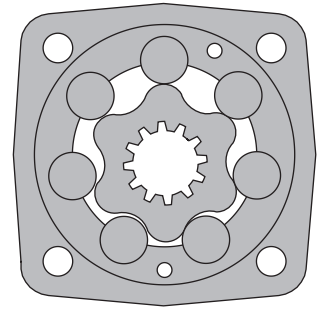


# HYDRAULIC MOTORS EPMS



## APPLICATION

- » Conveyors;
- » Metal working machines;
- » Machines for agriculture;
- » Road building machines;
- » Mining machinery;
- » Food industries;
- » Special vehicles etc.



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## OPTIONS

- » Model- Disc valve, geroler;
- » Flange and wheel mount;
- » Short motor;
- » Motor with Drum Brake;
- » Tacho connection;
- » Side and rear ports
- » Shafts- straight, splined and tapered;
- » Metric and BSPP ports;
- » Other special features.

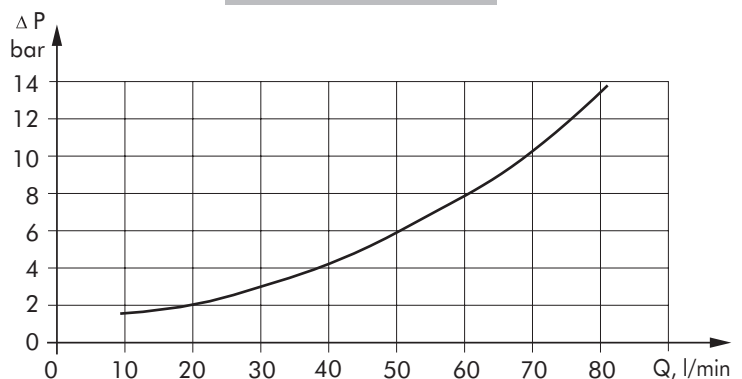
## GENERAL

Displacement,	[cm <sup>3</sup> /rev.]	80,5 ÷ 711,9
Max. Speed,	[RPM]	810 ÷ 105
Max. Torque,	[daNm]	23,5 ÷ 58
Max. Output,	[kW]	19,5 ÷ 5,4
Max. Pressure Drop,	[bar]	200 ÷ 55
Max. Oil Flow,	[l/min]	75
Min. Speed,	[RPM]	10 ÷ 5
Permissible Shaft Loads,	[daN]	$P_{rad} = 1500$ ; $P_a = 500$
Pressure fluid		Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range,	[°C]	-30 ÷ 90
Optimal Viscosity range,	[mm <sup>2</sup> /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 <sup>2</sup> /s)	Oil flow in drain line (l/min)
140	20	1,5
	35	1
210	20	3
	35	2

### Pressure Losses



## SPECIFICATION DATA

Type		EPMS 80	EPMS 100	EPMS 125	EPMS 160	EPMS 200
Displacement [cm <sup>3</sup> /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.	23,5	29,2	32	34	40
	Int.*	25,8	32	38	48	50
	peak**	26	32	40	51	65
Max. Output [kW]	cont.	18,2	19,5	17,5	15,5	14
	int.*	22	22,5	21	21	17,5
Max. Pressure Drop [bar]	cont.	200	200	175	175	140
	Int.*	225	225	210	210	175
	peak**	250	250	225	225	225
Max. Oil Flow [l/min]	cont.	65	75	75	75	75
	Int.*	80	90	90	90	90
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	100	100	100	100	100
	cont. 100-300 RPM	50	50	50	50	50
	cont. >300 RPM	20	20	20	20	20
Max. Return Pressure with Drain Line [bar]	Int.* 0-max. RPM	100	100	100	100	100
	cont.	140	140	140	140	140
Max. Starting Pressure with Unloaded Shaft, [bar]	Int.*	175	175	175	175	175
	peak**	210	210	210	210	210
	cont.	12	10	10	8	8
Min. Starting Torque [daNm]	at max. press. drop cont.	16,5	20,5	26	28	33
	at max. press. drop Int.*	19,5	25	31	39	41
Min. Speed***, [RPM]		10	10	8	8	6
Weight, [kg]	EPMS(F) [E]	9,8[10,2]	10[10,4]	10,3[10,7]	10,7[11,1]	11,1[11,5]
	EPMSW [E]	10,3[10,7]	10,5[10,9]	10,8[11,2]	11,2[11,6]	11,6[12]
	EPMS(Z) [E]	7,8[8,2]	8[8,4]	8,3[8,7]	8,7[9,1]	9,1[9,5]
	EPMSV [E]	5,7[6,1]	5,9[6,3]	6,2[6,6]	6,6[7]	7[7,4]
	EPMSQ [E]	10,2[10,6]	10,4[10,8]	10,7[11,1]	11,1[11,5]	11,5[11,9]
	EPMSB [E]	16,8[17,2]	17,0[17,4]	17,3[17,7]	17,7[18,1]	18,1[18,5]

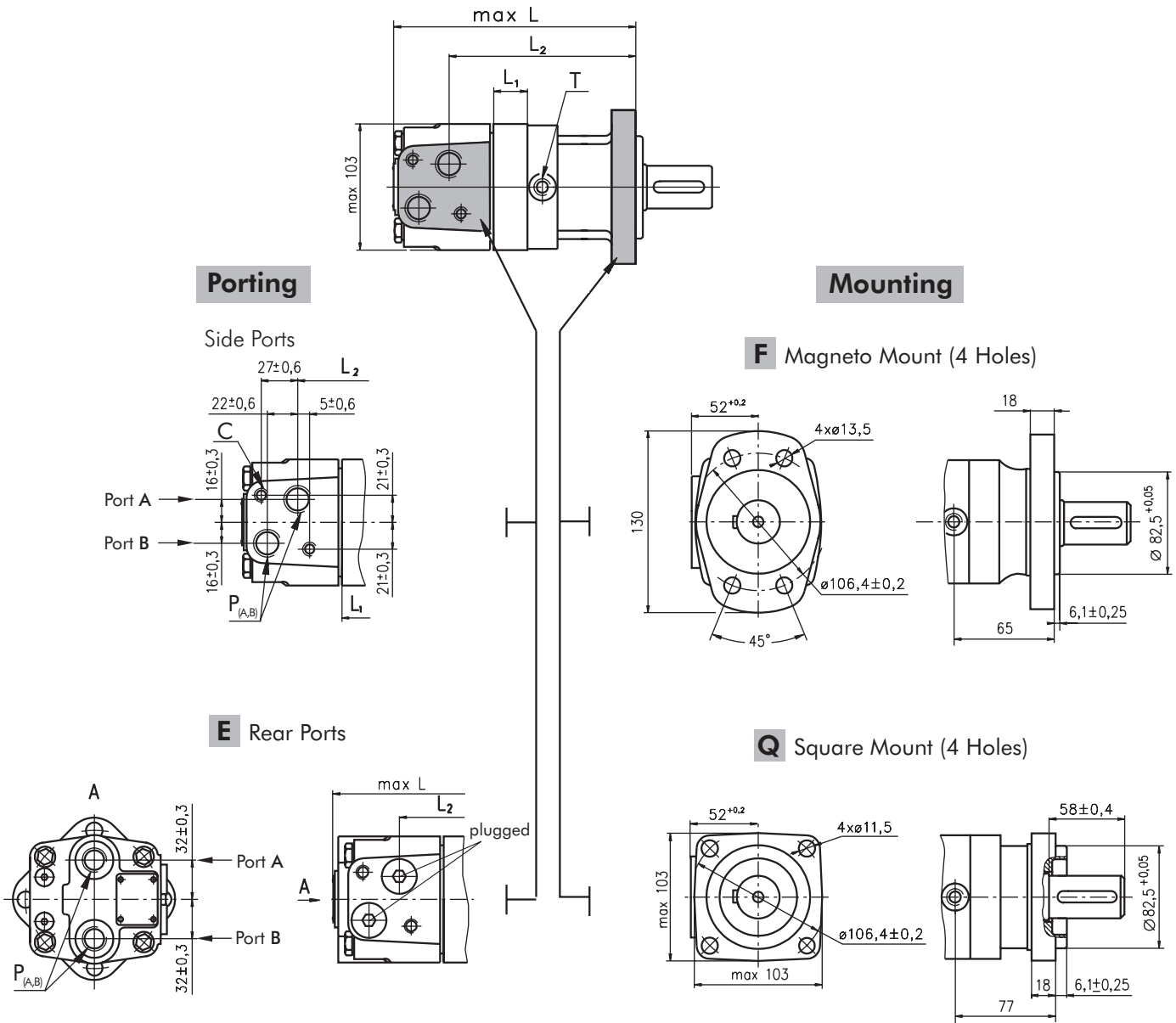
\* Intermittent operation: the permissible values may occur for max. 10% of every minute.

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

\*\*\* For speeds of 5 RPM lower than given, consult factory or your regional manager.

- 1) Intermittent speed and intermittent pressure must not occur simultaneously.
- 2) Recommended filtration is per ISO cleanliness 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 13mm<sup>2</sup>/s at operating temperatures.
- 5) Recommended maximum system operating temperature is 82°C.
- 6) To assure optimum motor life fill with fluid prior to loading and run at moderate load and speed for 10-15 minutes.

**DIMENSIONS AND MOUNTING DATA**



**C:** 2xM10-12 mm depth

**P<sub>(A,B)</sub>:** 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 <sub>2</sub> , mm	Type	L, mm	L <sub>2</sub> , mm	Type	L, mm	Type	L, mm	*L <sub>1</sub> , mm
EPMSF 80	166	121	EPMSQ 80	177	133	EPMSFE 80	173	EPMSQE 80	185	11
EPMSF 100	169	125	EPMSQ 100	181	137	EPMSFE 100	177	EPMSQE 100	189	14,4
EPMSF 125	174	129	EPMSQ 125	185	141	EPMSFE 125	181	EPMSQE 125	193	18,8
EPMSF 160	180	135	EPMSQ 160	191	147	EPMSFE 160	187	EPMSQE 160	199	24,8
EPMSF 200	187	142	EPMSQ 200	198	154	EPMSFE 200	194	EPMSQE 200	206	31,8
EPMSF 250	195	151	EPMSQ 250	207	163	EPMSFE 250	203	EPMSQE 250	215	40,5
EPMSF 315	207	162	EPMSQ 315	218	174	EPMSFE 315	214	EPMSQE 315	226	51,8
EPMSF 400	221	176	EPMSQ 400	233	189	EPMSFE 400	228	EPMSQE 400	241	66,4
EPMSF 475	235	190	EPMSQ 475	245	202	EPMSFE 475	242	EPMSQE 475	254	79,6
EPMSF 565	250	206	EPMSQ 565	261	217	EPMSFE 565	257	EPMSQE 565	269	95,3
EPMSF 715	276	231	EPMSQ 715	287	243	EPMSFE 715	283	EPMSQE 715	295	121,2

\* The width of the gerolor is 3 mm greater than L<sub>1</sub>.