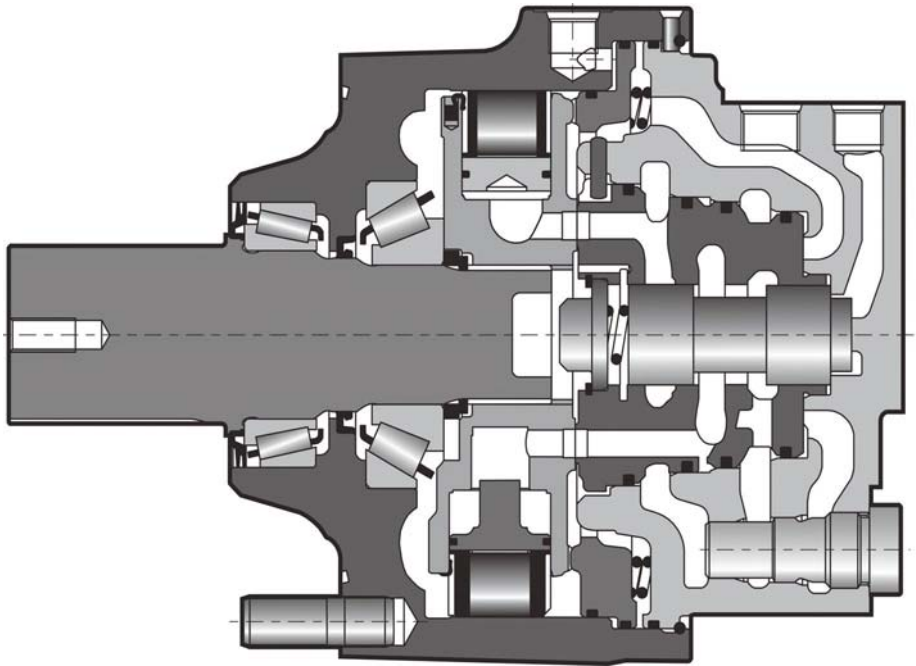


ML06 - MLE06

SKID-STEER LOADER MOTOR



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



Single displacement motor

	C	cm ³ /tr [cu.in/rev.]	Theoretical torque		Max. power kW [HP]	Max. speed tr/min/[RPM]	Max. pressure bar [PSI]
			at 100 bar Nm	at 1000 PSI [lb.ft]			
ML06	2	630 [38,4]	1 002	[509]	30 [40]	226	381 [5 526]
MLE06	2	842 [51,4]	1 339	[681]		169	

Dual displacement motor

		①		②		Theoretical torque		① kW [HP]	Max. power		Max. speed		Max. pressure bar [PSI]
		cm ³ /tr [cu.in/rev.]	cm ³ /tr [cu.in/rev.]	①	②	at 100 bar Nm	at 1000 PSI [lb.ft]		② preferred kW [HP]	② non-preferred kW [HP]	① tr/min [RPM]	② tr/min [RPM]	
ML06	2	630 [38.4]	420 [25.6]	1 002	[509]	30 [40]	20 [27]	15 [20]	226	330	381 [5 526]		
MLE06	2	842 [51.4]	561 [34.2]	1 339	[681]				169	241			
	C	702 [42.8]	421 [25.7]	1 116	[568]				203	322			

- ① First displacement
- ② Dual displacement



CONTENT

MODEL CODE **5**

Model code

CHARACTERISTICS **7**

Definition of shaft motor	8
Exchange	8
Efficiency	10
Chassis mounting	11
Hydraulic connections	12
Specification of the motor's rotation direction	12
Immobilisator	13

Characteristics

OPTIONS **15**

Options



Methodology :

This document is intended for manufacturers of machines that incorporate Poclairn Hydraulics products. It describes the technical characteristics of Poclairn 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.



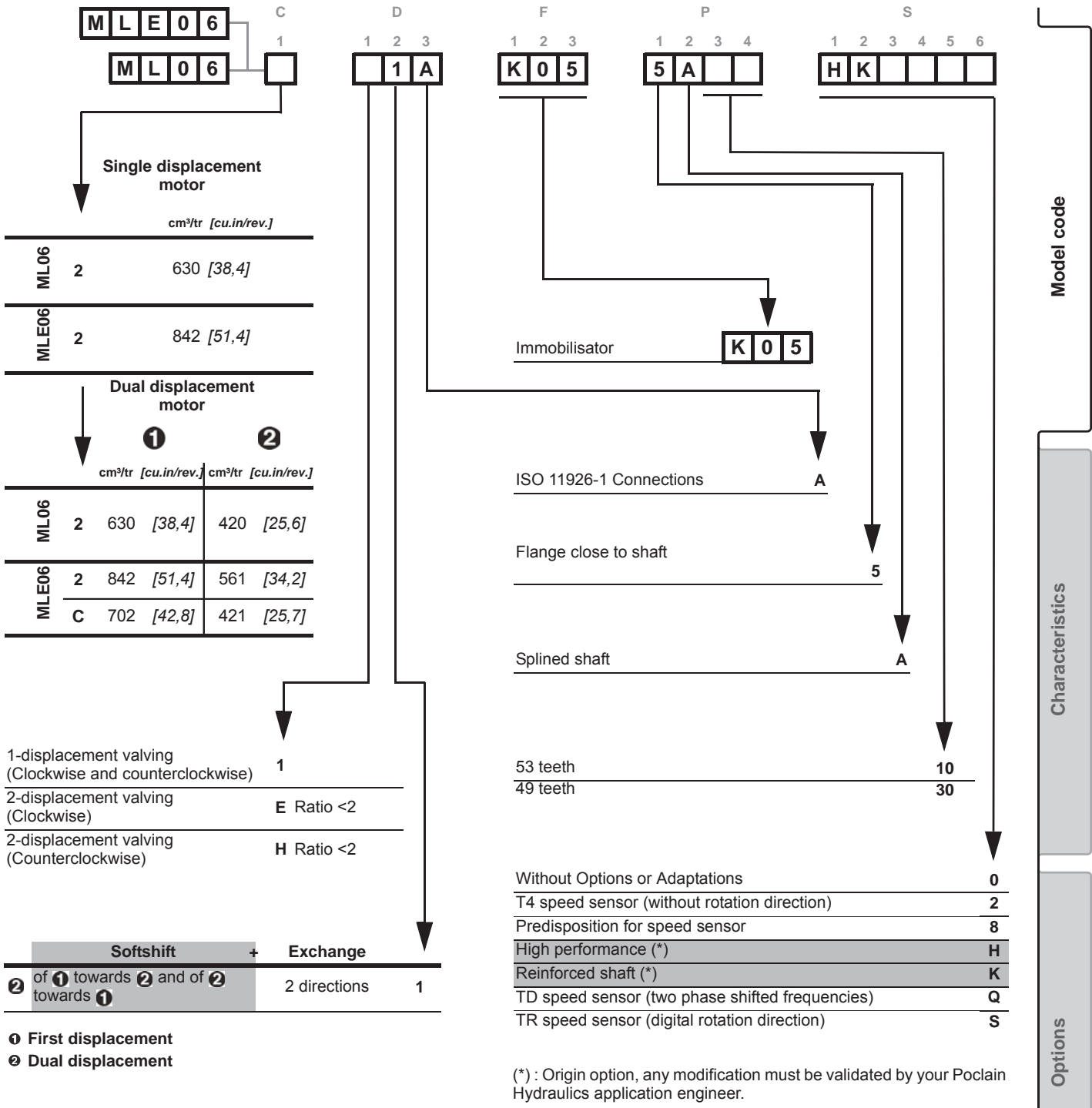
Information intended for Poclairn-Hydraulics personnel.

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)





MODEL CODE



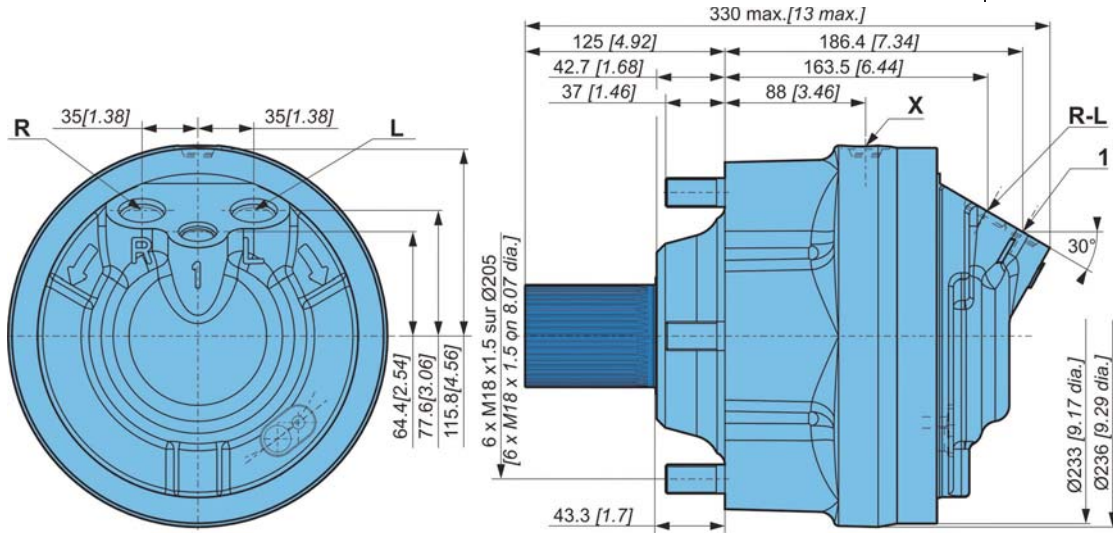




CHARACTERISTICS

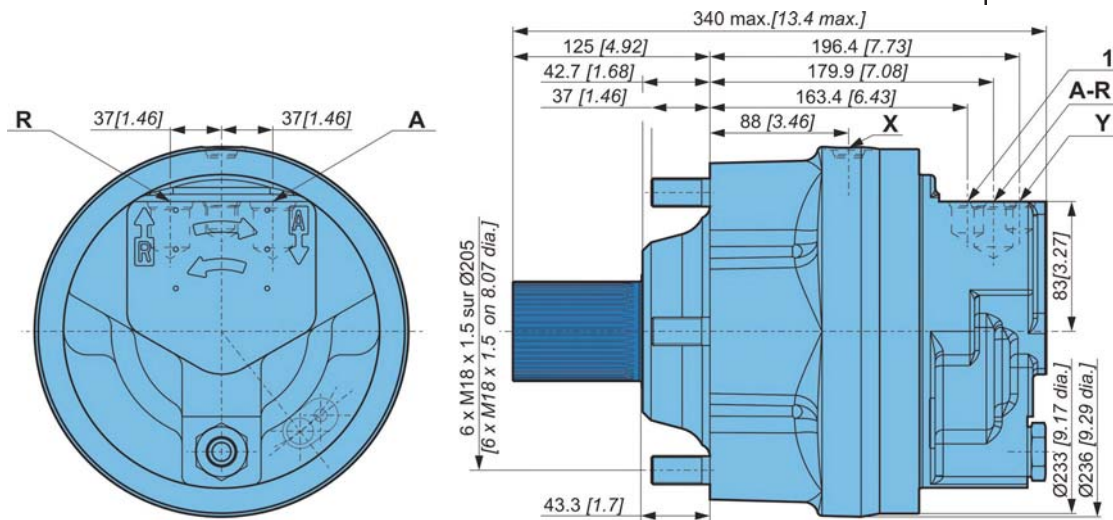
Dimensions for 1-displacement motor with built-in exchange

	43 kg [95 lb]
	1.10 L [66 cu.in]



Dimensions for 2-displacement motor with built-in exchange

	49 kg [108 lb]
	1,10 L [66 cu.in]



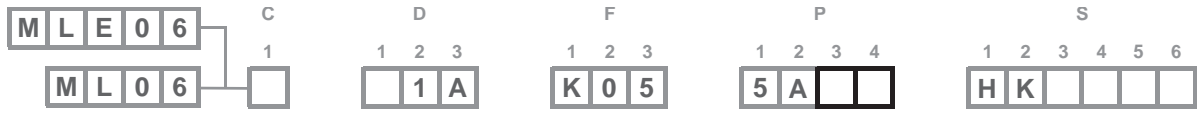
Model code

Characteristics

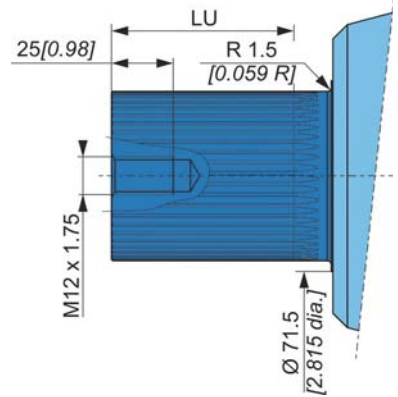
Options



Definition of shaft motor



splines	10	30
Standard	ANSI B92.1-1996	ANSI B92.1-1996
Accuracy class	5	5
Pressure angle	30°	30°
Module.	20/40	20/40
Number of teeth	53	49
LU	67.8	67.8
Outer diameter	68.58	63.5



Consult your Poclain Hydraulics application engineer to check the position of pinions.

Exchange



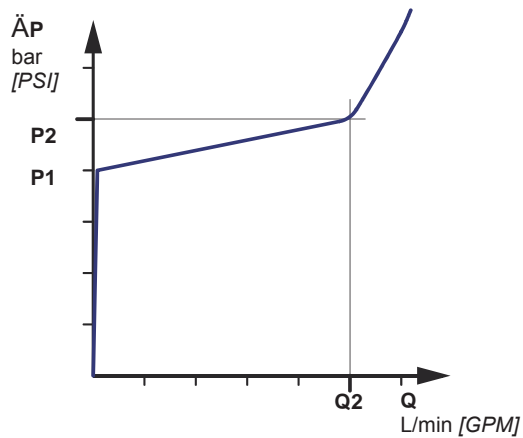
When a coding request is made, you must specify information on the threshold of the selector and the valve.

- Selector spool

Selector threshold bar [PSI]	Opening pressure of selector bar [PSI]
7 [101.5]	7 - 10 [101.5 - 145]

- Fitted valve

P1 bar [PSI]	Q2 L/min [GPM]	P2 bar [PSI]
20 [290]	12 [3.17]	31 [449.6]





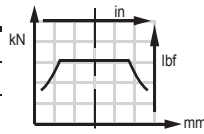
Load curves

Permissible radial loads

Test conditions :

Static : 0 rev/min 0 bar [0 PSI]

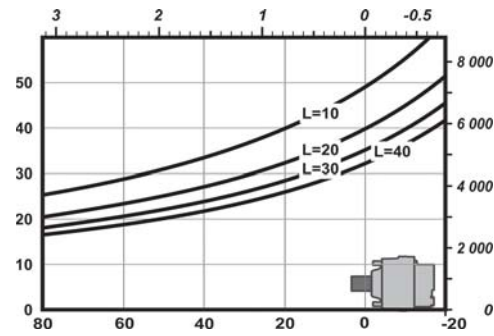
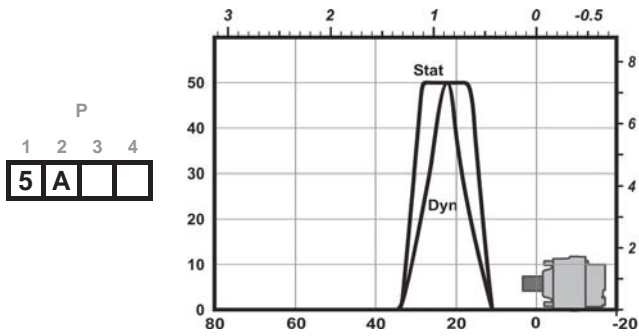
Dynamic : 0 rev/min, code 2 displacement, without axial load at max. torque



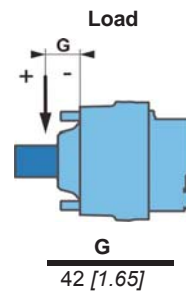
Service life of bearings

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 Poclair Hydraulics application engineer. ㄚ



Model code

Characteristics

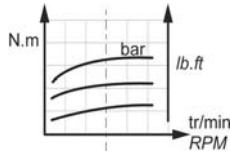
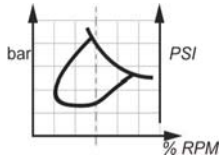
Options



Efficiency

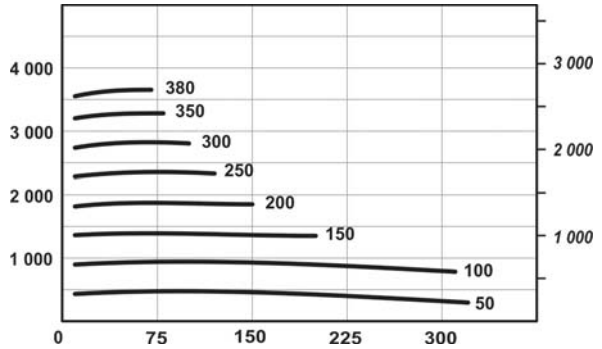
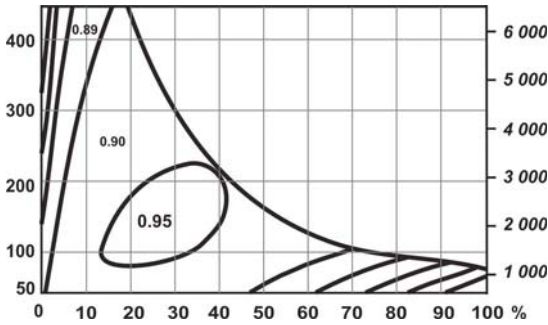
Overall efficiency

Average values given for guidance for code 2 displacement after 100 hours of operation with HV46 hydraulic fluid at 50°C [122°F].

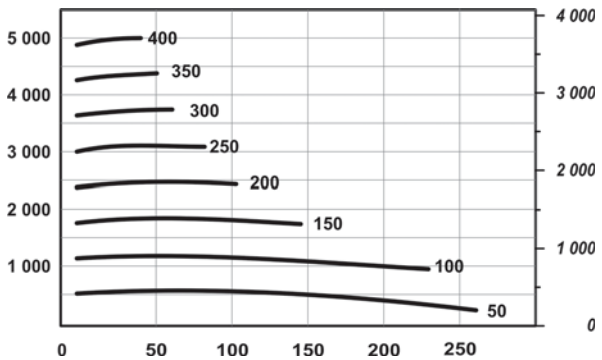
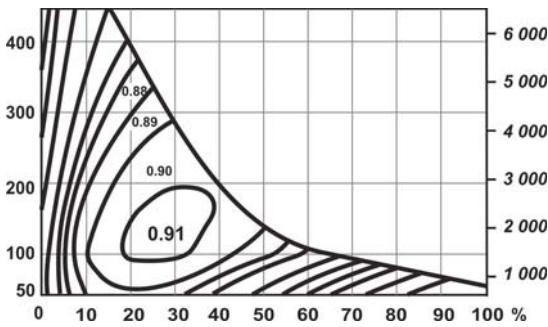


Actual output torque

ML06



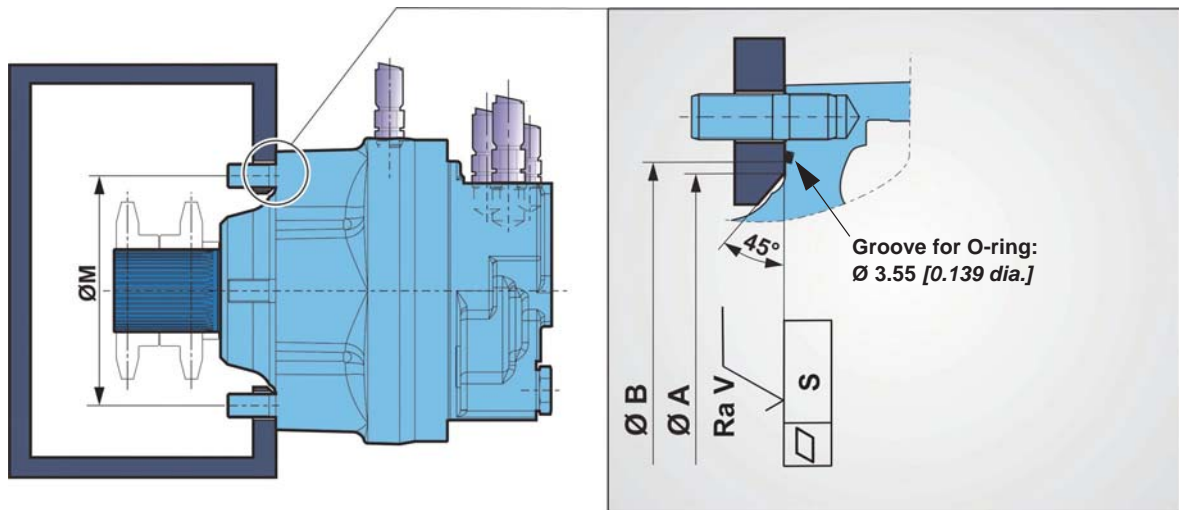
MLE06



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





Chassis mounting



Take care over the immediate environment of the connections.

Chassis mounting

ØM mm [in]	ØU mm [in]	S mm [in]	Ra V µm [µin]	 6 x M18	Class of screw	 N.m [lb.ft]
205 [8,07]	247 [9,72]	0,2 [0,01]	12,5 [0,49]		12,9	550 [406]

Installation constraint



To insure optimal operation, the sprocket should be contained in a sealed and self-lubricated housing. see the "Motors Generic installation" brochure No. 801478197L.

Model code

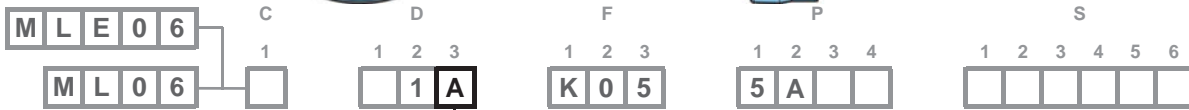
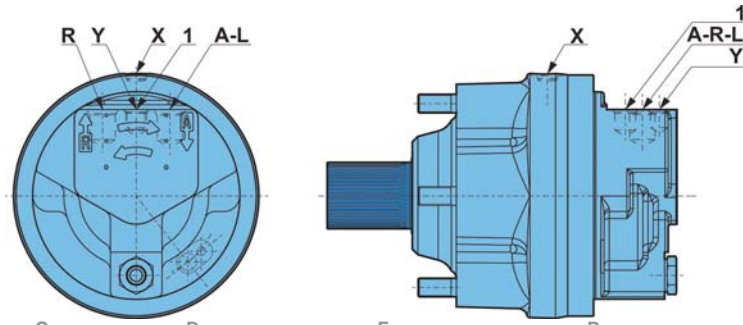
Characteristics

Options



Hydraulic connections

Connections



	Old standards	Standards	Power supply	2 nd displacement	Drainage	Control of brake
			A-R, R-L	Y	1	X
A	SAE J514	ISO 11926-1	1" 1/16 12 UN	3/4" - 16 UNF	7/8" - 14 UNF	3/4" - 16 UNF



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

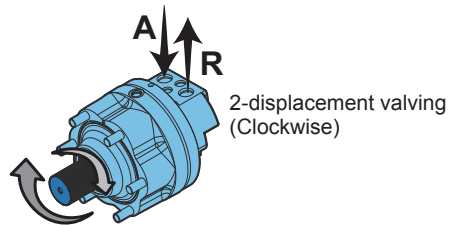


You are strongly advised to use the fluids specified in brochure "Installation guide" N° 801478197L.



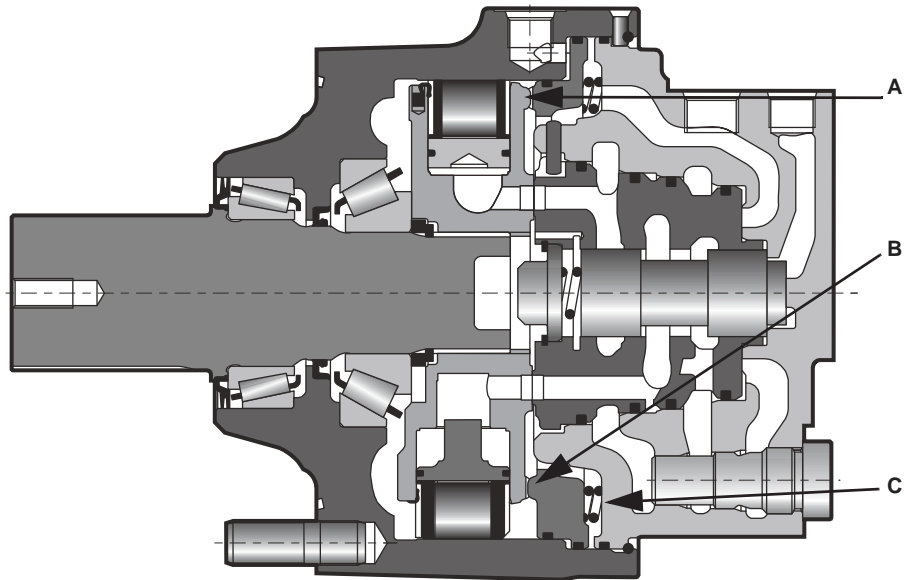
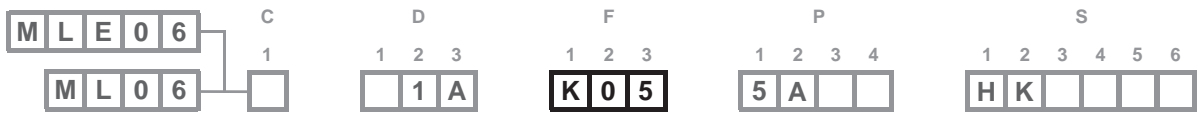
Do not put either a check valve or a poppet valve on the pilot lines (parking brake and displacement change) between the charge pump and the pilot valve. Do not use a piloting valve with integrated check valve.

Specification of the motor's rotation direction





Immobilisator



Brake principle

The parking brake consists of two parts, one static (A), one rotating (B), each bordered by a row of teeth. In the absence of pressure, the (C) spring maintains part A in contact with the cylinder-block, thus immobilizing it.

	K 0 5
Parking brake torque with 0 bars in the housing (new brake)	4 500 Nm [3 319 lb.ft]
Minimum brake release pressure	12 bar [174 PSI]
Maximum brake release pressure	32 bar [464 PSI]
Capacity	13.5 cm ³ [0.82 cu.in]
Brake release capacity	23 cm ³ [1.40 cu.in]



Do not pilot the pump when the brake is engaged.

Model code

Characteristics

Options





OPTIONS

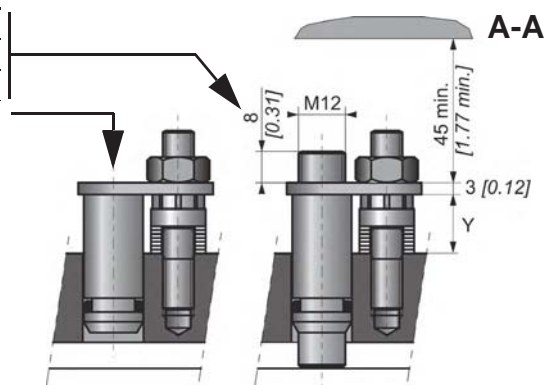
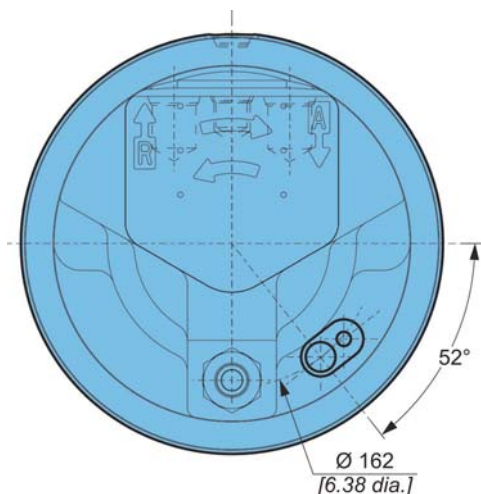


You can accumulate more than one optional part. Consult your Poclain Hydraulics sales engineer.

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= 13.6
Standard number of pulses per revolution= 62



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

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.


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 20/02/2017

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