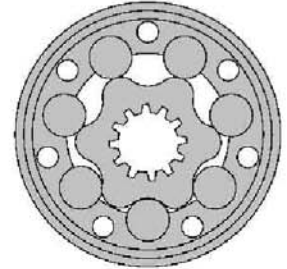




The AMR series motor provides high performance with high efficiency due to low rolling friction drive elements

Industry standard housings & shafts enables the AMR motor to interchange with most makes of motor

High pressure shaft seal offers superior seal life & performance



Specifications

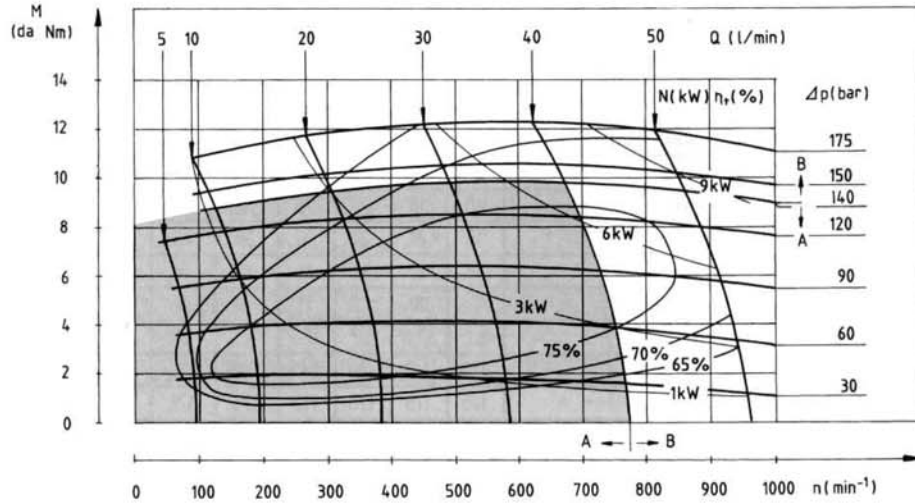
TYPE		AMR 50	AMR 80	AMR 100	AMR 125	AMR 160	AMR 200(1)	AMR 200(2)	AMR 250(1)	AMR 250(2)	AMR 315(1)	AMR 315(2)	AMR 400(1)	AMR 400(2)
Displacement (c.c/rev)		51.2	80.5	100.8	125.1	159.4	199.6	199.6	249.8	249.8	315.7	315.7	396.5	396.5
Max. speed (rpm)	Cont	770	745	600	470	370	300	300	240	240	190	190	150	150
	Int(3)	970	940	750	600	470	370	370	300	300	240	240	190	190
Max. Torque (da Nm)	Cont	10	19.6	24.2	27.1	38.9	45	38.5	53.8	38.8	53.1	38.5	58.5	35.5
	Int(3)	12.8	22.1	28.1	33.9	42.8	50	46	60.8	57.9	63	57	68.7	59.8
	Peak(4)	16.8	27	32.1	36.8	45.8	56	56	70.6	65.5	83	83	86.8	71.3
Max. output (Kw)	Cont	6.9	12.6	12	12.4	11.4	11	9	10.5	6.4	9	6	7.7	4.7
	Int(3)	8.3	15	15	14.5	12.6	13	11.5	12	10.5	11	9.6	10.6	8.7
Max. pressure drop (bar)	Cont	140	160	160	160	160	160	135	150	105	135	85	110	65
	Int(3)	175	180	180	180	180	180	175	175	160	150	130	140	75
	Peak(4)	210	210	210	210	210	210	210	210	200	175	175	175	175
Max. oil flow (l/min)	Cont	40	60	60	60	60	60	60	60	60	60	60	60	60
	Int(3)	50	75	75	75	75	75	75	75	75	75	75	75	75
Max. inlet pressure (bar)	Cont	175	175	175	175	175	175	175	175	175	175	175	175	175
	Int(3)	200	200	200	200	200	200	200	200	200	200	200	200	200
	Peak(4)	225	225	225	225	225	225	225	225	225	225	225	225	225
Weight (kg)		6.7	6.9	6.9	7.2	7.5	8.1	8.1	8.5	8.5	9.1	9.1	9.5	9.5

(1) 32mm Straight (2) 1" Straight, 25mm Straight, 6-b Spline (3) Intermittent operation rating applies to 6 sec. of every minute

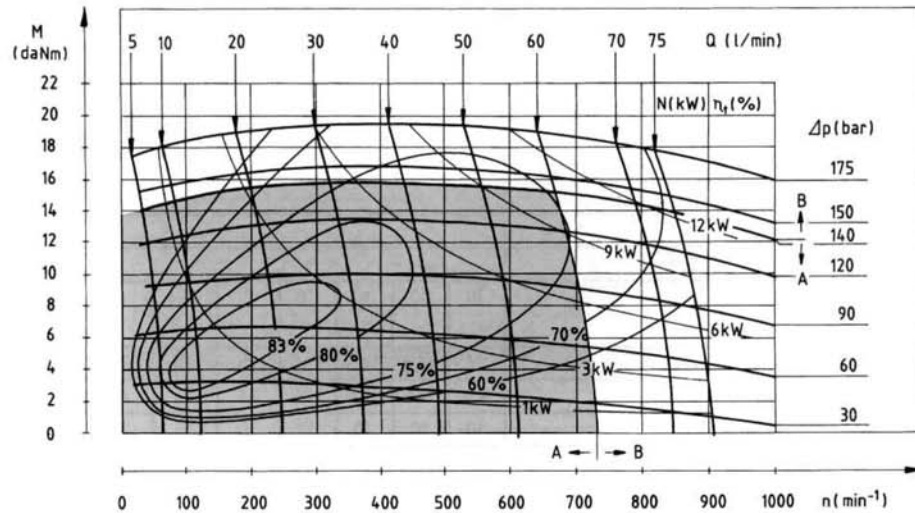
(4) Peak load rating applies to 0.6 sec of every minute

A : Continuous Operation
B : Intermittent Operation (Rating applies to 10% of every minute)

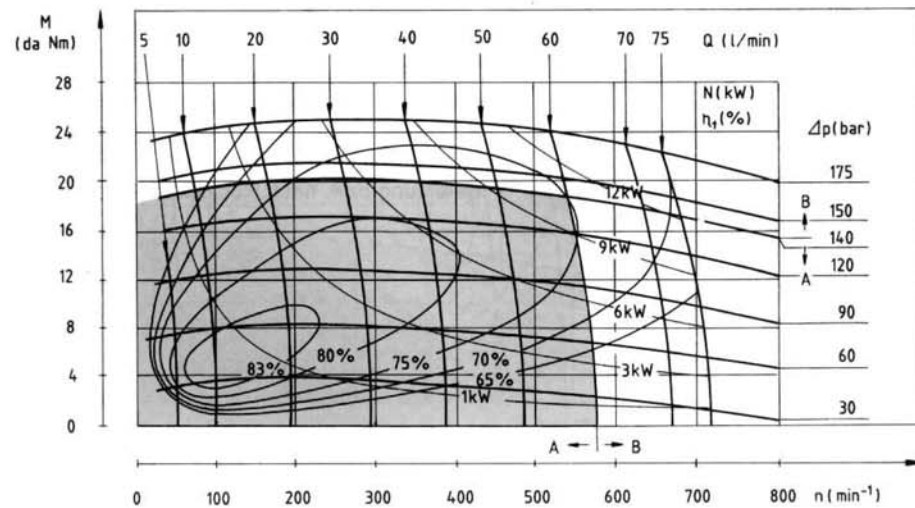
AMR50



AMR80

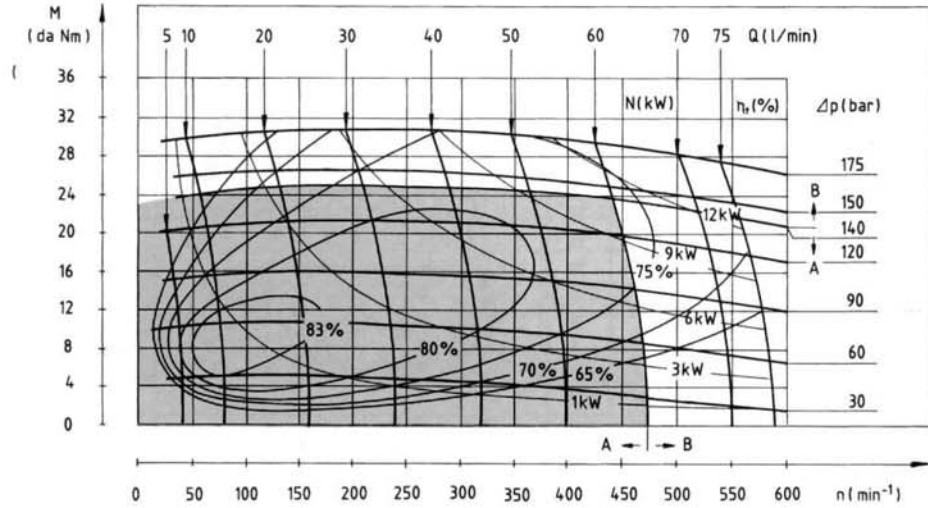


AMR100

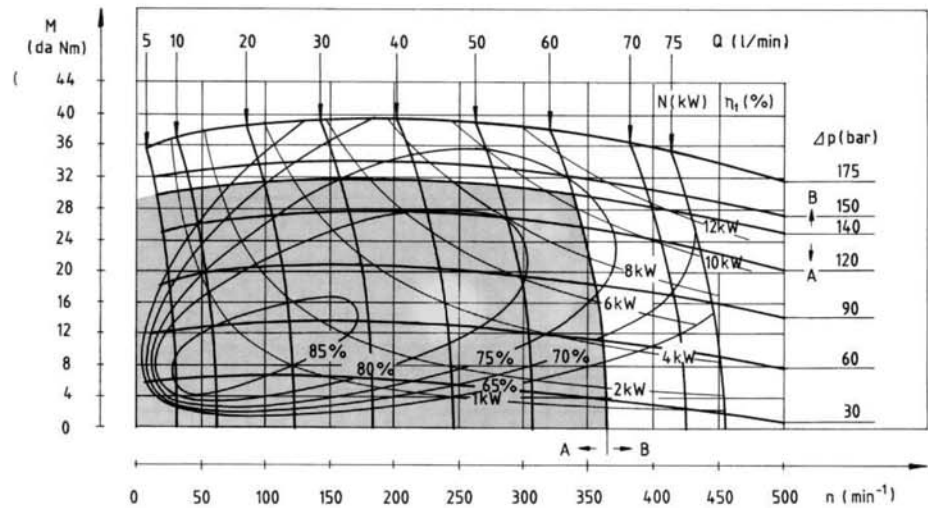


A : Continuous Operation
 B : Intermittent Operation (Rating applies to 10% of every minute)

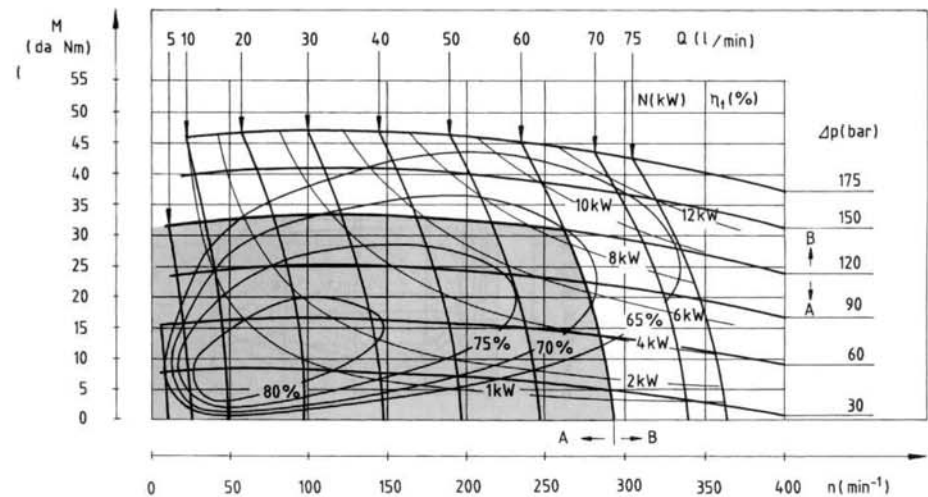
AMR125



AMR160

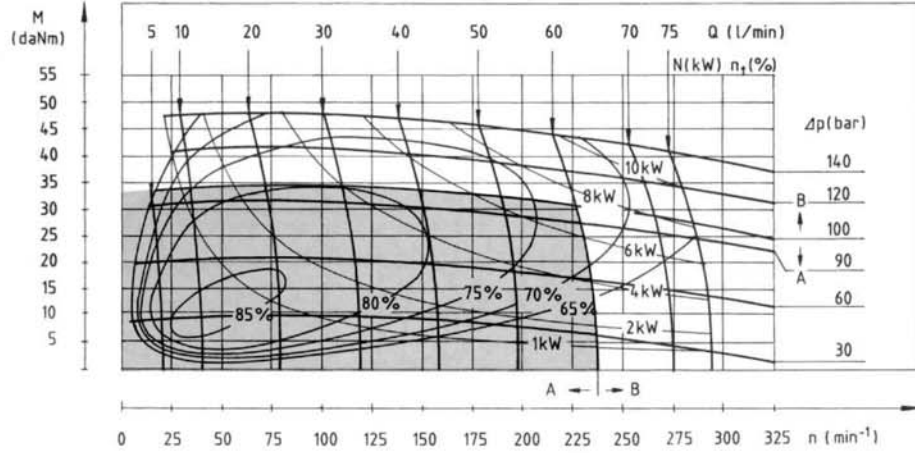


AMR200

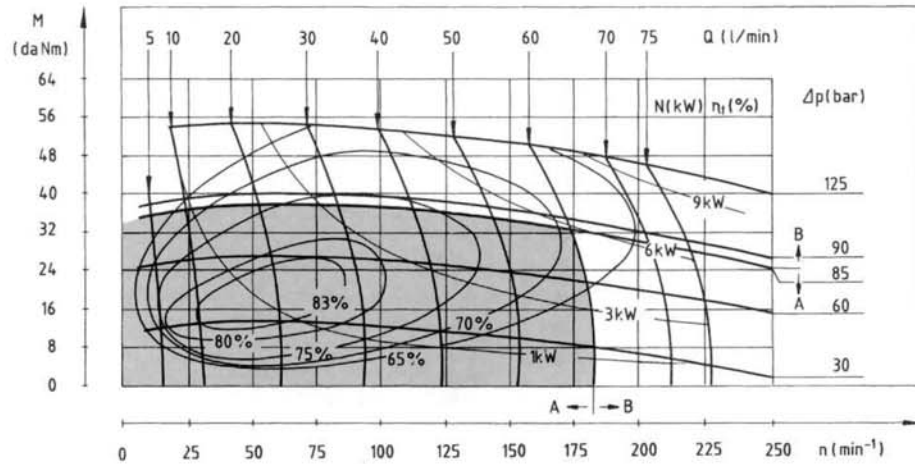


A : Continuous Operation
B : Intermittent Operation (Rating applies to 10% of every minute)

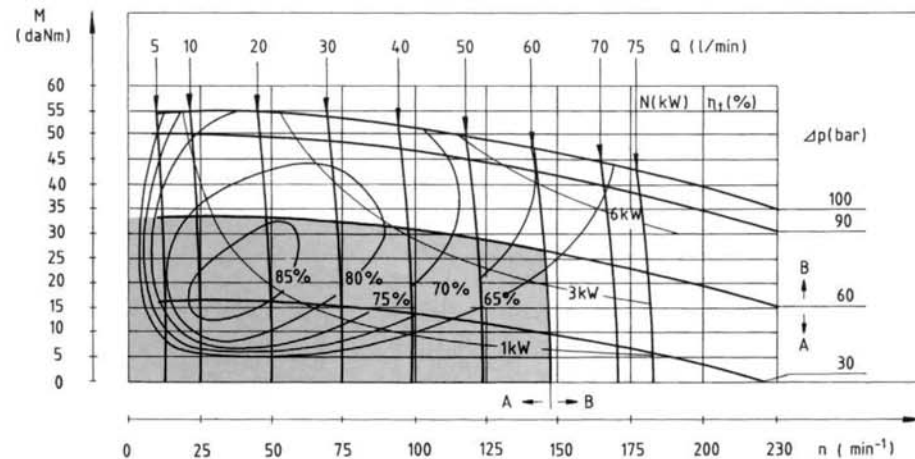
AMR250



AMR315



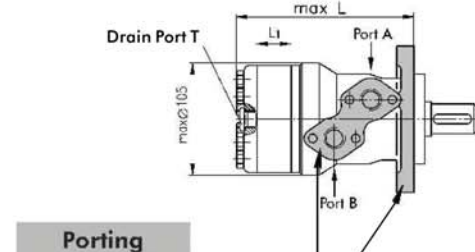
AMR400



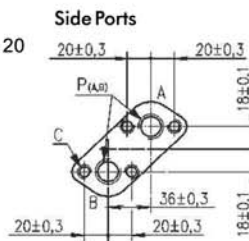
Dimensions & Mounting Data for AMR Motors

Type	L	L ₁
AMR 50	140	10
AMR 80	146	16
AMR 100	150	20
AMR 125	155	25
AMR 160	161.5	31.5
AMR 200	170	40
AMR 250	180	50
AMR 315	192	62
AMR 400	204	74

P(A,B) : 2 x G1/2 or 2xM22x1,5 - 20
T : G1/4 or M14 x 1.5 - 12
C : 4 x M8 - 13

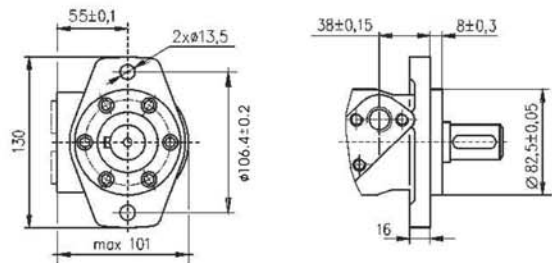


Porting

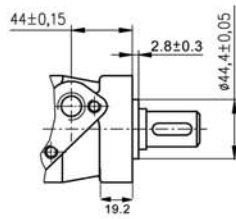
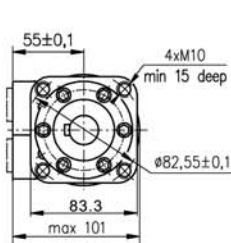


Mounting

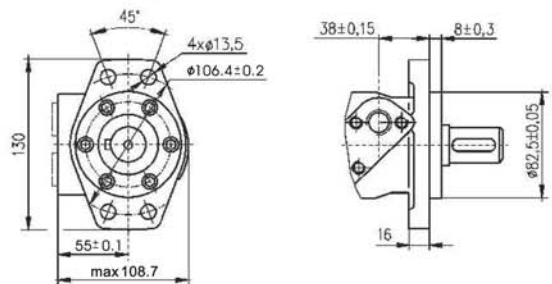
A Oval Mount SAE.A (2 Holes)



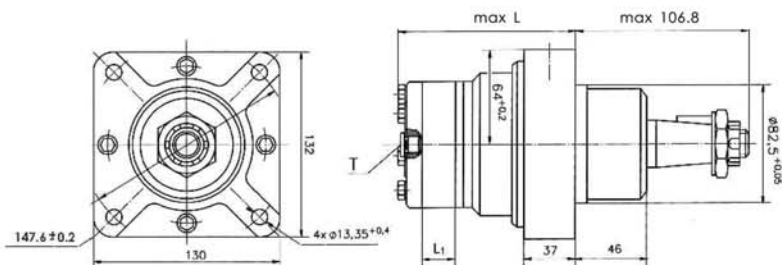
Q Square Mount (4 Bolts)



F Magneto Mount (4 Holes)

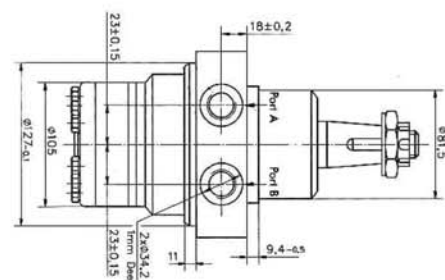


W Wheel Mounting

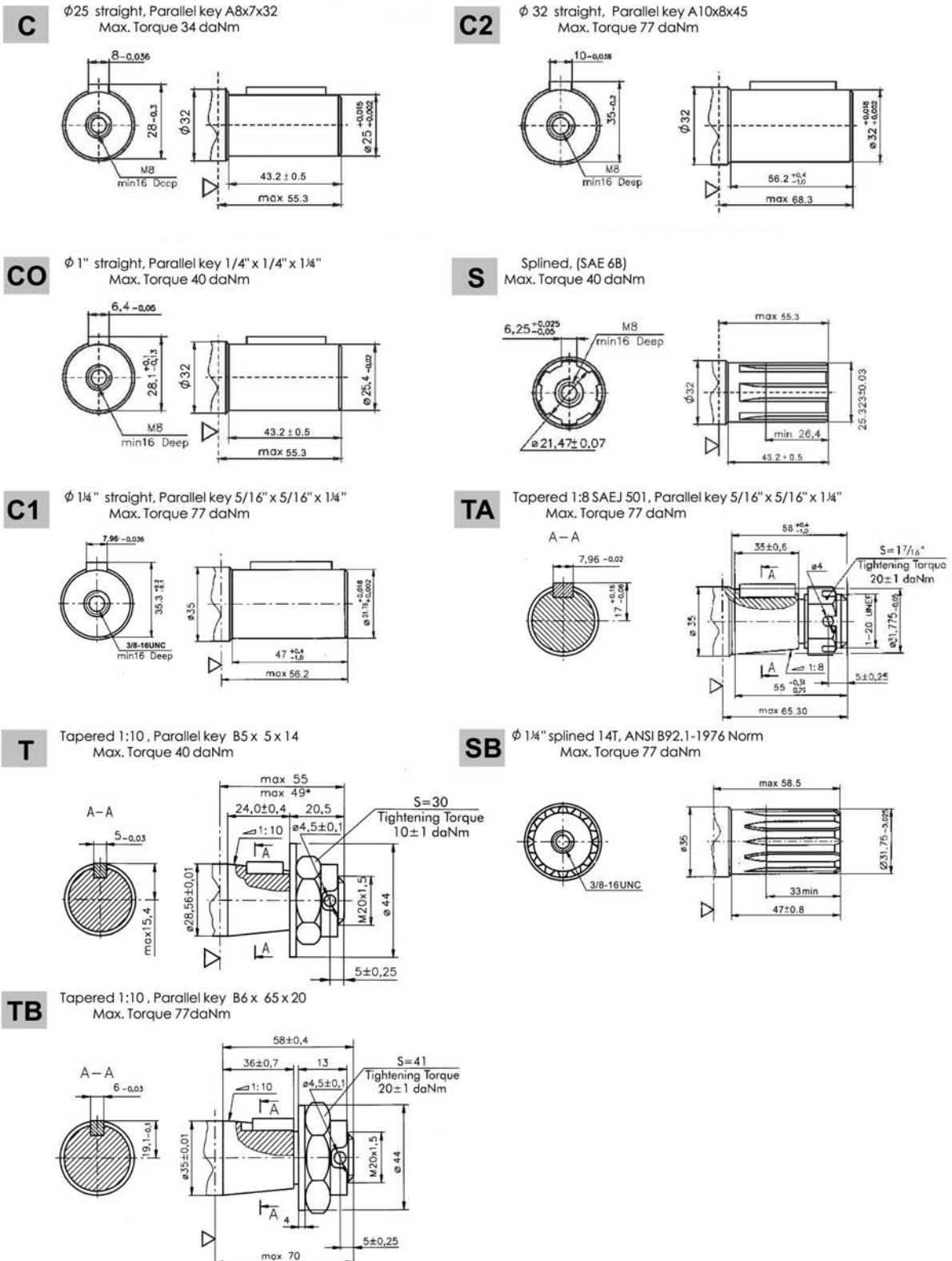


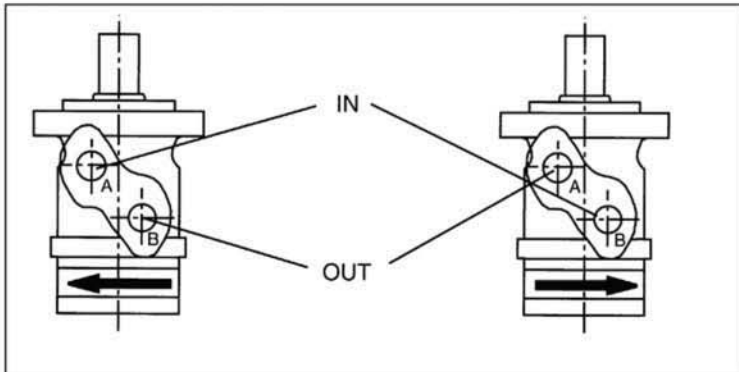
Type	L	L ₁
AMRW 50	109	10
AMRW 80	115	16
AMRW 100	118.6	20
AMRW 125	124.2	25
AMRW 160	130.7	31.5
AMRW 200	139.2	40
AMRW 250	149	50
AMRW 315	161.2	62
AMRW 400	173.1	74

P(A,B) : 2xG1/2 or 2xM22x1,5 - 15mm depth
T : G1/4 or M14x1.5 - 12mm depth (plugged)



AMR Series Motor Shaft Options





Rotation Selection

AMR motors are designed with built in check valves

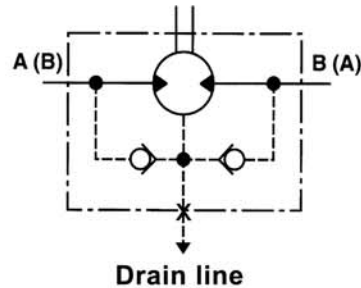
In applications without a drain line the pressure on the shaft seal will not exceed the return line pressure

Max. return pressure without drain line or/ Max. pressure in drain line

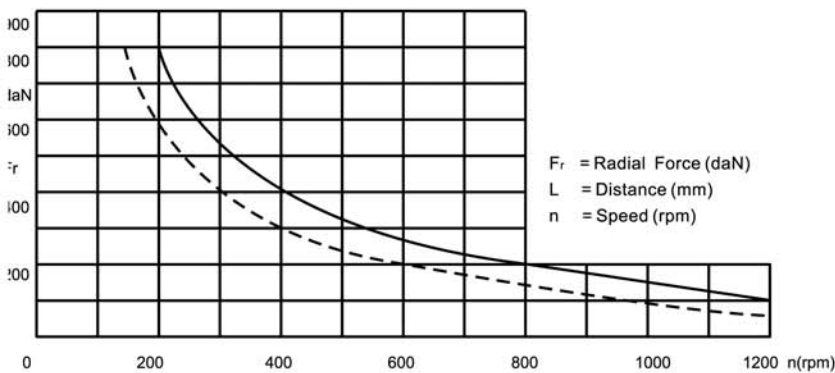
rpm	Cont. (bar)
0 - 100 rpm	75
100 - 300 rpm	50
300 - 1000 rpm	25

Max. return pressure with drain line

Continuous	160 bar
Intermittent	175 bar
Peak	210 bar

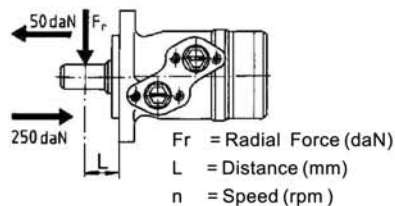


Shaft Load

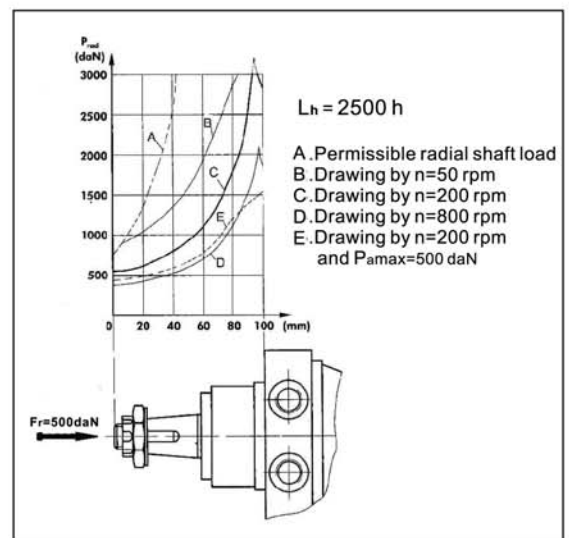


F_r = Radial Force (daN)
 L = Distance (mm)
 n = Speed (rpm)

$$F_r = \frac{800}{n} \cdot \frac{25000}{95 + L} \text{ daN}$$



AMRW



AMR Series Motor Ordering Information

	1	2	3	4	5	6	7
AMR							

Pos.3 Displacement Code

50	-	51.2cc / 3.1 [in.3/r]
80	-	80.5cc / 4.9 [in.3/r]
100	-	100.8cc / 6.1 [in.3/r]
125	-	125.1cc / 7.7 [in.3/r]
160	-	159.4cc / 9.7 [in.3/r]
200	-	199.6cc / 12.2 [in.3/r]
250	-	251.1cc / 15.3 [in.3/r]
315	-	315.7cc / 19.3 [in.3/r]
400	-	398.5cc / 24.3 [in.3/r]

Pos.2 Mounting Flange

A	-	Oval mount, SAE. A 2 holes
F	-	Magneto mount, 4 holes
Q	-	Square mount, 4 bolts
W	-	Wheel mount with bearings (not available)

Pos.3 Shaft Extensions (See page 6)

C	-	ϕ 25 straight, Parallel key A8x7x32
CO	-	ϕ 1" straight, Parallel key 1/4" x 1/4" x 1/4"
C2	-	ϕ 32 straight, Parallel key A10x8x45
S	-	ϕ 25,32 splined (SAE 6B)

C1	-	ϕ 31.75 straight, Parallel key 5/16" x 5/16" x 1 1/4"
SB	-	ϕ 1 1/4" splined 14T, ANSI B92.1-1976 Norm
T	-	Tapered 1:10, Parallel key B5 x 5 x 14
TA	-	Tapered 1:8 SAEJ 501, Parallel key 5/16" x 5/16" x 1 1/4"
TB	-	Tapered 1:10 Parallel key B6 x 6 x 20

Pos.4 Option Bearings

Omit	-	None
N	-	With needle bearings

Pos.5 Porting

Omit	-	G 1/2
M	-	Metric

Pos.6 Shaft Seal Version

Omit	-	Standard Seal
D	-	High pressure seal

Pos.7 Rotation

Omit	-	Standard rotation
R	-	Reverse rotation