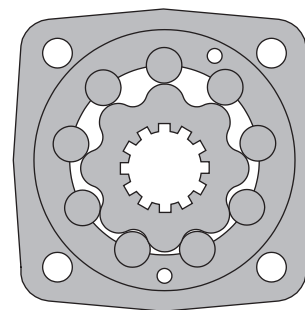


HYDRAULIC MOTORS EPMV



APPLICATION

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



CONTENTS

Specification data	98
Function diagrams	99 ÷ 101
Permissible shaft loads	101
Dimensions and mounting	102
Dimensions and mounting- EPMVS	102 ÷ 104
Internal Spline data	104
Tacho connection	104
Shaft extensions	105
Order code	105

OPTIONS

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

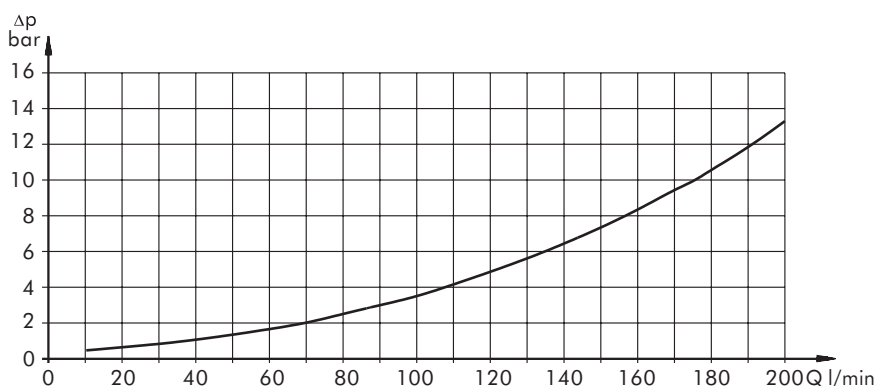
GENERAL

Displacement, [cm ³ /rev.]	314,5 ÷ 801,8
Max. Speed, [RPM]	510 ÷ 250
Max. Torque, [daNm]	92 ÷ 188
Max. Output, [kW]	42,5 ÷ 53,5
Max. Pressure Drop, [bar]	200 ÷ 160
Max. Oil Flow, [l/min]	160 ÷ 200
Min. Speed, [RPM]	10 ÷ 5
Permissible Shaft Loads, [daN]	P _{rad} = 2800; P _a = 1500
Pressure fluid	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, [°C]	-30 ÷ 90
Optimal Viscosity range, [mm ² /s]	20 ÷ 75
Filtration	ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop (bar)	Viscosity (mm ² /s)	Oil flow in drain line (l/min)
140	20	3
	35	2
210	20	6
	35	4

Pressure Losses



SPECIFICATION DATA

Type		EPMV 315	EPMV 400	EPMV 500	EPMV 630	EPMV 800
Displacement [cm ³ /rev.]		314,5	400,9	499,6	629,1	801,8
Max. Speed, [RPM]	cont.	510	500	400	315	250
	Int.*	630	600	480	380	300
Max. Torque [daNm]	cont.	92	118	146	166	188
	Int.*	111	141	176	194	211
	peak**	129	164	205	221	247
Max. Output [kW]	cont.	42,5	53,5	53,5	48	42,5
	int.*	51	64	64	56	48
Max. Pressure Drop [bar]	cont.	200	200	200	180	160
	Int.*	240	240	240	210	180
	peak**	280	280	280	240	210
Max. Oil Flow [l/min]	cont.	160	200	200	200	200
	Int.*	200	240	240	240	240
Max. Inlet Pressure [bar]	cont.	210	210	210	210	210
	Int.*	250	250	250	250	250
	peak**	300	300	300	300	300
Max. Return Pressure without Drain Line or Max. Pressure in Drain Line , [bar]	cont. 0-100 RPM	60	60	60	60	60
	cont. 100-300 RPM	30	30	30	30	30
	cont. >300 RPM	20	20	20	20	20
	Int.* 0-max. RPM	75	75	75	75	75
Max. Return Pressure with Drain Line [bar]	cont.	140	140	140	140	140
	Int.*	175	175	175	175	175
	peak**	210	210	210	210	210
Max. Starting Pressure with Unloaded Shaft, [bar]		8	8	8	8	8
Min. Starting Torque [daNm]	at max. press. drop cont.	71	91	113	133	151
	at max. press. drop Int.*	85	109	136	155	170
Min. Speed***, [RPM]		10	9	8	6	5
Weight, [kg]	EPMV	31,8	32,6	33,5	34,9	36,5
	EPMVW	32,4	33,2	34,1	35,5	37,1
	EPMVS	22,7	23,5	24,4	25,6	27,7

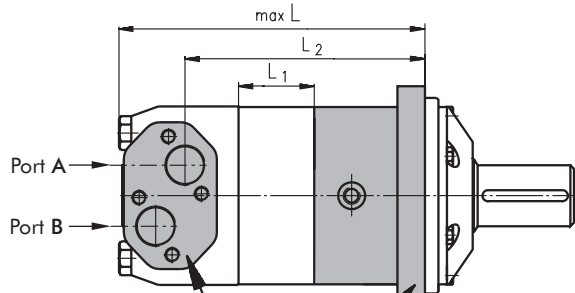
* Intermittent operation: the permissible values may occur for max. 10% of every minute.

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

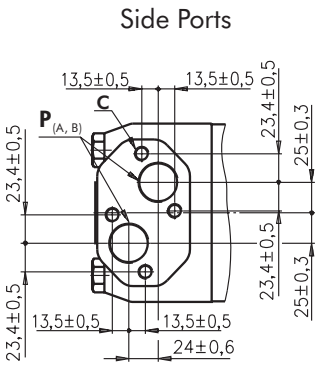
*** For speeds of 5 RPM lower than given, consult factory or your regional manager.

- 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(ISO6743/4).
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 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

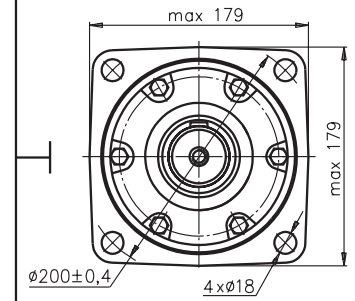
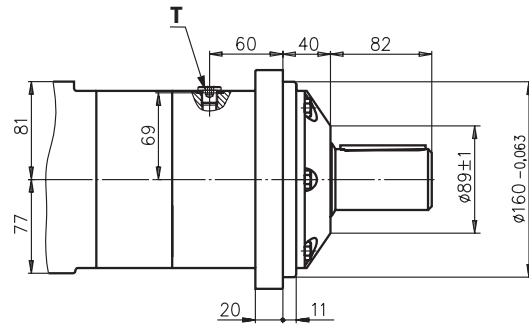


Porting

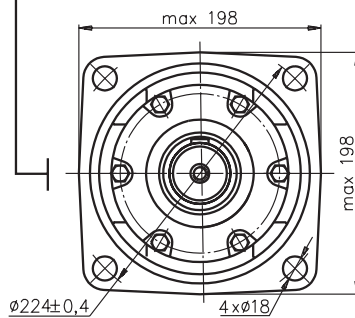
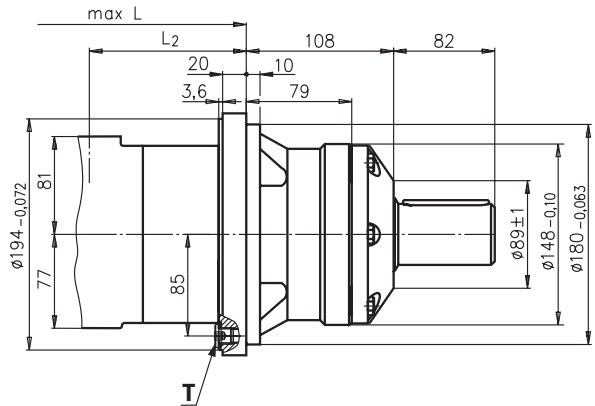


Mounting

Square Mount (4 Holes)



W Wheel Mount



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: 4xM12- 12 mm depth
P_(A,B): 2xG1 - 20 mm depth
T: G 1/4 - 12 mm depth

Type	L, mm	L ₂ , mm	Type	L, mm	L ₂ , mm	*L ₁ , mm
EPMV 315	214,5	160	EPMVW 315	146	92	22,0
EPMV 400	221,5	167	EPMVW 400	153	99	29,0
EPMV 500	229,5	175	EPMVW 500	161	107	37,0
EPMV 630	240,0	186	EPMVW 630	172	118	47,5
EPMV 800	254,0	200	EPMVW 800	185	132	61,5

* The width of the gerolor is 3,5 mm greater than L₁.