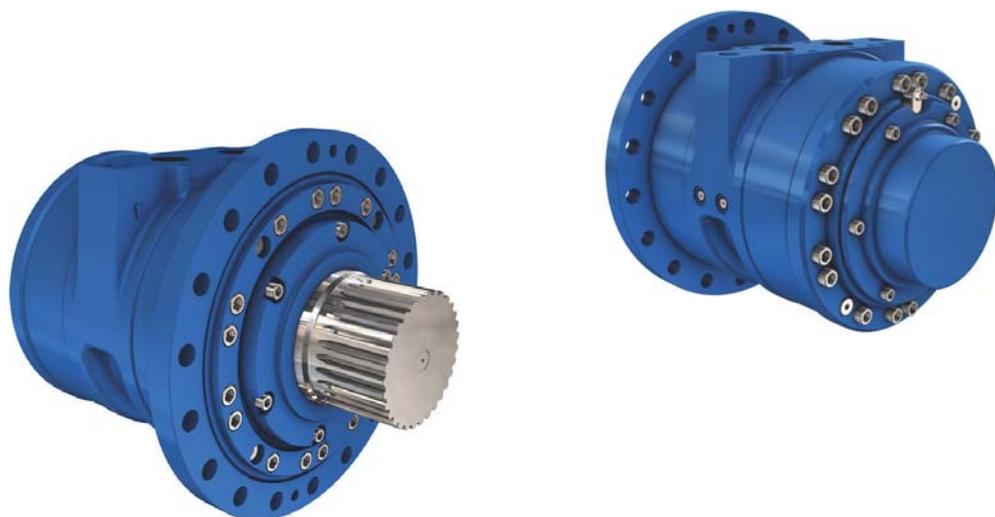


MI88

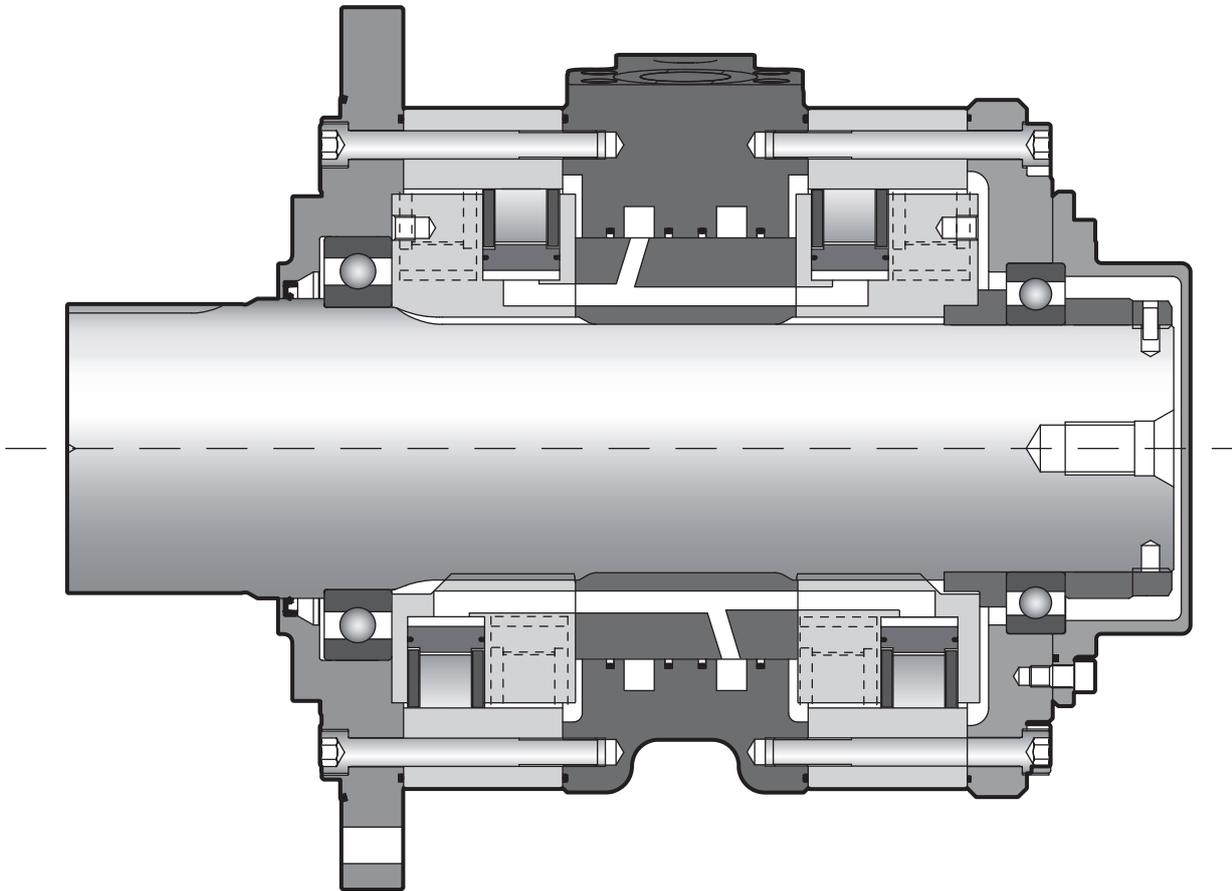
HYDRAULIC MOTORS



T E C H N I C A L C A T A L O G



CHARACTERISTICS



C	① cm ³ /tr [cu.in/rev.]	Theoretical torque		Max.power ① kW [HP]	Max.speed Ⓜ tr/min[RPM]	Pression max. bar [PSI]
		at ΔP 100 bar Nm	at ΔP 1000 PSI [lb.ft]			
8	7000 [426,9]	11130	[5 660]	265 [355]	140 [140]	450 [6 527]
9	7920 [483,0]	12593	[6 404]		130 [130]	
0	8800 [536,7]	13992	[7 115]		120 [120]	
2	10400 [634,3]	16536	[8 409]		100 [100]	

① First displacement



CONTENT



MODEL CODE

4

Model code

MOTORS

7

Motors

- Motor with splined shaft 7
- Efficiency and output torque 8

VALVING SYSTEM

9

Valving systems

- Hydraulic connections 9

INSTALLATION

11

Installation

- Lifting method 11
- Torque arms mounting 11
- Bracket mounting 12

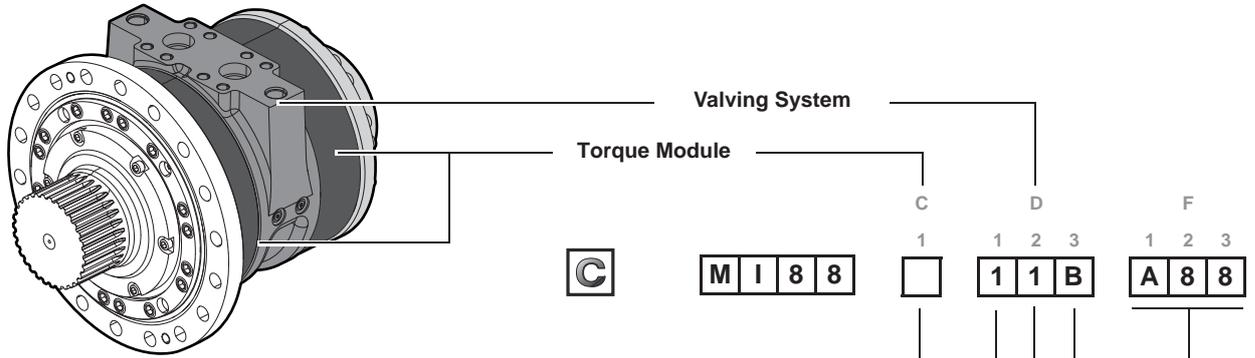
OPTIONS

13

Options



MODEL



C1

Cam ring type

1 displacement
cm³/tr [cu.in/rev.]

7 000 [427.2]	8
7 920 [483.3]	9
8 800 [537.0]	0
10 400 [634.6]	2

D1

Valving type

1-displacement valving

1

D2

Valving cover

Without mounting

1

D3

Connection type

- R-L ports: SAE flange DN 51 - ISO 6162 (with UNC screws)
- 1-2-3-4 ports: SAE J514 with O-ring seal - ISO 11926-1

B

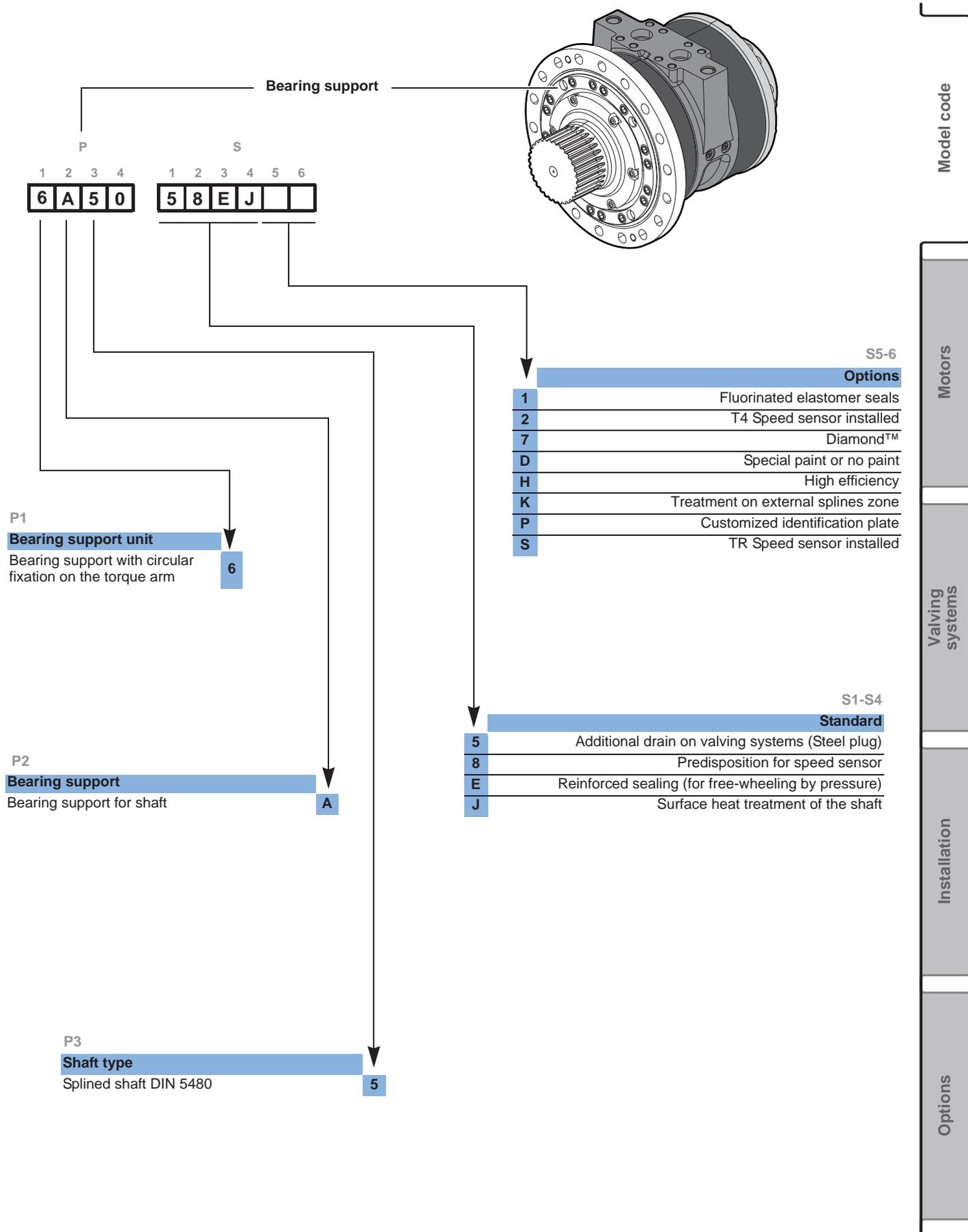
F1-F3

Valving size

A88



CODE





Methodology :

This document is intended for manufacturers of machines that incorporate Poclain Hydraulics products. It describes the technical characteristics of Poclain Hydraulics products and specifies installation conditions that will ensure optimum operation. This document includes important comments concerning safety. They are indicated in the following way:



Safety comment.

This document also includes essential operating instructions for the product and general information. These are indicated in the following way:



Essential instructions.



General information .



Information on the model number.



Weight of component without oil.



Volume of oil.



Units.



Tightening torque.



Screws.



Information intended for Poclain-Hydraulics personnel.

The views in this document are created using metric standards.

The dimensional data is given in mm and in inches (inches are between brackets and italic)

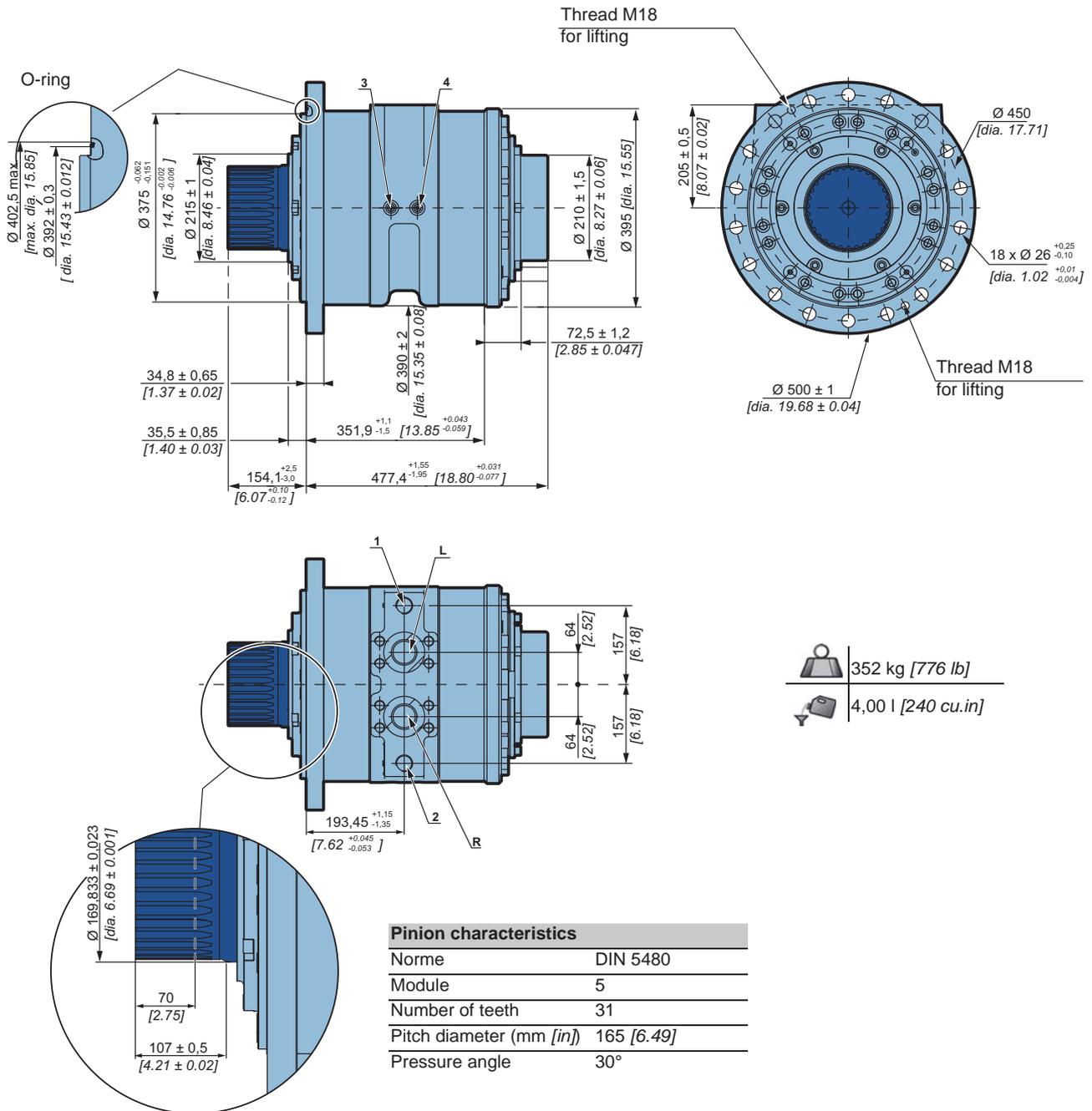




MOTORS

Motor with splined shaft

C	D	F	P	S
1	1 2 3	1 2 3	1 2 3 4	1 2 3 4 5 6
M I 8 8	1 1 B	A 8 8	6 A 5 0	5 8 E J



Model code

Motors

Valving systems

Installation

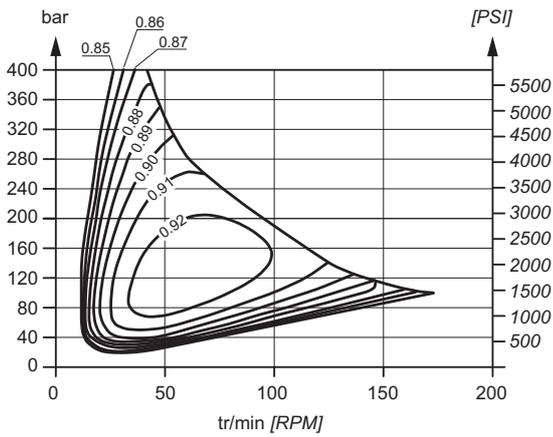
Options



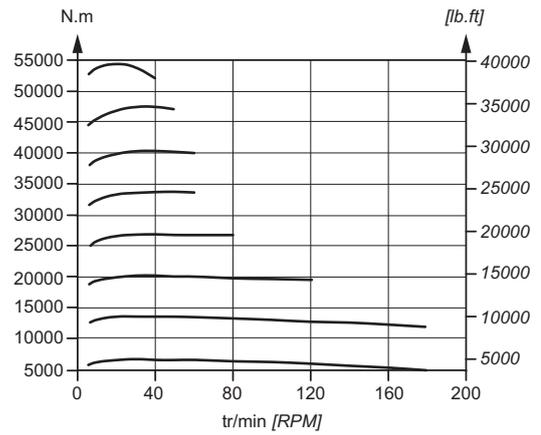
Efficiency and output torque

Overall efficiency

Average values given for guidance for code 0 displacement after 100 hours of operation with HV46 hydraulic fluid at 50°C [122°F].



Actual output torque

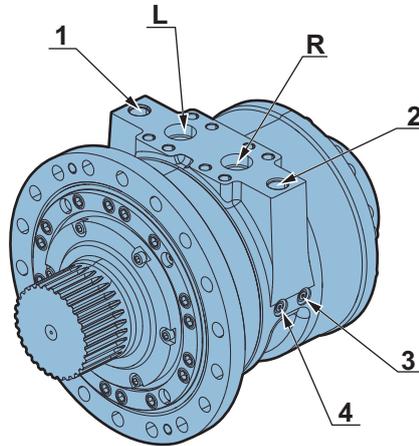


For a precise calculation, consult your Poclain Hydraulics application engineer.



VALVING SYSTEM

Hydraulic connections



	C	D	F	P	S
	1	1 2 3	1 2 3	1 2 3 4	1 2 3 4 5 6
M I 8 8		1 1 B	A 8 8	6 A 5 0	5 8 E J
			Power supply	Case drain	Pressure gauge
			R-L	1 - 2	3 - 4
	B		SAE flange DIN 51	1" 5/16"-12UNF	7/16" - 20 UNF
Max. pressures	bar [PSI]		450 [6 527]	2,5 [36]	450 [6 527]
Instantaneous pressure peaks resistance	bar [PSI]			15 [218]	



You are strongly advised to use the fluids specified in brochure "Installation guide" N° 801478197L.



To find the connections' tightening torques, see the brochure "Installation guide" N° 801478197L.

Model code

Motors

Valving systems

Installation

Options



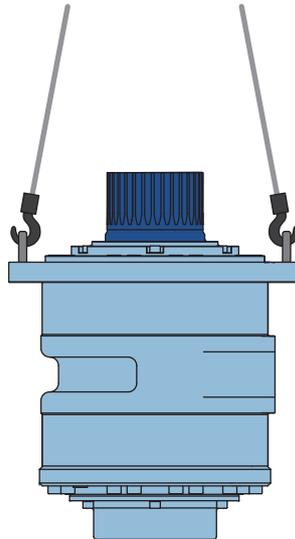


INSTALLATION

Lifting method



Before any lifting we recommend you to check the center of gravity position.

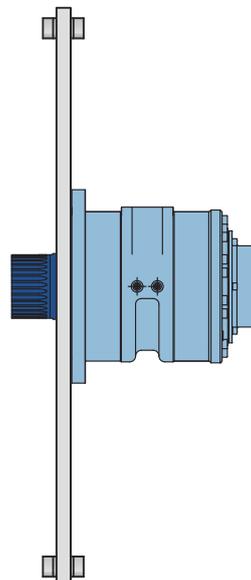


M188 motor can't accept any axial or radial load.

Torque arms mounting

We recommend a length of the torque arm of 800 mm [31.50 in].

In order to avoid residual forces due to misalignment and twisting, the end of the arms must retain freedom of movement in 2 axis.



Model code

Motors

Valving systems

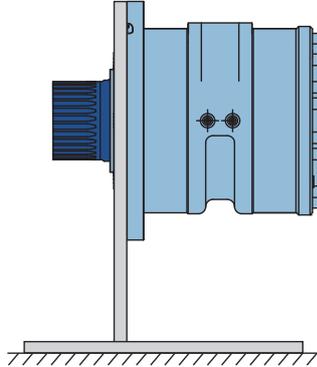
Installation

Options



Bracket mounting

To avoid axial or radial loads, we recommend you to check particularly the alignment of the axis.



For more information see technical catalogue "Installation guide N° 801478197L.



You are strongly advised to use the fluids specified in brochure "Installation guide" N° 801478197L.



To find the connections' tightening torques, see the brochure "Installation guide" N° 801478197L.

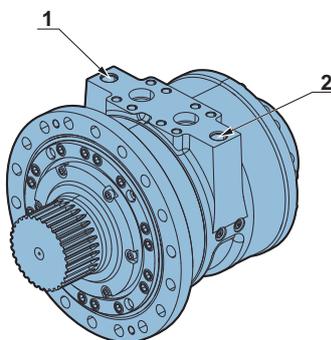


OPTIONS



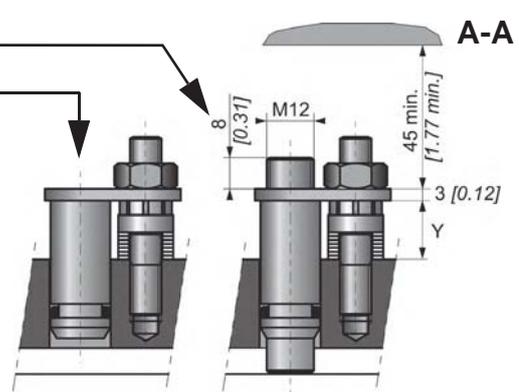
You can accumulate more than one optional part. Consult your Poclain Hydraulics sales engineer.

5 Drain on the valving system



2 S 8 Installed speed sensor or predisposition

Designation	C
T4 Speed sensor installed	2
TR Speed sensor installed (direction of rotation)	S
Predisposition for speed sensor	8



Max. length Y = 18,65 [0.73]
Standard number of pulses per revolution = 60

Look at the "Mobile Electronic" N° A01889D technical catalogue for the sensor specifications and its connection.

To install the sensor, see the "Installation guide" brochure No. 801478197L.

Model code

Motors

Valving systems

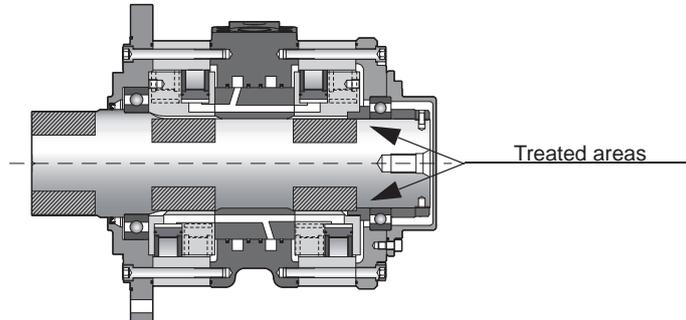
Installation

Options



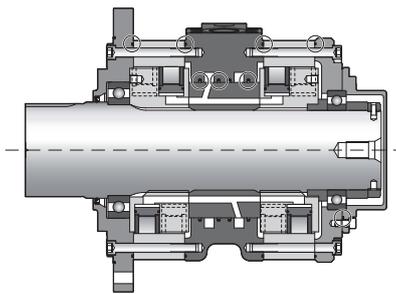
J Treated shaft

Heat treatment on the indicated bearing radius and splines.



1 Fluorinated elastomer seals

Nitrile seals marked in the figure below replaced by fluorinated elastomer seals.



Consult your Poclain Hydraulics sales engineer.

7 Diamond™

Special treatment of the motor core which considerably increases its strength, making the motor much more tolerant to temporary instances of the operating conditions being exceeded.

D Special paint or no paint

The motors are delivered with Poclain Hydraulics yellow ochre primer as standard.



Consult your Poclain Hydraulics application engineer for other colors of primer or topcoat.

H High efficiency

Reinforced piston sealing to improve volumetric efficiency.



For a precise calculation, consult your Poclain Hydraulics application engineer.



P Customized identification plate

Your part number can be engraved on the plate.



Consult your Poclain Hydraulics application engineer for other possibilities.

E Reinforced sealing

For free-wheeling by pressure.

K Treatment on external splines zone

Model code

Motors

Valving systems

Installation

Options



Poclain Hydraulics reserves the right to make any modifications it deems necessary to the products described in this document without prior notification. The information contained in this document must be confirmed by Poclain Hydraulics before any order is submitted.

Illustrations are not binding.

The Poclain Hydraulics brand is the property of Poclain Hydraulics S.A.

 06/09/2018

 A43291F

 A43292G

