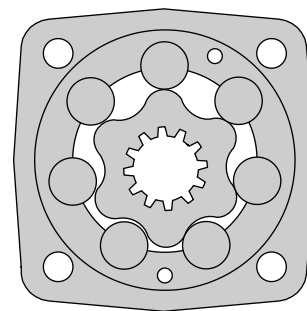


HYDRAULIC MOTORS EPMS - series 3



APPLICATION

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



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OPTIONS

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

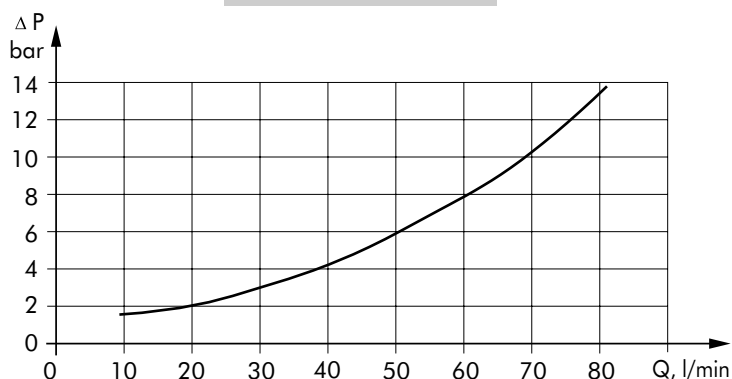
GENERAL

Displacement, [cm ³ /rev.]	80,5 ÷ 564,9
Max. Speed, [RPM]	130 ÷ 810
Max. Torque, [daNm]	20 ÷ 58
Max. Output, [kW]	20 ÷ 6,9
Max. Pressure Drop, [bar]	100 ÷ 200
Max. Oil Flow, [l/min]	75
Min. Speed, [RPM]	5 ÷ 10
Permissible Shaft Loads, [daN]	P _o = 500
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	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 ³ /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.	20	29,2	37,4	46	46
	Int.*	24	32	41	51,5	60
	peak**	26	32	41	51,5	65
Max. Output [kW]	cont.	16,4	19,5	20	15,5	14
	int.*	22	26	24	21,9	21
Max. Pressure Drop [bar]	cont.	175	205	205	205	160
	Int.*	210	225	225	225	210
	peak**	225	225	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
	Int.* 0-max. RPM	100	100	100	100	100
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]		12	10	10	8	8
Min. Starting Torque [daNm]	at max. press. drop cont.	16,5	23,9	26	36,9	37,5
	at max. press. drop Int.*	19,4	26,4	31	40,5	48,5
Min. Speed***, [RPM]		10	10	8	8	6
Weight, [kg] For Rear Ports +0,4 kg	EPMS(F)	9,9	10,1	10,4	10,8	11,2
	EPMSW	10,4	10,6	10,9	11,3	11,7
	EPMSS(Z)	7,9	8,1	8,4	8,8	9,2
	EPMSV	5,8	6	6,3	6,7	7,1
	EPMSQ	10,3	10,5	10,8	11,2	11,6
	EPMSB	16,9	17,1	17,4	17,8	18,2

* 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 13 mm²/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.

SPECIFICATION DATA (continued)

Type	EPMS 250	EPMS 315	EPMS 400	EPMS 475	EPMS 525	EPMS 565	
Displacement [cm ³ /rev.]	250	314,9	397	474,6	522,7	564,9	
Max. Speed, [RPM]	cont.	300	240	190	160	145	130
	Int.*	360	290	230	190	175	160
Max. Torque [daNm]	cont.	50	54	58	58	58	58
	Int.*	63	63	69	68	69	69
	peak**	72	84	85	84	85	85
Max. Output [kW]	cont.	13,5	11,5	10	8,4	7,6	6,9
	int.*	21	13,5	13	11,3	10,4	9,6
Max. Pressure Drop [bar]	cont.	140	120	100	85	80	75
	Int.*	175	140	120	100	90	85
	peak**	200	185	140	115	105	100
Max. Oil Flow [l/min]	cont.	75	75	75	75	75	75
	Int.*	90	90	90	90	90	90
Max. Inlet Pressure [bar]	cont.	210	210	210	210	210	210
	Int.*	250	250	250	250	250	250
	peak**	300	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	100
	cont. 100-300 RPM	50	50	50	50	50	50
	cont. >300 RPM	-	-	-	-	-	-
Max. Return Pressure with Drain Line [bar]	Int.* 0-max. RPM	100	100	100	100	100	100
	cont.	140	140	140	140	140	140
Max. Starting Pressure with Unloaded Shaft, [bar]	Int.*	175	175	175	175	175	175
	peak**	210	210	210	210	210	210
	cont.	8	8	8	8	8	8
Min. Starting Torque [daNm]	at max. press. drop cont.	40	51	54	47	47	47
	at max. press. drop Int.*	50	65	63	55	55	55
Min. Speed***, [RPM]		6	5	5	5	5	5
Weight, [kg] For Rear Ports +0,4 kg	EPMS(F)	11,7	12,4	13,3	14,4	14,6	15
	EPMSW	12,2	12,9	13,8	14,6	15,1	15,5
	EPMS(Z)	9,7	10,4	11,3	12,1	12,6	13
	EPMSV	7,6	8,3	9,2	10	10,5	10,9
	EPMSQ	12,1	12,8	13,7	14,5	15,0	15,4
	EPMSB	18,7	19,4	20,3	21,1	21,6	23

* 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 13 mm²/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.

SPECIFICATION DATA for EPMS...LSV

Low Speed Valve (LSV) "LSV" Series hydraulic motors have been designed to operate with normal pressure drop and to ensure smooth run at low speed (up to 200 min⁻¹), as the best security for operation is guaranteed at frequency of rotation 20 ÷ 50 min⁻¹. They have an increased starting pressure drop and are not recommended for using at pressure less than 40 bars.

Look at specification data for hydraulic motors standard version. The modification concerns only the following parameters : maximum speed , maximum output, maximum Oil flow and maximum starting pressure.

Type		EPMS 80	EPMS 100	EPMS 125	EPMS 160	EPMS 200	EPMS 250	EPMS 315	EPMS 400
Max. Speed, [RPM]	Cont.	200	200	200	200	200	200	200	185
	Int.*	250	250	250	250	250	250	250	225
Max. Output [kW]	Cont.	3,6	4,6	6,2	8,0	8,5	9,1	10,6	9,5
	Int.*	5,3	6,7	8,4	12,2	12,4	12,5	15,0	12,8
Max. Oil Flow [l/min]	Cont.	16	20	25	32	40	50	65	75
	Int.*	20	25	32	40	50	62,5	80	90
Max. Starting Pressure with Unloaded Shaft, [bar]		25	20	20	20	15	15	15	15

SPECIFICATION DATA for EPMS...LL

Low Leakage (LL) "LL" Series hydraulic motors have been designed to operate at the whole standard range of working conditions (pressure drop and frequency of rotation) , but with considerable decreased volumetric losses in the drainage ports. Their main purpose is to operate as series-connected motors in hydraulic systems.

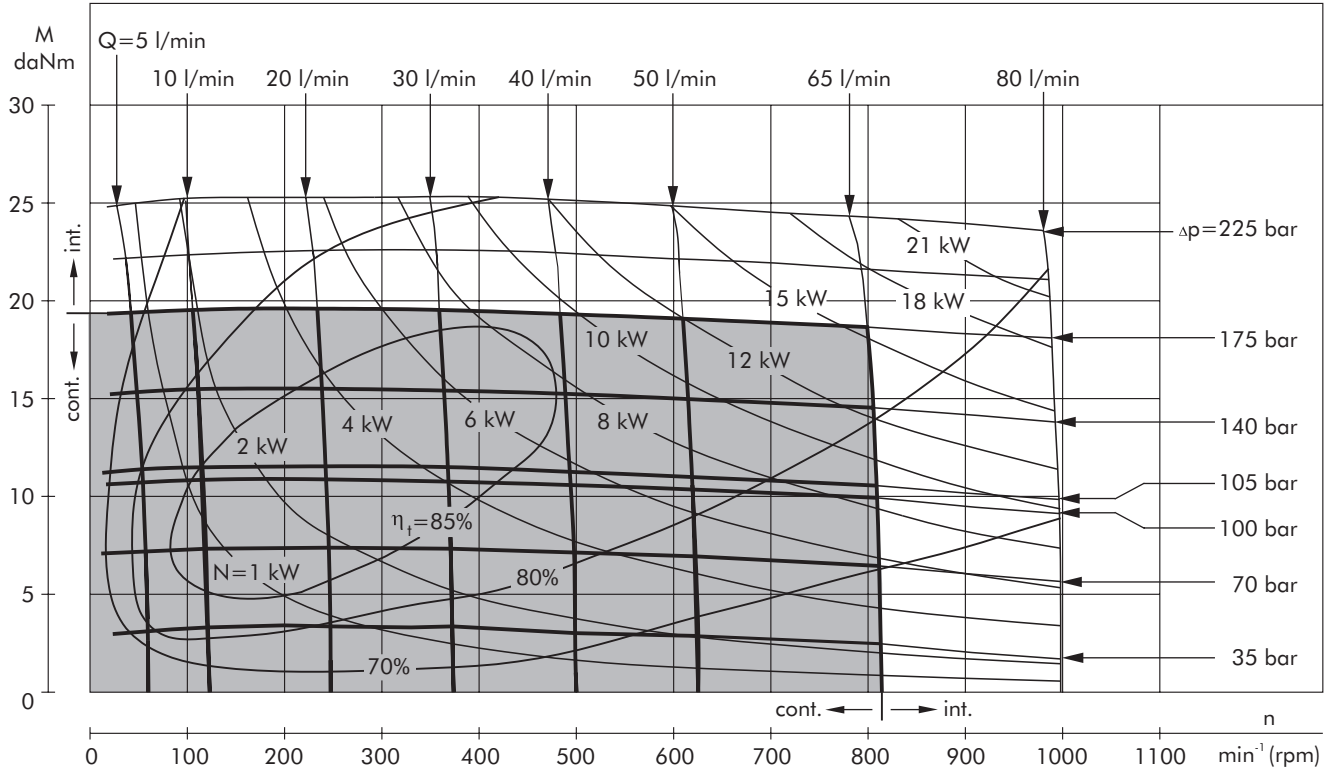
For this version is permissible decreasing of the maximal torque with up to 5% (at middle speed) and up to 10% (at high speed) in comparison to the standard versions of motors.

Look at specification data for hydraulic motors standard version. The modification concerns only the parameters: maximum torque, maximum output, minimum starting torque.

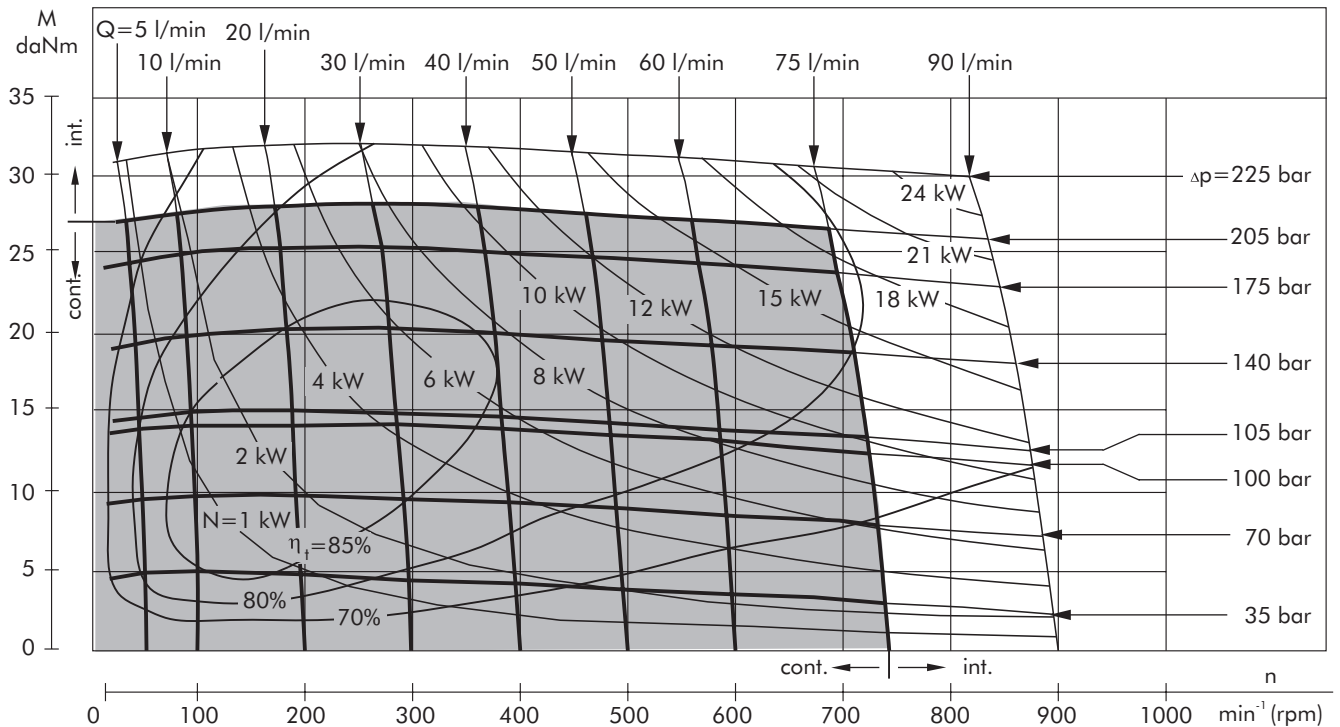
Type		EPMS 80	EPMS 100	EPMS 125	EPMS 160	EPMS 200	EPMS 250	EPMS 315	EPMS 400
Max. Torque [daNm]	Cont.	19,5	27,75	35,6	43,8	44,8	48,7	51,3	55,1
	Int.*	23,4	31,1	39,0	48,9	58,4	61,4	60,0	65,6
Max. Output [kW]	Cont.	16,0	18,0	19,4	17,6	13,6	13,1	10,6	9,3
	Int.*	19,5	25,3	24,6	21,8	20,4	20,4	12,5	12,0
Min. Starting Torque [daNm]	Cont.	15,9	22,5	28,3	35,9	36,9	39,1	41,8	44,7
	Int.*	18,8	25,9	31,8	39,6	47,8	50,1	49,5	52,3

FUNCTION DIAGRAMS

EPMS 80



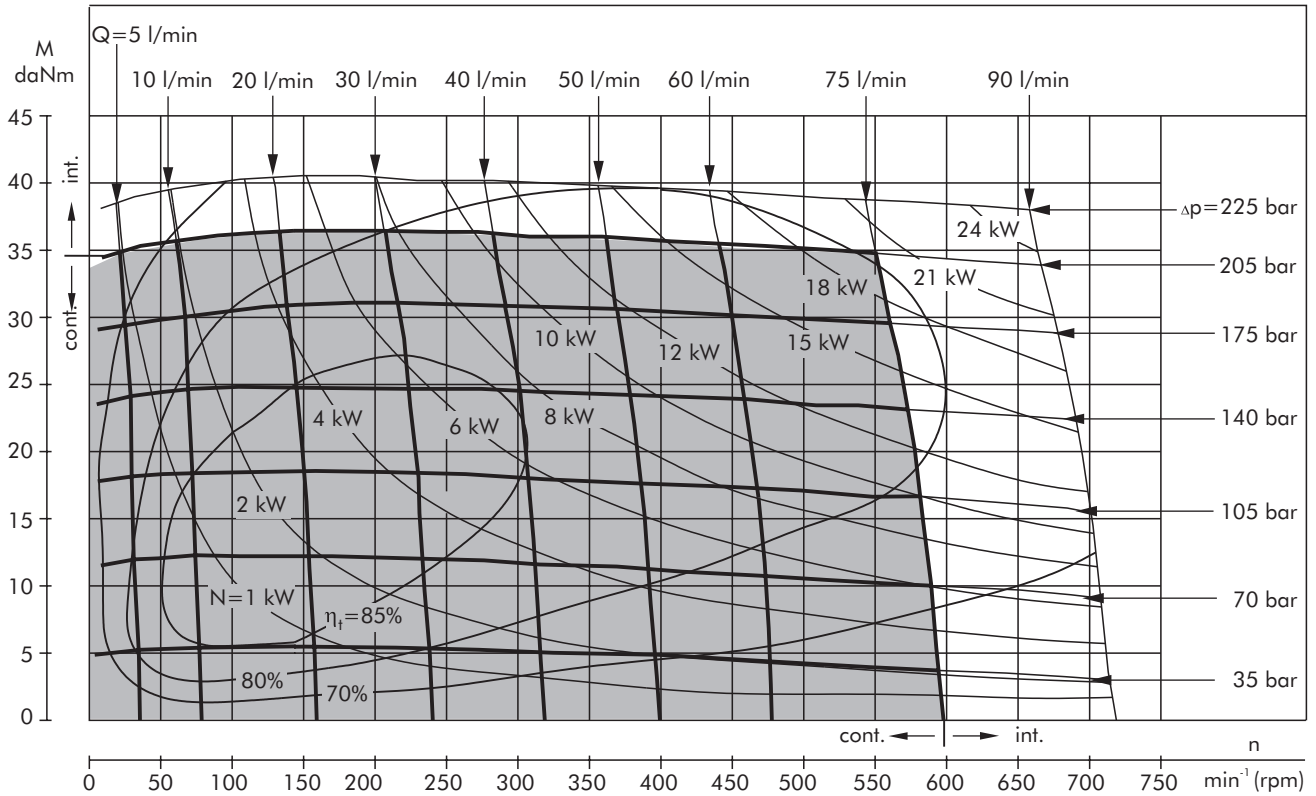
EPMS 100



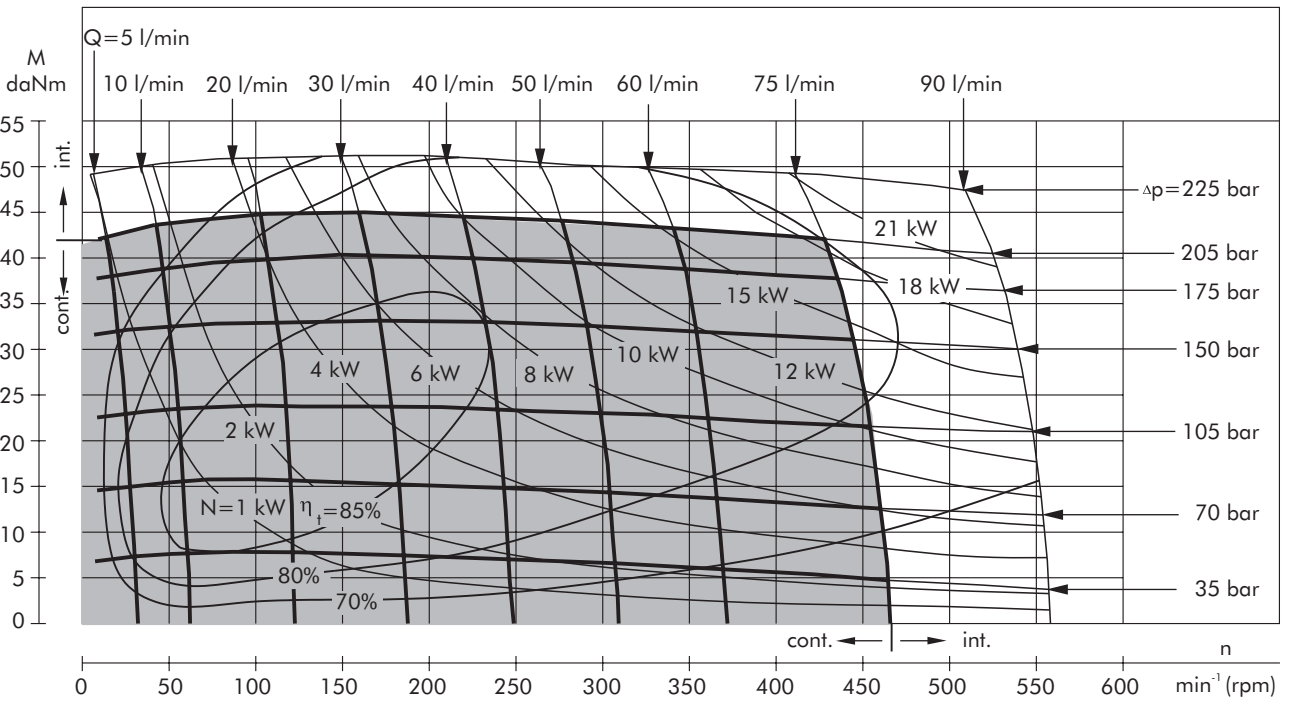
The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

FUNCTION DIAGRAMS

EPMS 125



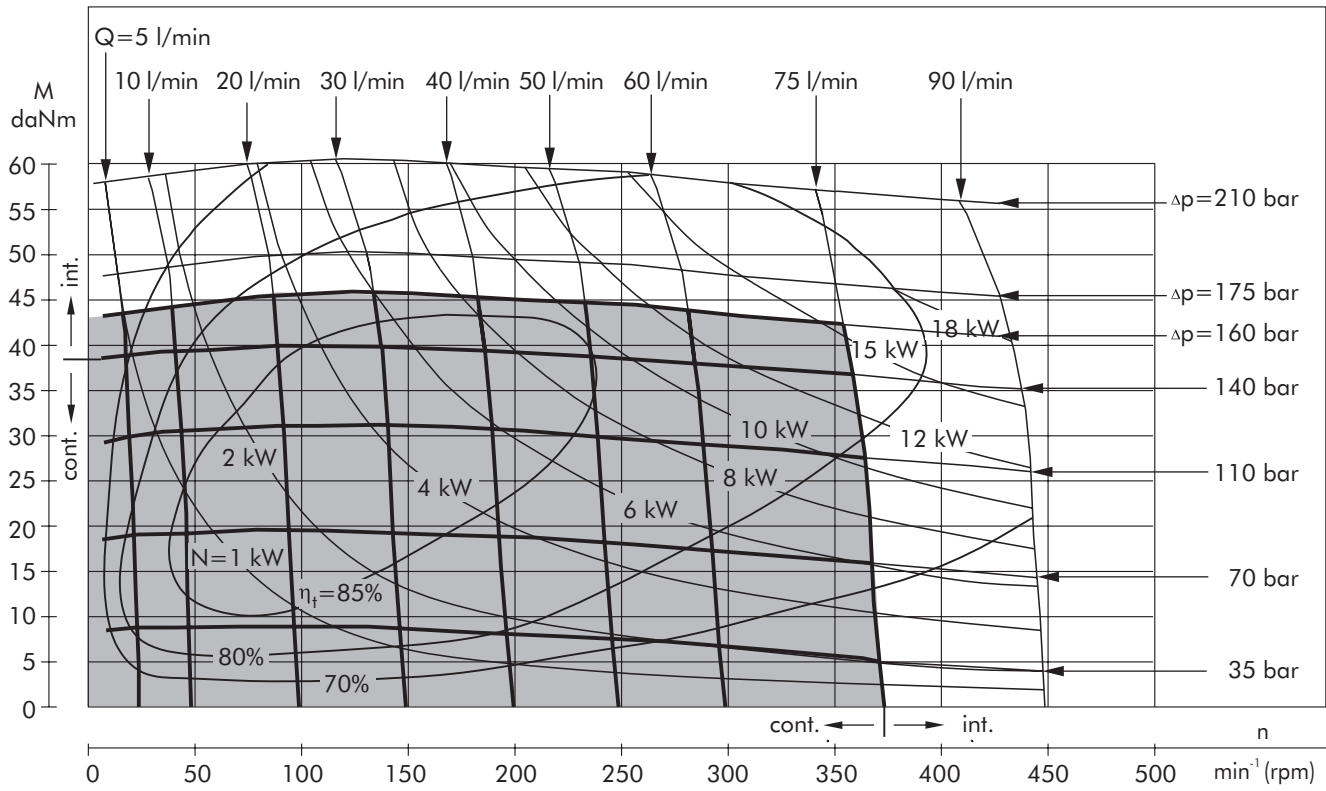
EPMS 160



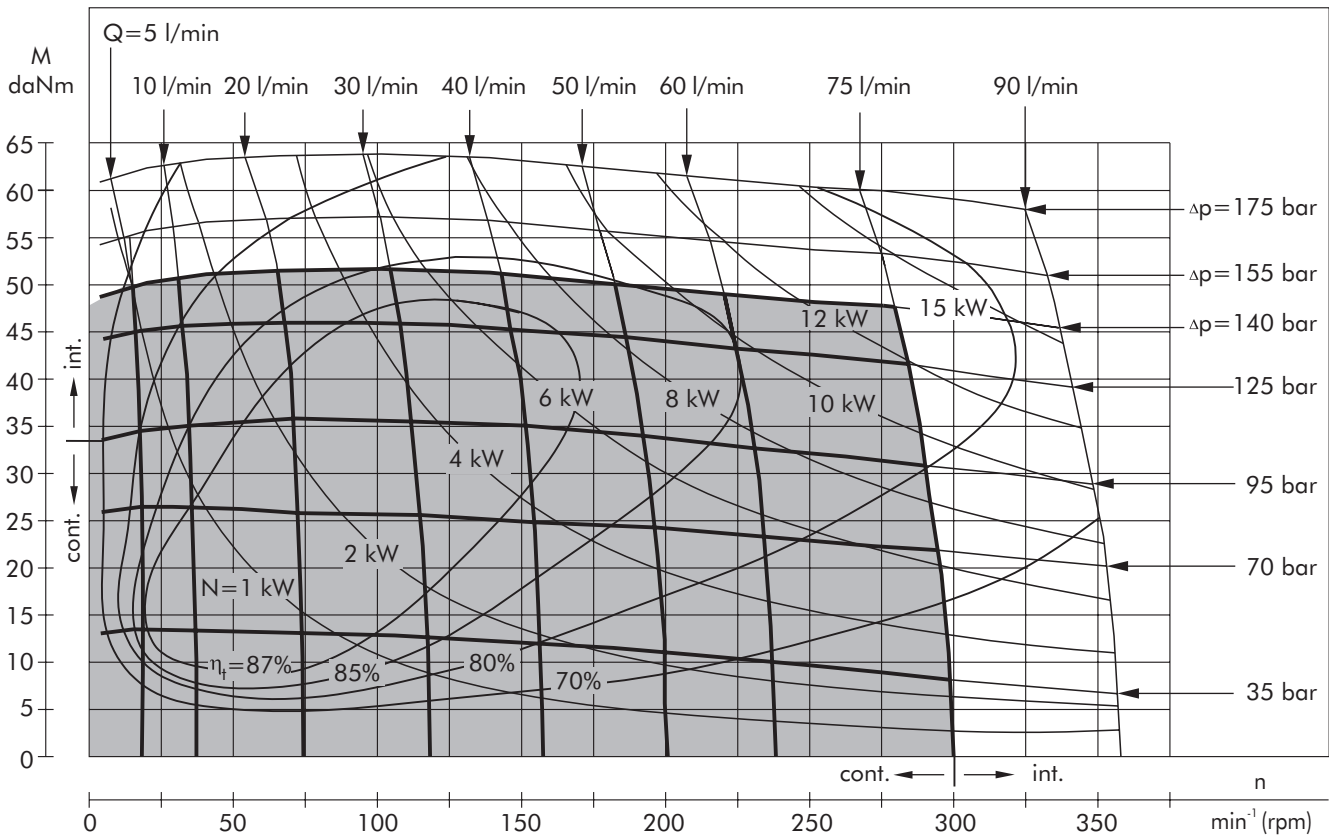
The function diagrams data was collected at back pressure $5 \div 10 \text{ bar}$ and oil with viscosity of $32 \text{ mm}^2/\text{s}$ at 50° C .

FUNCTION DIAGRAMS

EPMS 200

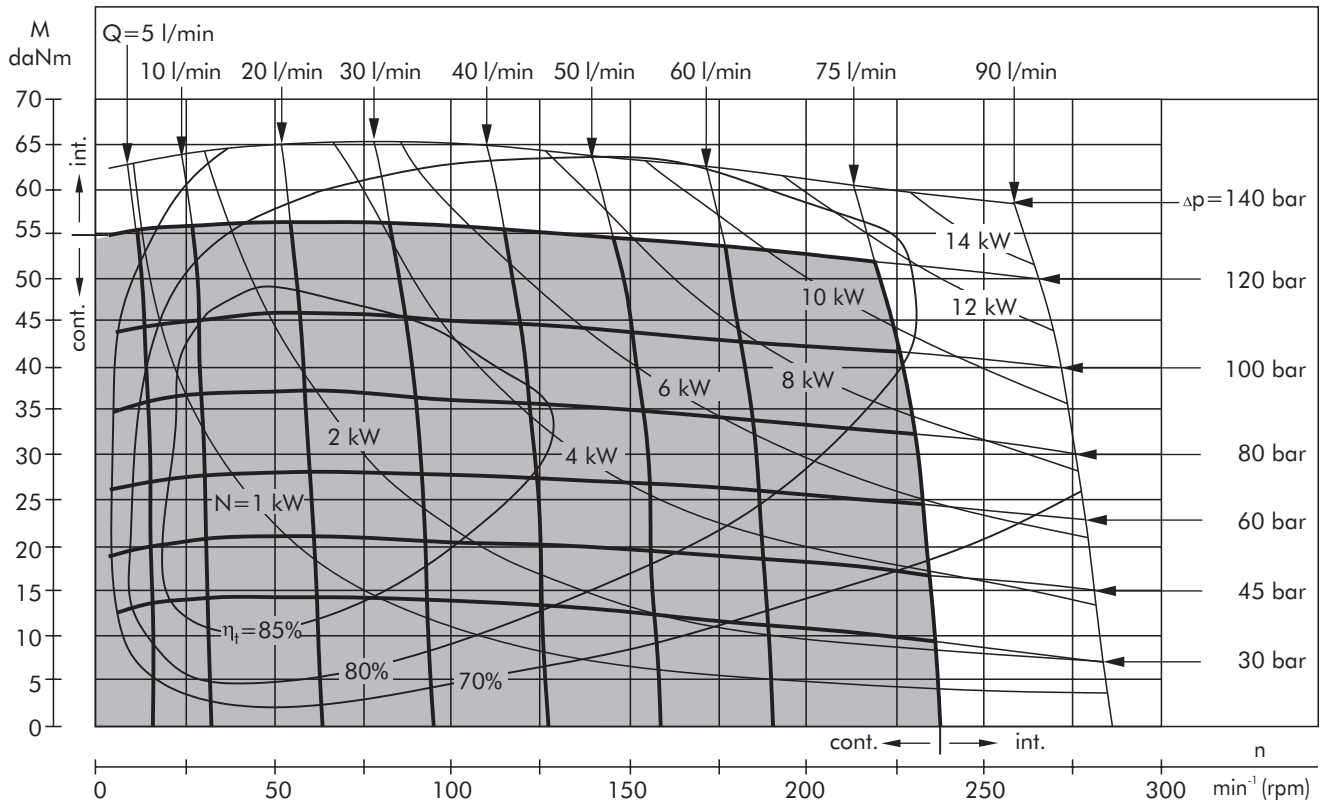


EPMS 250

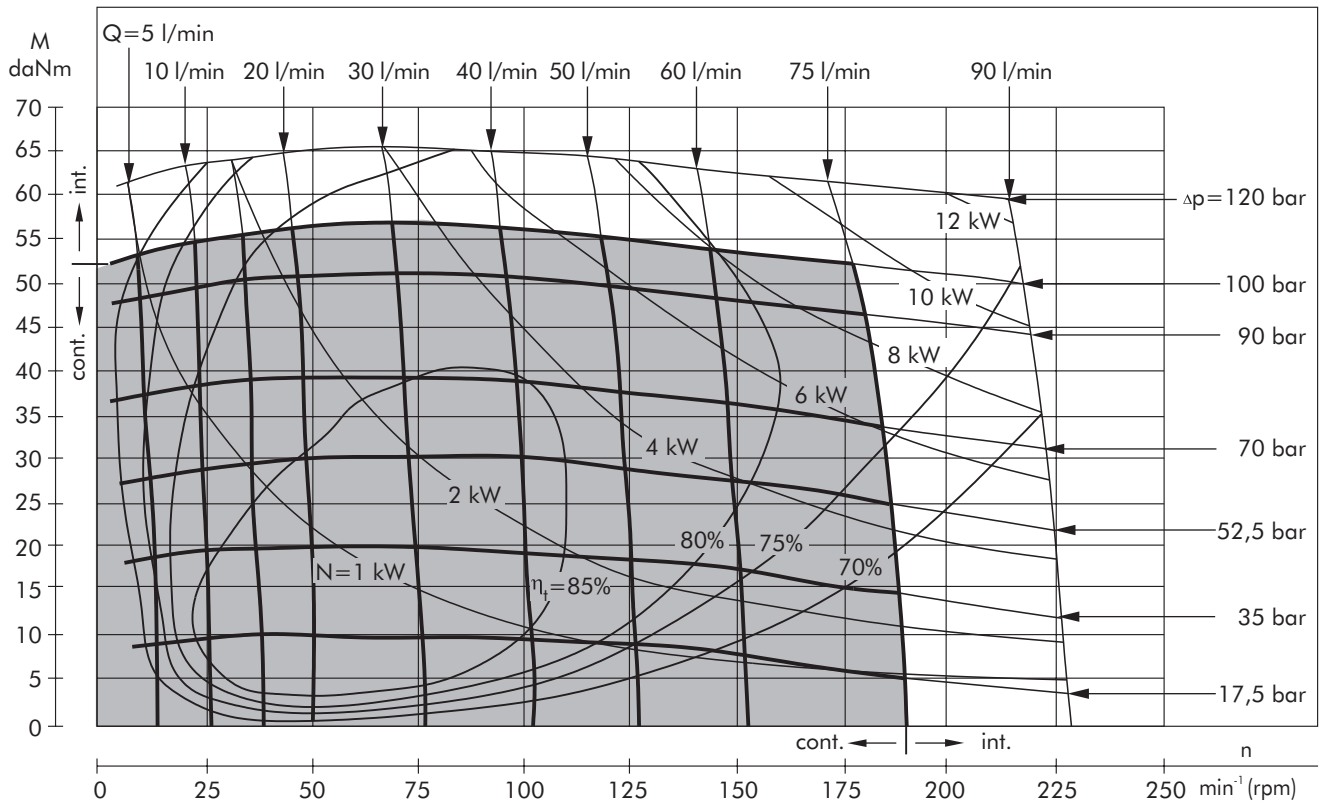


The function diagrams data was collected at back pressure 5 ÷ 10 bar and oil with viscosity of 32 mm²/s at 50° C.

EPMS 315

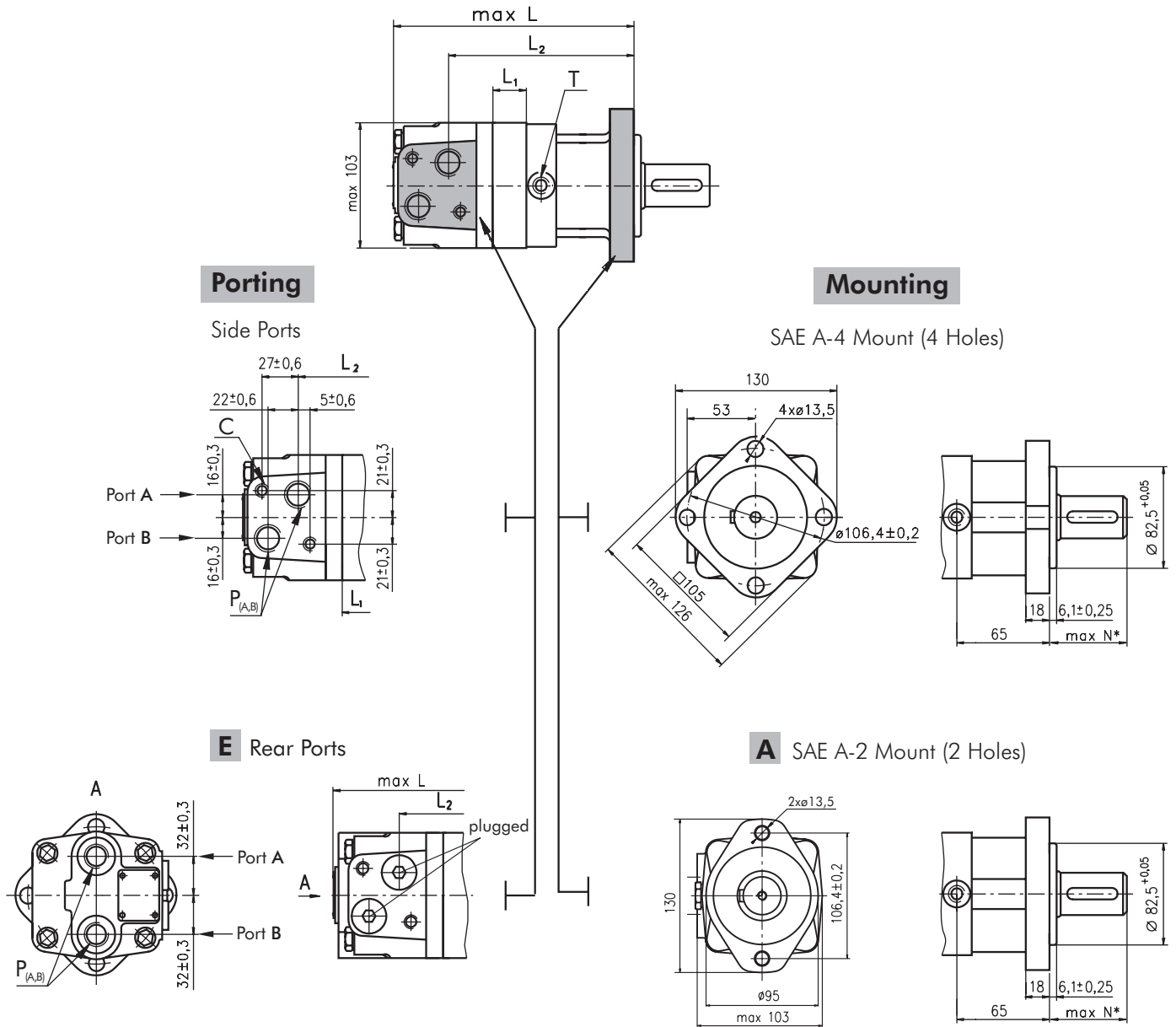


EPMS 400



The function diagrams data was collected at back pressure $5 \div 10$ bar and oil with viscosity of $32 \text{ mm}^2/\text{s}$ at 50° C .

DIMENSIONS AND MOUNTING DATA



*For N see page 74

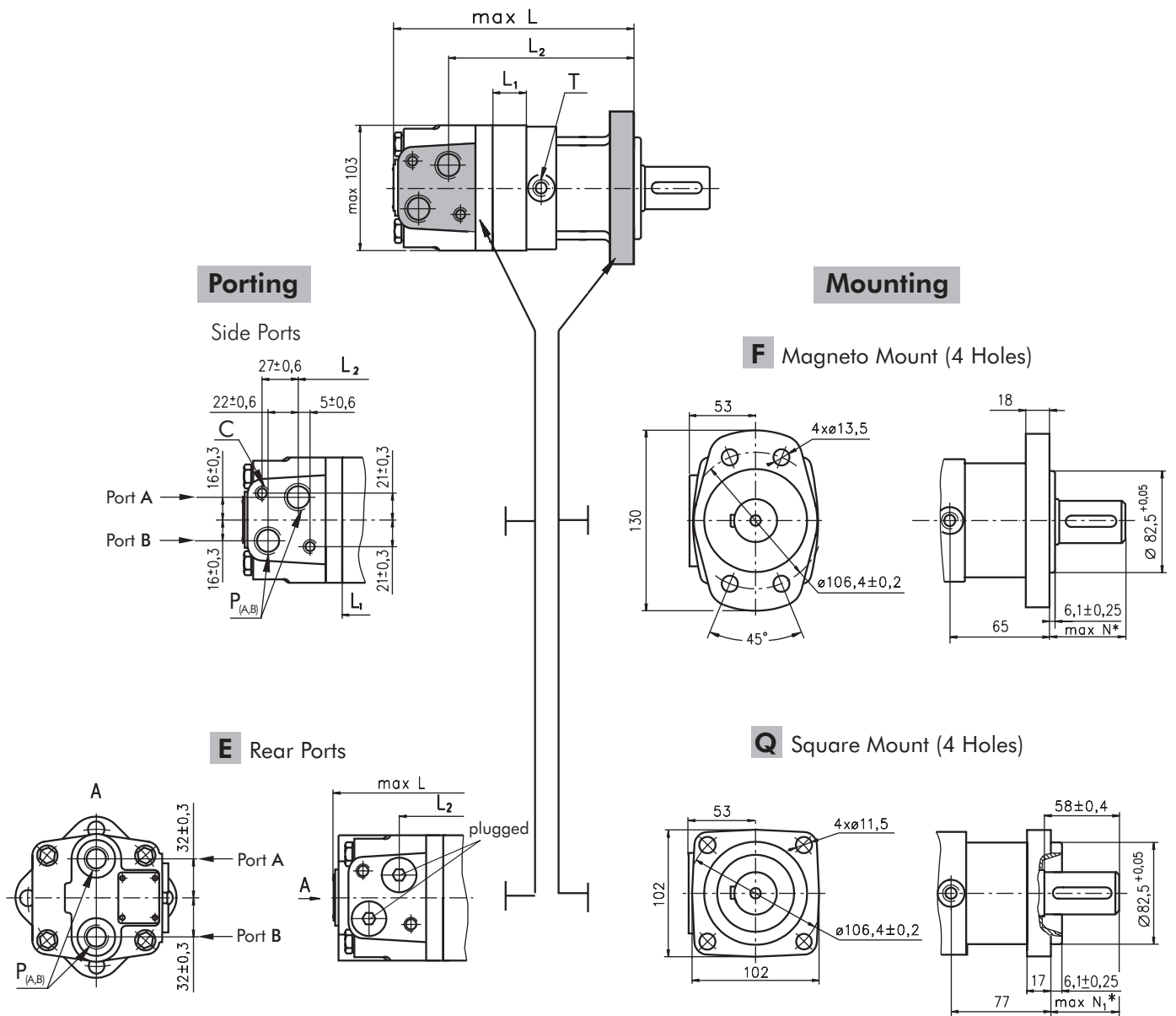
- C:** 2xM10-12 mm depth
- $P_{(A,B)}$:** 2xG1/2 or 2xM22x1,5-15 mm depth
- T:** G 1/4 or M14x1,5- 12 mm depth (plugged)

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_2 , mm	Type	L , mm	L_1 , mm
EPMS(A) 80	168	124	EPMS(A)E 80	173	14
EPMS(A) 100	171	129	EPMS(A)E 100	177	17,4
EPMS(A) 125	176	132	EPMS(A)E 125	181	21,8
EPMS(A) 160	182	138	EPMS(A)E 160	187	27,8
EPMS(A) 200	189	145	EPMS(A)E 200	194	34,8
EPMS(A) 250	197	154	EPMS(A)E 250	203	43,5
EPMS(A) 315	209	165	EPMS(A)E 315	214	54,8
EPMS(A) 400	223	179	EPMS(A)E 400	228	69,4
EPMS(A) 475	237	193	EPMS(A)E 475	242	82,6
EPMS(A) 525	229	185	EPMS(A)E 525	235,9	74,5
EPMS(A) 565	252	209	EPMS(A)E 565	257	98,3

DIMENSIONS AND MOUNTING DATA



C: 2xM10-12 mm depth
P_(A,B): 2xG1/2 or 2xM22x1,5-15 mm depth
T: G 1/4 or M14x1,5- 12 mm depth (plugged)

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

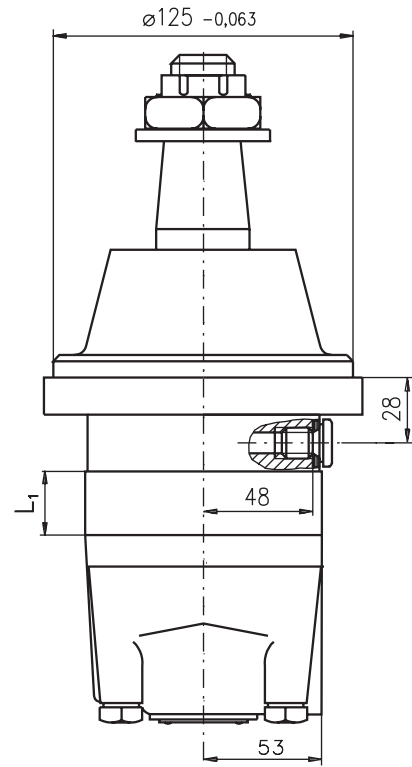
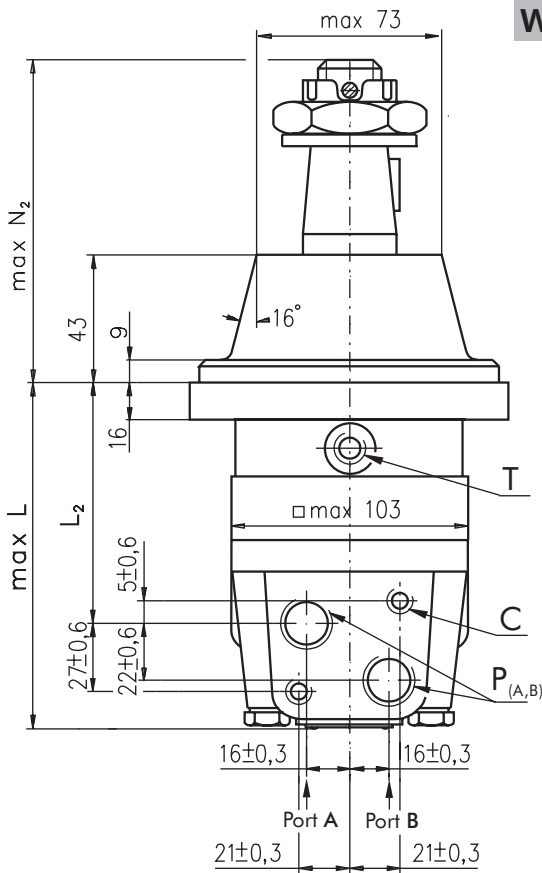
Reverse Rotation
 Viewed from Shaft End
 Port A Pressurized - CCW
 Port B Pressurized - CW

*For **N** and **N₁**, see page 74

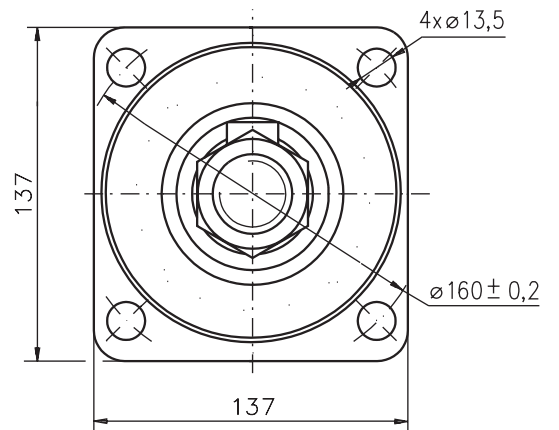
Type	L, mm	L ₂ , mm	Type	L, mm	L ₂ , mm	Type	L, mm	Type	L, mm	L ₁ , mm
EPMSF 80	168	124	EPMSQ 80	179	136	EPMSFE 80	173	EPMSQE 80	185	14
EPMSF 100	171	129	EPMSQ 100	183	140	EPMSFE 100	177	EPMSQE 100	189	17,4
EPMSF 125	176	132	EPMSQ 125	187	144	EPMSFE 125	181	EPMSQE 125	193	21,8
EPMSF 160	182	138	EPMSQ 160	193	150	EPMSFE 160	187	EPMSQE 160	199	27,8
EPMSF 200	189	145	EPMSQ 200	200	157	EPMSFE 200	194	EPMSQE 200	206	34,8
EPMSF 250	197	154	EPMSQ 250	209	166	EPMSFE 250	203	EPMSQE 250	215	43,5
EPMSF 315	209	165	EPMSQ 315	220	177	EPMSFE 315	214	EPMSQE 315	226	54,8
EPMSF 400	223	179	EPMSQ 400	235	192	EPMSFE 400	228	EPMSQE 400	241	69,4
EPMSF 475	237	193	EPMSQ 475	247	205	EPMSFE 475	242	EPMSQE 475	254	82,6
EPMSF 525	229	185	EPMSQ 525	240	197	EPMSFE 525	235,9	EPMSQE 525	245,9	74,5
EPMSF 565	252	209	EPMSQ 565	263	220	EPMSFE 565	257	EPMSQE 565	269	98,3

DIMENSIONS AND MOUNTING DATA -EPMSW

W Wheel Mount

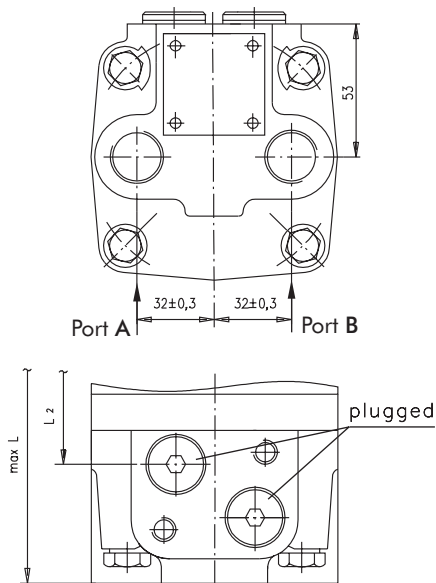


C: 2xM10-12 mm depth
P_(A,B): 2xG1/2 or 2xM22x1,5-15 mm depth
T: G 1/4 or M14x1,5 - 12 mm depth(plugged)



*For N₂ see page 74

E Rear Port

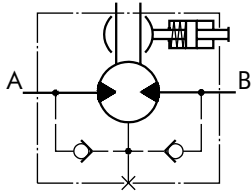


Standard Rotation
 Viewed from Shaft End
 Port A Pressurized - CW
 Port B Pressurized - CCW

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

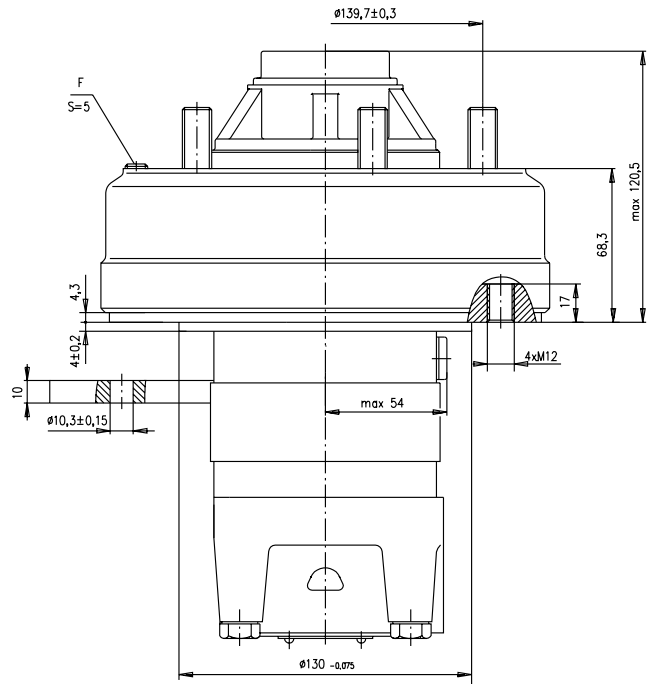
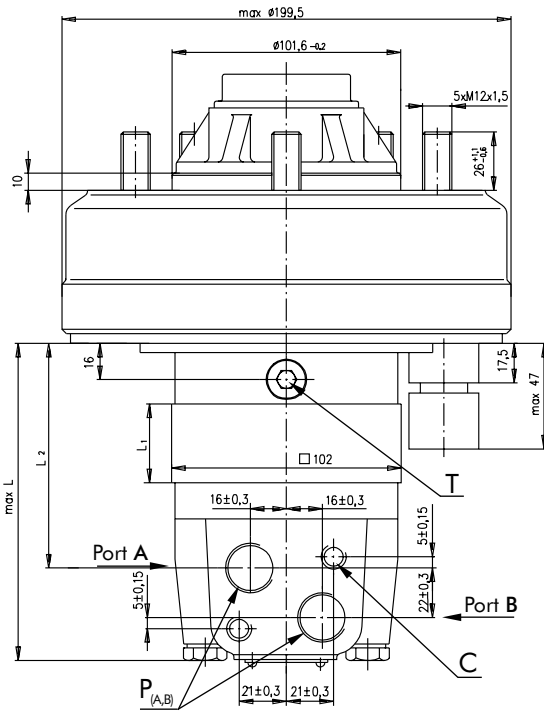
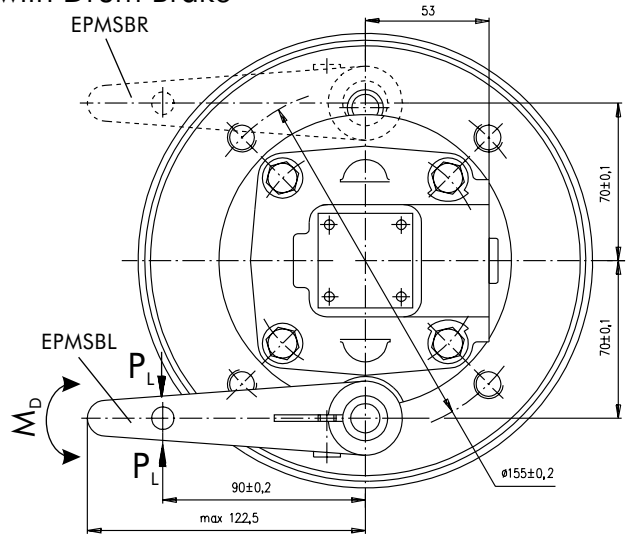
Type	L, mm	L ₁ , mm	L ₂ , mm	Type	L, mm
EPMSW 80	129	14	87	EPMSWE 80	138
EPMSW100	133	17,4	91	EPMSWE 100	142
EPMSW 125	137	21,8	95	EPMSWE 125	146
EPMSW 160	143	27,8	101	EPMSWE 160	152
EPMSW 200	150	34,8	108	EPMSWE 200	159
EPMSW 250	159	43,5	117	EPMSWE 250	168
EPMSW 315	170	54,8	128	EPMSWE 315	179
EPMSW 400	184	69,4	143	EPMSWE 400	194
EPMSW 475	198	82,6	156	EPMSWE 475	207
EPMSW 525	189,9	74,5	147,9	EPMSWE 525	201,6
EPMSW 565	213	98,3	171	EPMSWE 565	222

B Motor with Drum Brake



Actuating the brake level, the brake shaft is turned. The rectangular shape of the inner part of this shaft forces the brake pads to be pressed against the brake drum. This brakes the wheel or the winch drum.

Releasing the level, the springs pull it and the brake pads back to the initial position. The motor output shaft is released. Minimum angle adjustment is 10°. It can be adjusted by dismounting the level. Depending on the application You can choose the actuating direction of the brake level. The rod connection actuating the brake should be capable of moving at last 25 mm from neutral to extreme position.



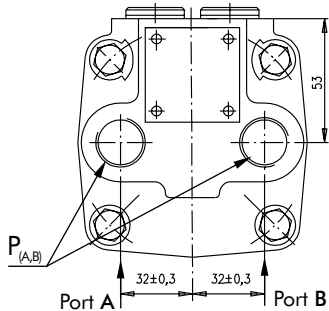
C: 2xM10-12 mm depth

F: Inspection hole for checking brake lining

T: G 1/4 or M14x1,5 - 12 mm depth (plugged)

P_(A,B): 2xG1/2 or 2xM22x1,5-15 mm depth

E Rear Port

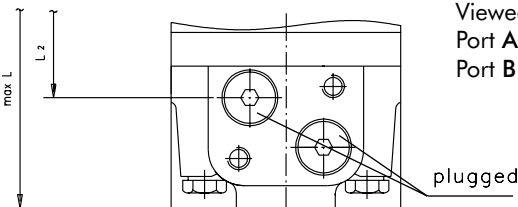


Standard Rotation

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

Reverse Rotation

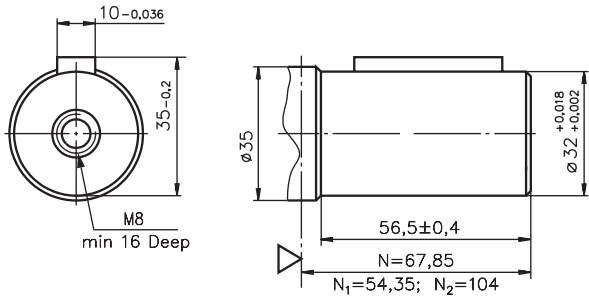
Viewed from Shaft End
Port A Pressurized - CCW
Port B Pressurized - CW



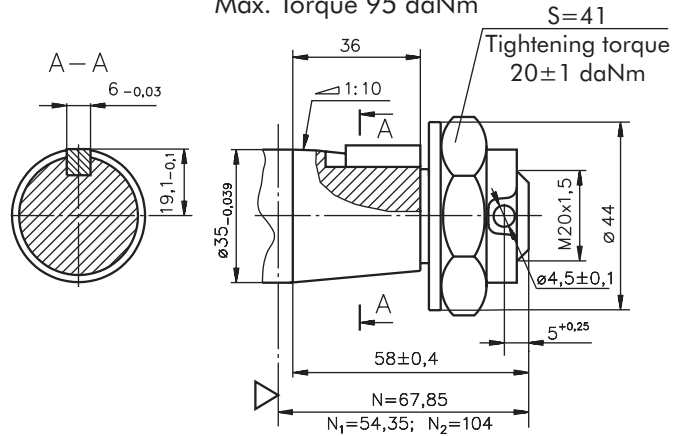
Type	L, mm	L ₁ , mm	L ₂ , mm	Type	L, mm
EPMSB 80	119	14	74	EPMSBE 80	127
EPMSB100	122	17,4	77	EPMSBE 100	130
EPMSB 125	126	21,8	82	EPMSBE 125	134
EPMSB 160	132	27,8	88	EPMSBE 160	140
EPMSB 200	139	34,8	95	EPMSBE 200	147
EPMSB 250	148	43,5	110	EPMSBE 250	156
EPMSB 315	159	54,8	115	EPMSBE 315	167
EPMSB 400	174	69,4	130	EPMSBE 400	182
EPMSB 475	188	82,6	143	EPMSBE 475	196
EPMSB 525	179,9	74,5	134,9	EPMSBE 525	187,9
EPMSB 565	203	98,3	158	EPMSBE 565	211

SHAFT EXTENSIONS

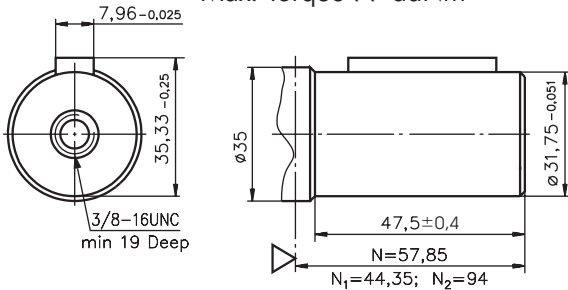
C - $\varnothing 32$ straight, Parallel key A10x8x45 DIN 6885
Max. Torque 77 daNm



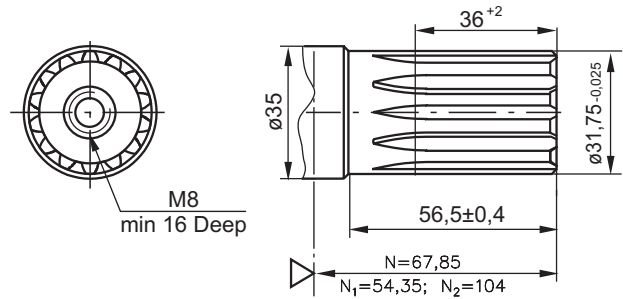
K - tapered 1:10, Parallel key B6x6x20 DIN 6885
Max. Torque 95 daNm



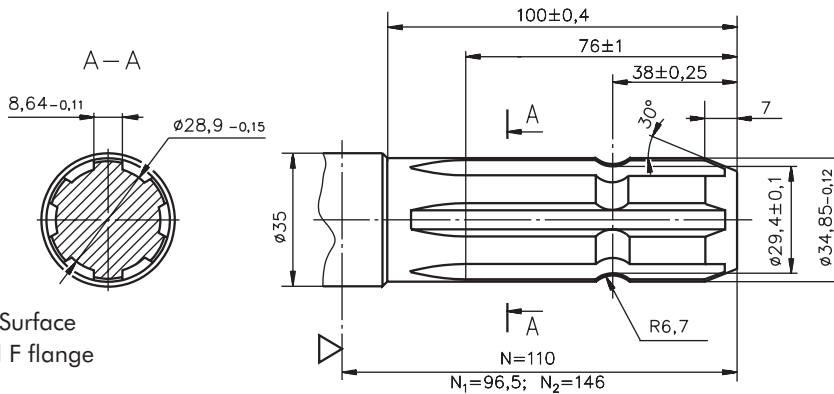
CO - $\varnothing 1\frac{1}{4}$ " straight, Parallel key $\frac{5}{16}$ "x $\frac{5}{16}$ "x $\frac{1}{4}$ "BS46
Max. Torque 77 daNm



SH - $\varnothing 1\frac{1}{4}$ " splined 14T, DP12/24 ANSI B92.1-1976
Max. Torque 95 daNm

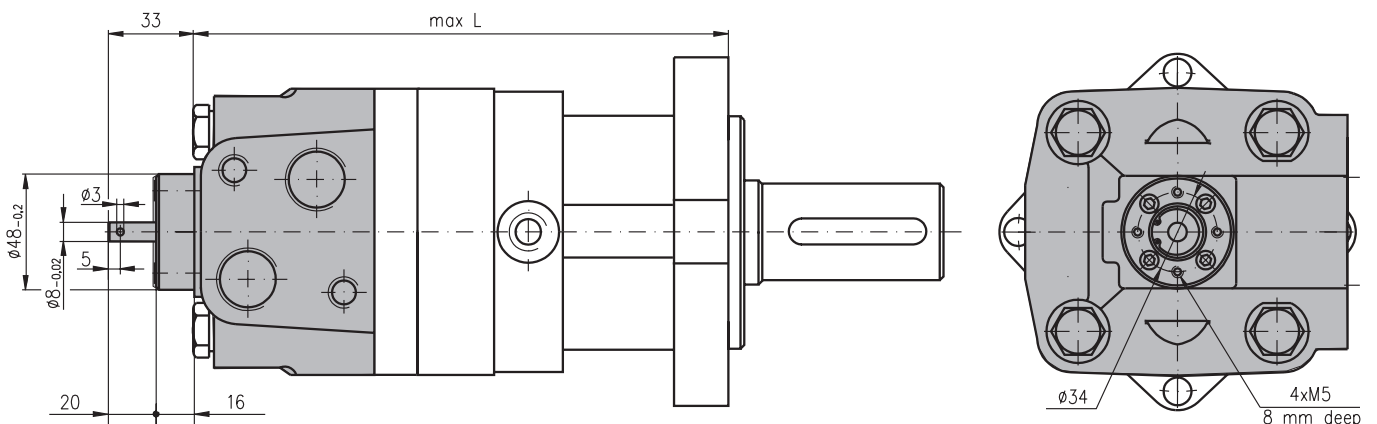


SL - $\varnothing 34,85$ p.t.o. DIN 9611 Form 1
Max. Torque 77 daNm

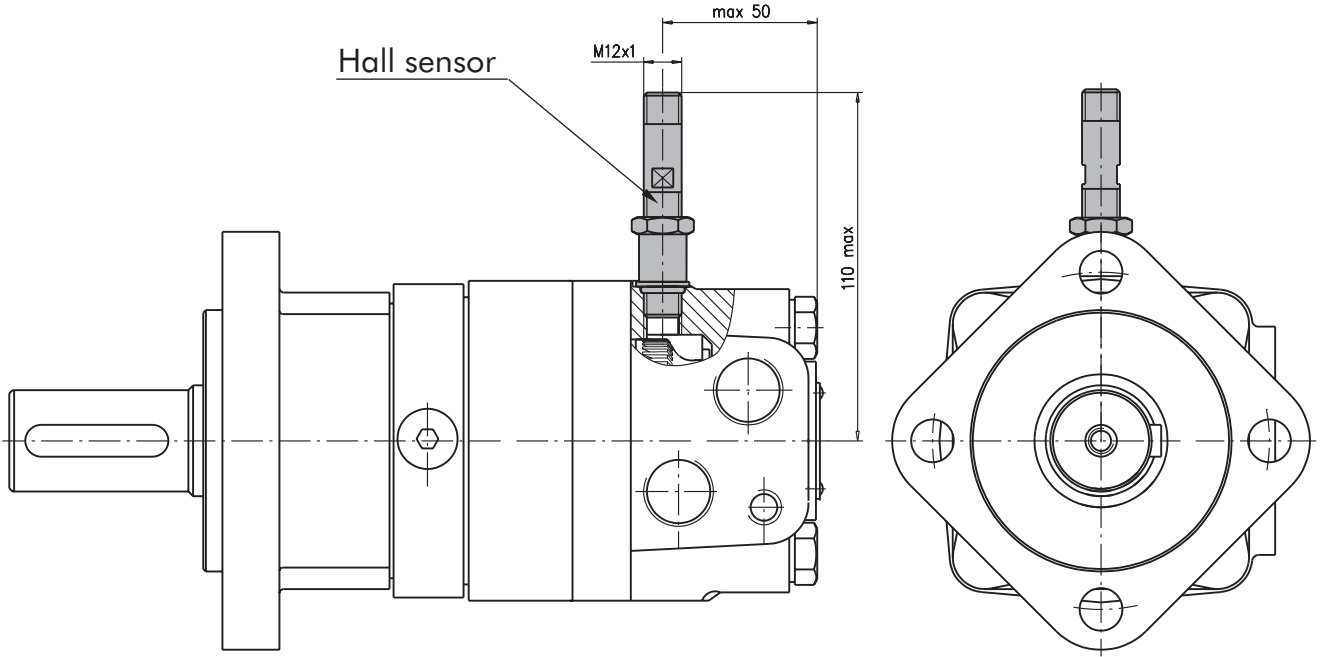


▽ - Motor Mounting Surface
N - for standart, A and F flange
N₁ - for Q flange
N₂ - for W flange

MOTORS WITH TACHO CONNECTION



MOTORS WITH SPEED SENSOR

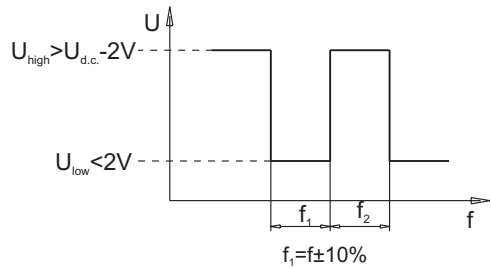


TECHNICAL DATA OF THE SPEED SENSOR

Technical data

Frequency range	3...20 000 Hz
Output	PNP, NPN
Power supply	10...36 VDC
Current input	20 mA (@24 VDC)
Current load	500 mA (@24 VDC; 24°C)
Ambient Temperature	minus 40... plus 125°C
Protection	IP 67
Plug connector	M12-Series
Mounting principle	ISO 6149
Pulses per revolution	54

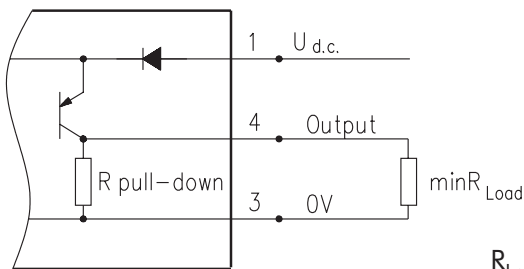
Output signal



Load max.: $I_{high} = I_{low} < 50\text{mA}$
 No load current, max: 20 mA

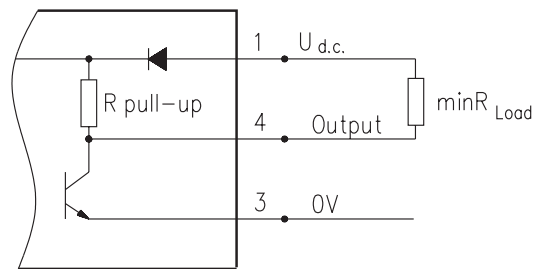
Wiring diagrams

PNP

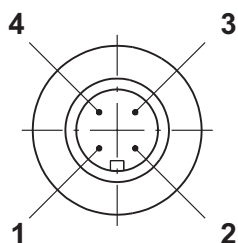


$$R_{Load} = U_{d.c.} / I_{max} (=50\text{mA})$$

NPN



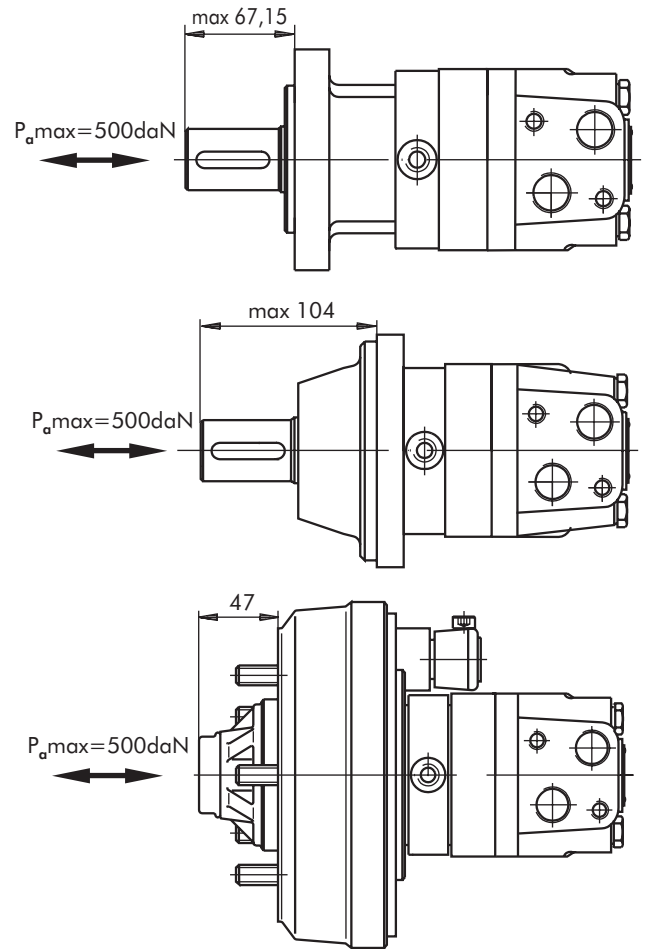
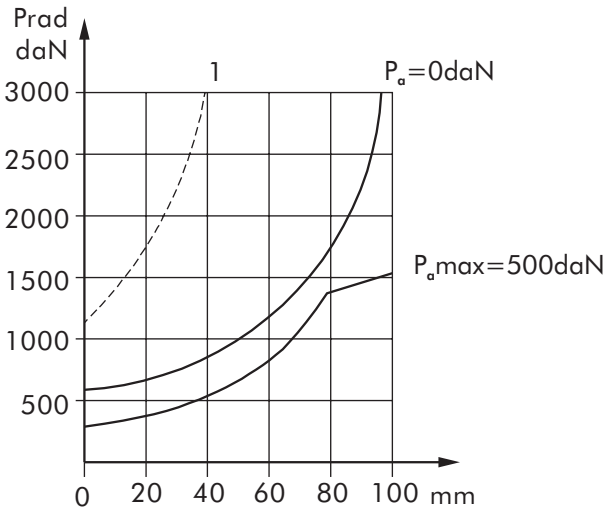
Stik type



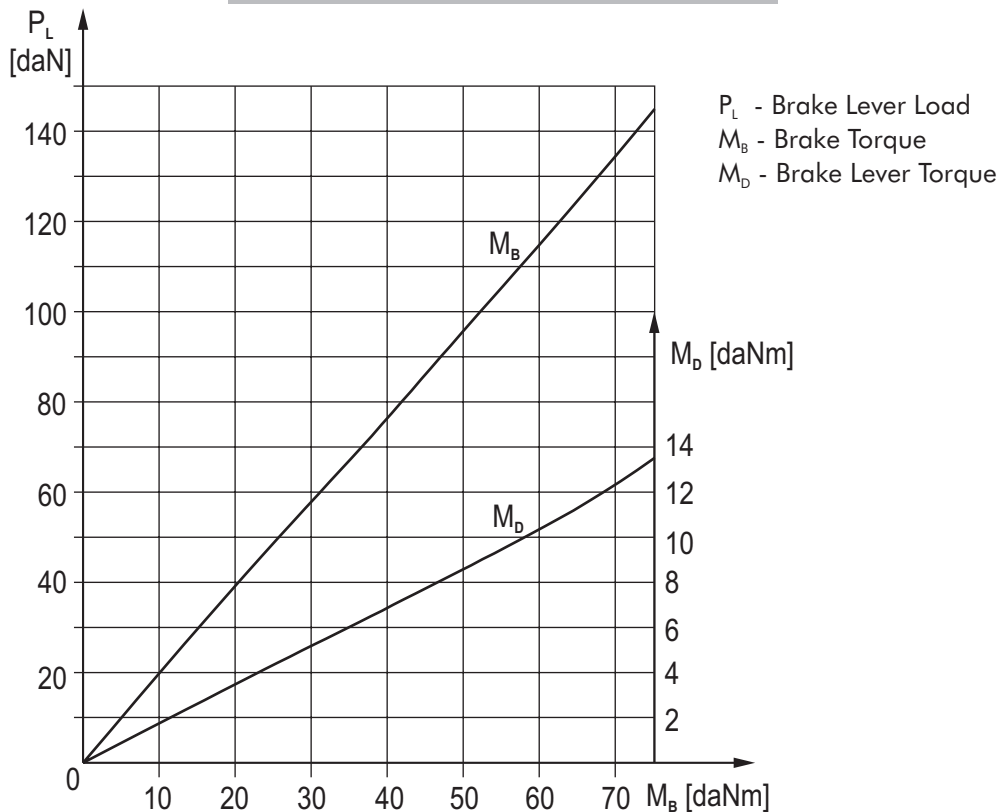
Terminal No.	Connection
1	$U_{d.c.}$
2	No connection
3	0V
4	Output signal

PERMISSIBLE SHAFT LOADS

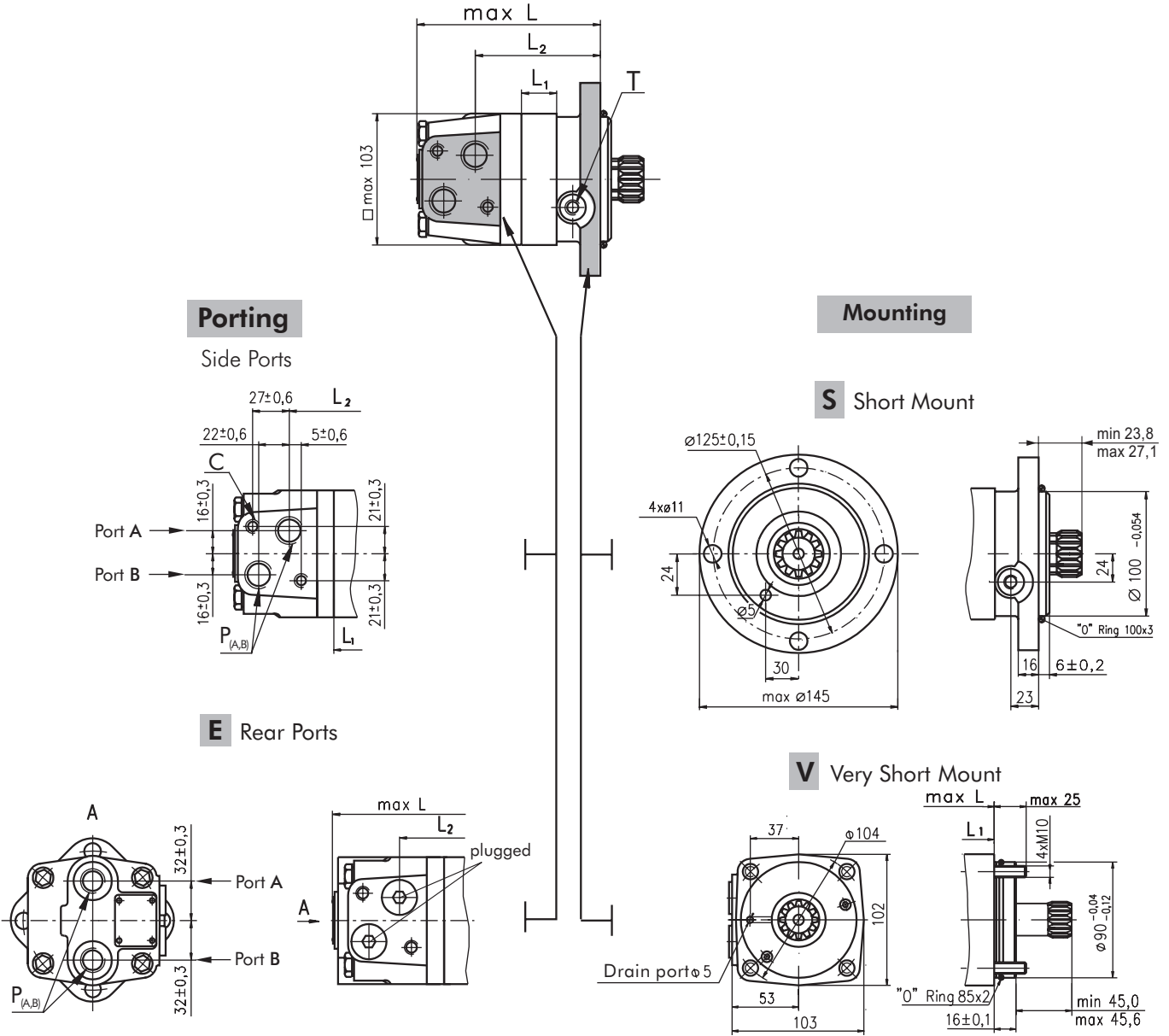
The output shaft runs in tapered bearings that permit high axial and radial forces. Curve "1" shows max. radial shaft load. Any shaft load exceeding the values quoted in the curve will seriously reduce motor life. The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.



FUNCTION DIAGRAM EPMSB



DIMENSIONS AND MOUNTING DATA - EPMS and EPMSV



C: 2xM10-12 mm depth

P_(A,B): 2xG1/2 or 2xM22x1,5-15 mm depth

T: G 1/4 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

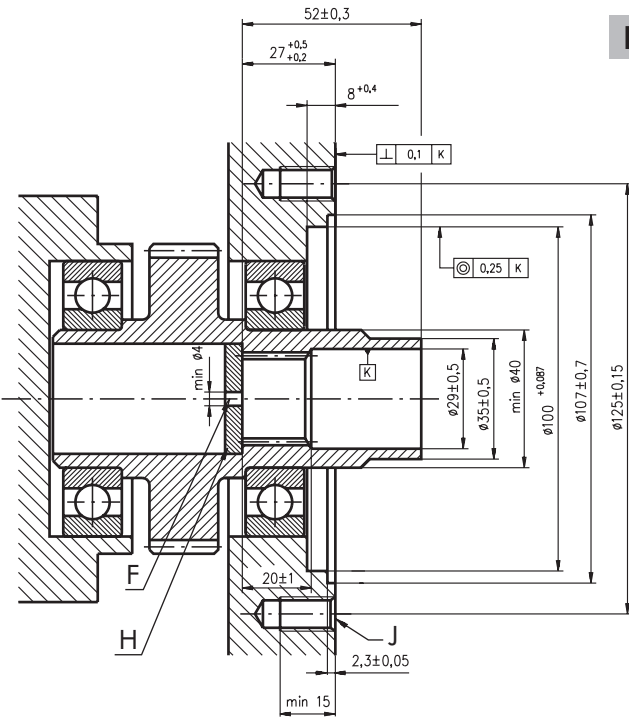
Port A Pressurized - CCW

Port B Pressurized - CW

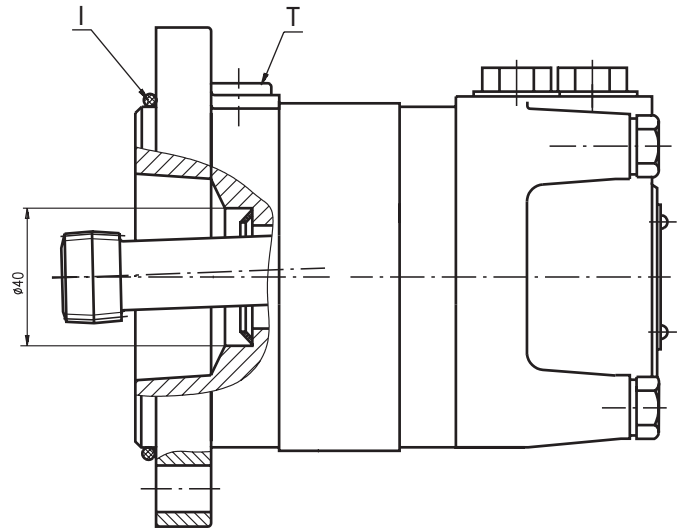
Type	L, mm	L ₂ , mm	Type	L, mm	Type	L, mm	L ₂ , mm	Type	L, mm	L ₁ , mm
EPMS 80	125	83	EPMSSE 80	134	EPMSV 80	91	52	EPMSVE 80	97	14
EPMS 100	129	87	EPMSSE 100	138	EPMSV 100	94	55,5	EPMSVE 100	100	17,4
EPMS 125	133	90	EPMSSE 125	141	EPMSV 125	100	60	EPMSVE 125	105	21,8
EPMS 160	139	96	EPMSSE 160	147	EPMSV 160	106	66	EPMSVE 160	111	27,8
EPMS 200	146	103	EPMSSE 200	154	EPMSV 200	113	73	EPMSVE 200	118	34,8
EPMS 250	155	112	EPMSSE 250	163	EPMSV 250	121	81,5	EPMSVE 250	126	43,5
EPMS 315	166	123	EPMSSE 315	174	EPMSV 315	133	93	EPMSVE 315	138	54,8
EPMS 400	181	138	EPMSSE 400	189	EPMSV 400	147	108	EPMSVE 400	153	69,4
EPMS 475	194	152	EPMSSE 475	203	EPMSV 475	161	121	EPMSVE 475	166	82,6
EPMS 525	185,9	143,9	EPMSSE 525	194,6	EPMSV 525	152,9	116,5	EPMSVE 525	161,5	74,5
EPMS 565	209	167	EPMSSE 565	218	EPMSV 565	180	136	EPMSVE 565	181	98,3

DIMENSIONS OF THE ATTACHED COMPONENT

For EPMS

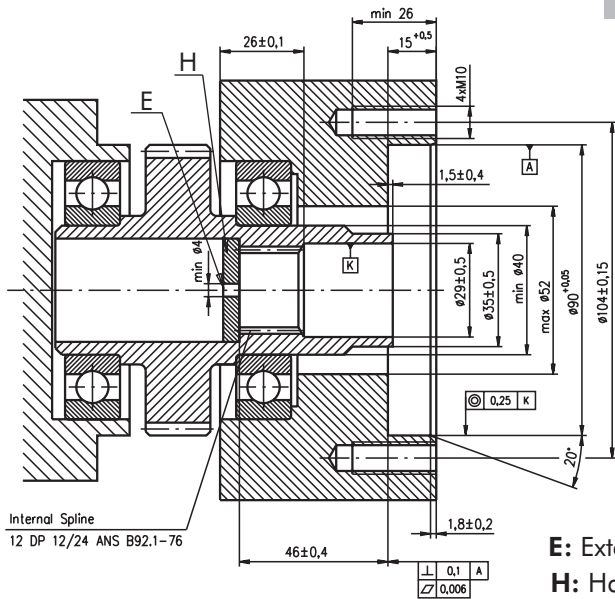


F: Oil circulation hole
H: Hardened stop plate

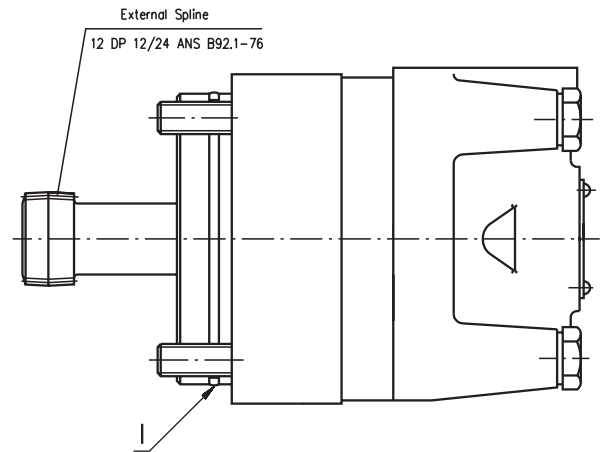


I: O- Ring 100x3mm
J: 4xM10-16 mm depth, 90°
T: Drain connection G1/4 or M14x1,5

For EPMSV



E: External drain hole
H: Hardened stop plate
I: O- Ring 85x2mm



DRAIN CONNECTION

A drain line ought to be used when pressure in the return line can exceed the permissible pressure. It can be connected:

- For EPMS at the drain port of the motor;
- For EPMSV at the drain connection of the attached component. The maximum pressure in the drain line is limited by the attached component and its shaft seal.

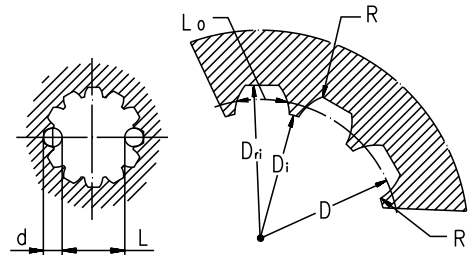
The drain line must be possible for oil to flow freely between motor and attached component and must be led to the tank. The maximum pressure in the drain line is limited by the attached component and its seal.

INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

Standard ANSI B92.1-1976, class 5
[$m=2.1166$; corrected $x.m=+0,8$]

Fillet Root Side Fit		mm
Number of Teeth	z	12
Diametral Pitch	DP	12/24
Pressure Angle		30°
Pitch Dia.	D	25,4
Major Dia.	D_{ri}	28,0 _{-0,1}
Minor Dia.	D_i	23,0 ^{+0,033}
Space Width [Circular]	L_o	4,308±0,020
Fillet Radius	R	0,2
Max. Measurement between Pin	L	17,62 ^{+0,15}
Pin Dia.	d	4,835±0,001

Above are when hardened



Hardening Specification:
HRC 60±2
Effective case depth (HRC 52) 0,7±0,2 mm
Materiall 20 MoCr4 DIN 17210 or better

ORDER CODE

	1	2	3	4	5	6	7	8	9	10	11
EPMS											

Pos. 1 - Mounting Flange

- omit - SAE A-4 mount, four holes
- A** - SAE A-2 mount, two holes
- F** - Magneto mount, four holes
- Q** - Square mount, four holes
- B** - Motor with drum brake
- S** - Short mount
- V** - Very short mount
- W** - Wheel mount

Pos. 2 - Port type

- omit - Side ports
- E** - Rear ports

Pos. 3 - Displacement code

- 80** - 80,5 [cm³/rev]
- 100** - 100,0 [cm³/rev]
- 125** - 125,7 [cm³/rev]
- 160** - 159,7 [cm³/rev]
- 200** - 200,0 [cm³/rev]
- 250** - 250,0 [cm³/rev]
- 315** - 314,9 [cm³/rev]
- 400** - 397,0 [cm³/rev]
- 475** - 474,6 [cm³/rev]
- 525** - 522,7 [cm³/rev]
- 565** - 564,9 [cm³/rev]

Pos. 4 - Shaft Extensions*

- C** - ø32 straight, Parallel key A10x8x45 DIN6885
- CO** - ø1 ¼" straight, Parallel key 5/16"x5/16"x1 ¼" BS46
- K** - ø35 tapered 1:10, Parallel key B6x6x20 DIN6885
- SL** - ø34,85 p.t.o. DIN 9611 Form 1
- SH** - ø1 ¼" splined 14T ANSI B92.1-1976

Pos. 5 - Ports

- omit - BSPP (ISO 228)
- M** - Metric (ISO 262)

Pos. 6 - Actuating Direction**

- R** - Right
- L** - Left

Pos. 7 - Speed Monitoring

- omit - none
- T** - with tacho connection (only for side ports)
- RS-P** - with speed sensor (PNP pull-down resistor)
- RS-N** - with speed sensor (NPN pull-up resistor)

Pos. 8 - Special Features (see Specification data-page 65)

- omit - none
- LL** - Low Leakage
- LSV** - Low Speed Valve

Pos. 9 - Rotation

- omit - Standard Rotation
- R** - Reverse Rotation

Pos. 10 - Option (Paint)***

- omit - no Paint
- P** - Painted
- PC** - Corrosion Protected Paint

Pos. 11 - Design Series

- omit - Factory specified

NOTES:
* The permissible output torque for shafts must be not exceeded!
** Only for EPMSB
*** Color at customer's request.

The hydraulic motors are mangano-phosphatized as standard.