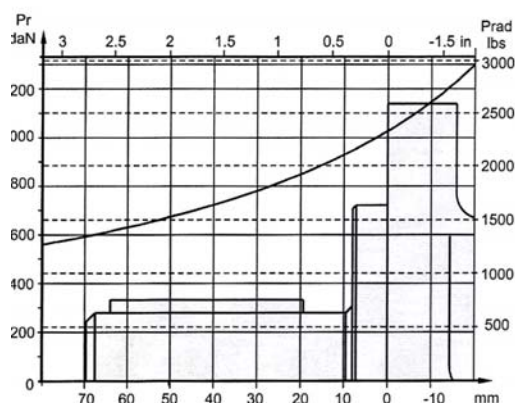
MRFL

Orbitmotor

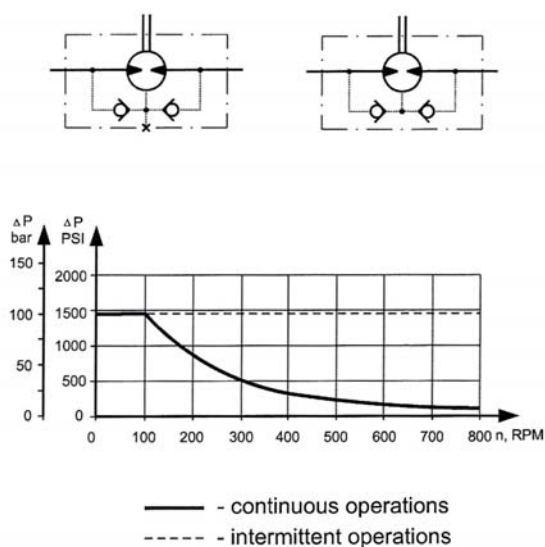
De hydraulische motor type MRFL... en MLHRFL... zijn ontworpen voor radiale piek belasting op de aandrijf-as (speciaal tijdens het starten en stoppen). Om de radiale krachten te weerstaan is er een radiale kogellager gemonteerd op de as van hydraulische motor. De algemene technische gegevens komen overeen met de standaard MRF $\varnothing 35$ afdichting diameter.



PERMISSIBLE SHAFT LOADS

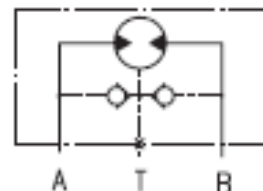
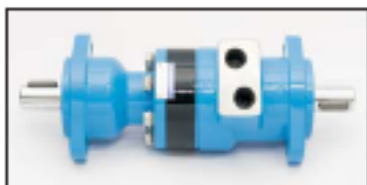


MAX. PERMISSIBLE SHAFT SEAL PRESSURE

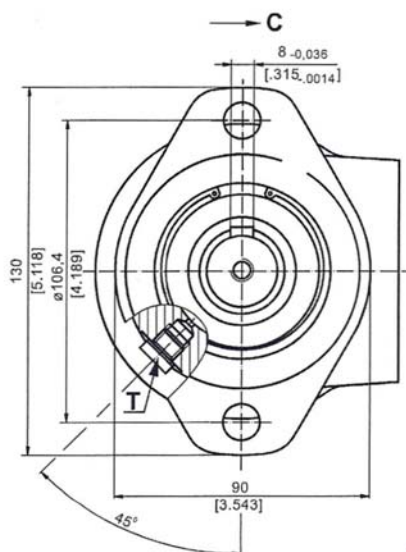
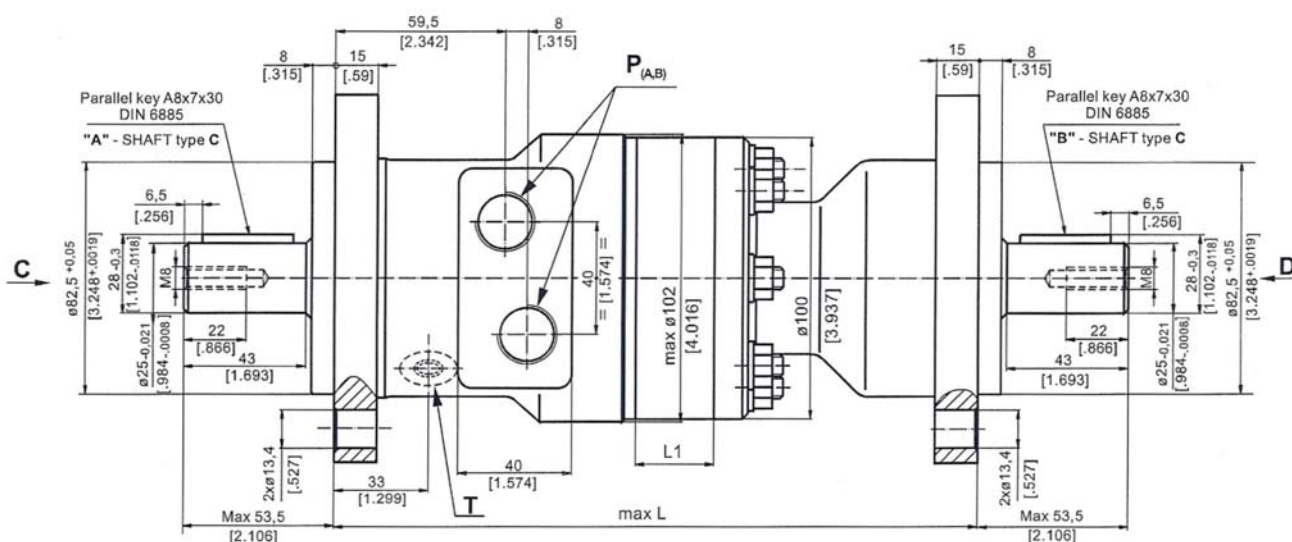


MRB

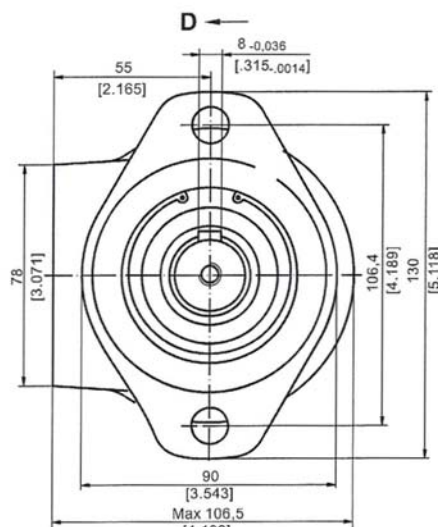
Orbitmotor met dubbele uitgaande as



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 [0.71 in] depth
T : G1/8 - 9 mm [0.35 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	cont. 0 - 100 RPM	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]
Pressure without	cont. 100-200 RPM	50 [730]	50 [730]	50 [730]	50 [730]	50 [730]	50 [730]	50 [730]	50 [730]	50 [730]
Drain Line, bar [PSI]	cont. 200-500 RPM	20 [290]	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]	75 [1090]

* Intermittent operation: the permissible values may occur for max. 10% of every minute.

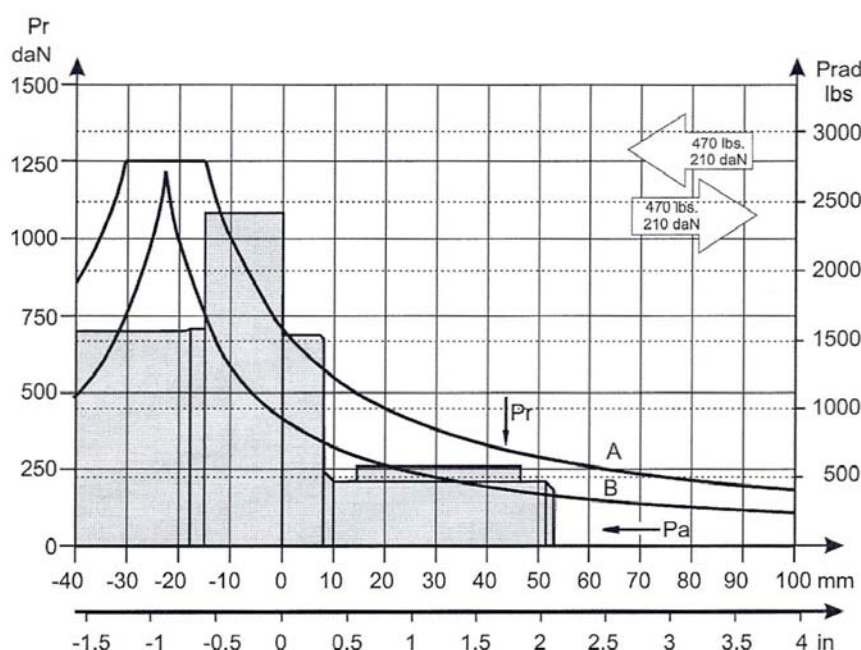
- Intermittent speed and intermittent pressure must not occur simultaneously.
- Recommended filtration is per ISO cleanliness code 20/16. A nominal filtration of 25 micron or better.
- Recommend using a premium quality, anti-wear type mineral based hydraulic oil HLP (DIN51524) or HM (ISO 6743/4).
If 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
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Pos. 3 - "B" Shaft Extensions*

C	- ø25 straight, Parallel key A8x7x30 DIN6885
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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
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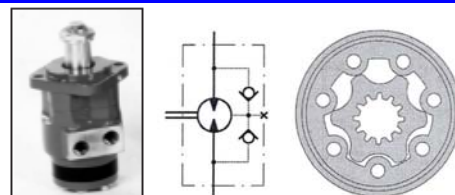
NOTES:

* For other shaft extensions please contact with "M+S Hydraulic".

** Color at customer's request.

The hydraulic motors are manganophosphatized as standard.

PL Orbitmotor



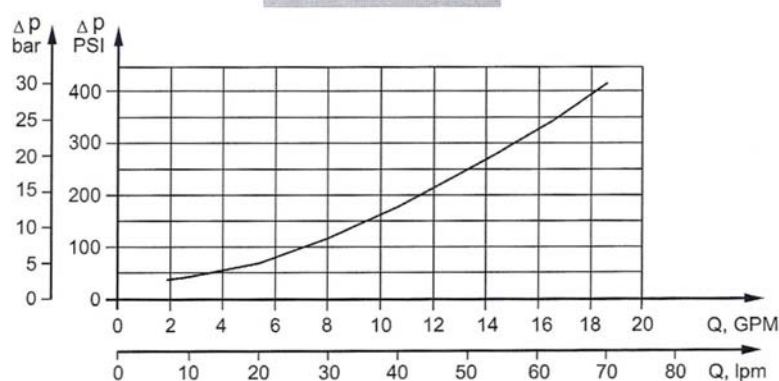
Algemene informatie

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, in ³ /rev. [cm ³ /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	150
	Int.* 1515	945	755	605	472	378	303	236	189
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.

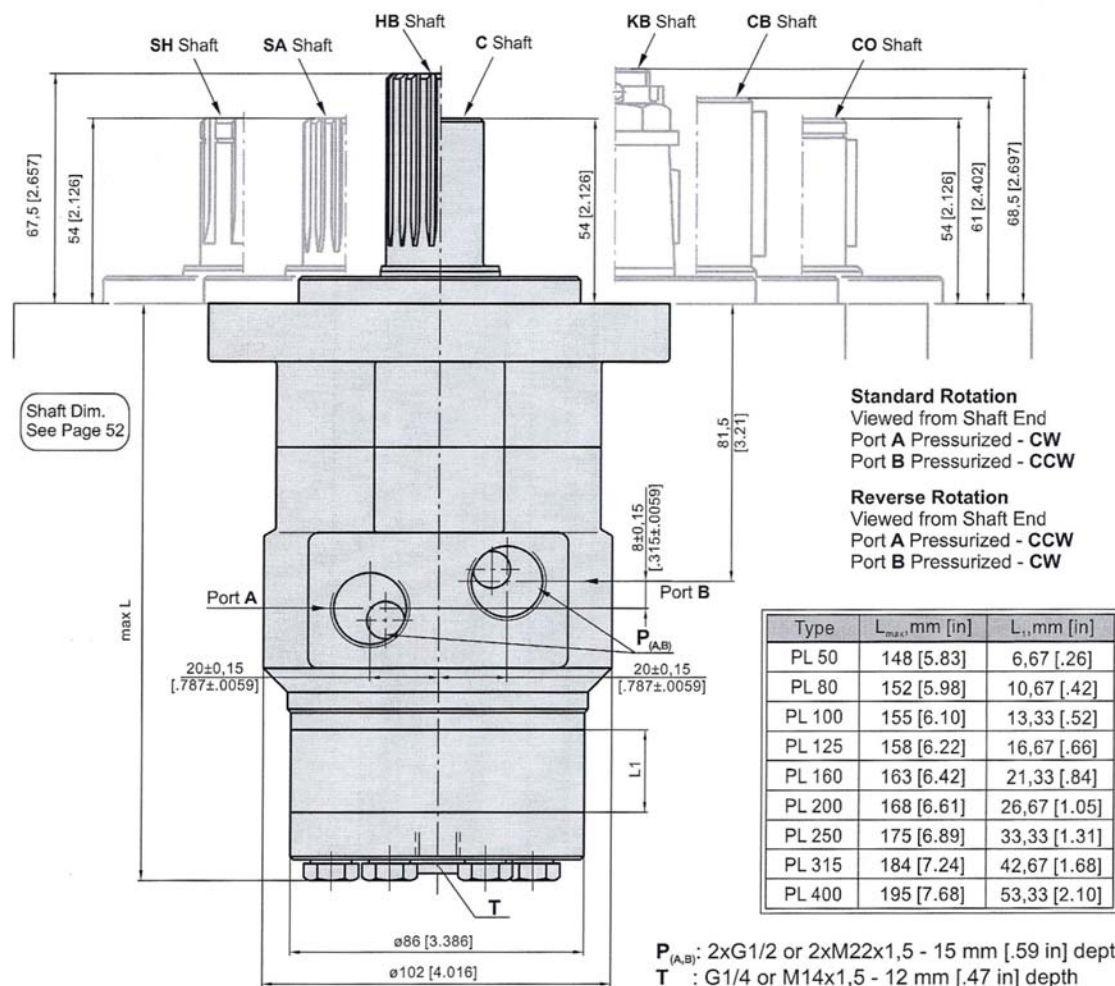
*** Voor toerentallen van 20l./min of minder neem contact op met onze medewerkers

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 aandrijfas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

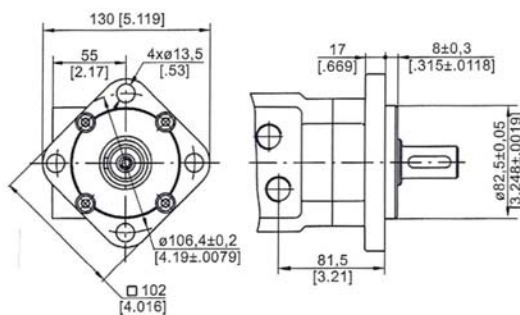
PL Orbitmotor

Afmetingen en uitvoeringen

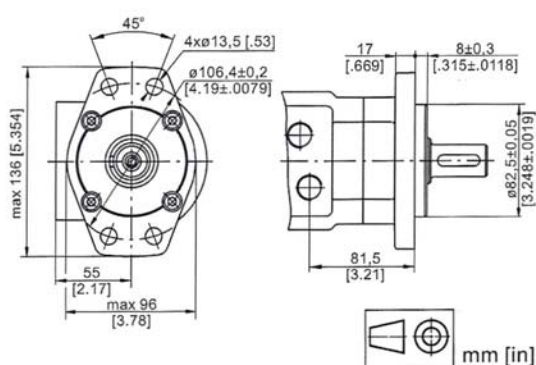


MOUNTING

Square Mount (4 Holes)



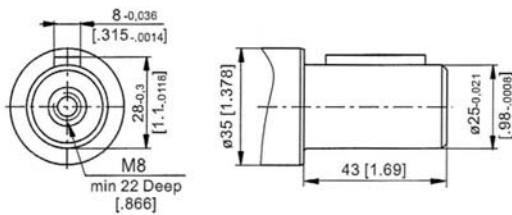
F Oval Mount (4 Holes)



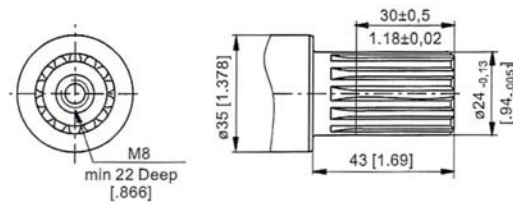
PL Orbitmotor

Mogelijke assen

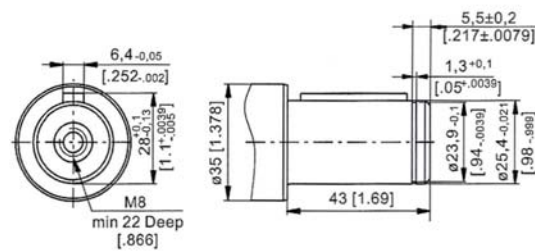
C - $\varnothing 25$ straight, Parallel key A8x7x30 DIN 6885
 Max. Torque 34 daNm [3010 lb-in]



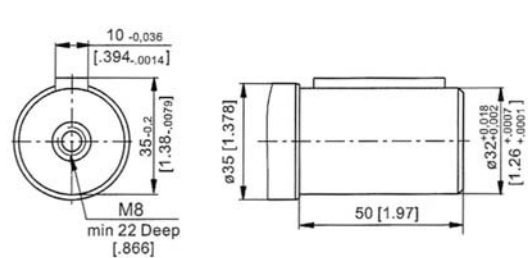
SA - splined B25x22 DIN 5482
 Max. Torque 40 daNm [3540 lb-in]



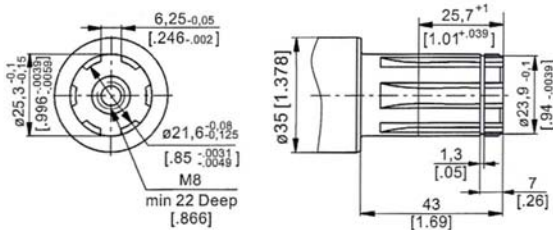
CO - $\varnothing 1"$ straight, Parallel key $\frac{1}{4} \times \frac{1}{4} \times 1\frac{1}{4}"$ BS46
 Max. Torque 34 daNm [3010 lb-in]



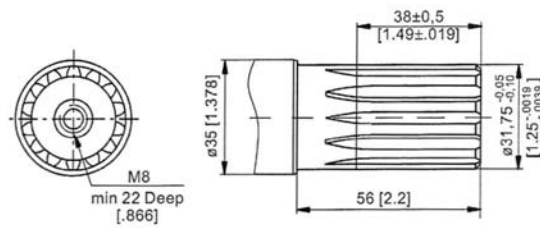
CB - $\varnothing 32$ straight, Parallel key A10x8x40 DIN 6885
 Max. Torque 77 daNm [6815 lb-in]



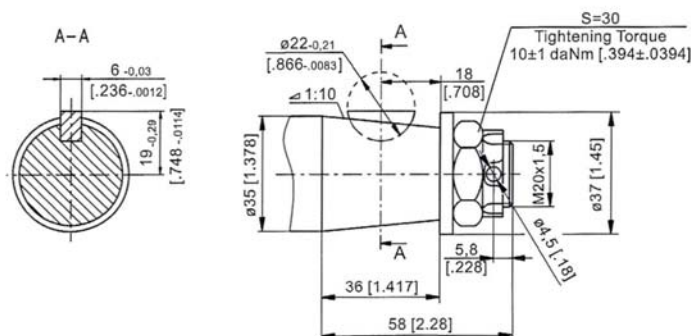
SH - splined, BS 2059 (SAE 6B)
 Max. Torque 40 daNm [3540 lb-in]



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

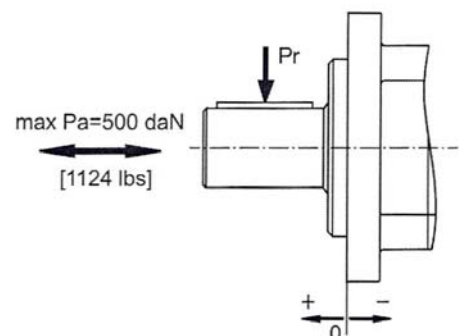
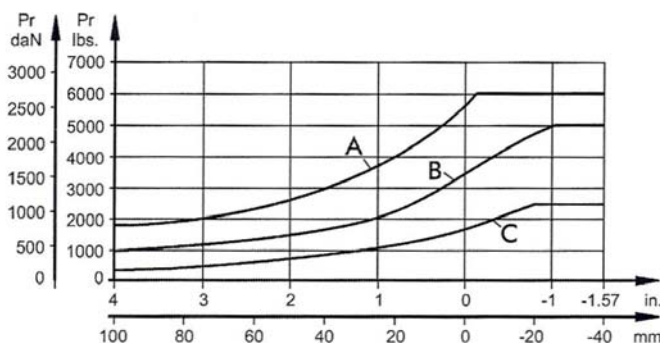
NOTES:

* 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.

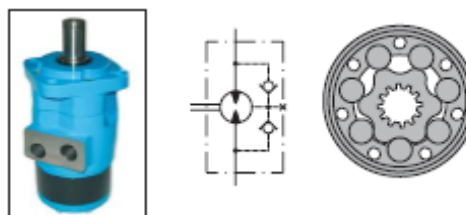
Toegepaste als belasting PL en RL



- 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.



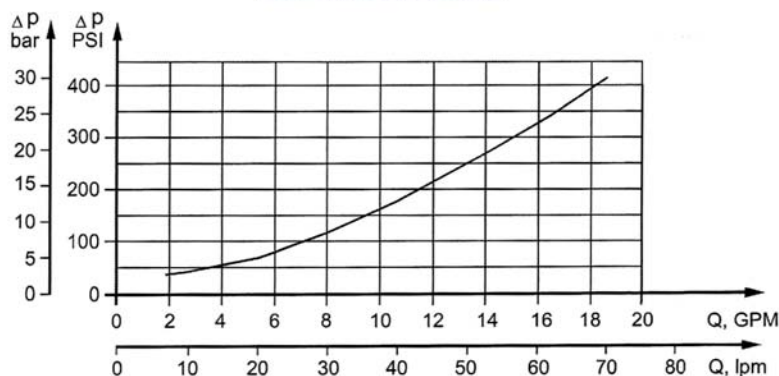
Algemene informatie

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, cm ³ /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	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]	61 [5400]
	Int.*	13 [1150]	22,0 [1947]	28 [2480]	34 [3010]	43 [3805]	50 [4425]	61 [5400]	69 [6100]
	Peak**	17 [1505]	27,0 [2390]	32 [2832]	37 [3275]	46 [4070]	56 [4960]	71 [6280]	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]
	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]
Max. Pressure Drop bar [PSI]	Cont.	140 [2030]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	135 [1960]	115 [1670]
	Int.*	175 [2540]	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]	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]
	Int.*	50 [13]	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]
	Int.*	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]
Max. Return Pres- sure without Drain Line or Max. Pres- sure 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]
	Cont. 100-300 RPM	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]
	Cont. >600 RPM	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]
Max. Return Pres- sure with Drain Line bar [PSI]	Cont.	140 [2030]	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]
	Peak**	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]
Min. Starting Torque daNm [lb-in]		8 [710]	15 [1330]	20 [1770]	25 [2215]	2835 [32]	37 [3275]	45 [4000]	49 [4340]
Min. Speed***, [RPM]		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]	11,5 [25.4]

* Tijdelijk gebruik: gebruik gedurende max. 10% per minuut.

** Piekbelasting: max. 1% per minuut.

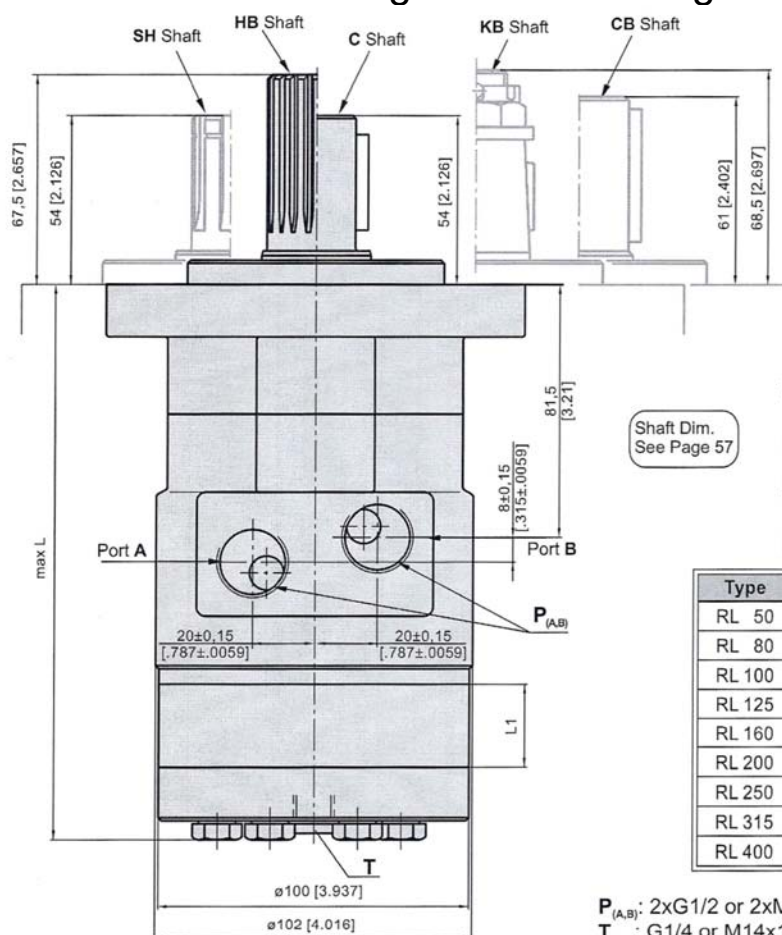
*** Voor toerentallen van 20ltr./min of minder neem contact op met onze medewerkers

- 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 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

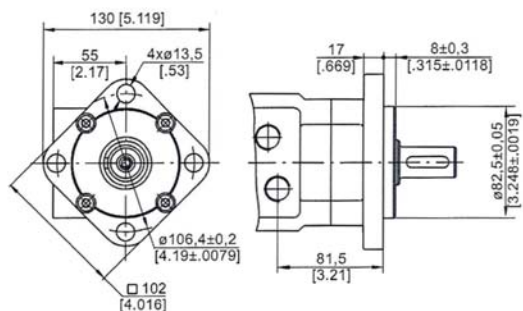
Reverse Rotation
Viewed from Shaft End
Port A Pressurized - CCW
Port B Pressurized - CW

Type	L, mm [in]	L ₁ , mm [in]
RL 50	152 [5.98]	9,0 [0.35]
RL 80	157 [6.18]	14,0 [0.55]
RL 100	160 [6.30]	17,4 [0.69]
RL 125	165 [6.50]	21,8 [0.86]
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]

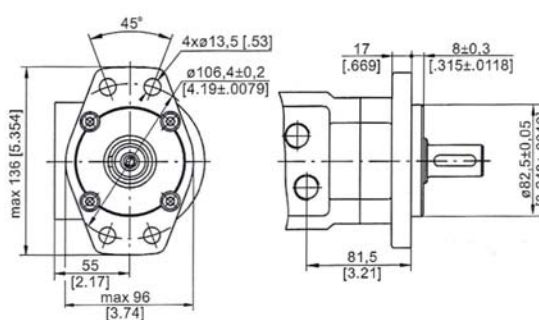
P_(A,B): 2xG1/2 or 2xM22x1,5 - 15 mm [0.59 in] depth
T : G1/4 or M14x1,5 - 12 mm [0.47 in] depth

MOUNTING

Square Mount (4 Holes)



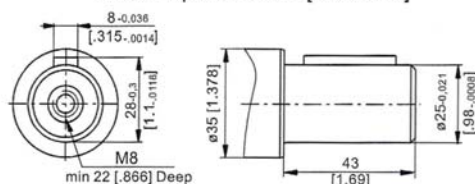
F Oval Mount (4 Holes)



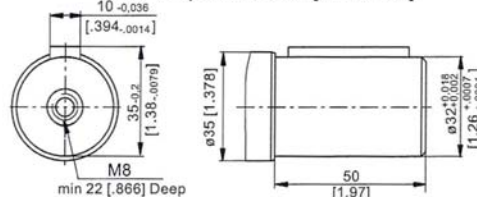
RL Orbitmotor

Mogelijke assen

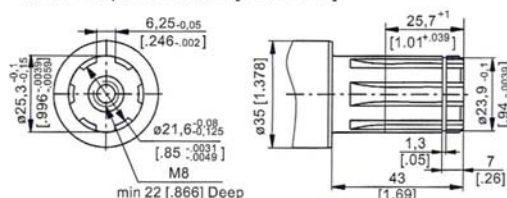
C - ø25 straight, Parallel key A8x7x30 DIN 6885
Max. Torque 34 daNm [3010 lb-in]



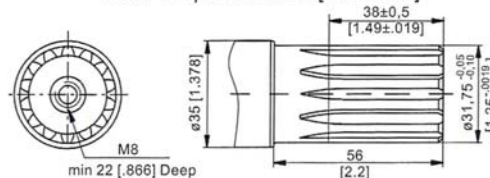
CB - ø32 straight, Parallel key A10x8x40 DIN 6885
Max. Torque 77 daNm [6815 lb-in]



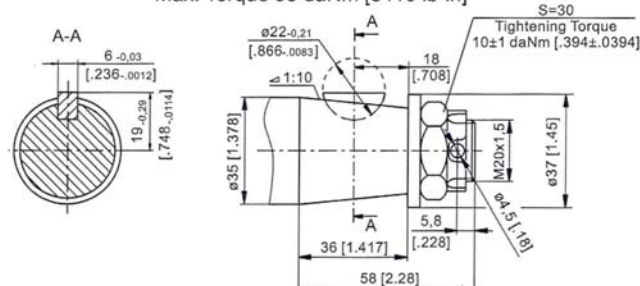
SH - splined, BS 2059 (SAE 6B)
Max. Torque 40 daNm [3540 lb-in]



HB - ø1¼" 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 cm³/rev [3.14 in³/rev]
80	- 80,3 cm³/rev [4.90 in³/rev]
100	- 99,8 cm³/rev [6.09 in³/rev]
125	- 125,7 cm³/rev [7.67 in³/rev]
160	- 159,6 cm³/rev [9.74 in³/rev]
200	- 199,8 cm³/rev [12.19 in³/rev]
250	- 250,1 cm³/rev [15.26 in³/rev]
315	- 315,7 cm³/rev [19.26 in³/rev]
400	- 397,0 cm³/rev [24.40 in³/rev]

Pos.3 - Shaft Extensions**

- C** - ø25 straight, Parallel key A8x7x30 DIN6885
CB - ø32 straight, Parallel key A10x8x40 DIN6885
SH - ø25,3 splined, BS 2059 (SAE 6B)
HB - ø1¼" 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:

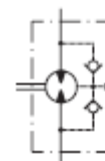
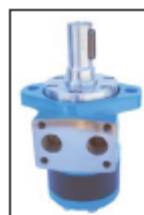
* For the Function Diagrams data please look at "M+S Hydraulic" Catalogue for MR motors, pages 37+41.

** 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 bspp.

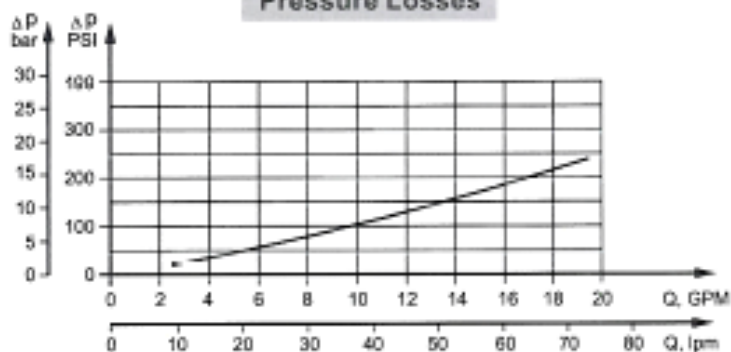
Algemene informatie

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]	8,6 [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]
	Int.*	9,2 [814]	14,6 [1292]	18,3 [1619]	22,9 [2026]	29,3 [2593]	36,6 [3239]	37,6 [3328]	44 [3894]
	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]
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]
	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]
Max. Pressure Drop bar [PSI]	Cont.	105 [1520]	105 [1520]	105 [1520]	105 [1520]	105 [1520]	105 [1520]	90 [1305]	70 [1015]
	Int.*	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	115 [1665]	105 [1520]
	Peak**	215 [3120]	215 [3120]	215 [3120]	215 [3120]	215 [3120]	215 [3120]	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]
	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]
Max. Inlet Pressure bar [PSI]	Cont.	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]
	Peak**	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]
	Cont. 100-300 RPM	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]
	Cont. >600 RPM	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]
Max. Starting Pressure with Unloaded Shaft, bar [PSI]		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]
Min. Speed***, [RPM]		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]

* 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 overleg te worden.

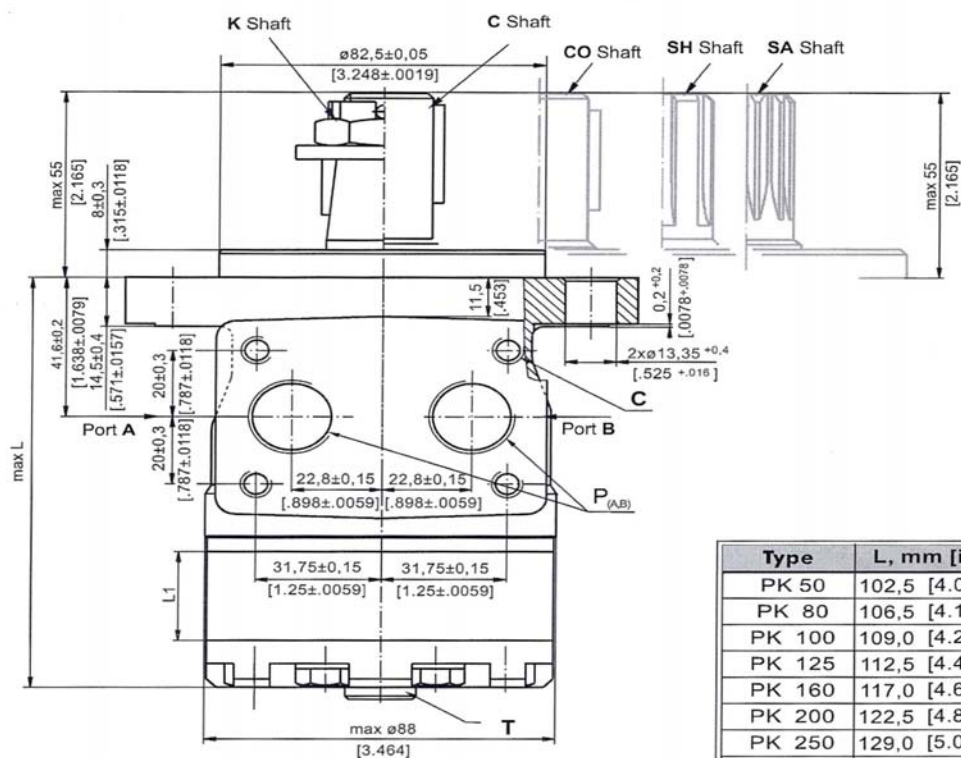
14. Aanbevolen minerale viscositeit is 13mm² bij 50° C.

15. Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.

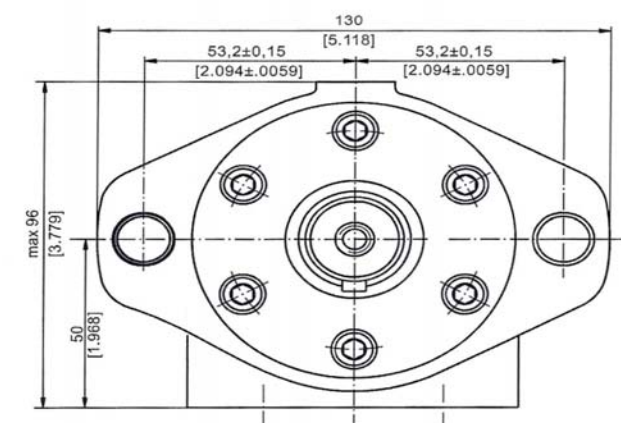
De levensduur van de motoren kan men verhogen als men de aandrijfas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

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]



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

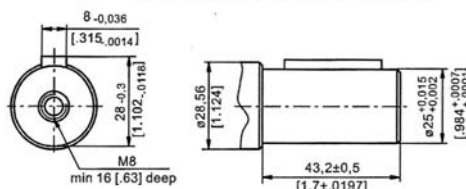
C : 4xM8 - 13 mm [.51 in] depth
 P_(A, B): 2xG1/2 or 2xM22x1,5 - 15 mm [.59 in] depth
 T : G1/4 or M14x1,5 - 8,5 mm [.33 in] depth (plugged)



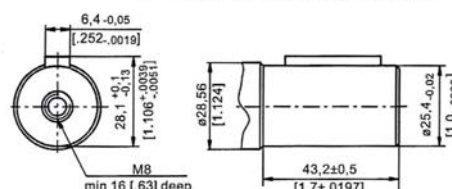
PK Orbitmotor

Mogelijke assen

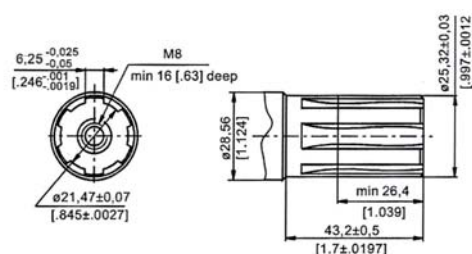
C - $\varnothing 25$ straight, Parallel key A8x7x32 DIN 6885
 Max. Torque 34 daNm [3010 lb-in]



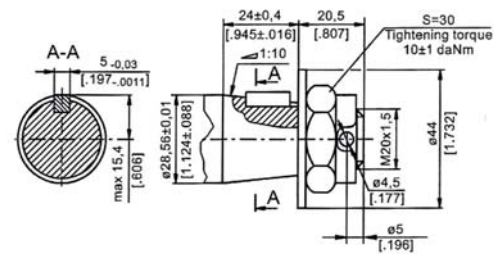
CO - $\varnothing 1"$ straight, Parallel key $\frac{1}{4}" \times \frac{1}{4}" \times 1\frac{1}{4}"$ BS46
 Max. Torque 34 daNm [3010 lb-in]



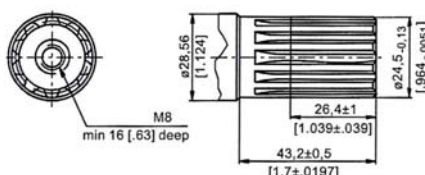
SH - splined, BS 2059 (SAE 6B)
 Max. Torque 40 daNm [3540 lb-in]



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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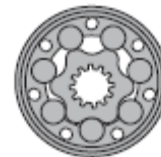
NOTE:

* 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, antifricctie conische lagering, flens, as recht, splines en taps, poorten metrisch en bspp.

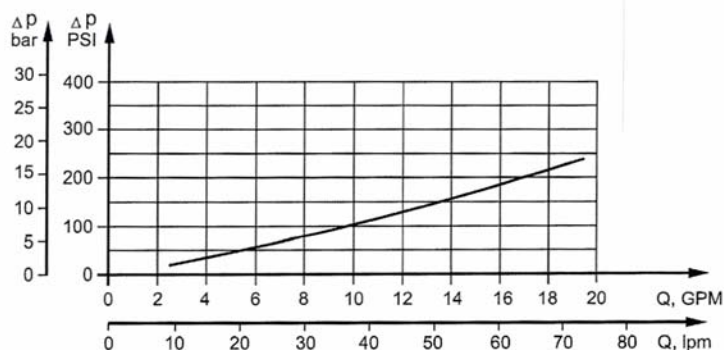
Algemene informatie

Max. Displacement, cm ³ /rev [in ³ /rev]	397 [24.4]
Max. Speed, [RPM]	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, cm ³ /rev [in ³ /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	190	150
	Int.*	970	940	750	600	470	375	300	240	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 20ltr./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.

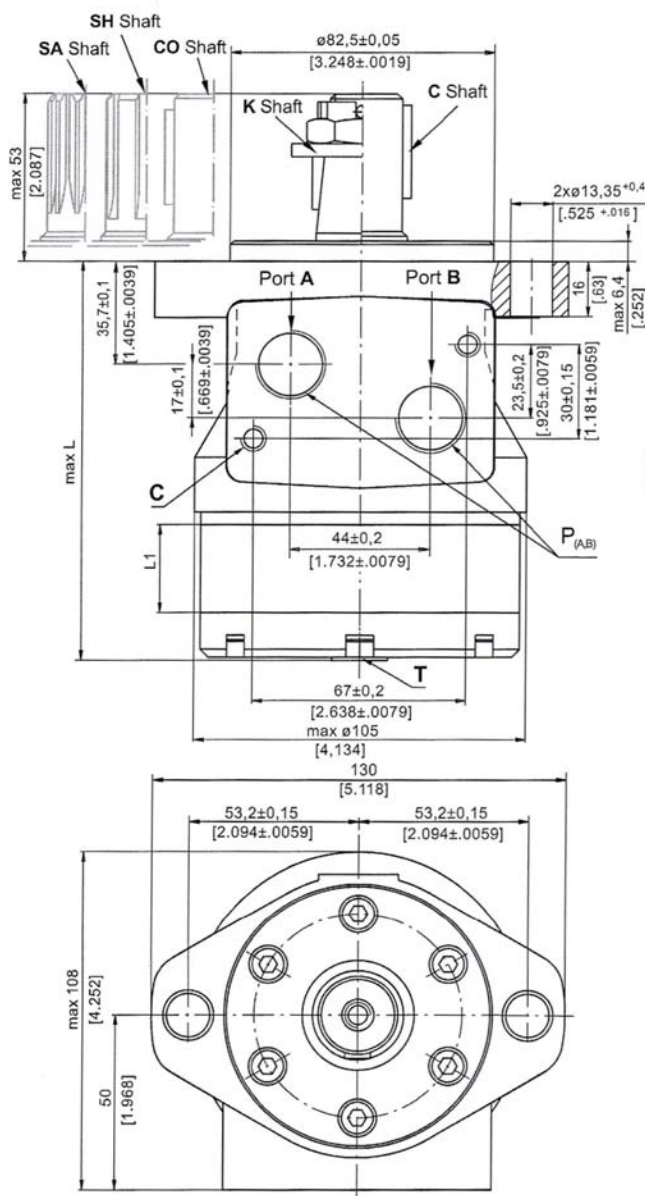
20. Aanbevolen maximum olietemperatuur tijdens gebruik is 82° C.

De levensduur van de motoren kan men verhogen als men de aandrijfas 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

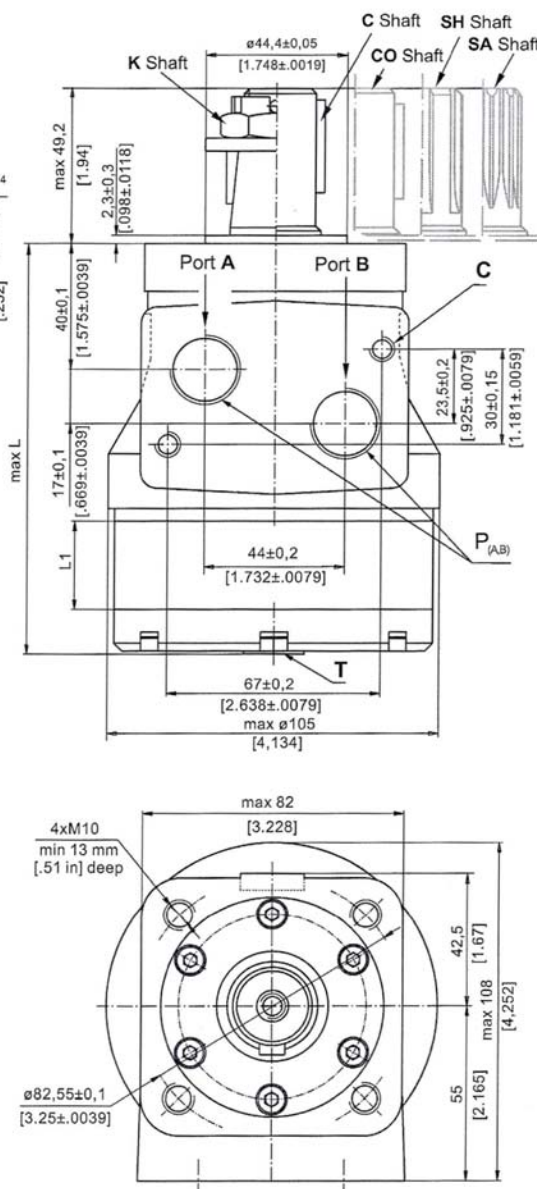
RK Orbitmotor

Afmetingen en uitvoeringen

Oval Mount (2 Holes)



Q - Square Mount (4 Bolts)



- 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

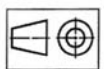
Port B Pressurized - CCW

Reverse Rotation

Viewed from Shaft End

Port A Pressurized - CCW

Port B Pressurized - CW



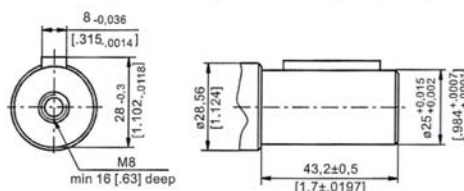
mm [in]

Type	L, mm [in]	Type	L, mm [in]	L, 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]

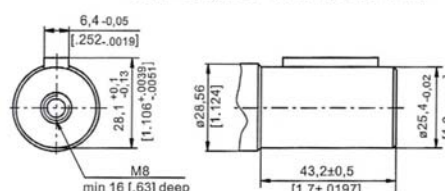
RK Orbitmotor

Mogelijke assen

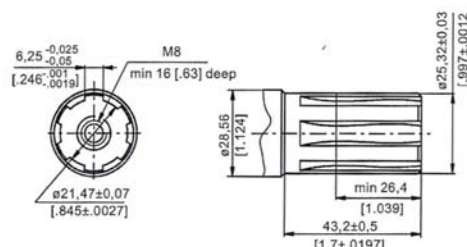
C - $\varnothing 25$ straight, Parallel key A8x7x32 DIN 6885
Max. Torque 34 daNm [3010 lb-in]



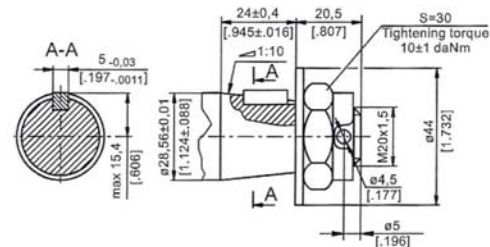
CO - $\varnothing 1"$ straight, Parallel key $\frac{1}{4}" \times \frac{1}{4}" \times \frac{1}{4}"$ BS46
Max. Torque 34 daNm [3010 lb-in]



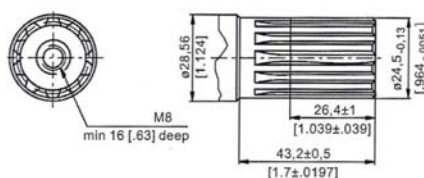
SH - splined, BS 2059 (SAE 6B)
Max. Torque 40 daNm [3540 lb-in]



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:

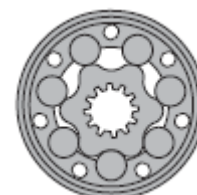
* The permissible output torque for shafts must be not exceeded!

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.

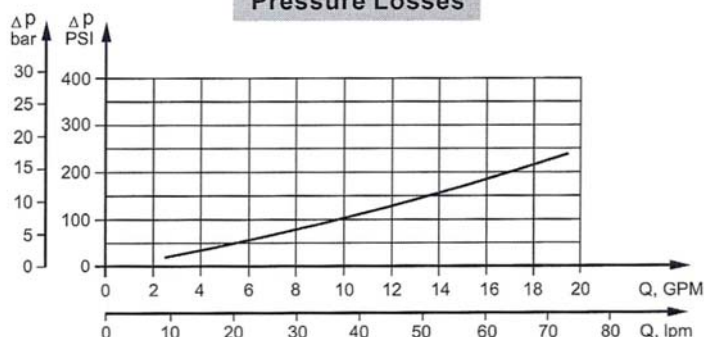
Algemene informatie

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. [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	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 Pres- sure 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.

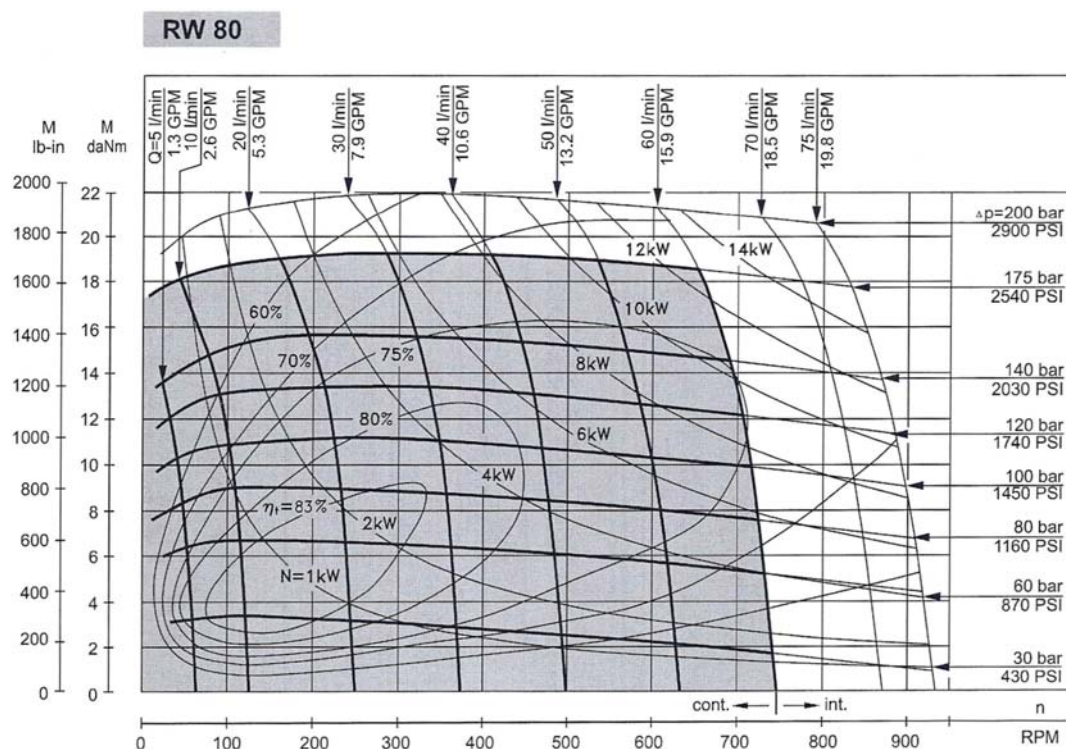
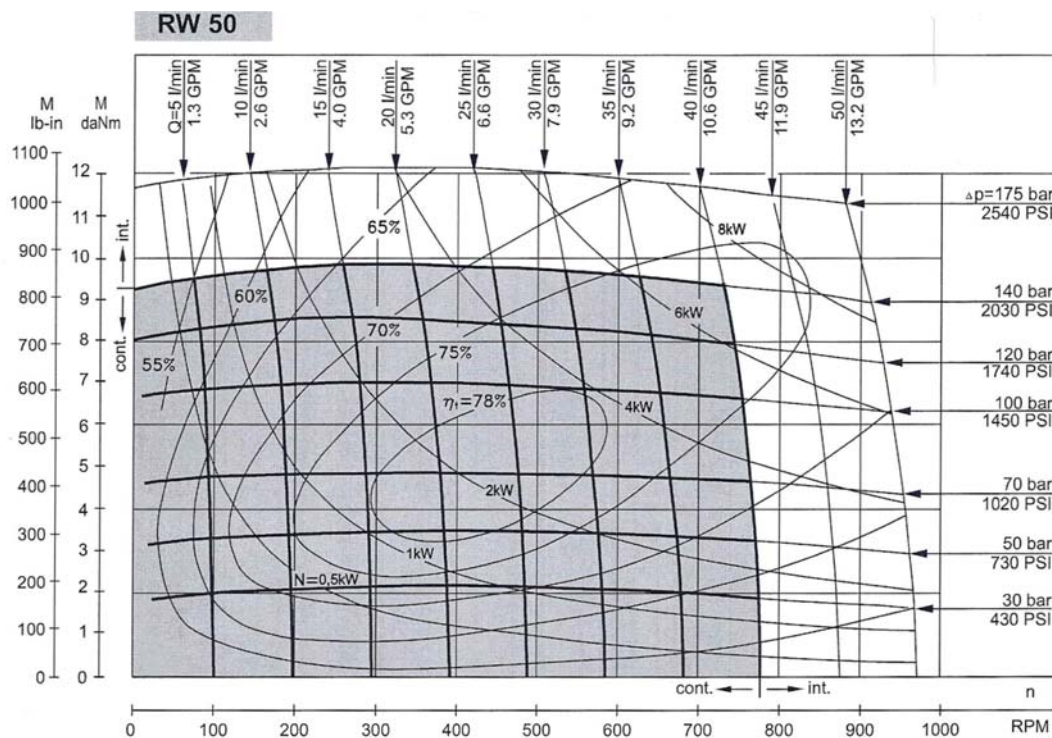
*** Voor toerentallen van 20ltr./min of minder neem contact op met onze medewerkers

- 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 aandrijf-as 15 tot 30 minuten onbelast laat draaien voor de motor volledig te belasten.

RW Orbitmotor

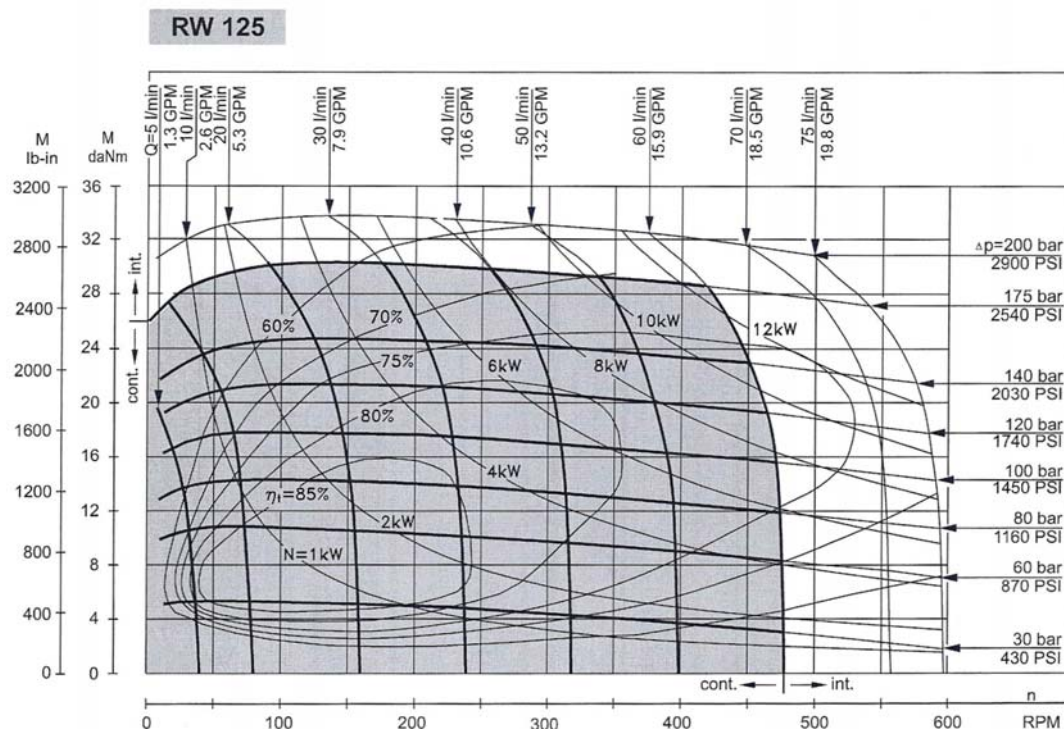
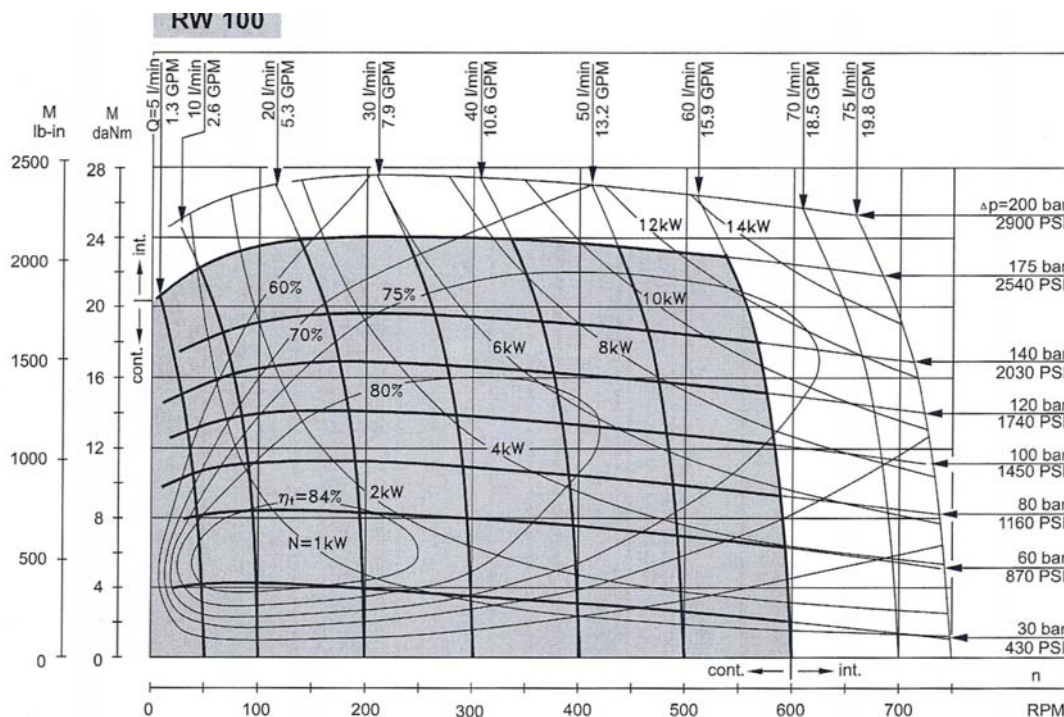
Functiediagrammen



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

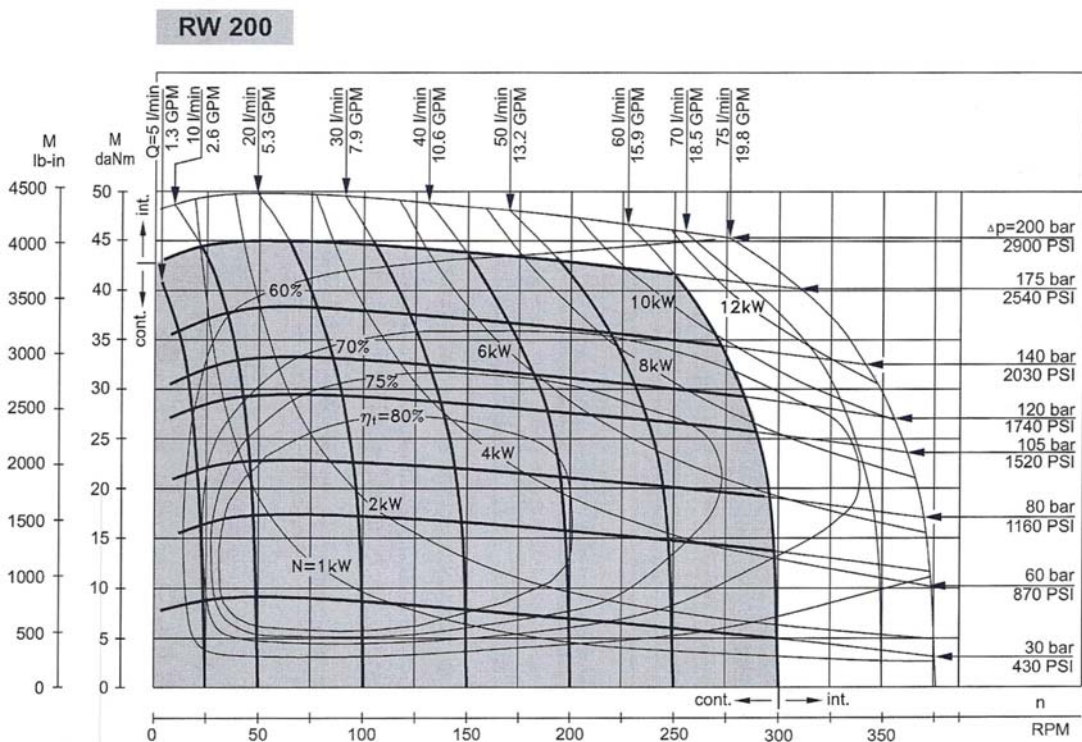
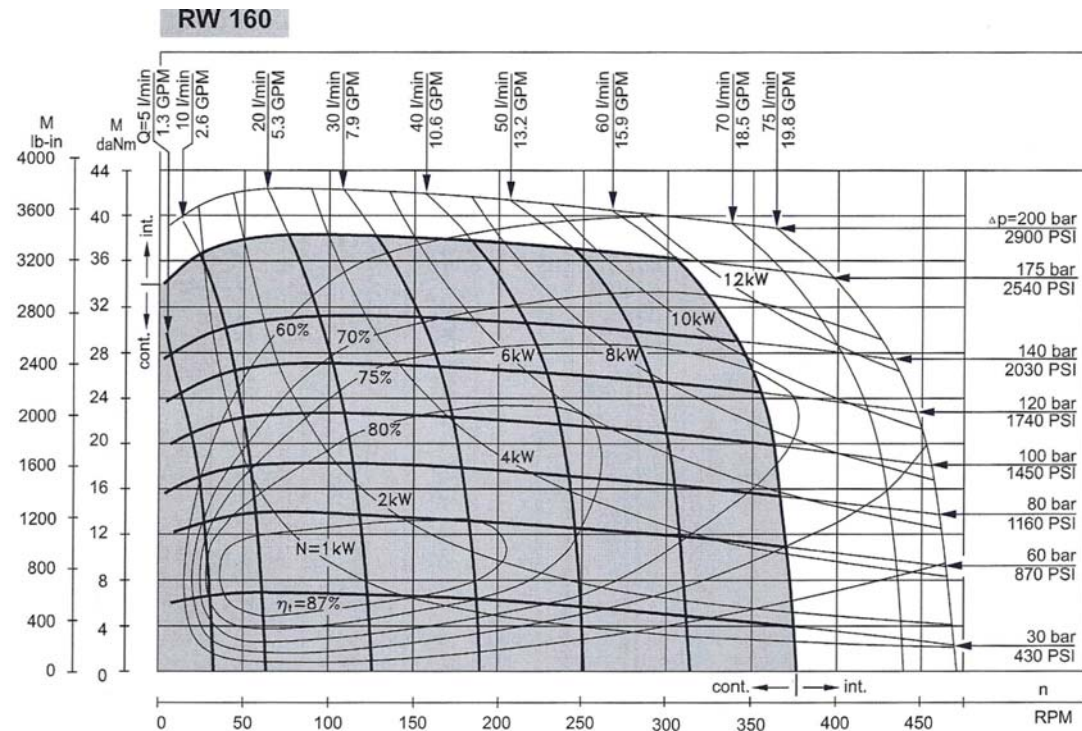
Functiediagrammen



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

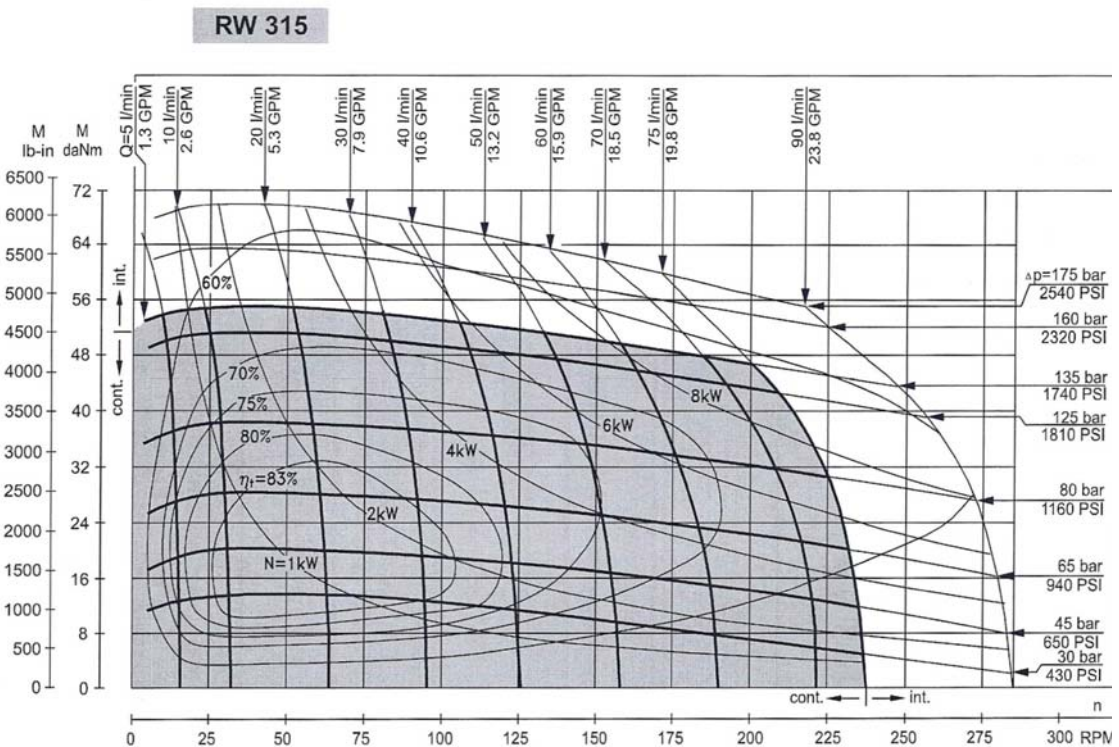
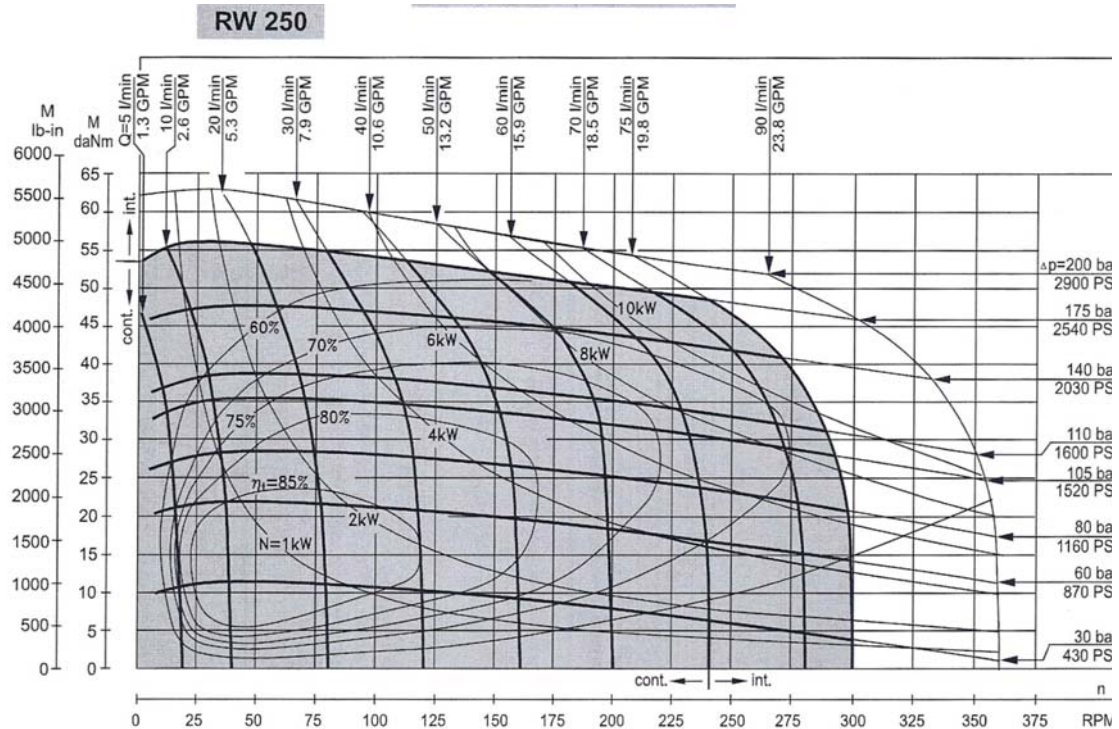
Functiedigrammen



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

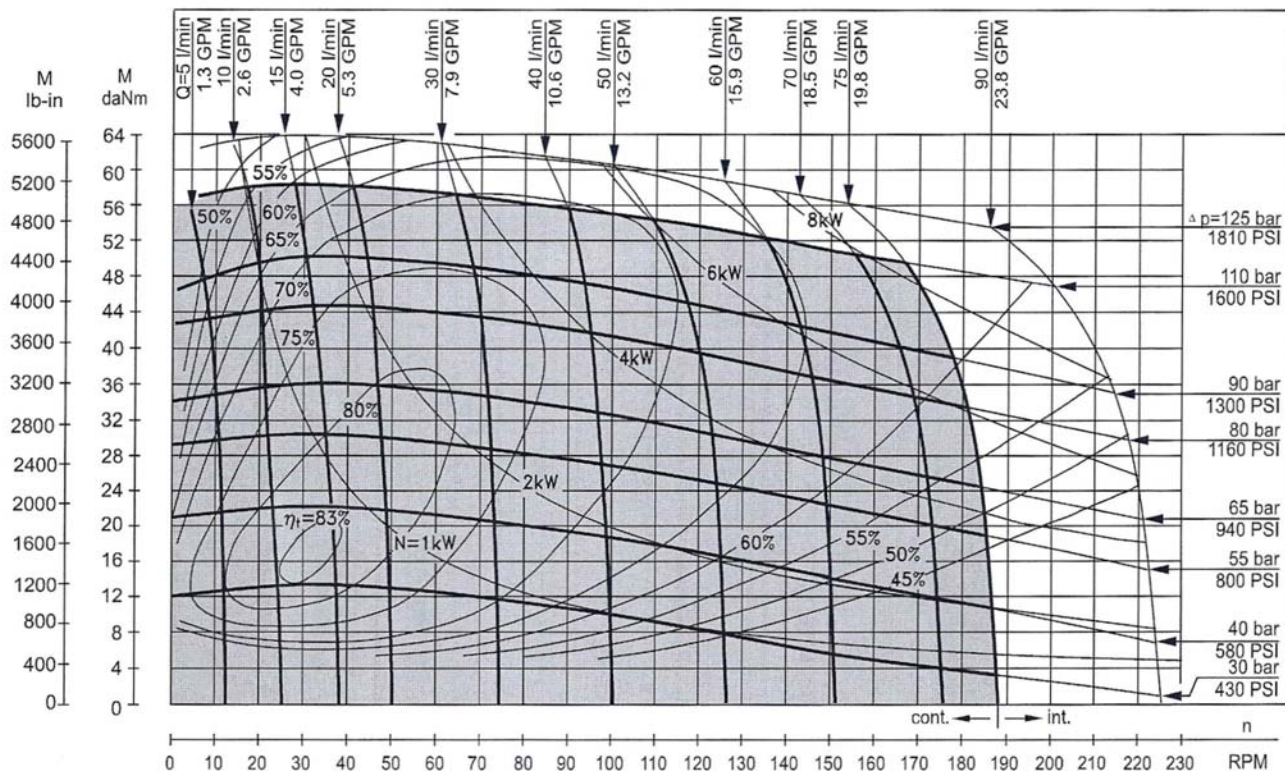


The function diagrams data is for average performance of randomly selected motors at back pressure 5+10 bar (72.5+145 PSI) and oil with viscosity of 32 mm²/s (150 SUS) at 50°C (122°F).

RW Orbitmotor

Functiediaagram

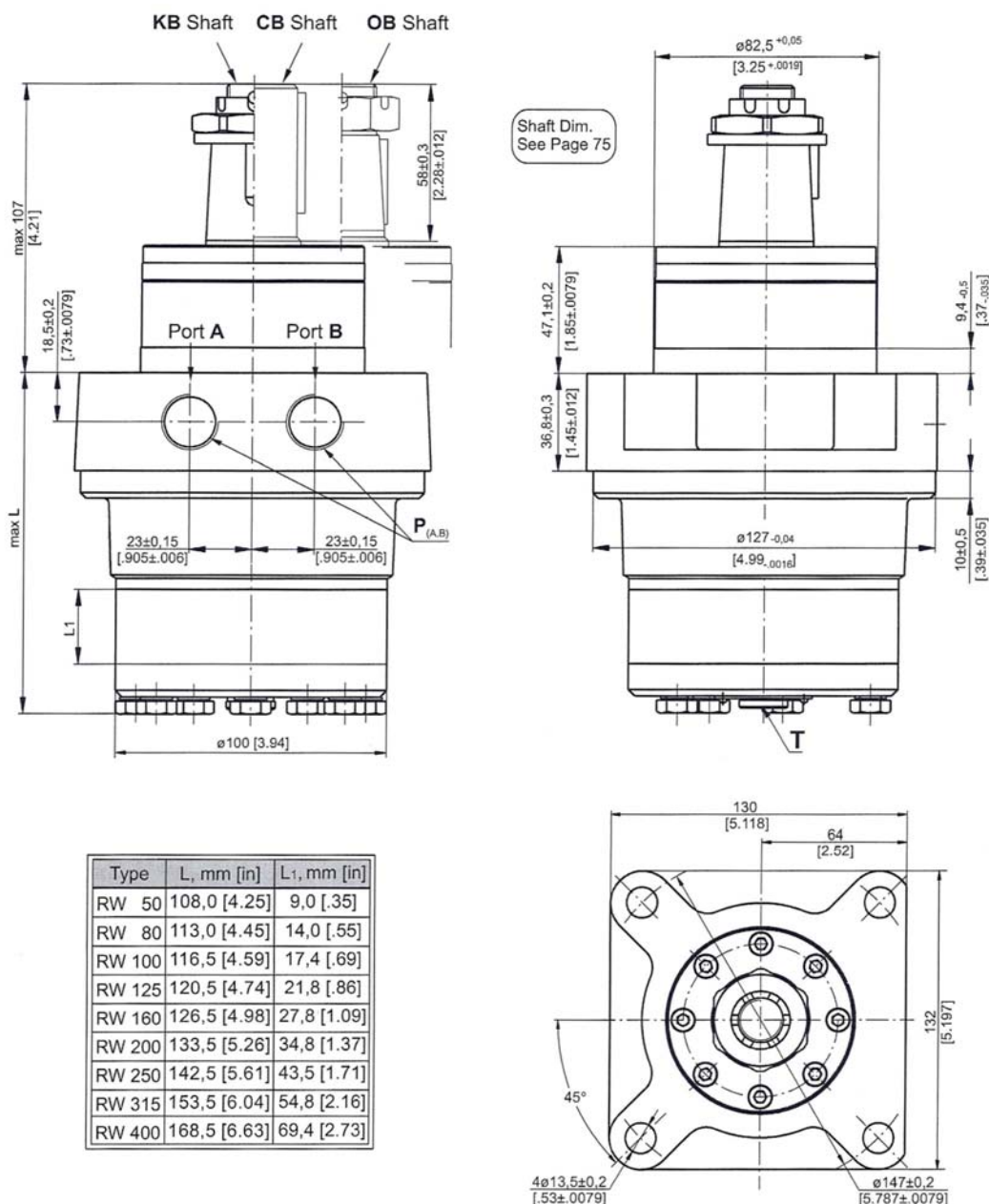
RW 400



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



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

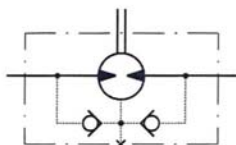


RW Orbitmotor

Maximaal toegestane druk as afdichting

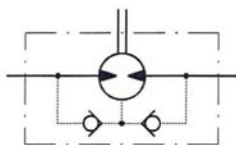
**RW...; RW...UK motors
with drain connection:**

The shaft seal pressure equals the pressure in the drain line.



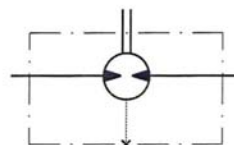
**RW...1 motors without
drain connection:**

The shaft seal pressure never exceeds the pressure in the return line.

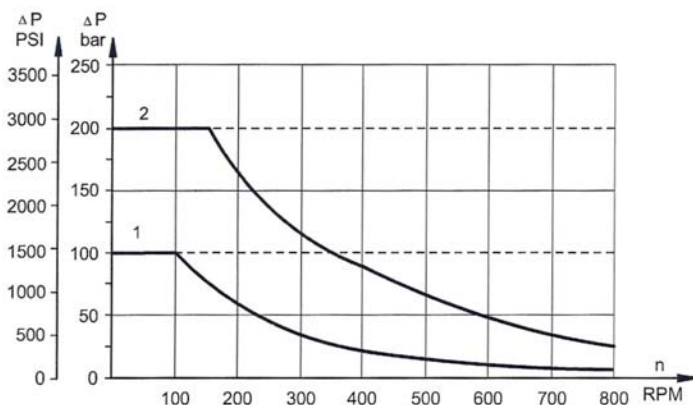


**RW...U motors with
high pressure seal
and drain connection:**

The shaft seal pressure equals the pressure in the drain line.



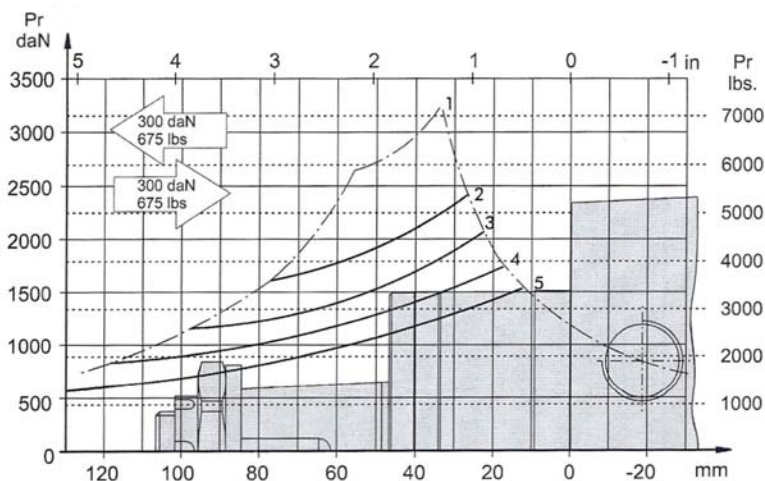
**Max. return pressure without drain line or
max. pressure in the drain line**



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.

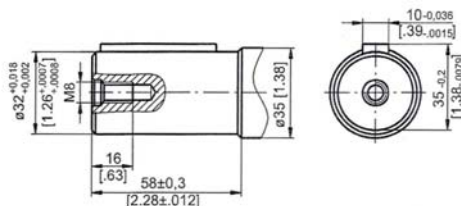


1. Permissible radial shaft load
 2. Drawing by n= 50 rpm
 3. Drawing by n=100 rpm
 4. Drawing by n=200 rpm
 5. Drawing by n=400 rpm

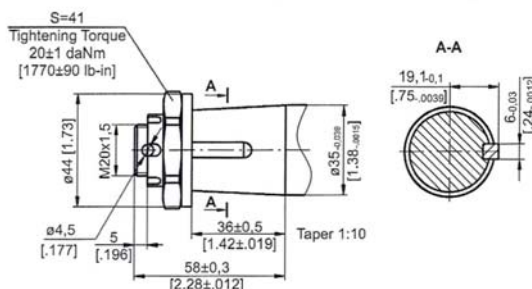
RW Orbitmotor

Mogelijke assen

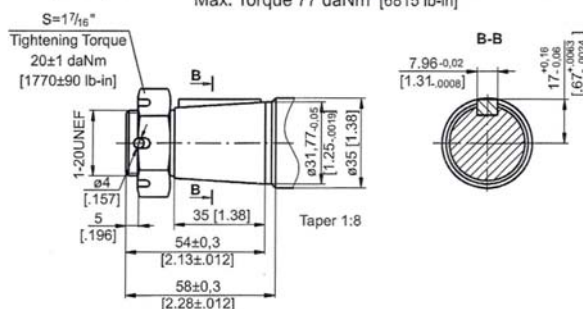
CB - $\phi 32$ straight, Parallel key A10x8x45 DIN 6885
Max. Torque 77 daNm [6815 lb-in]



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
RW							

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:

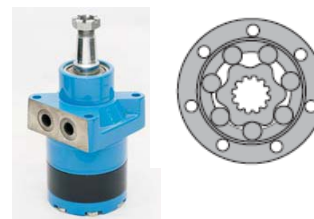
* The permissible output torque for shafts must not be exceeded!

The hydraulic motors are manganophosphatized 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.

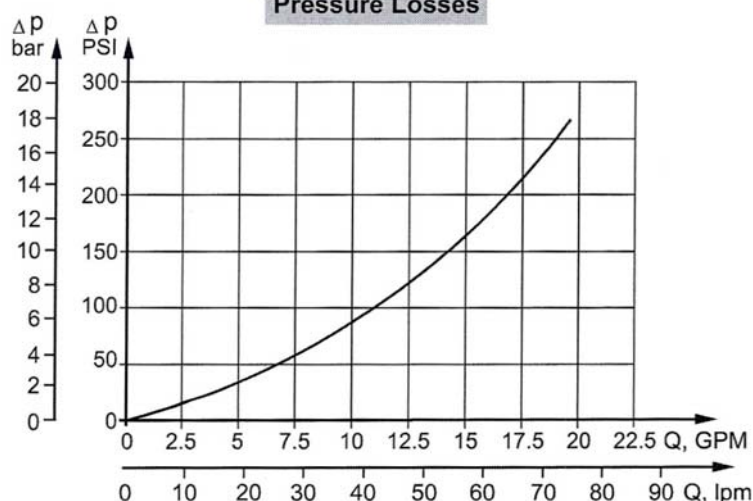
Algemene informatie

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 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 aandrijf-as 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,	cont.	216	203	189	159	149	140	136
[RPM]	int.*	288	271	252	244	229	215	209
Max. Torque	cont.	94 [8320]	96 [8497]	96 [8497]	92 [8143]	91 [8054]	90 [7966]	89 [7877]
daNm [in-lb]	int.*	102 [9028]	105 [9293]	98 [8674]	101 [8939]	101 [8939]	104 [9205]	105 [9293]
Max. Output,	cont.	16,5 [22]	13,2 [17.7]	12,5 [16.8]	10,6 [14.2]	10,8 [14.5]	9,4 [12.6]	9 [12]
kW [HP]	int.*	20,8 [27.9]	19,2 [25.7]	18,5 [24.8]	17,4 [23.3]	17,8 [23.9]	16,4 [22]	15,8 [21.2]
Max. Pressure	cont.	205 [2970]	205 [2970]	185 [2680]	150 [2180]	140 [2030]	130 [1885]	125 [1815]
Drop, bar [PSI]	int.*	225 [3260]	225 [3260]	190 [2760]	165 [2390]	155 [2250]	150 [2180]	145 [2105]
Max. Oil Flow	cont.	75 [20]	75 [20]	75 [20]	75 [20]	75 [20]	75 [20]	75 [20]
lpm [GPM]	int.*	100 [26.4]	100 [26.4]	100 [26.4]	115 [30.4]	115 [30.4]	115 [30.4]	115 [30.4]
Max. Inlet Pressure,	cont.	210 [3050]	210 [3050]	210 [3050]	210 [3050]	210 [3050]	210 [3050]	210 [3050]
bar [PSI]	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	at max. press. drop cont.	77 [6815]	79,5 [7036]	78,7 [6966]	75,4 [6674]	74,6 [6603]	73,8 [6532]	72,9 [6452]
daNm [in-lb]	at max. press. drop int.*	83,6 [7400]	86 [7612]	80,3 [7107]	82,8 [7328]	82,8 [7328]	85,2 [7540]	84,4 [7470]
Min. Speed**, [RPM]		8	8	8	8	8	5	5
Weight, avg. kg [lb]	HW	16,7 [36.8]	16,9 [37.3]	17,3 [38.1]	18,1 [39.9]	18,4 [40.6]	18,8 [41.5]	18,9 [41.7]
	HWF	15,2 [33.5]	15,4 [34]	15,8 [34.8]	16,6 [36.6]	16,9 [37.3]	17,3 [38.1]	17,4 [38.3]
	HWS	16,4 [36.2]	16,6 [36.6]	17 [37.5]	17,8 [39.2]	18,1 [39.9]	18,5 [40.8]	18,6 [41]

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** Piekbelasting: max. 1% per minuut.

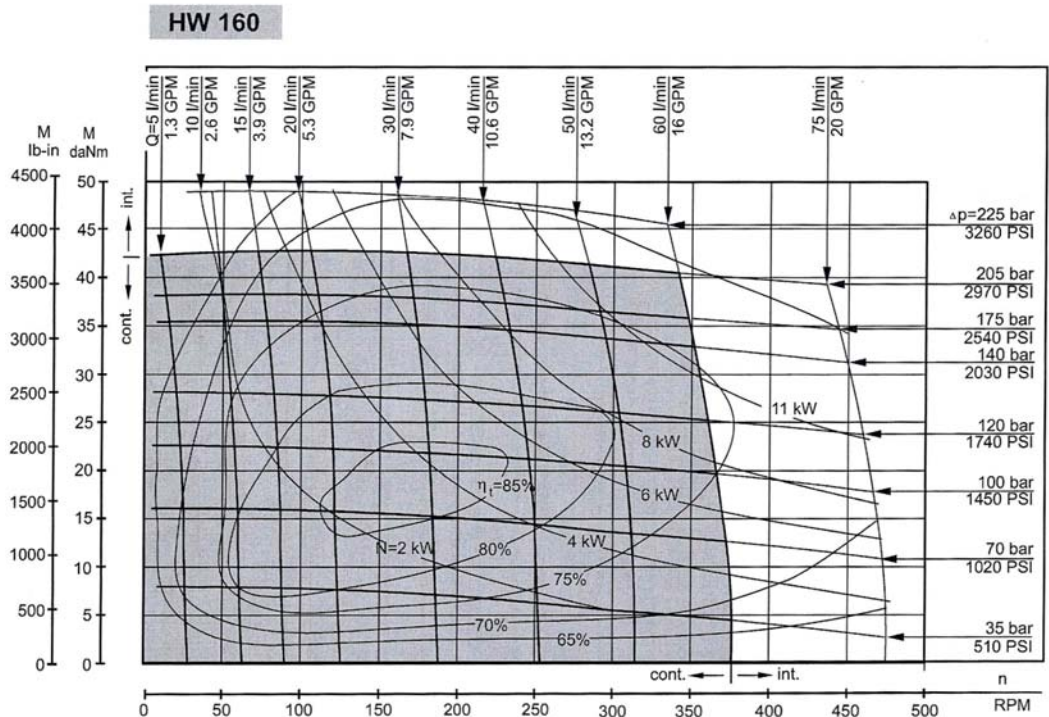
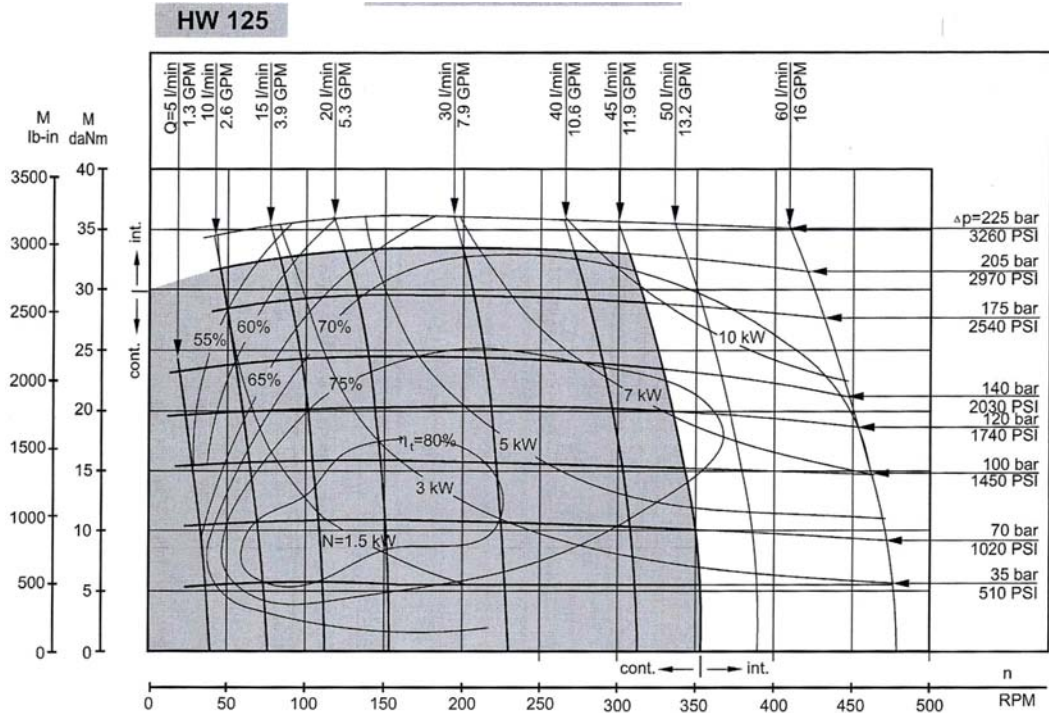
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HW Orbitmotor

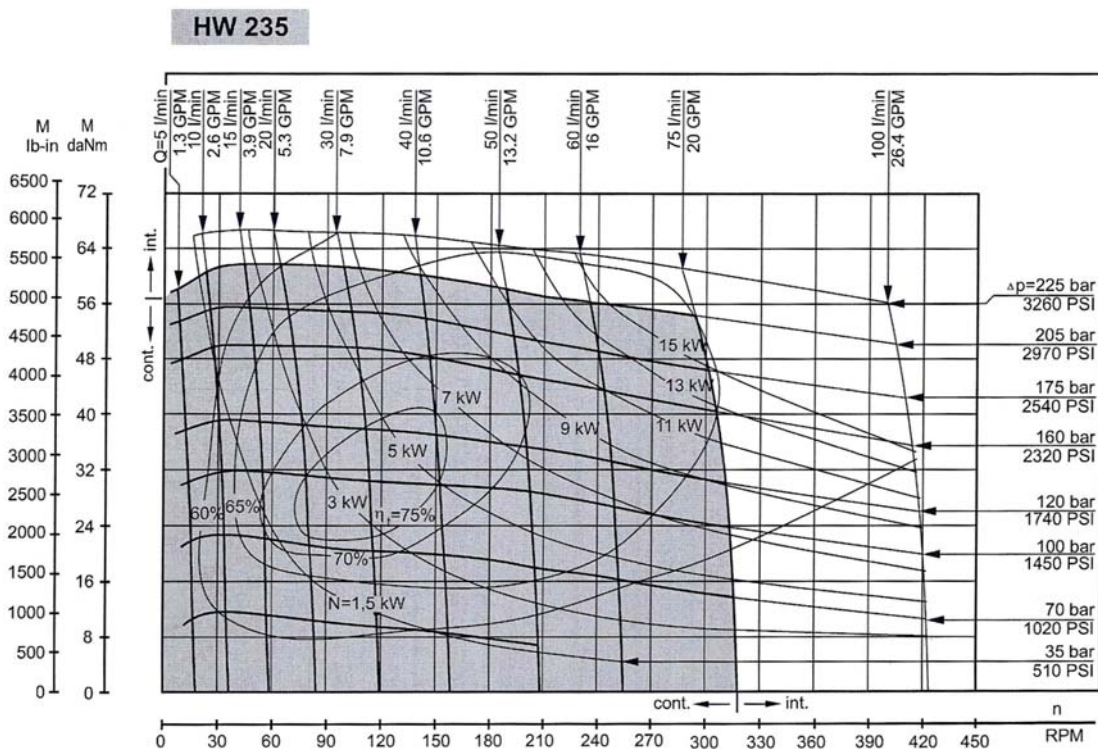
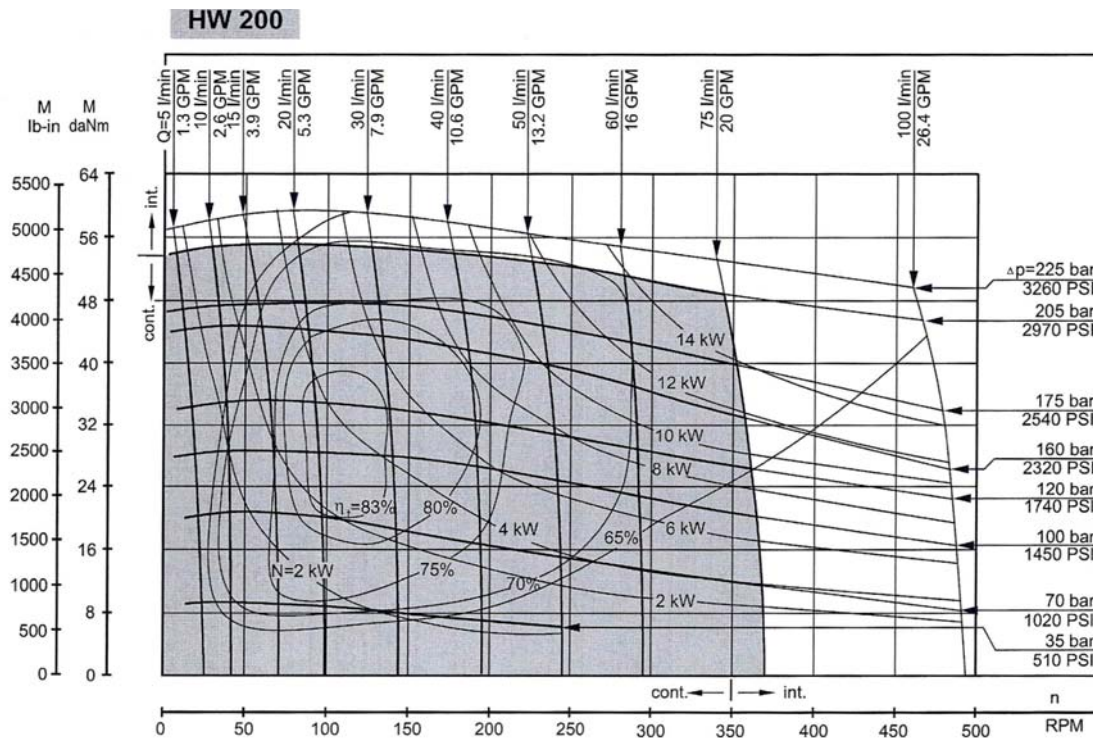
Functiedigram



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

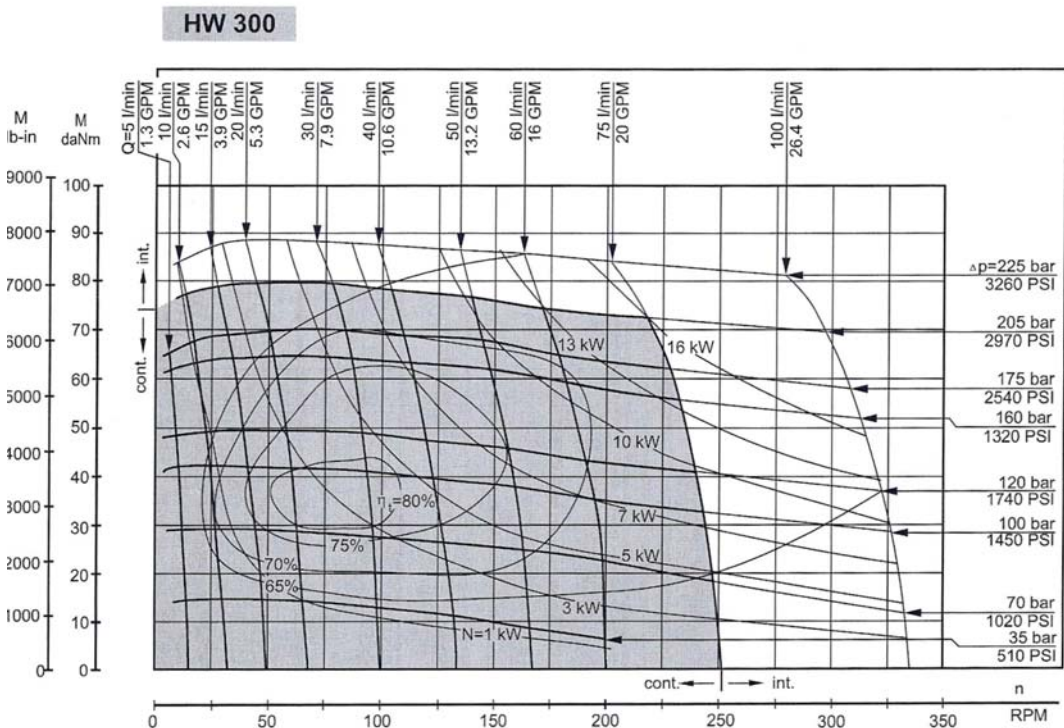
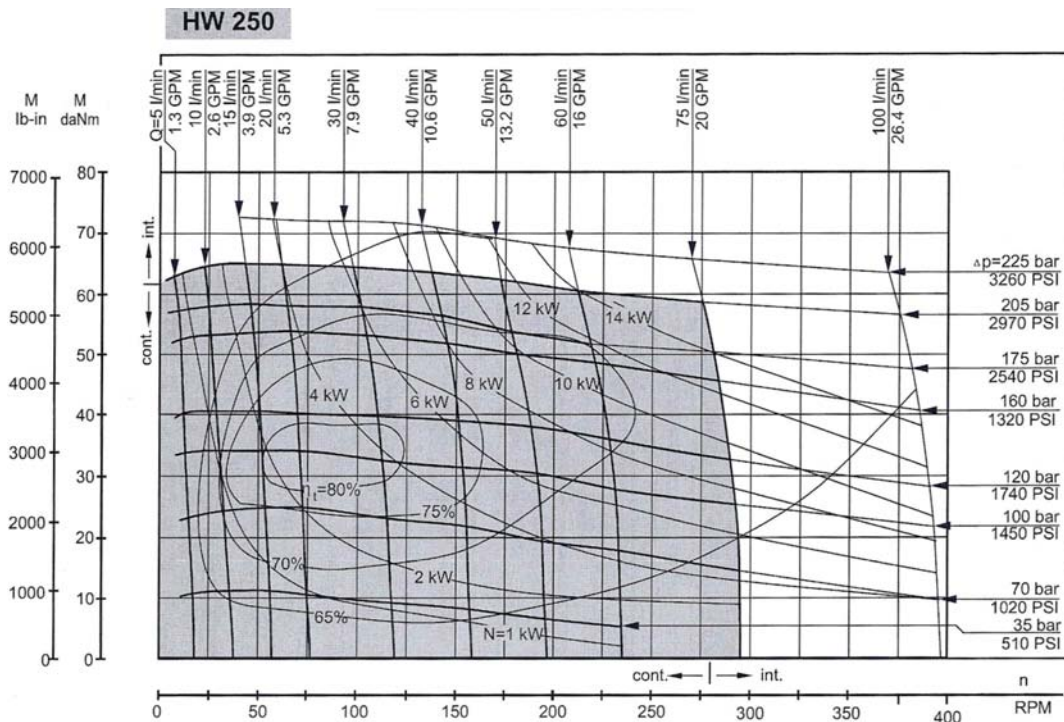
Functiediagrammen



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

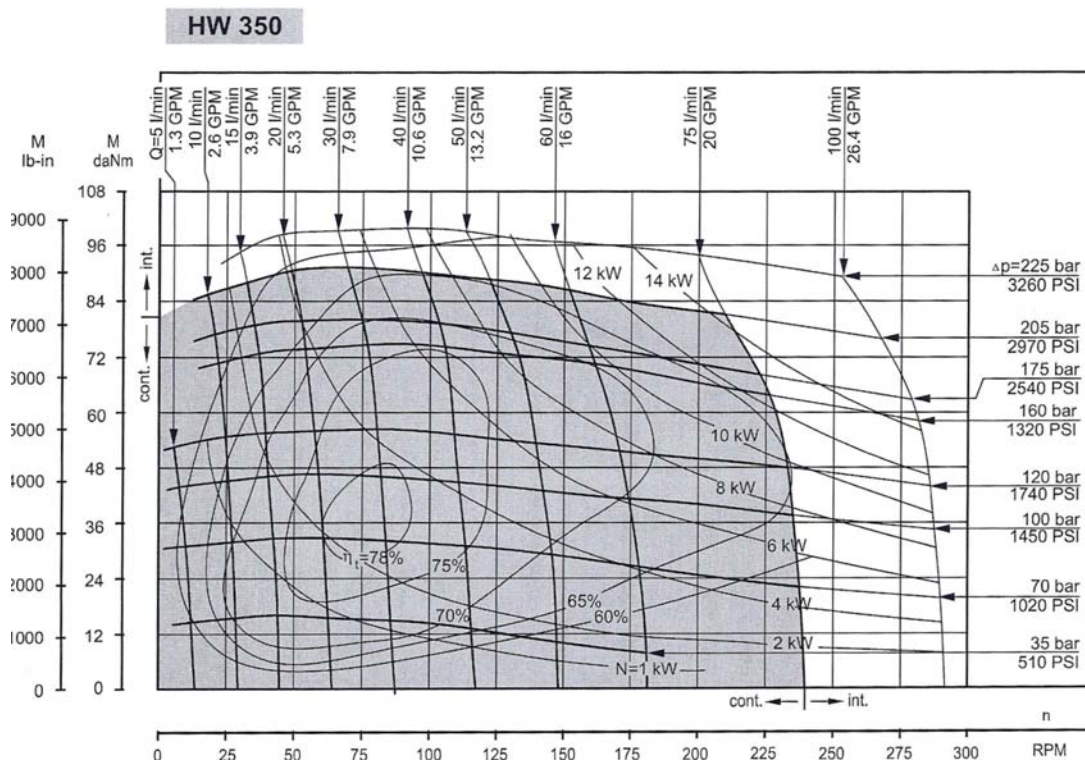
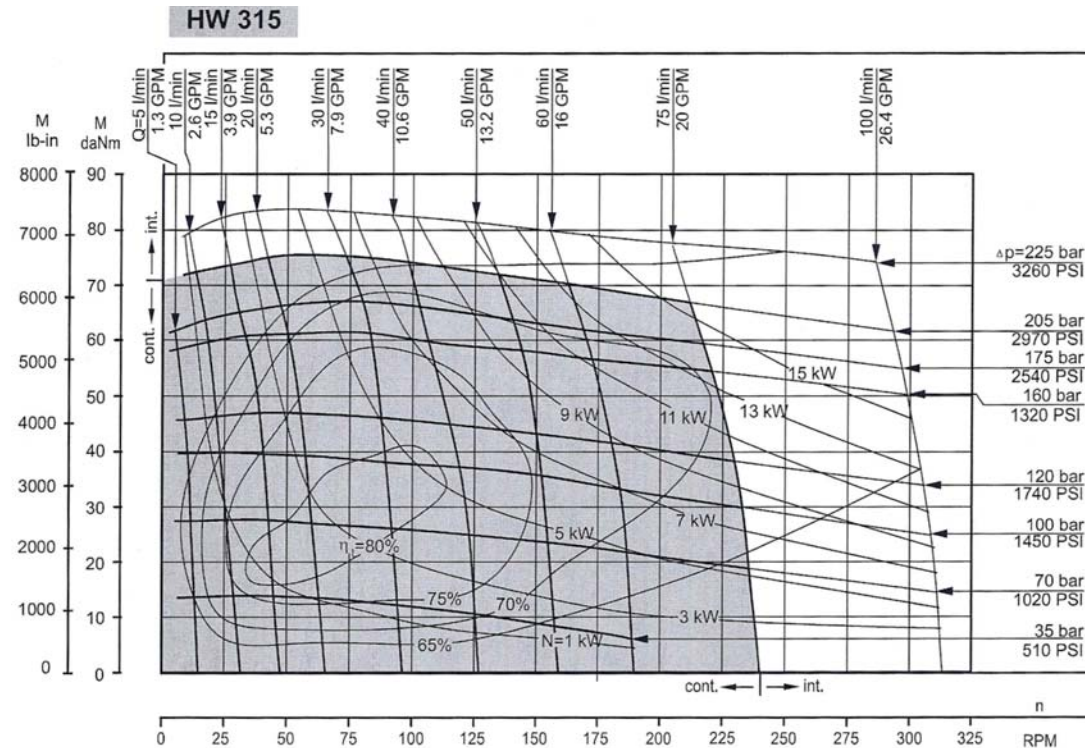
Functiediagrammen



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

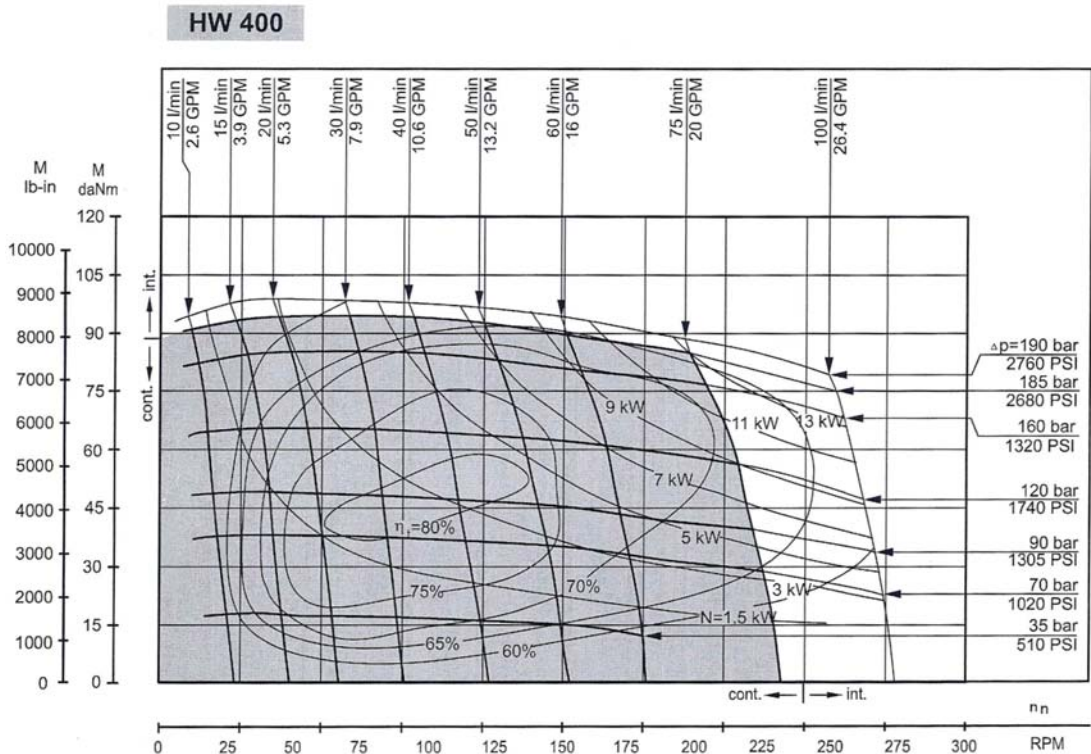
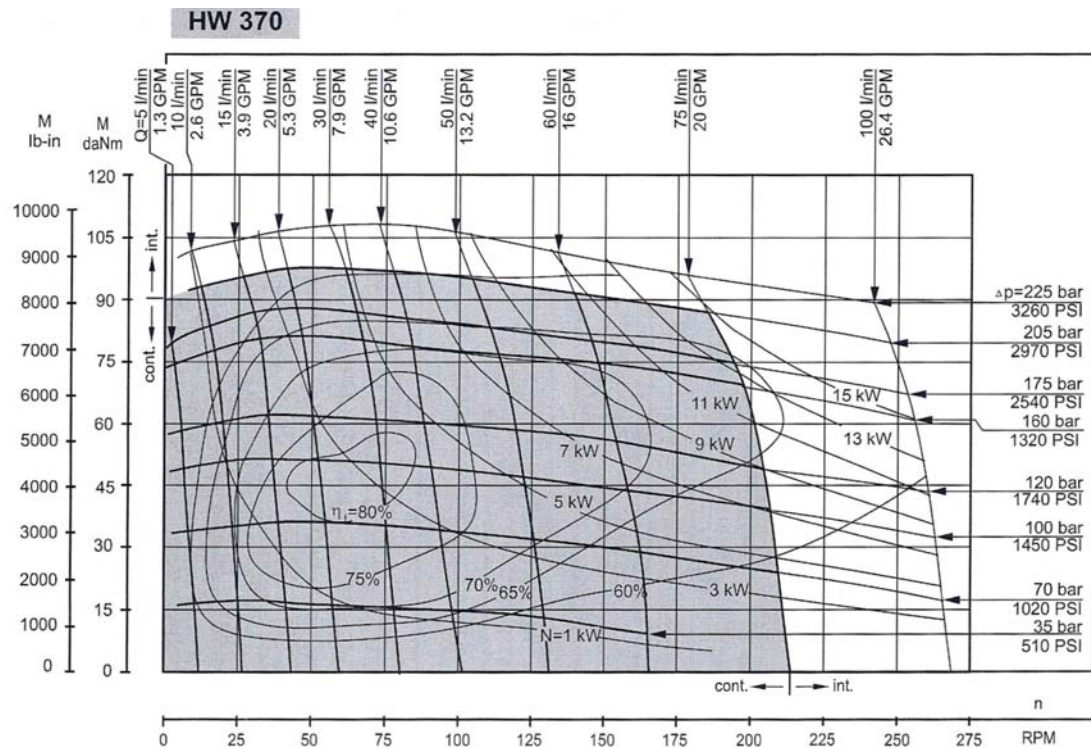
Functiediagrammen



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

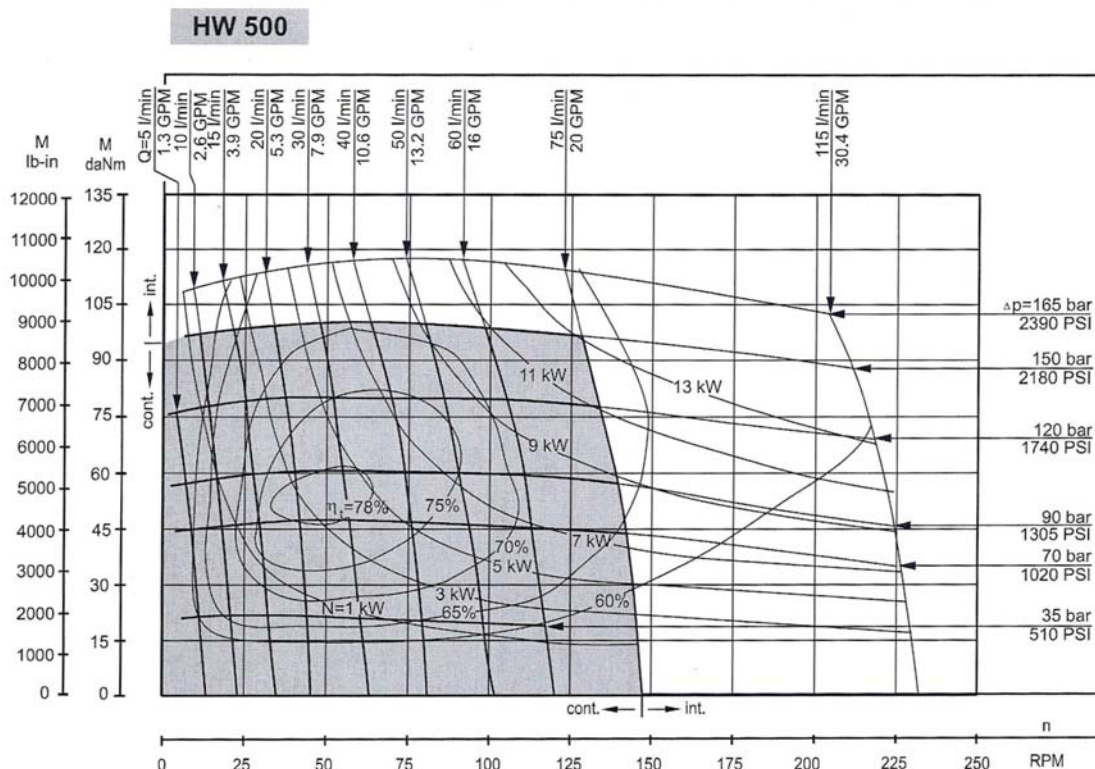
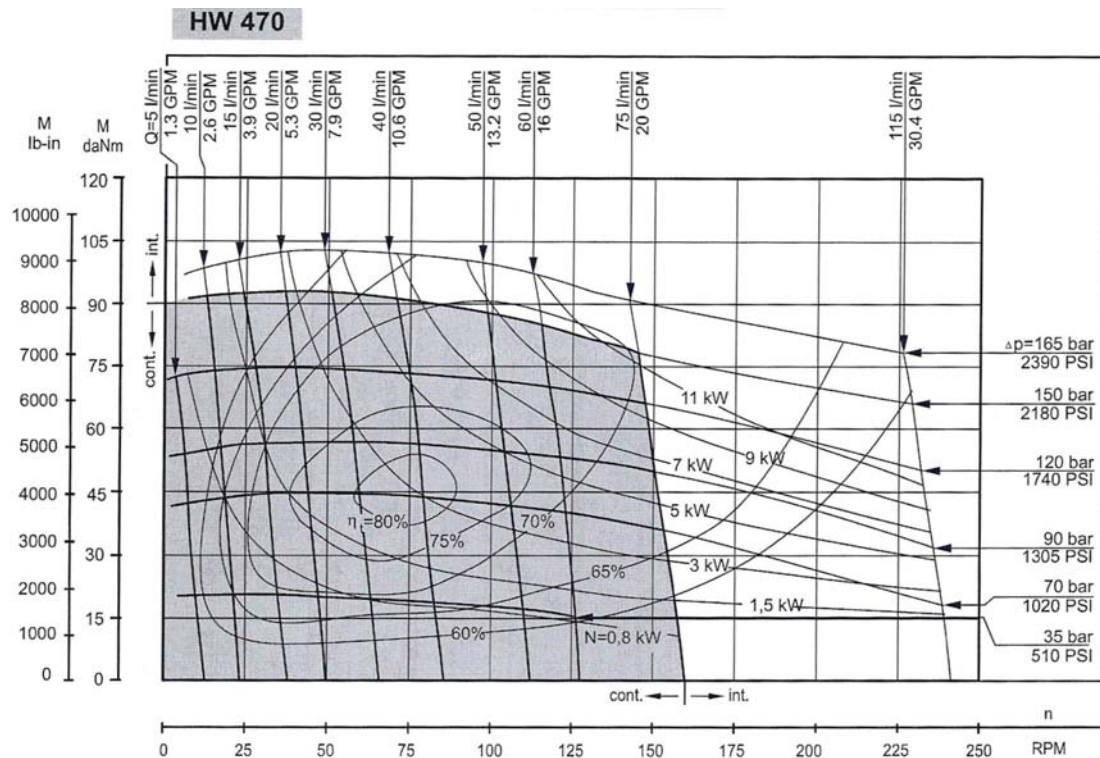
Functiediagrammen



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

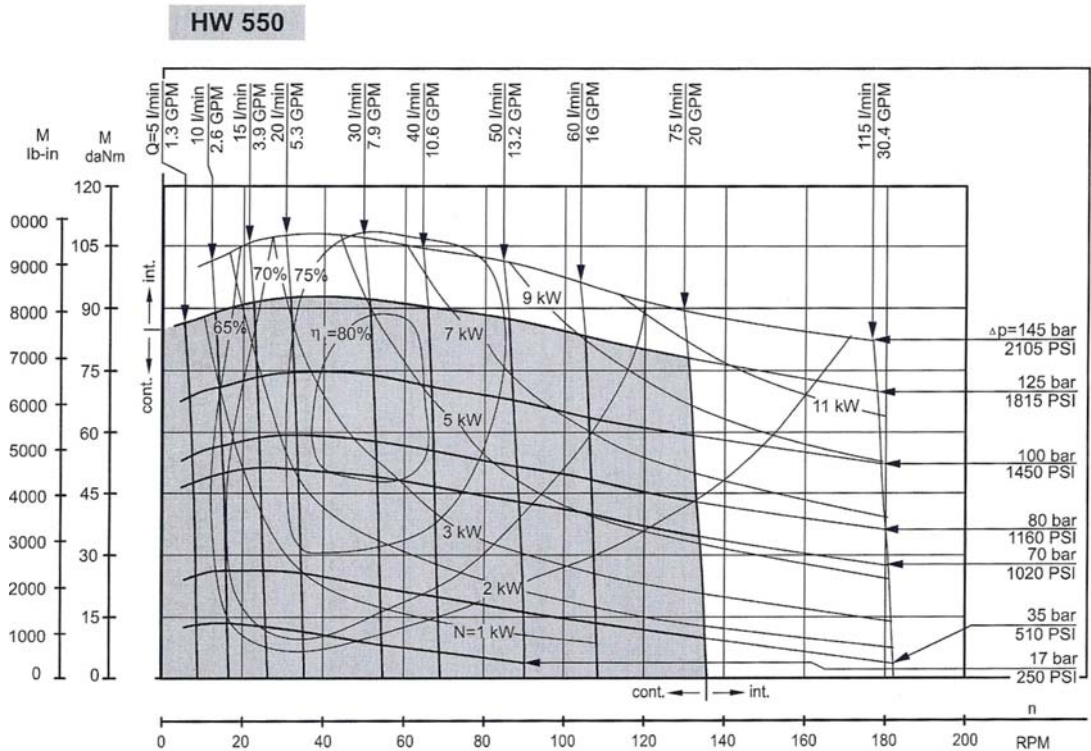
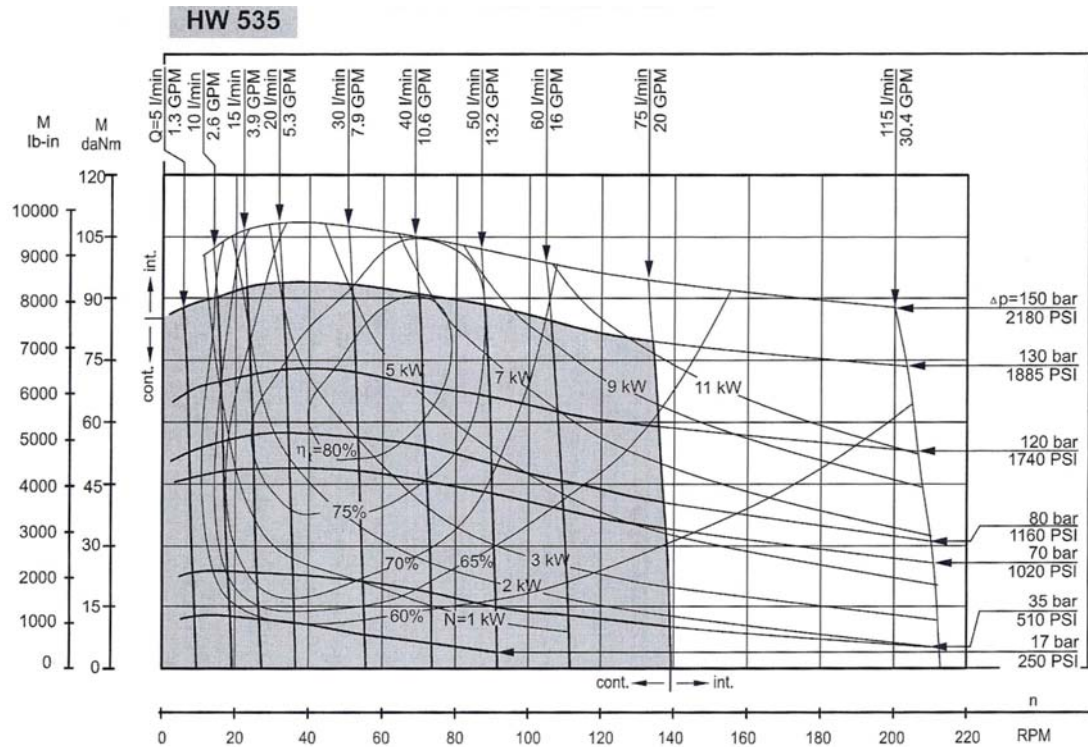
Functiediagrammen



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

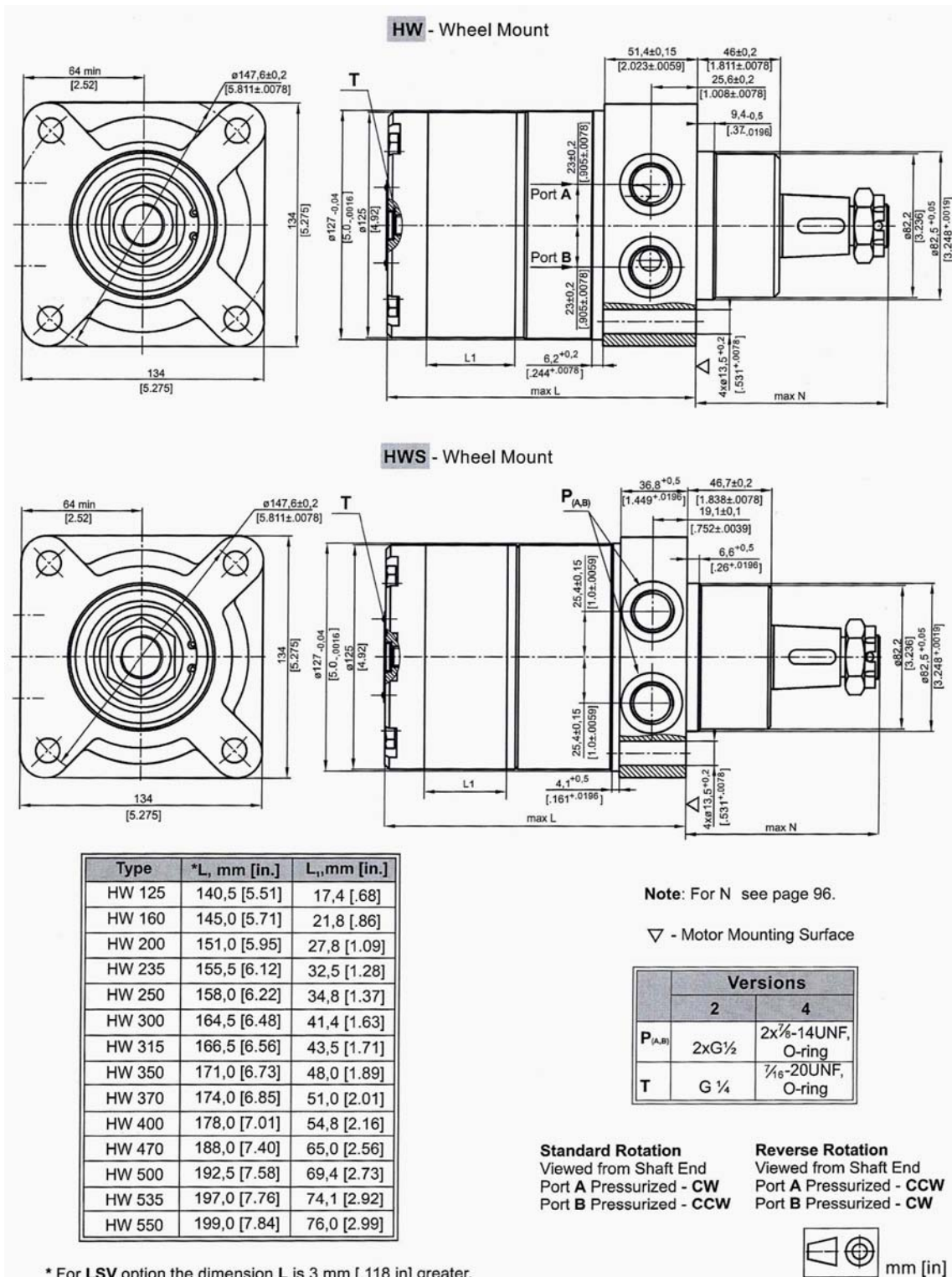
Functiediagrammen



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].

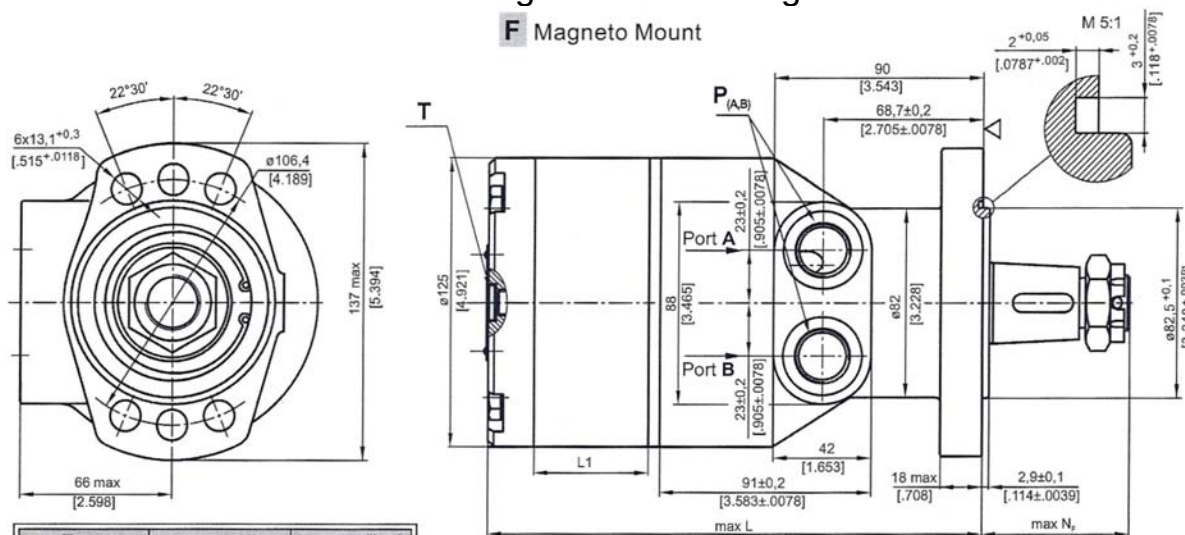
HW Orbitmotor

Afmetingen en uitvoeringen



HW Orbitmotor

Afmetingen en uitvoeringen



Note: For N_F see page 96.

▽ - Motor Mounting Surface

	Versions	
	2	4
P _(A,B)	2xG $\frac{1}{2}$	2x $\frac{1}{8}$ -14UNF, O-ring
T	G $\frac{1}{4}$	$\frac{7}{16}$ -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

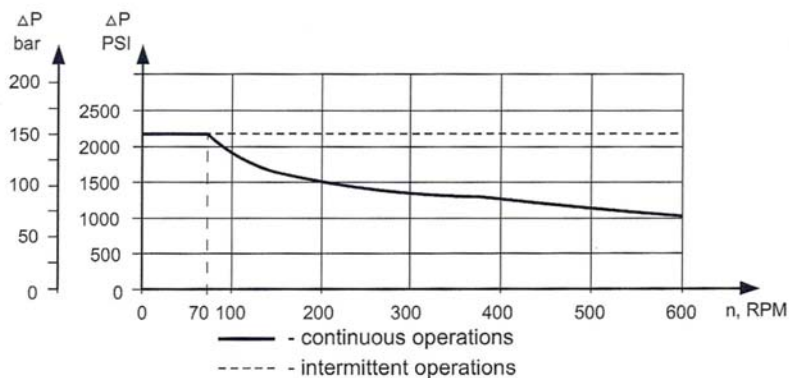
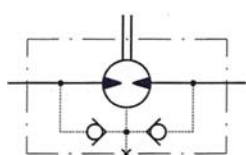


* For LSV option the dimension L is 3 mm [.118 in] greater.

Maximaal toegestane druk op as afdichting

HW... motors with drain connection:

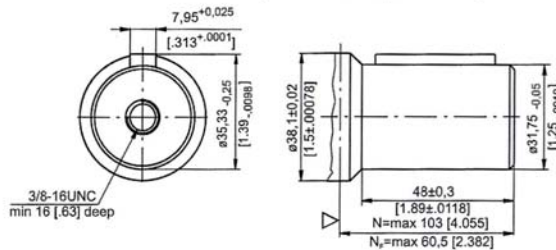
The shaft seal pressure equals the pressure in the drain line.



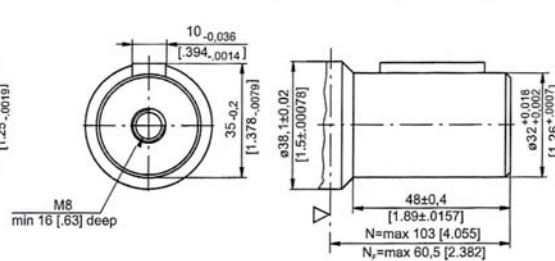
HW Orbitmotor

Mogelijke assen

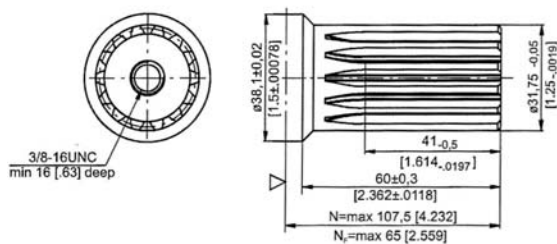
K - 1 1/4" straight, Parallel key 5/16"x5/16"x1 1/2" BS46
Max. Torque 77 daNm [6815 in-lb]



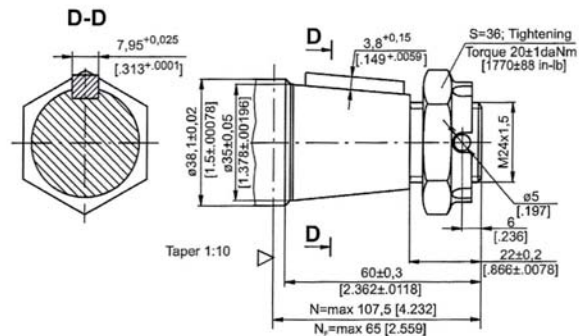
M - $\phi 32$ straight, Parallel key A10x8x32 DIN 6885
Max. Torque 77 daNm [6815 in-lb]



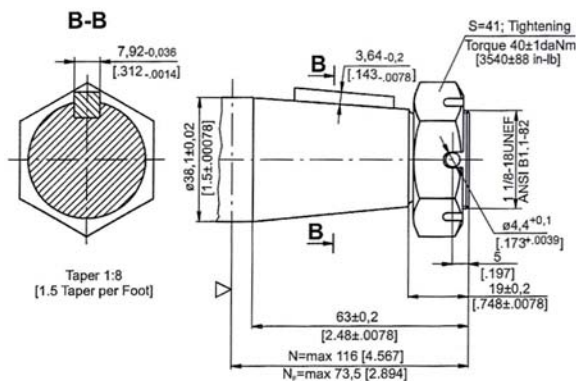
L - $\phi 1 1/4$ " splined 14T, DP12/24 ANSI B92.1-1976 Norm
Max. Torque 77 daNm [6815 in-lb]



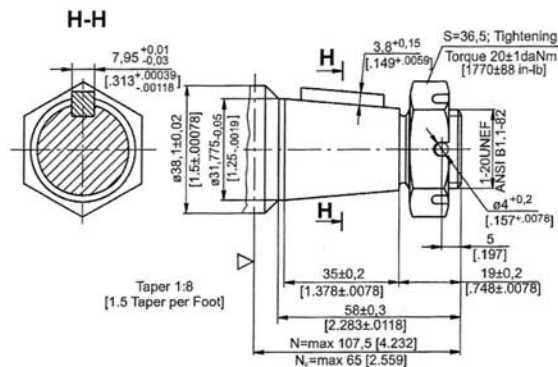
KB - $\phi 35$ tapered 1:10, Parallel key 5/16"x5/16"x1 1/4" BS46
Max. Torque 95 daNm [8410 in-lb]



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 1/4" tapered 1:8, Parallel key 5/16"x5/16"x1" BS46
Max. Torque 77 daNm [6815 in-lb]



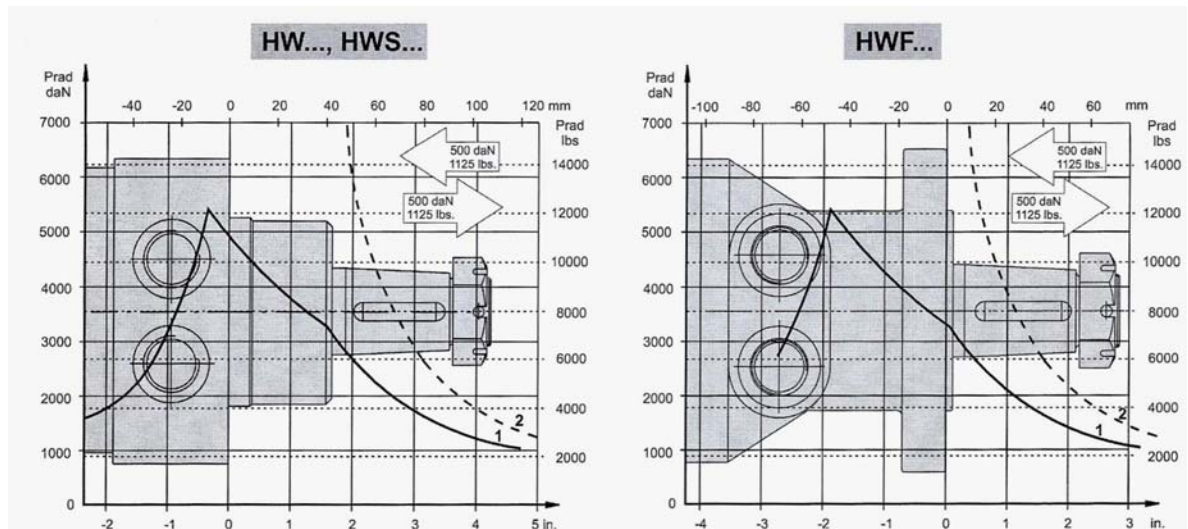
▽ - Motor Mounting Surface
N - for standart and **S** flange
N_F - for F flange



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** - 1 1/4" [31,75] straight, Parallel key 5/16"x5/16"x1 1/2" BS46
KB - ø35 tapered 1:10, Parallel key 5/16"x5/16"x1 1/4" BS46
L - 1 1/4" [31,75] splined 14T, ANSI B92.1-1976
M - ø32 straight, Parallel key A10x8x32 DIN 6885
R - 1 1/4" [31,75] Tapered 1:8, Parallel key 5/16"x5/16"x1" BS46
T - 1 1/2" [38,1] Tapered 1:8, Parallel key 5/8"x5/8"x1 1/4" 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.