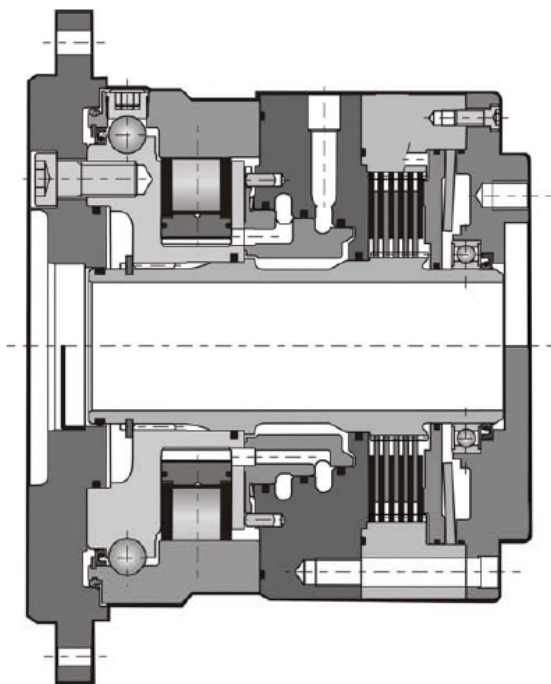




MK MOTORS



MK/MKE09. COMPACT MOTOR.



Motor Inertia 0.3 kg.m²

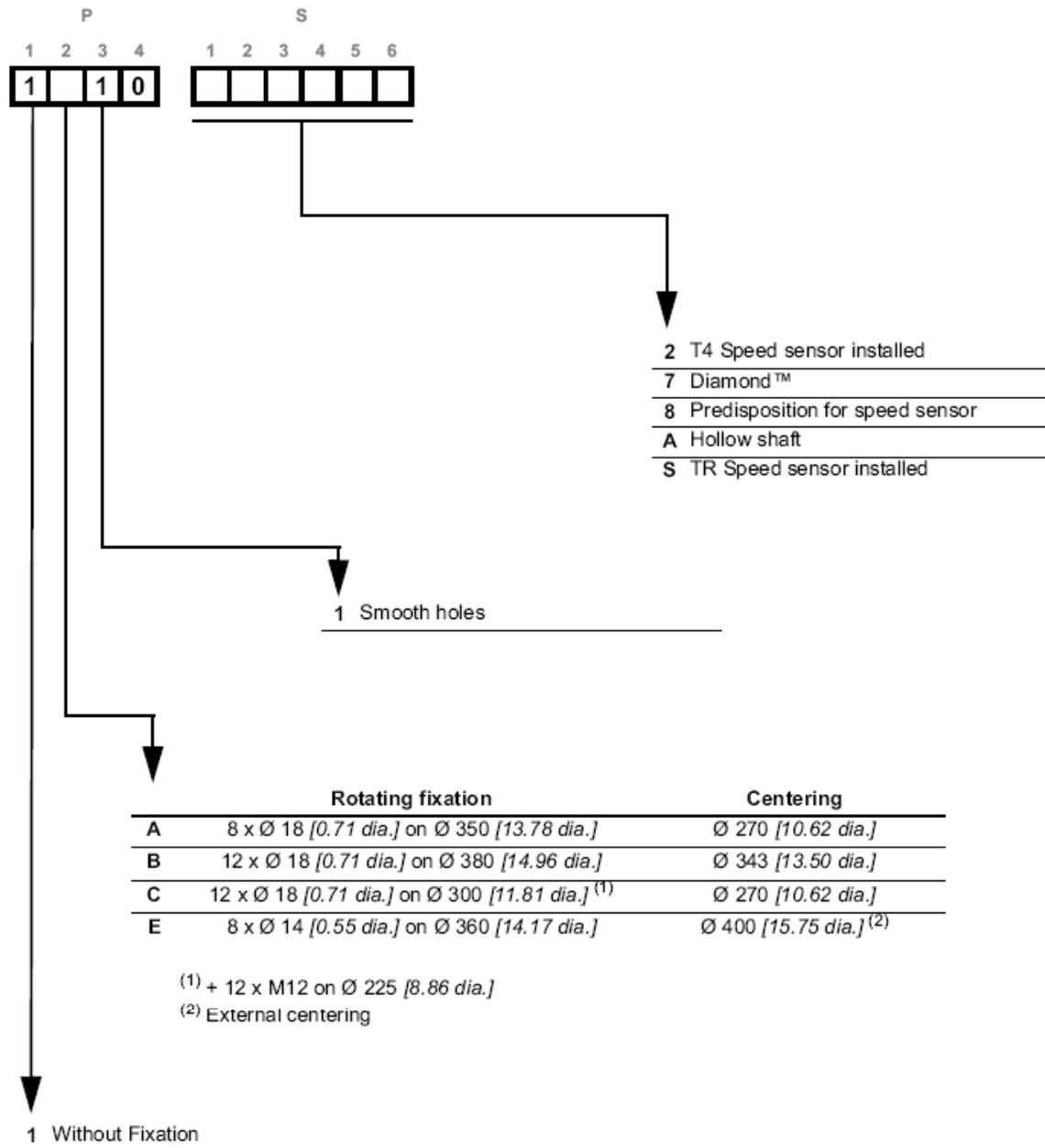
C	① cm ³ /tr [cu.in./rev.]	Theoretical torque		Max. power ① kW [HP]	Max. speed ① tr/min [RPM]	Max. pressure bar [PSI]
		at 100 bar Nm	at 1000 PSI [lb.ft]			
8	667 [40,7]	1 061	[539]	30 [40]	100	400 [5 802]
9	750 [45,7]	1 193	[606]		90	
0	833 [50,8]	1 324	[674]		80	
2*	1 000 [61,0]	1 590	[809]		65	

* : Comes with Diamond™ option

CONTENT

MODEL CODE	4	Model code
<hr/>		
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	
<hr/>		
OPTIONS	11	Options

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. Information on the model code.



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)

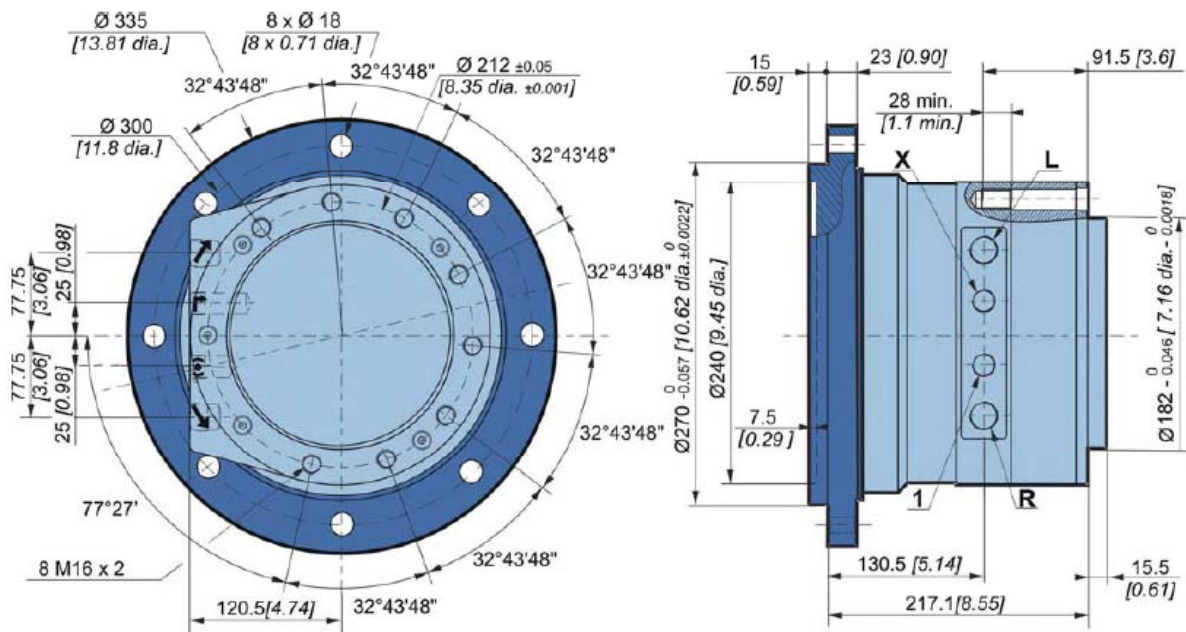
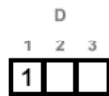
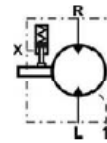


CHARACTERISTICS



Dimensions for standard 1-displacement motor

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



Rotating fastening screw

	Classe	N.m	[lb.ft]
M16x2	12.9	355	[260]

(*) The tightening torques are given for the indicated loads.



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



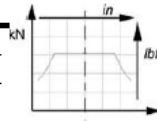
Load curves

Permissible radial loads

Test conditions :

Static : 0 tr/min [0 RPM] 0 bar [0 PSI]

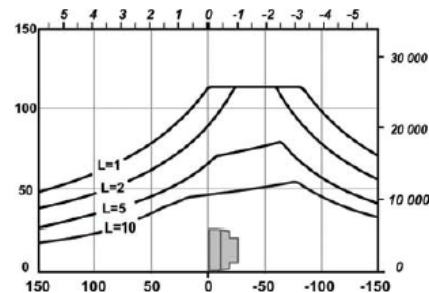
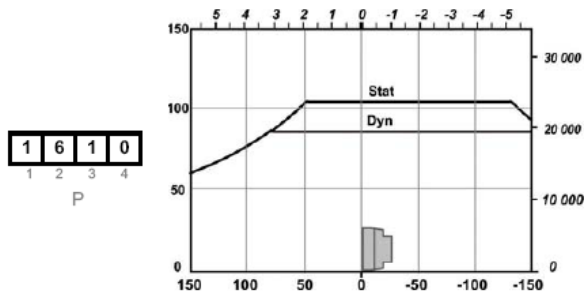
Dynamic : 0 tr/min [0 RPM], code 0 displacement, without axial load at max. torque



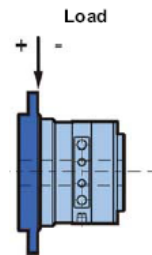
Service life of bearings

Test conditions :

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



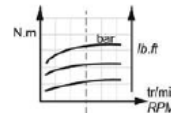
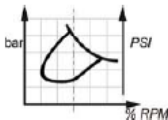
The service life of the components is influenced by the pressure. You must check that the combination of forces applied (Axial load / Radial load) is compatible with the permissible loads for the components, and that the resulting service lives of these components complies with the application's specifications.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



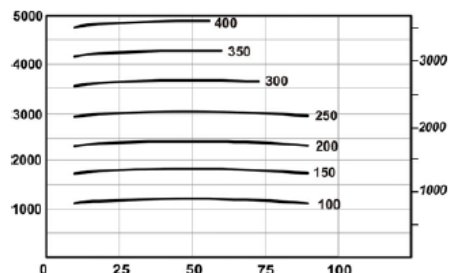
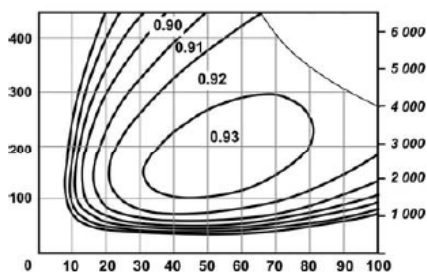
Efficiency

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].



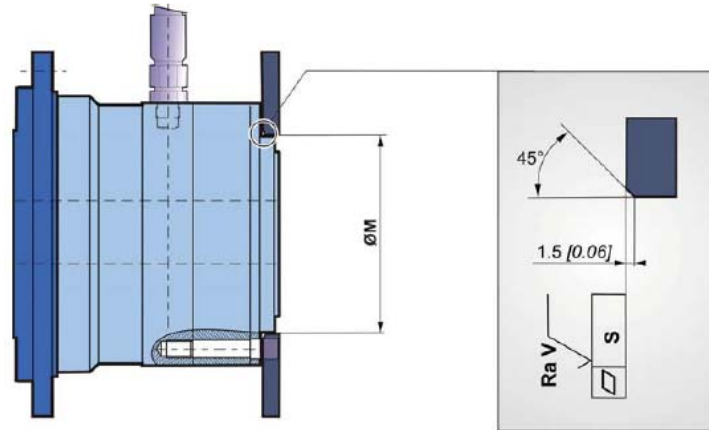
Actual output torque



The starting torque is taken to be approximately 85% of the first value for available pressure. For a precise calculation, consult your Poclairn Hydraulics application engineer.



Chassis mounting

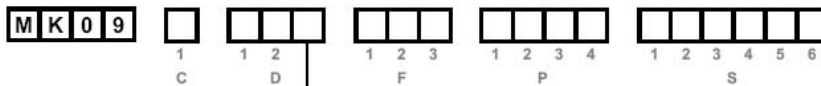
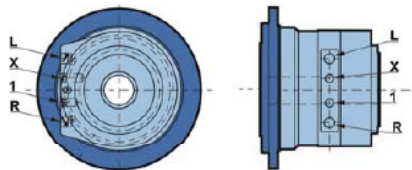


$\varnothing M$ ⁽¹⁾ mm [in]	S mm [in]	Ra V μm [μin]		Class	
182 [7,17]	0,2 [0,01]	12,5 [0,49]	8x M16 x2	12,9	N.m [lb.ft]
					355 [262]

(1) $\begin{matrix} 0 & 0 \\ -0,046 & [-0,0018] \end{matrix}$

Hydraulic connections

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



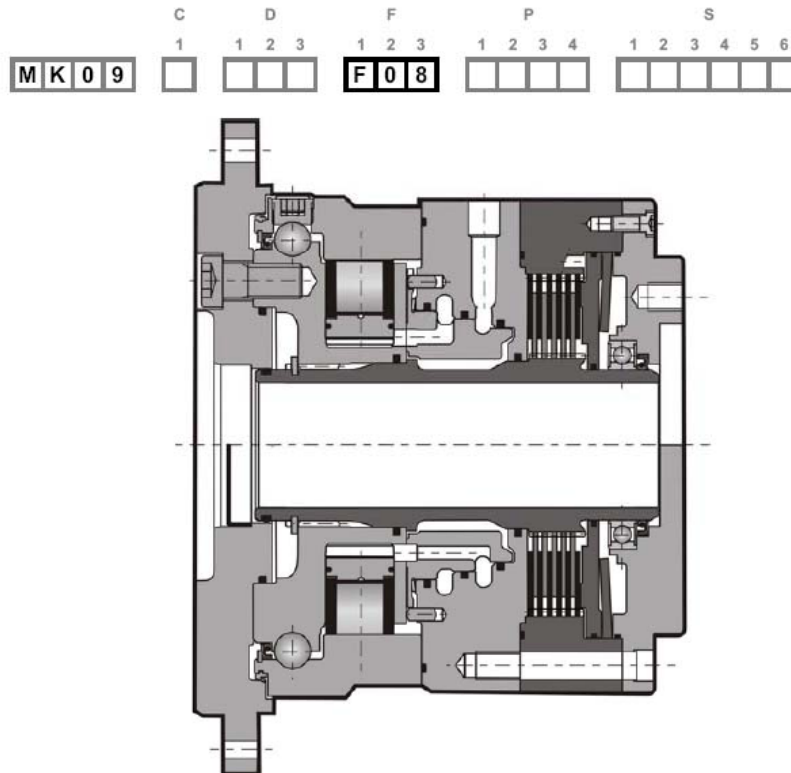
To find the connections' tightening torques, see the brochure "Installation guide" N° 801478197L.



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



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 rests on the fixed and mobile discs, and immobilizes the shaft. The braking torque decreases in linear proportion to the brake release pressure.

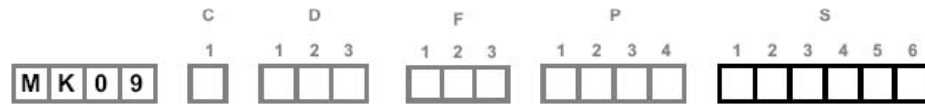
Parking brake torque with 0 bars in the housing (new brake)	6 050 N.m [4 460 lb.ft]
Emergency dynamic braking torque with 0 bars in the housing (gives a maximum of 10 emergency braking operations)	3 930 N.m [2 900 lb.ft]
Residual parking torque at 0 bars in the housing*	4 535 N.m [3 340 lb.ft]
Minimum 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



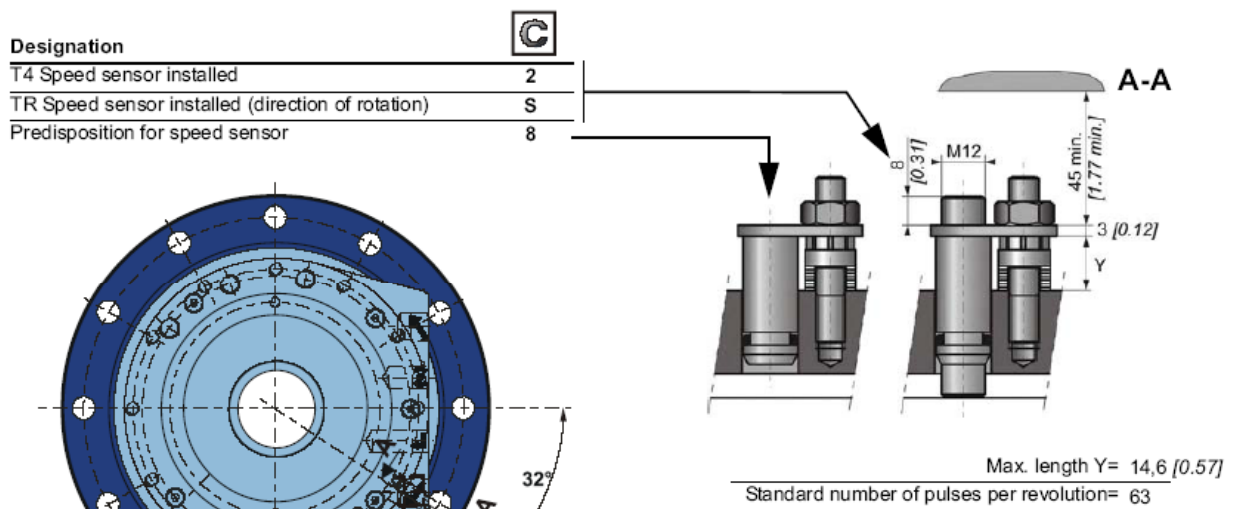
Do not run-in the multidisc brakes.

OPTIONS



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

2 - S - 8 - Installed speed sensor or predisposition



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

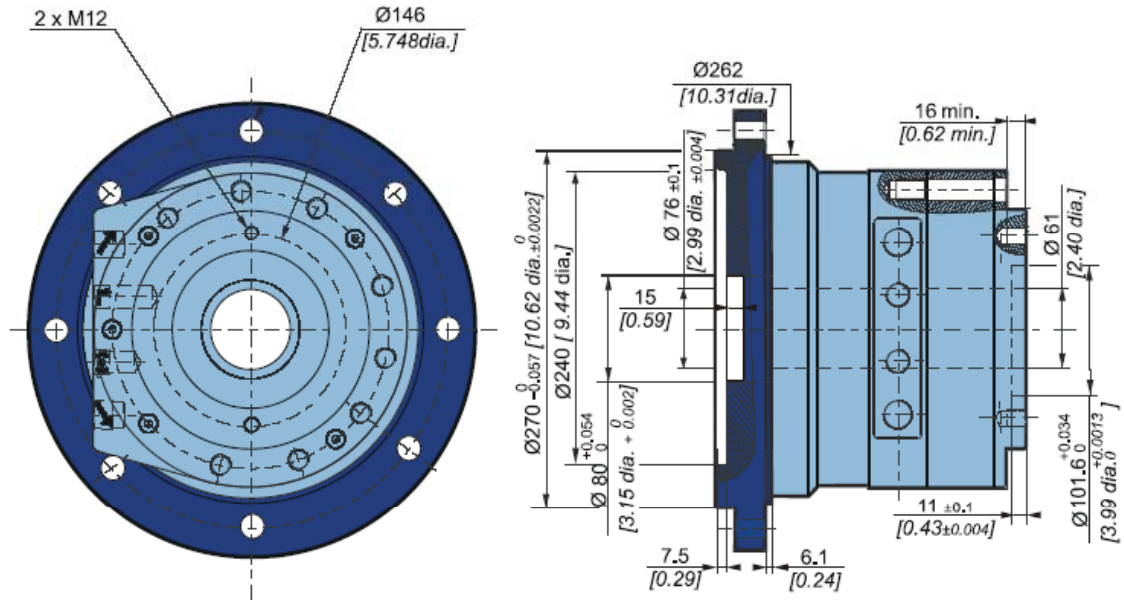


To install the sensor, see the "Installation guide" brochure No. 801478197L.



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.

A - Hollow shaft



Mounting bolt for high speed motor

	Classe	N.m	 [lb.ft]
M12 x 2	10.9	120	[89]