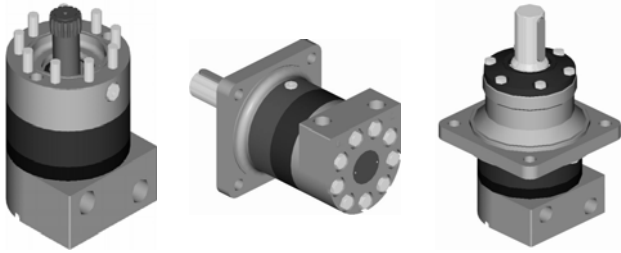
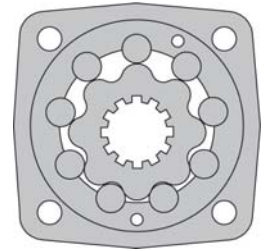


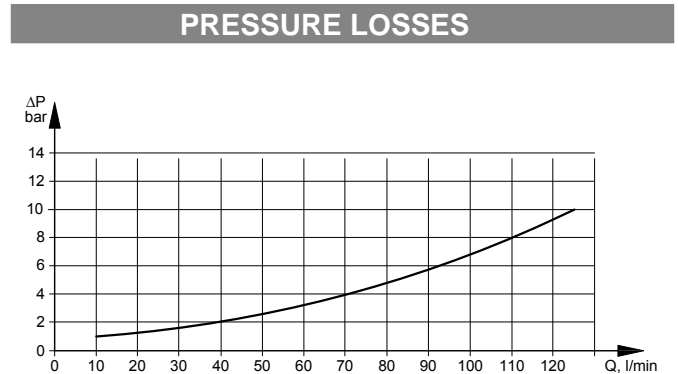
LOW SPEED HIGH TORQUE MOTORS OTM



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



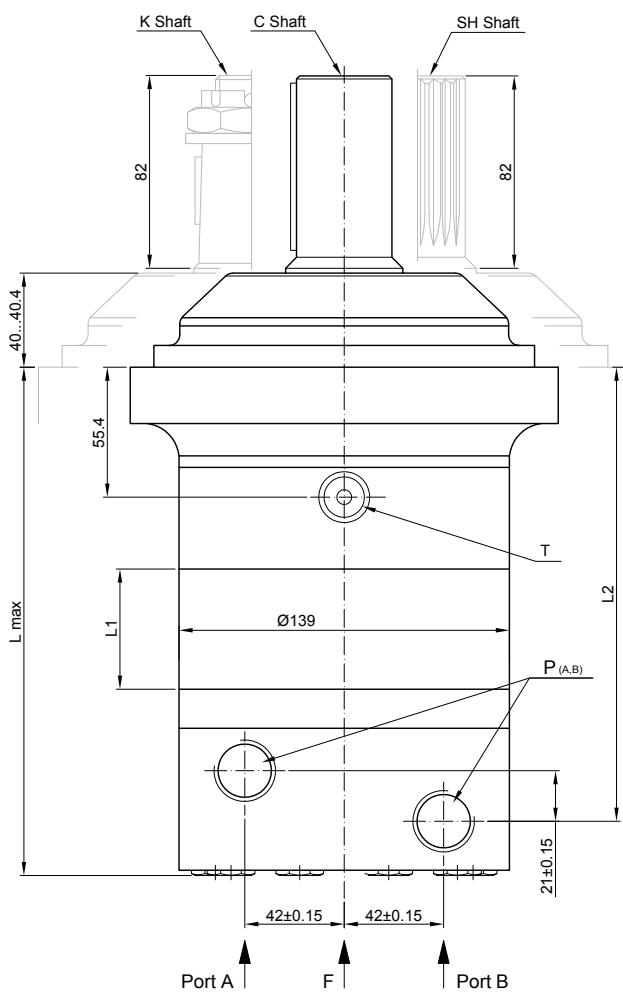
GENERAL	
Displacement, (cm ³ /rev)	201,4 ÷ 523,6
Max. Speed, (RPM)	625 ÷ 240
Max. Torque, (daNm)	72 ÷ 172
Max. Output, (kW)	29 ÷ 37,5
Max. Pressure Drop, (bar)	230 ÷ 185
Max. Oil Flow, (l/min)	125
Min. speed, (RPM)	5
Permissible Shaft Loads, (daN)	P _a =1000
Pressure fluid	Mineral based- HLP(DIN 51524) 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)



SPECIFICATION DATA								
Type			OTM 200	OTM 250	OTM 315	OTM 400	OTM 470	OTM 500
Displacement [cm ³ /rev.]			201,4	251,8	326,3	410,9	475	523,6
Max. Speed, [RPM]	cont.		625	500	380	305	260	240
	int.		750	600	460	365	315	285
Max. Torque [daNm]	cont.		72	90	116	147	171	172
	int.		102	128	163	206	215	215
	peak		115	144	186	235	240	240
Max. Output [kW]	cont.		41	41	41	41	41	37,5
	int.		65	70	70	75	55	51
Max. Pressure Drop [bar]	cont.		250	250	250	250	250	230
	int.		350	350	350	350	315	280
	peak		400	400	400	400	350	320
Max. Oil Flow [l/min]	cont.		125	125	125	125	125	125
	int.		150	150	150	150	150	150
Max. Inlet Pressure, [bar]	cont.		270	270	270	270	270	270
	int.		370	370	370	370	370	370
	peak		420	420	420	420	420	420
Max. Return Pressure w/o Drain Line or Max. Pressure in Drain Line, [bar]	cont.	0-100	RPM	75	75	75	75	75
	cont.	100-300	RPM	40	40	40	40	40
	cont.	>300	RPM	20	20	20	20	-
	int.	0-max.	RPM	75	75	75	75	75
Max. Return Pressure with Drain Line [bar]	cont.		270	270	270	270	270	270
	int.		370	370	370	370	370	370
	peak		420	420	420	420	420	420
Max. Starting Pressure with Unloaded Shift, [bar]			6	6	6	6	6	6
Min. Starting Torque [daNm]			60	75	97	122	142	143
Min. Speed, [RPM]			5	5	5	5	5	5
Weight, [kg]	MTM		26,9	27,3	28,1	29	29,7	30,2
	MTMW		27,4	27,8	28,6	29,5	30,2	30,7
	MTMV		15,7	16,1	16,9	17,8	18,5	19

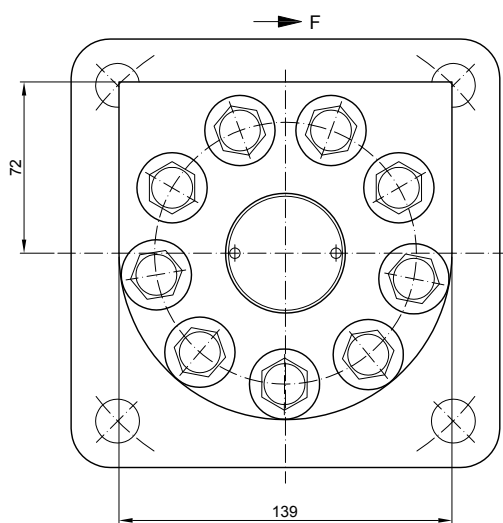
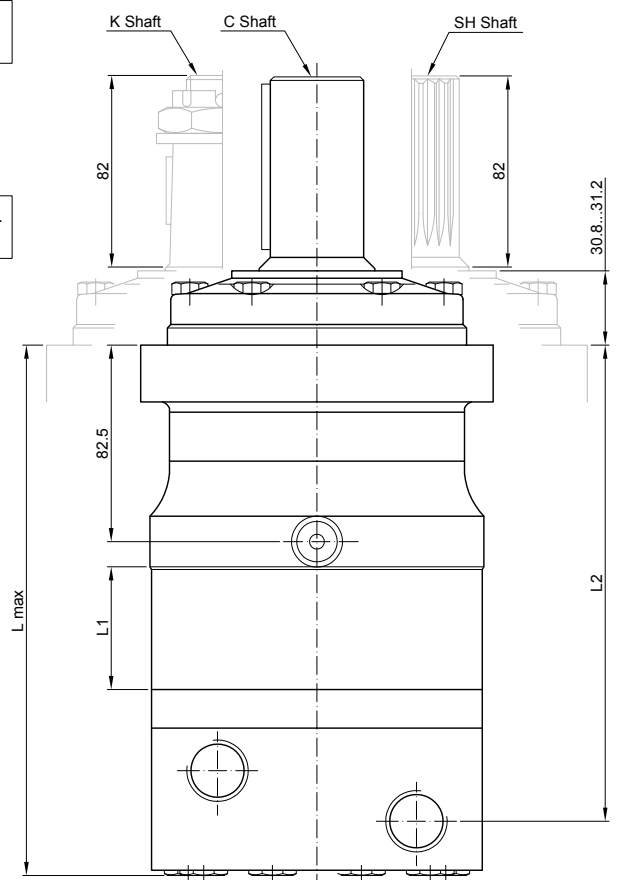
Intermittent operation: the permissible values may occur for max. 10% of every minute.
Peak load: the permissible values may occur for max. 1% of every minute.

DIMENSIONS - OTM AND OTMC



Shaft Dim.
See page 6

Flange Dim.
See page 5



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

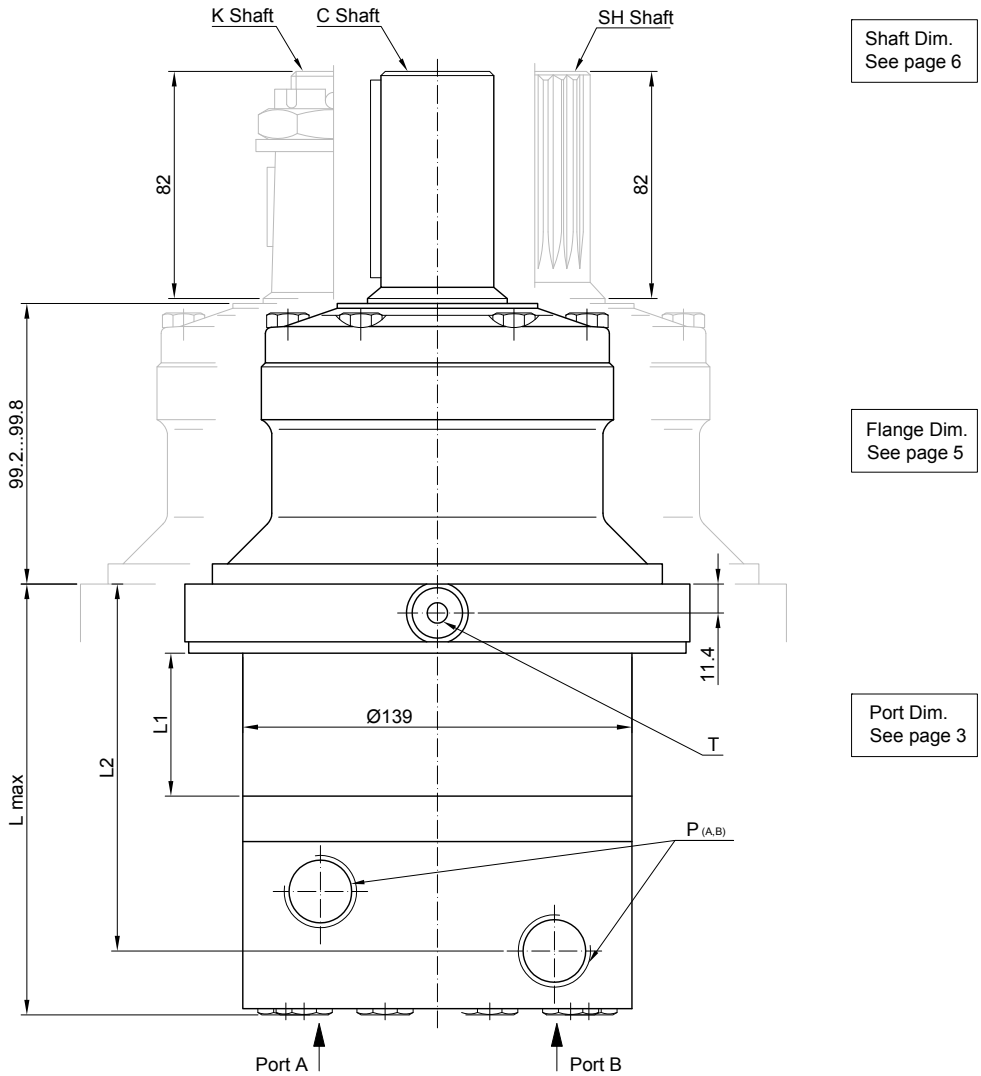
Reverse Rotation
Viewed from Shaft End
Port A Pressurized - **CCW**
Port B Pressurized - **CW**

P_(A,B) :2xG3/4 - 17 mm depth

T :G1/4 - 12 mm depth (plugged)

Type	L _{max} , mm	L ₂ , mm	Type	L _{max} , mm	L ₂ , mm	L ₁ , mm
OTM 200	188	163,3	OTMC 200	197	174	25
OTM 250	194	169,6	OTMC 250	203	180,3	31,3
OTM 315	203	178,5	OTMC 315	212,2	189,5	40,5
OTM 400	214	189,3	OTMC 400	223	200	51
OTM 470	222	197,3	OTMC 470	231	208	59
OTM 500	228	203,3	OTMC 500	237	214	65

DIMENSIONS - OTMW



$P_{(A,B)}$:2xG3/4 - 17 mm depth
 T :G1/4 - 12 mm depth (plugged)

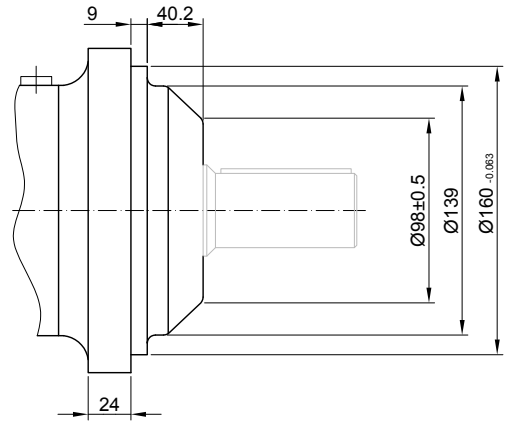
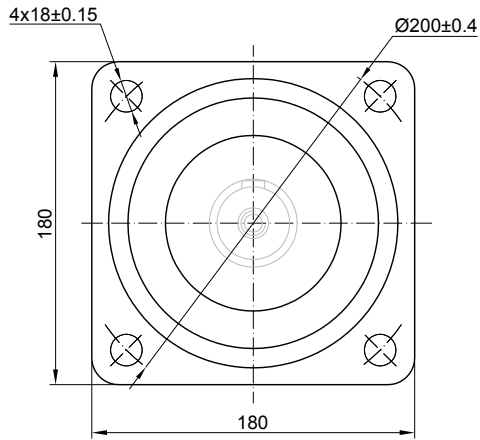
Standard Rotation
 Viewed from Shaft End
 Port A Pressurized - CW
 Port B Pressurized - CCW

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

Type	L _{max} , mm	L ₂ , mm	L ₁ , mm
OTMW 200	129	104,8	25
OTMW 250	135	112,1	31,3
OTMW 315	144	120,3	40,5
OTMW 400	155	130,8	51
OTMW 470	163	138,8	59
OTMW 500	169	144,8	65

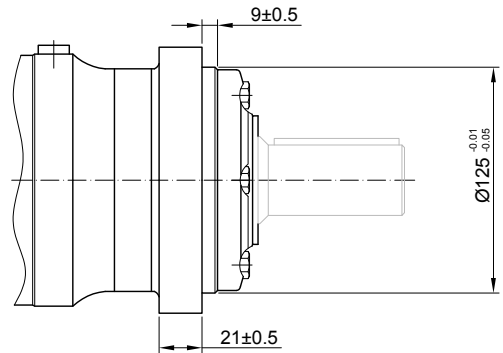
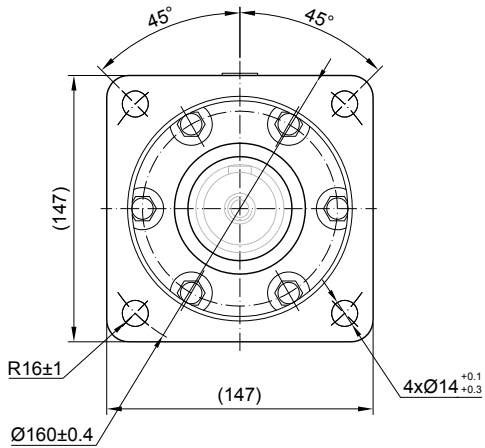
DIMENSIONS OF MOUNTING FOR OTM

4 - Bolt flange spigot diameter $\varnothing 160$ mm - BC $\varnothing 200$ mm.



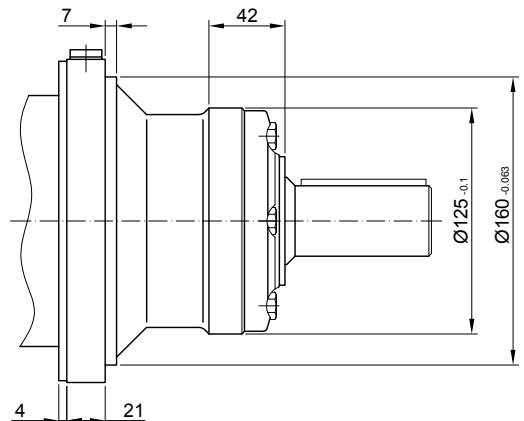
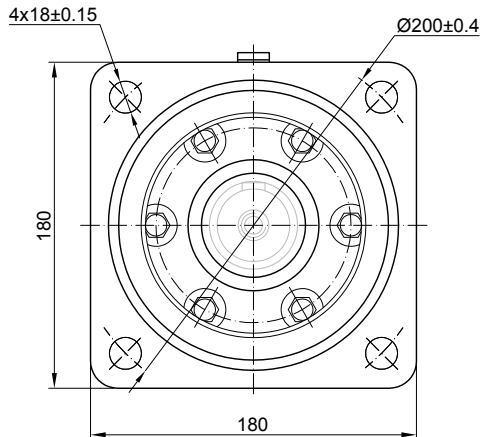
DIMENSIONS OF MOUNTING FOR OTM C

4 - Bolt flange spigot diameter $\varnothing 125$ mm - BC $\varnothing 160$ mm.



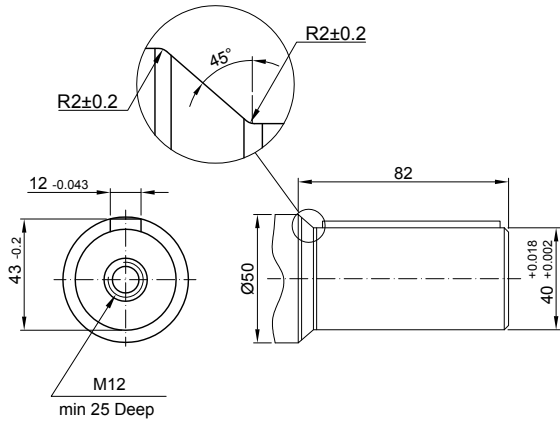
DIMENSIONS OF MOUNTING FOR OTM W

4 - Bolt flange, Wheel Motor spigot diameter $\varnothing 160$ mm - BC $\varnothing 200$ mm.

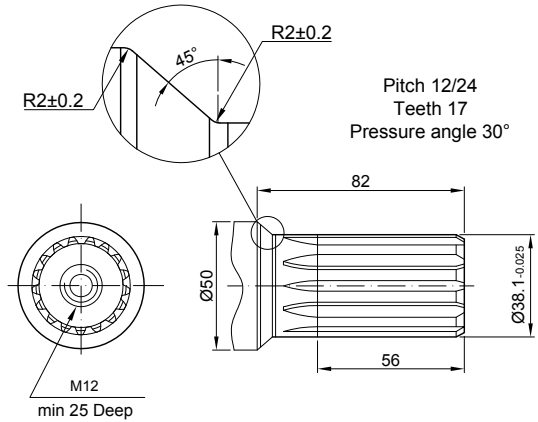


SHAFT EXTENSIONS

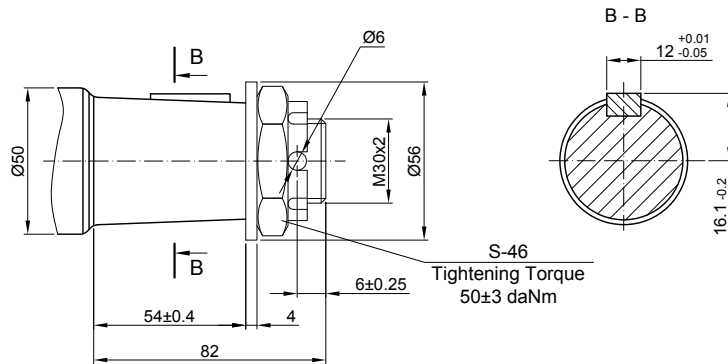
C Ø40 straight, Parallel key A12x8x70 DIN 6885
Max. Torque 132,8 daNm



SH Ø1 1/2" splined 17T, DP12/24 ANSI B92.1-1976
Max. Torque 132,8 daNm

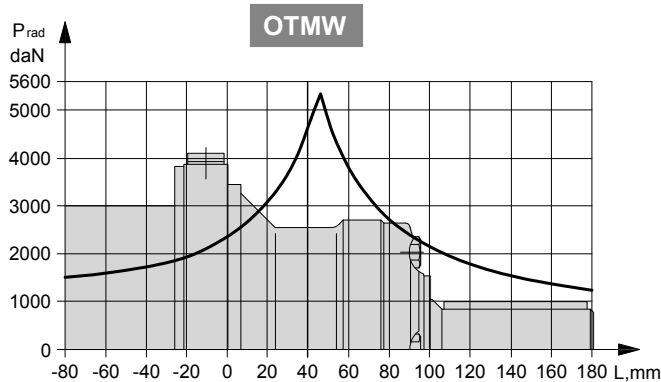
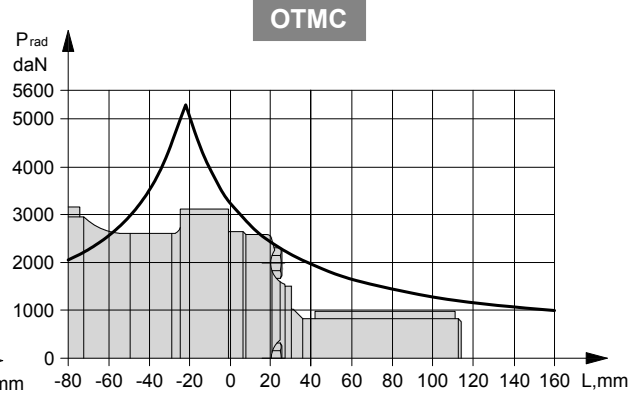
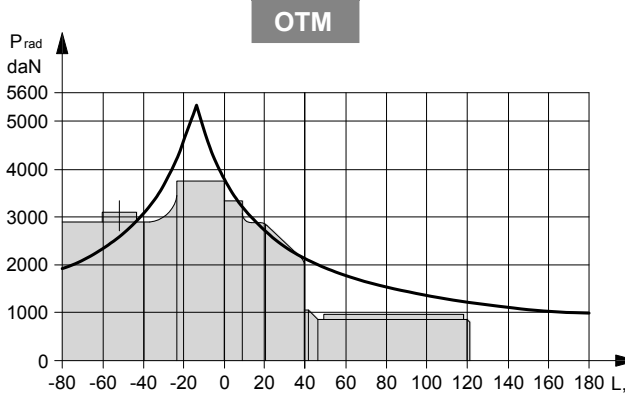


K tapered 1:10, Parallel key B12x8x28 DIN 6885
Max. Torque 210,7 daNm

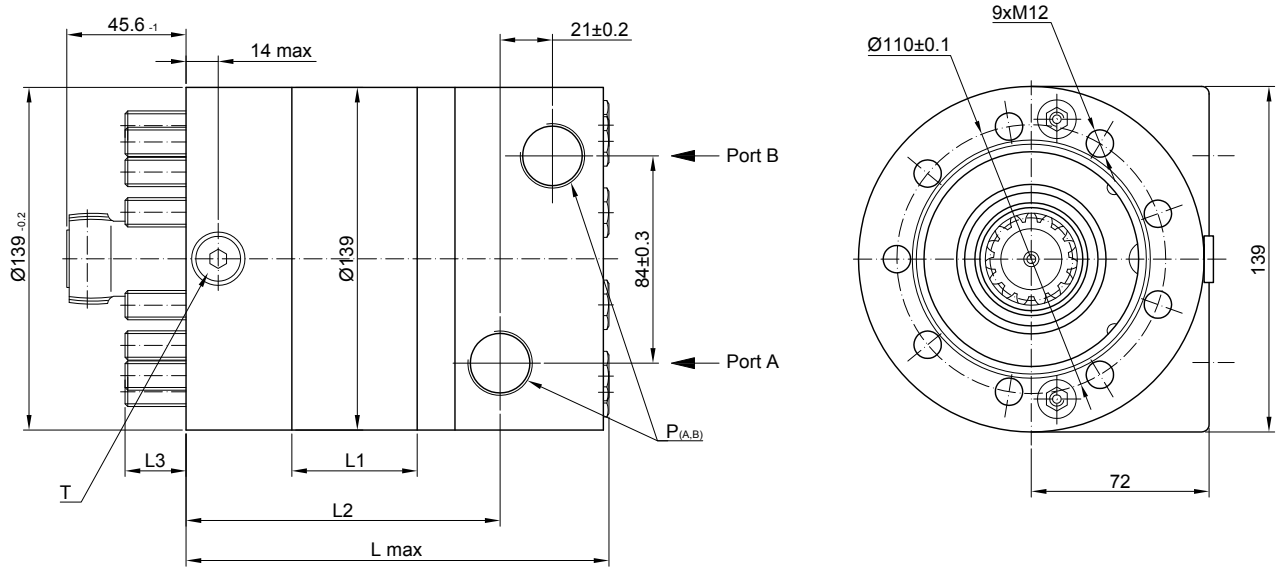


PERMISSIBLE SHAFT LOADS

The curves apply to a B10 bearing life (ISO281) of 2000 hours at 200 RPM



OUTLINE DIMENSIONS REFERENCE FOR OTMV



$P_{(A,B)}$:2xG3/4 - 17 mm depth

T :G1/4 - 12 mm depth (plugged)

Standard Rotation

Viewed from Shaft End

Port A Pressurized - **CW**

Port B Pressurized - **CCW**

Reverse Rotation

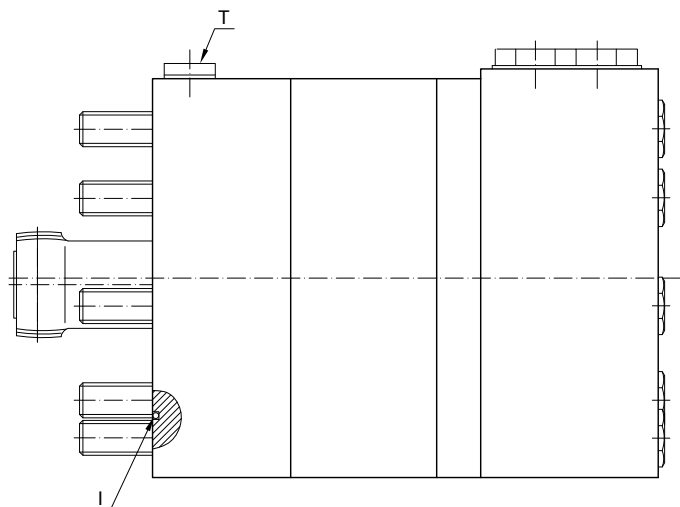
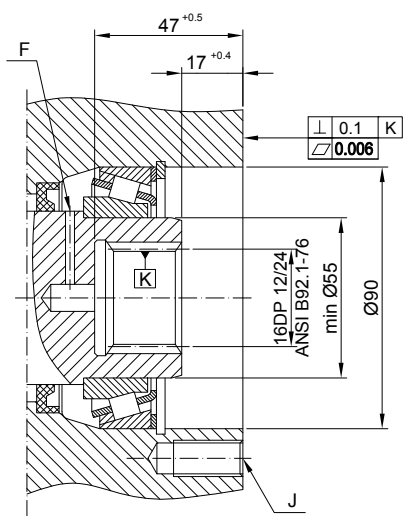
Viewed from Shaft End

Port A Pressurized - **CCW**

Port B Pressurized - **CW**

Type	L1 , mm	L2 , mm	L3 , mm	L , mm
OTMV 200	25	106,5	27,8	151
OTMV 250	31,3	112,8	26,5	157
OTMV 315	40,5	122	22,3	167
OTMV 400	51	132,5	21,8	177
OTMV 470	59	140,5	23,8	185
OTMV 500	65	146,5	27,8	191

DIMENSIONS OF THE ATTACHED COMPONENT FOR OTMV



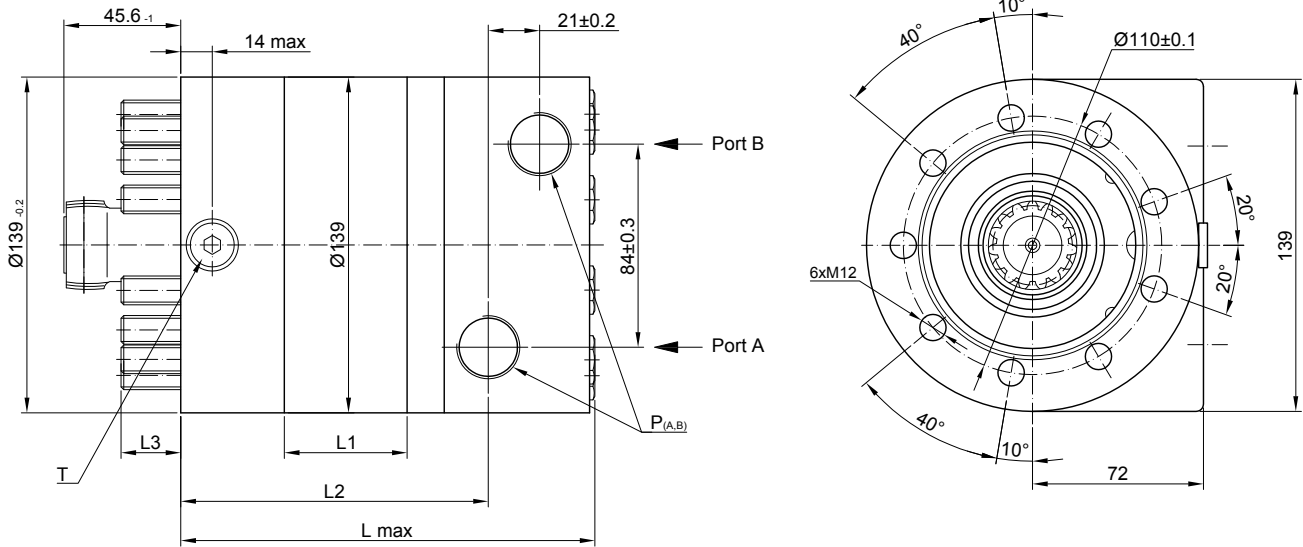
F: Oil circulation hole

J: 9xM12 - 30 mm depth, 40°, Ø110±0,1

I: O- Ring 93x1,5 mm

T: Drain connection G1/4

OUTLINE DIMENSIONS REFERENCE FOR OTM6V



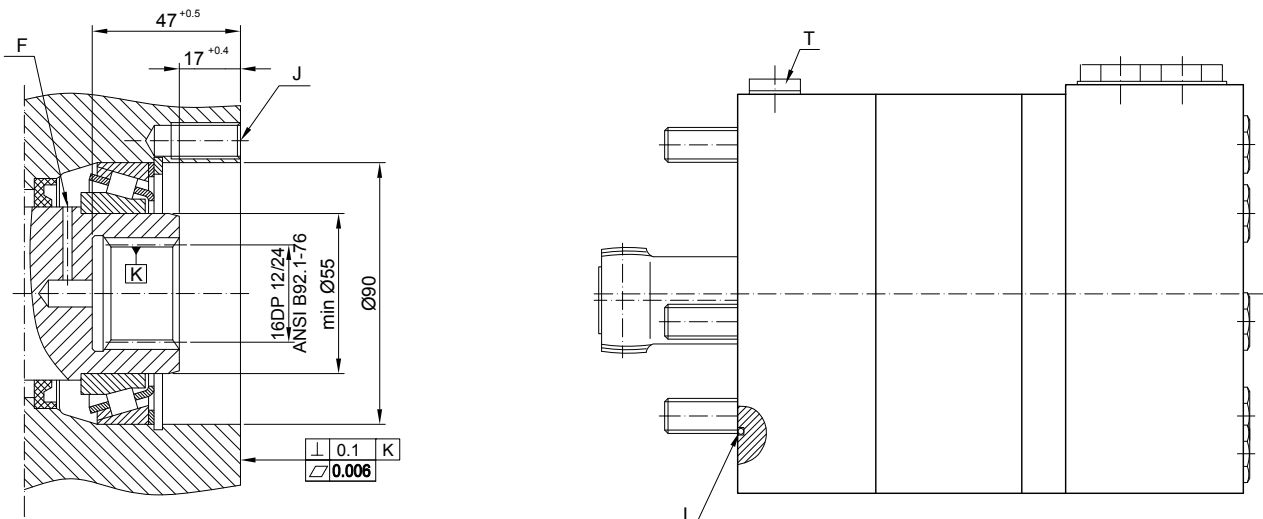
$P_{(A,B)}$:2xG3/4 - 17 mm depth
 T :G1/4 - 12 mm depth (plugged)

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	L1 , mm	L2 , mm	L3 , mm	L , mm
OTM6V 200	25	106,5	27,8	151
OTM6V 250	31,3	112,8	26,5	157
OTM6V 315	40,5	122	22,3	167
OTM6V 400	51	132,5	21,8	177
OTM6V 470	59	140,5	23,8	185
OTM6V 500	65	146,5	27,8	191

DIMENSIONS OF THE ATTACHED COMPONENT FOR OTM6V



F: Oil circulation hole
J: 9xM12 - 30 mm depth, 40°, Ø110±0.1
 or 6xM12 - 30 mm depth, situated in accordance
 with the bolts M12, shown on Fig. 1, Ø110±0.1

I: O-Ring 93x1,5 mm
T: Drain connection G1/4

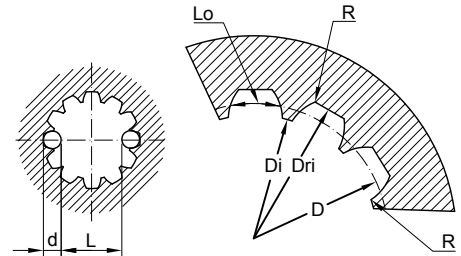
DRAIN CONNECTION

A drain line ought to be used when pressure in the return line can exceed the permissible pressure. It can be connected 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 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=+1,0]

Fillet Root Side Fit		mm
Number of Teeth	z	16
Pitch DP		12 / 24
Pressure Angle		30°
Pitch Dia.	D	33,8656
Major Dia.	Dri	38,4 ^{+0.4}
Minor Dia.	Di	32,15 ^{+0.04}
Space Width [Circular]	Lo	4,516±0,037
Fillet Radius	R	0,5
Max. Measurement between Pin	L	26,9 ^{+0.10}
Pin Dia.	d	4,835±0,001



Hardening Specification:
on the surface HV=750±50
0,7±0,2 mm under the surface HV=560
Material 20 MoCr4 DIN 17210 or better

ORDER CODE

	1	2	3	4	5	6	7	8
OTM								

1	Mounting Flange
omit	4-Bolt flange, spigot dia. Ø160, BC Ø200
C	4-Bolt flange, spigot dia. Ø125, BC Ø160
W	Wheel motor
V	Very short mount, 9xM12 mounting bolts
V6	Very short mount, 6xM12 mounting bolts
2	Displacement code
200	201,4 [cm³/rev]
250	251,8 [cm³/rev]
315	326,3 [cm³/rev]
400	410,9 [cm³/rev]
470	475,0 [cm³/rev]
500	523,6 [cm³/rev]
3	Shaft Extensions
C	ø40 straight, Parallel key A12x8x70 DIN6885
K	ø45 tapered 1:10, Parallel key B12x8x28 DIN6885
SH	ø1 1/2" splined 17T ANSI B92.1 - 1976

4	Ports
omit	BSPP (ISO 228)
5	Special Features
omit	none
LL	Low Leakage
LSV	Low Speed Valve
6	Rotation
omit	Standard Rotation
R	Reverse Rotation
7	Option (Paint)
omit	no paint
P	Painted
PC	Corrosion Protected Paint
8	Design Series
omit	Factory specified