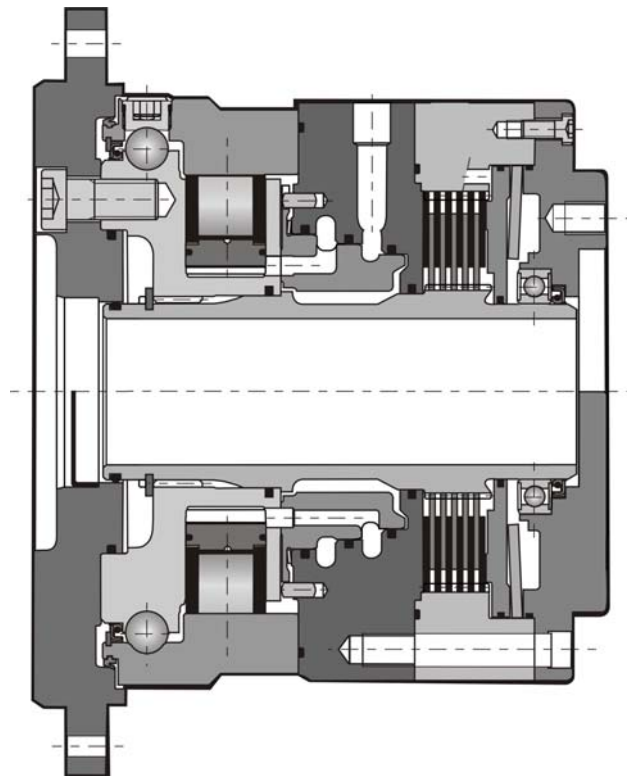


MK09

COMPACT MOTORS



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



Motor Inertia 0.3 kg.m²

C	① cm ³ /tr [cu.in/rev.]	Theoretical torque ①		Max.power ① kW [HP]	Max. speed ① tr/min[RPM]	Max. pressure bar [PSI]
		at 100 bar Nm	at 1000 PSI [lb.ft]			
8	667 [40,7]	1 061	[539]	30 [40]	100	400 [5 802]
9	750 [45,7]	1 193	[606]		90	
0	833 [50,8]	1 324	[674]		80	
2*	1 000 [61,0]	1 590	[809]		65	

* : Comes with Diamond™ option



CONTENT



MODEL CODE 4

CHARACTERISTICS 7

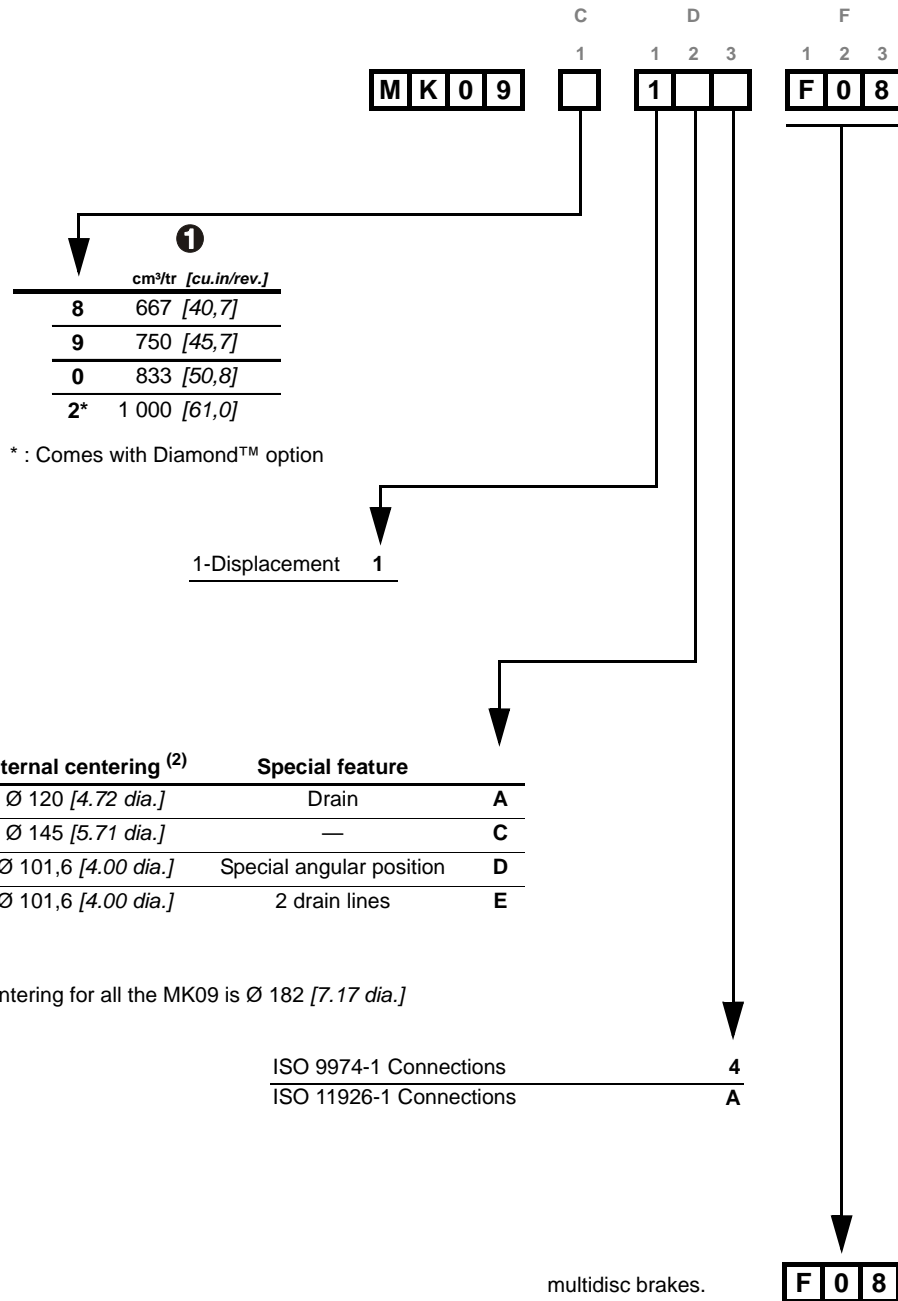
Dimensions for standard 1-displacement motor	7
Rotating fastening screw	7
Load curves	8
Efficiency	8
Chassis mounting	9
Hydraulic connections	9
Brakes	10

OPTIONS 11

Model code
Characteristics
Options

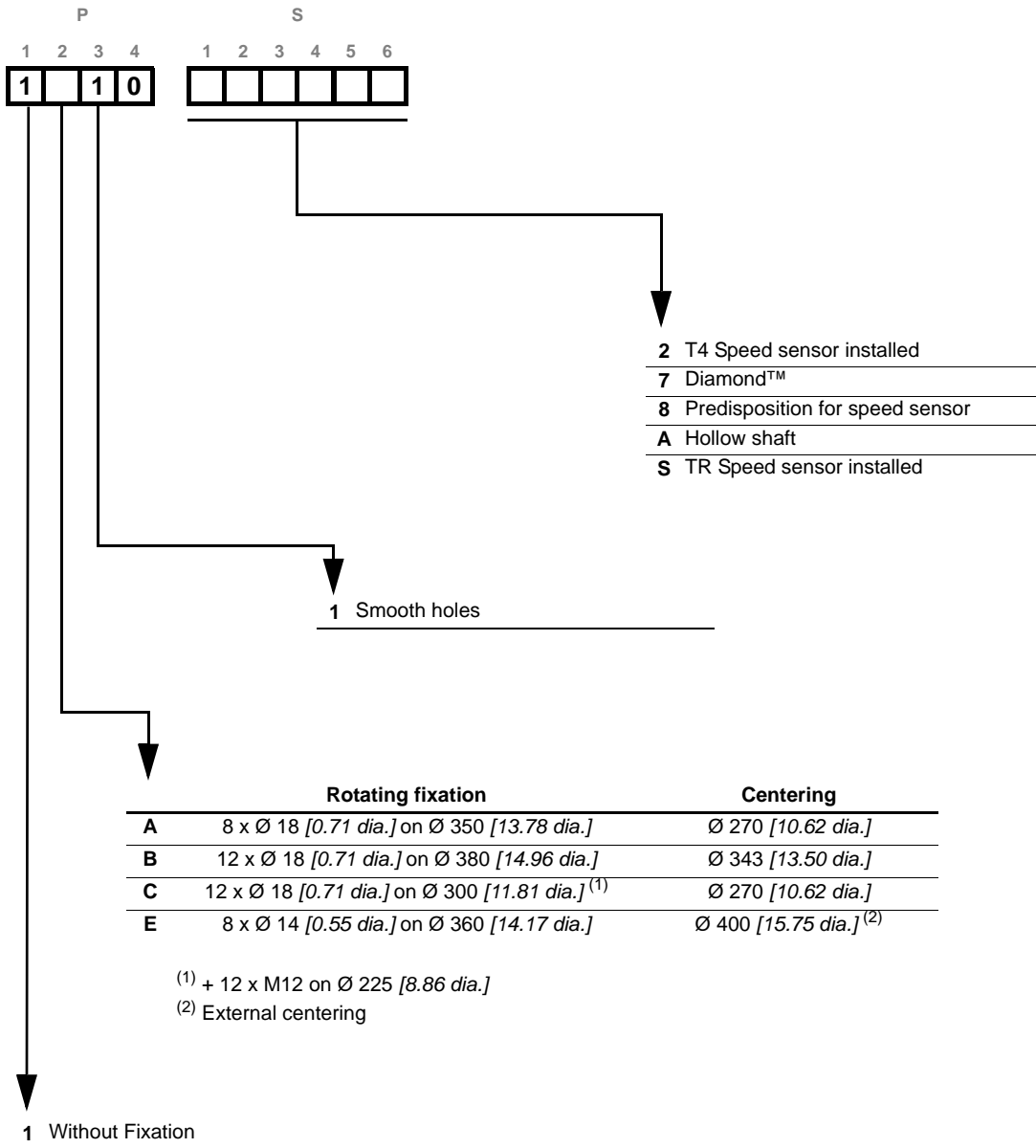


MODEL





CODE



Model code

Characteristics

Options



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 given in brackets in italic)



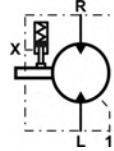


CHARACTERISTICS

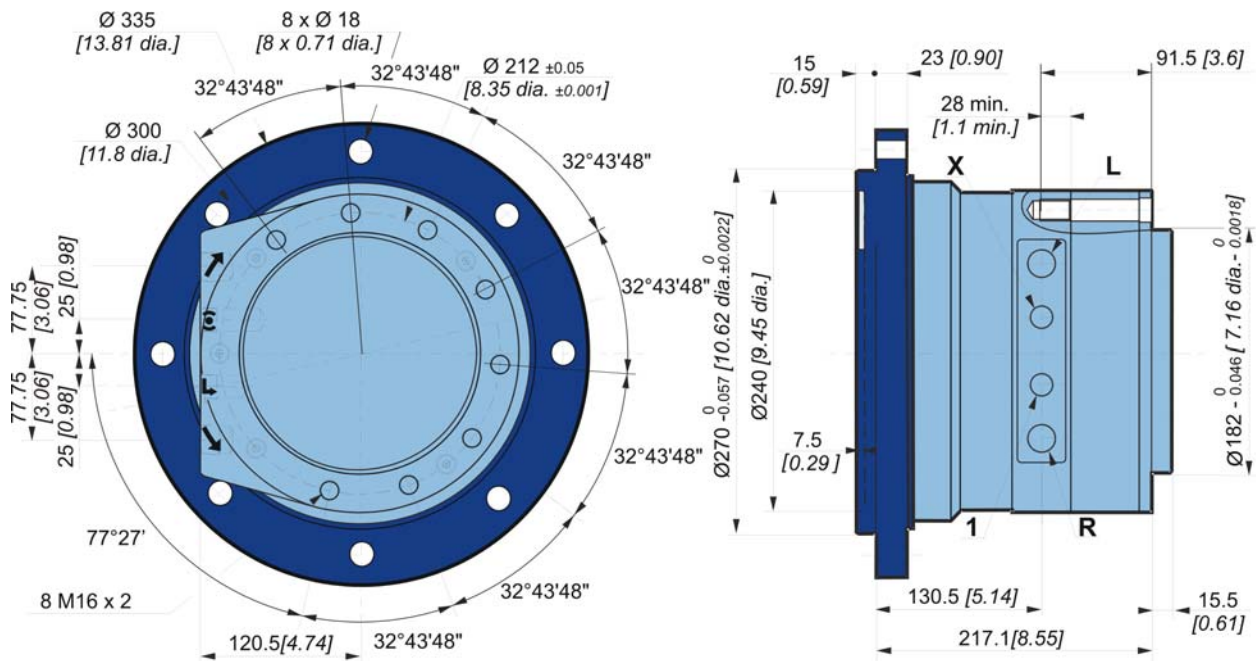
	C	D	F	P	S
	1	1 2 3	1 2 3	1 2 3 4	1 2 3 4 5 6
M K 0 9					

Dimensions for standard 1-displacement motor

	72 kg [158 lb]
	1,00 L [60 cu.in.]



D	1 2 3
	1



Rotating fastening screw

	Class
M16 x 2	12.9



the adaptation plates can be specified by the customer. Please consult your Poclair Hydraulics Applications Engineer.

Model code

Characteristics

Options



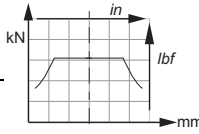
Load curves

Permissible radial loads

Max. permissible loads: 0 tr/min [0 RPM]; 0 bar [0 PSI]

Continuous permissible loads:

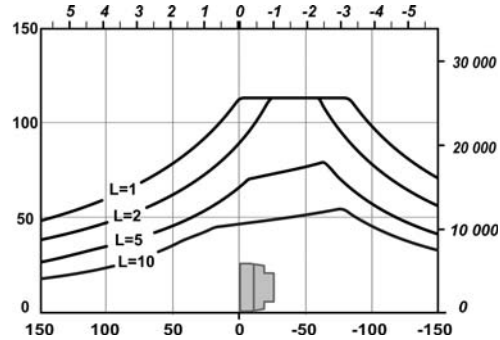
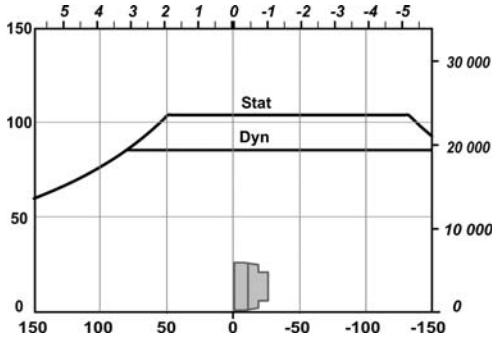
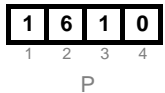
> 0 tr/min [> 0 RPM]; 275 bar [3 988 PSI].



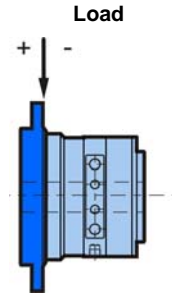
Service life of bearings

Test conditions :

L : Millions B10 revolutions at 150 bars (average pressure), with 25 cSt fluid, code 0 displacement, without axial load.



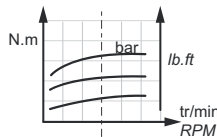
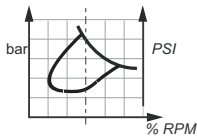
The service life of the components is influenced by the pressure. You must check that the combination of forces applied (Axial load / Radial load) is compatible with the permissible loads for the components, and that the resulting service lives of these components complies with the application's specifications. For an accurate calculation, consult your Poclain Hydraulics application engineer.



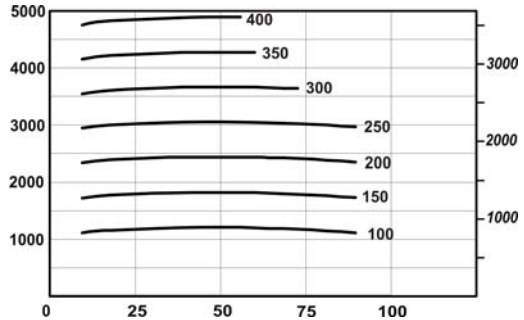
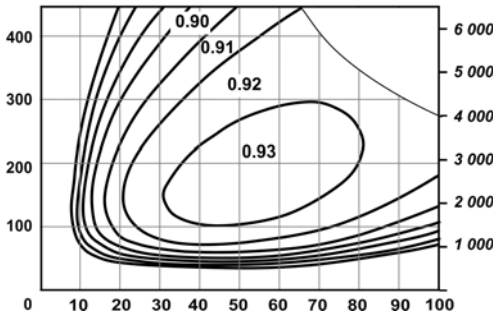
Efficiency

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].



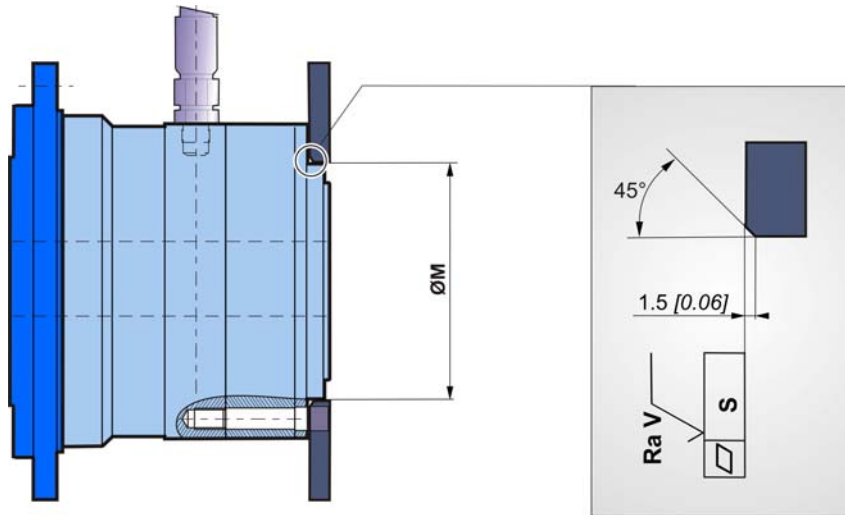
Actual output torque



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



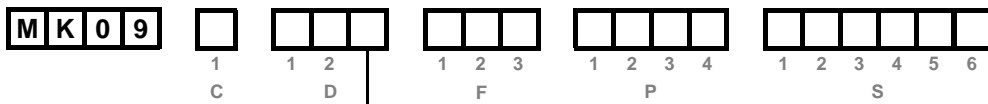
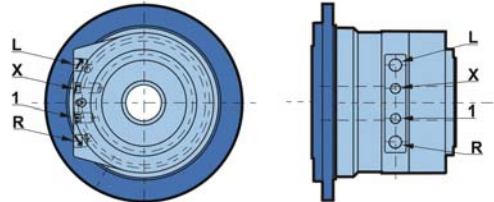
Chassis mounting



$\varnothing M$ (1) mm [in]	S mm [in]	Ra V μm [μin]	8x M16 x2	Class
182 [7,17]	0,2 [0,01]	12,5 [0,49]		12,9

(1) $\begin{matrix} 0 & 0 \\ -0.046 & [-0.0018] \end{matrix}$

Hydraulic connections



	Old standards	Standards	Power supply R,L	Drainage 1	Control of brake X
4	DIN 3 852 NFE 48 050	ISO 9 974-1	M22 x 1.5	M18 x 1.5	M16 x 1.5
A	SAEJ514	ISO 11 926-1	7/8" - 14 UNF	3/4" - 16 UNF	9/16" - 18 UNF



To find the connections' tightening torques, see the brochure "Installation guide" N° B61352L.

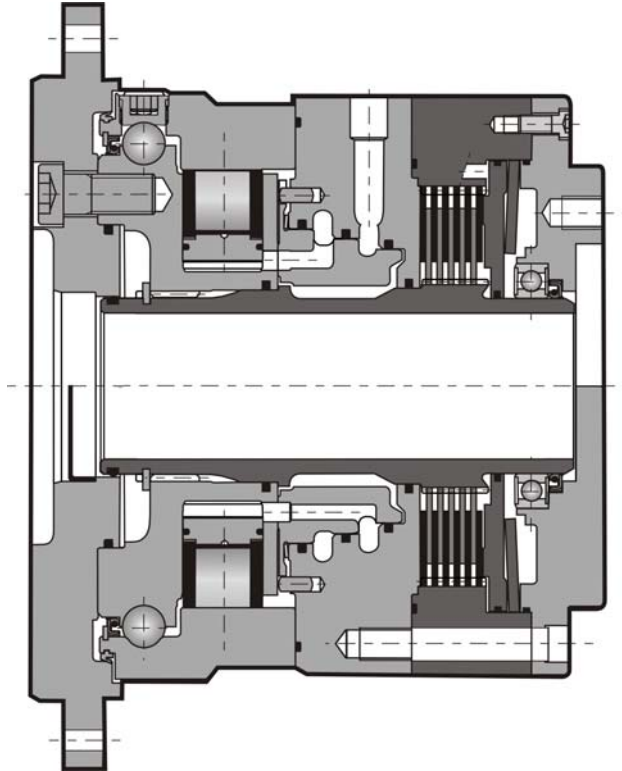
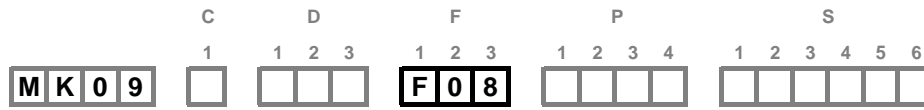


You are strongly advised to use the fluids specified in brochure "Installation guide" N° B61352L.

Model code

Characteristics

Options

**Brakes****Brake principle**

This is a multidisc brake which is activated by a lack of pressure. The spring exerts a force on the piston, which presses on the fixed and mobile discs, and immobilizes the shaft. The braking torque decreases in linear proportion to the brake release pressure.

Parking brake torque with 0 bars in the housing (new brake)	6 050 N.m	[4 460 lb.ft]
Emergency dynamic braking torque <i>with 0 bars in the housing</i> (gives a maximum of 10 emergency braking operations)	3 930 N.m	[2 900 lb.ft]
Residual parking torque <i>at 0 bars in the housing*</i>	4 535 N.m	[3 340 lb.ft]
Minimum brake release pressure	14 bar	[203,1 PSI]
Maximum brake release pressure	30 bar	[435,1 PSI]
Capacity	60 cm ³	[3,7 cu.in]
Brake release capacity	25 cm ³	[1,5 cu.in]

* After being used as emergency brake



Do not run-in the multidisc brakes.



OPTIONS

	C	D	F	P	S
	1	1 2 3	1 2 3	1 2 3 4	1 2 3 4 5 6
M K 0 9	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>



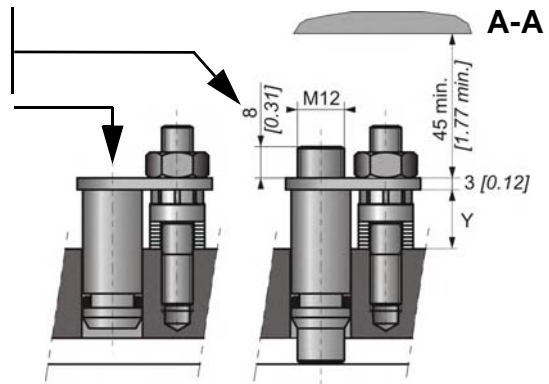
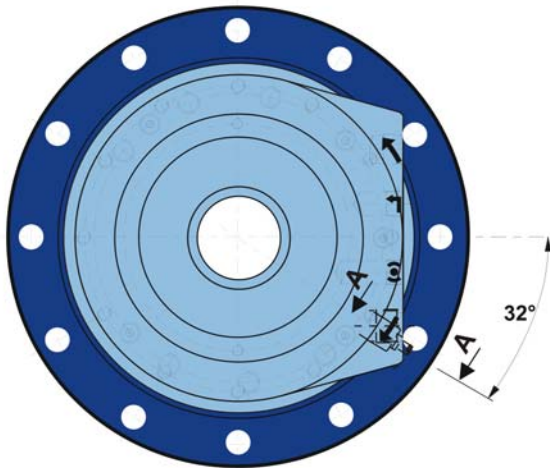
You can accumulate more than one optional part. Consult your Poclain Hydraulics sales engineer.

2 - S - Q - 8 - Installed speed sensor or predisposition

Designation



T4 Speed sensor (without rotation direction)	2
TR Speed sensor (digital rotation direction)	S
TD Speed sensor (two phase shifted frequencies)	Q
Predisposition for Speed sensor	8



Max. length Y= 14,6 [0.57]
Standard number of pulses per revolution= 63



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. B61352L.

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.

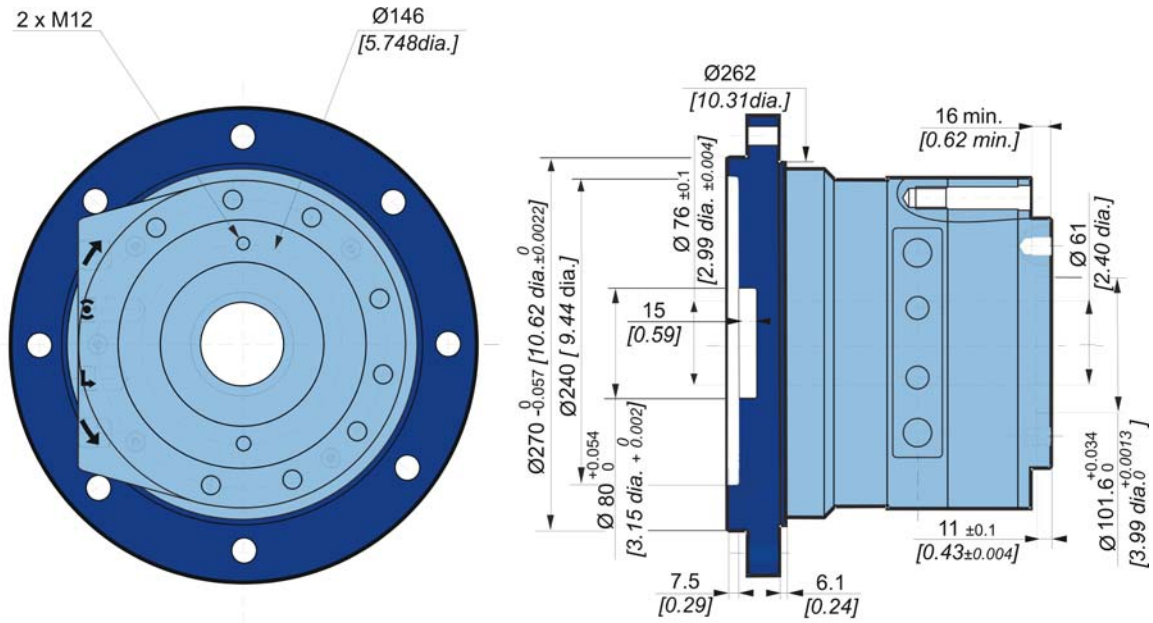
Model code

Characteristics

Options



A - Hollow shaft



Mounting bolt for high speed motor

	Class
M12 x 2	10.9



Model code

Characteristics

Options





Model code

Characteristics

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.

 19/10/2020

 801 578 145A

 801 578 156M

