

ORDER CODE

1	2	3	4	5	6	7	8	9
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	- 8,2cm ³ /rev [.5in ³ /rev]
12.5	- 12,9 cm ³ /rev [.79in ³ /rev]
20	- 20,0 cm ³ /rev [1.22in ³ /rev]
32	- 31,8 cm ³ /rev [1.93in ³ /rev]
40	- 40,0 cm ³ /rev [2.44in ³ /rev]
50	- 50,0 cm ³ /rev [3.05in ³ /rev]

Pos. 5 - Shaft Extensions*

C - ø 16 straight, Parallelkey A5x5x16 DIN6885
VC - ø 16 straight, Parallelkey A5x5x16 DIN6885 with corrosion resistant bushing
CK - ø14 straight, Parallelkey 5x5x16 DIN6885
Sh - ø 16,5 splined, B17x14 DIN5482

Pos. 6 - Ports
omit - BSPP (ISO 228)
M - Metric (ISO 262)

Pos. 7 - Line to control (see page 4)**
/L - B → A (left running) / B → A
/R - A → B (right running) / A → B

Pos. 8 - Valve Rated Pressure***
/50 - Δp=50 bar
/100 - Δp=100bar

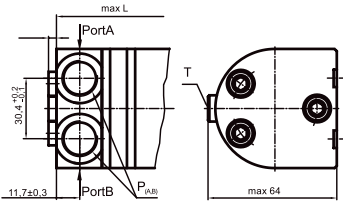
Pos. 9 - Special Features see page 98

Pos. 10 - Design Series
omit - Factory specified

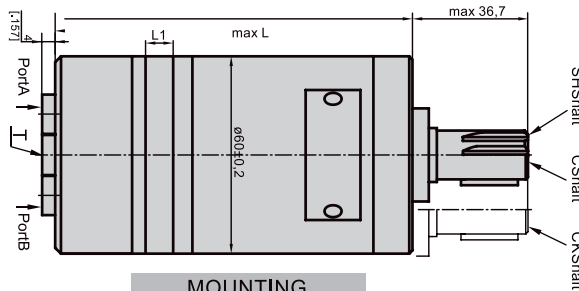
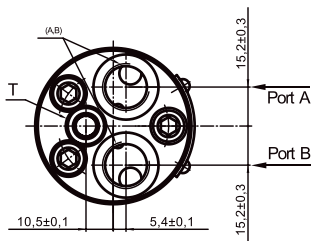


PORTING

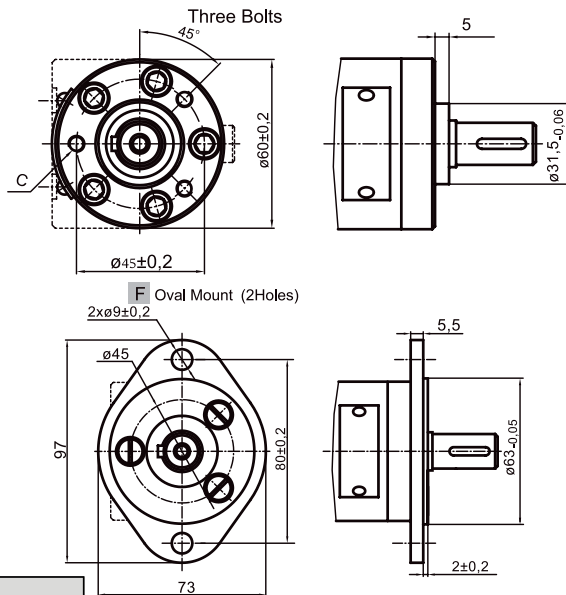
S Side Ports



Rear Ports

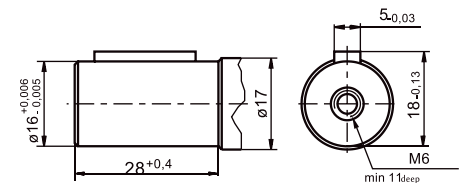


MOUNTING

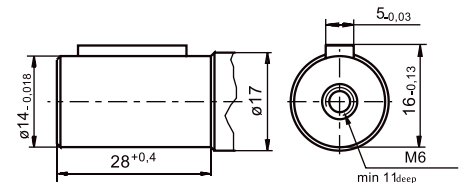


SHAFT EXTENSIONS

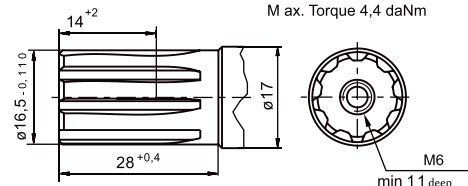
C - ø16 Max. Torque 3,9 daNm



CK - ø14 straight, Parallel key 5x5x16 DIN 6885 Max. Torque 3daNm



SH - ø16,5 Splined, B17x14 DIN5482 Max. Torque 44daNm
- ø16,5 Splined, B17x14 DIN5482 Max. Torque 4,4 daNm



Type	L,mm	Type	L,mm	L,mm
MM 8	104	MMS 8	105	3,5
MM 12,5	106	MMS 12,5	107	5,5
MM 20	109	MMS 20	110	8,5
MM 32	114	MMS 32	115	13,5
MM 40	117,5	MMS 40	118,5	17
MM 50	121,5	MMS 50	122,5	21

C : 3x M 6 - 1 2mm depth
P(A,B): 2xG 3/8 or 2xM18x1,5-12 mm depth
T : G1/8 or M10x1-10 mm depth

SPECIFICATION DATA

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	400	
	int.*	2440	1940	1250	790	625	500	
Max. Torque (daNm)	cont.	1.1	1.6	2.5	4	4.1	4.5	
	int.*	1.5	2.3	3.5	5.7	5.7	5.8	
	peak**	2.1	3.3	5.1	6.4	6.6	8	
Max. Output (kW)	cont.	1.8	2.4	2.4	2.4	1.8	1.7	
	int.*	2.6	3.2	3.2	3.2	3.0	2.1	
Max. Pressure Drop (bar)	cont.	100	100	100	100	80	70	
	int.*	140	140	140	140	110	90	
	peak**	200	200	200	200	140	125	
Max. Oil Flow (l/min)	cont.	16	20	20	20	20	20	
	int.*	25	25	25	25	25	25	
Max. Inlet Pressure (bar)	cont.	140	140	140	140	140	140	
	int.*	175	175	175	175	175	175	
	peak**	225	225	225	225	225	225	
Max. Return Pressure w/o Drain Line or Max. Pressure in Drain (bar)	cont. 0-100 RPM	140	140	140	140	140	140	
	cont. 100-400 RPM	100	100	100	100	100	100	
	cont. 400-800 RPM	50	50	50	50	50	50	
	cont. >800 RPM	20	20	20	-	-	-	
	int.* 0 - max.RPM	140	140	140	140	140	140	
Max. Return Pressure with Drain Line (bar)	cont.	140	140	140	140	140	140	
	int.*	175	175	175	175	175	175	
	peak**	225	225	225	225	225	225	
Max. Starting Pressure with Unloaded Shaft, (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	3.7	
	at max. press. drop. Int.*	1.0	1.7	2.9	4.8	4.6	4.8	
Min. Speed***, (RPM)		50	40	30	30	25	20	
weight, agv. (kg)	MM		1.9	2	2.1	2.2	2.3	2.5
	MMF(S)		2.3	2.4	2.5	2.6	2.7	2.9
	MMFS		2.7	2.8	2.9	3.0	3.1	3.3
	MMP		2.5	2.6	2.7	2.8	2.9	3.1
	MMPF		2.7	2.8	2.9	3.0	3.1	3.3
	MMD		2.6	2.7	2.8	2.9	3.0	3.2
	MMDF		2.8	2.9	3.0	3.1	3.2	3.4

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

** Peak load: The permissible values may occur for max. 1% of every minute.

*** For speed of 5 RPM lower than even, consult factory or your regional manager.

1) Intermittent speed and Intermittent pressure must not occur simultaneously.

2) Recommended filtration is per ISO clean lines code 20/16. A nominal filtration of 25 micron or better.

3) 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.

4) Recommended minimum oil viscosity 13 mm²/s at 50 C.

5) Recommended maximum system operation temperature is 82 C

6) To assure optimum motor life fill with fluid prior to load and run at moderate load and speed for 10-15 minutes.