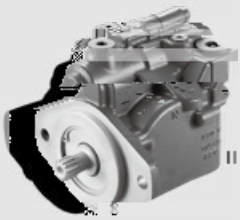
4.3

HM5V SERIES

Axial Piston Variable Displacement Motor

HM5V series swash-plate variable piston motor adopt fange design, small volume, light weight.Compact installation space, applied to the open or closed hydraulic transmission circuits.

Apply to open or close circuit		
Size	35	40
Nominal pressure (bar)	210	175
Max pressure (bar)	350	350



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Features

- ·Swash plate axial piston motor for open or close circuit.
- ·Flange design, widely used.
- ·Integration of two variable motor, servo variable piston, can set the minimum displacement of the motor.
- ·The side and the end are equipped with oil ports, easy to oil circuit arrangement
- ·High cliometric e f ciency.
- ·Based on mature technology, excellent reliability.

Technical data

Size		35	40
Max displacement (cc/rev)		35	40
Min displacement (cc/rev)		Can be adjusted according to the requirements	
Direction of rotation		Clockwise, Counter clockwise	
Rotation speed (at max displacement)	Rated (rpm)	3600	3500
	Max (rpm)	4000	3900
Rotation speed (at min displacement)	Rated (rpm)	4650	4500
	Max (rpm)	5200	5050
Pressure	Rated (bar)	210	175
	Max (bar)	415	350
Control Pressure	Min (bar)	14	
	Max (bar)	69	
Casting pressure	Rated (bar)	2	
	Max (bar)	6	
Weight (Kg)		15.4	
Oil viscosity (mm^2/s)		7~1600, Best range: 12~80	
Oil Temperature ( )		-30~100, Best range: 10~80	
Oil Cleanliness		ISO 4406 20/18/15	

Type introduction

HM5V	35	N	S1	R	N	N	F1513	

Product series

	Swash plate axial piston motor	HM5V

Displacement

	Displacement (cc/rev)	35	40

Speed sensor

	Without	N
	With 41 pulse/ring	S

The input shaft

	13T 16/32 pitch ANSI B92.1-1970	S1
	15T 16/32 pitch ANSI B92.1-1970	S2

Back cover port type

	Lateral port, 1-1/16-12UN-2B	R

Flush valve

	None (standard, If you want to fush valve please contact with us)	N
	Flow=option 1, open pressure 10.3bar (to be developed)	1

Adjustable min displacement limiter

	None	N

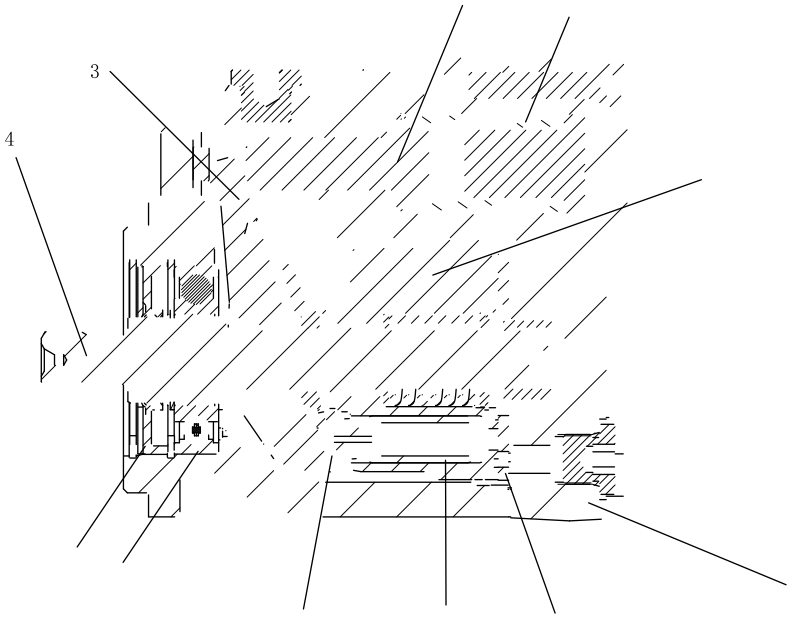
Minimum displacement set

	10.3 cc/rev	F1030
	13.3 cc/rev	F1330
	18 cc/rev	F1800

Paint and nameplate

	HL nameplate and black paint	

Section view



1. Servo piston
2. Bias spring
3. Swash plate
4. Output shaft
5. Shaft seal
6. Bearing
7. Slipper
8. Piston
9. Valve plate
10. Endcap
11. Cylinder block

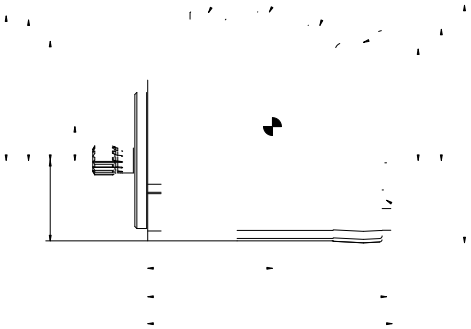
Principle

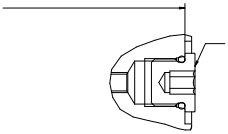
1) Two position variable motor, motor initial work location is maximum displacement location maintained by the bias spring and pressure oil to the motor control can switch the motor to minimum displacement.

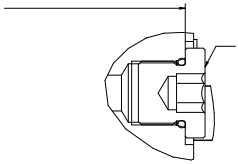
2) On the housing there is an oil channel, which is independent with

Installation size

HM5V 35/40 Installation size







Installation size

·Direction of rotation and oil flow direction

Installation	Rotation
Flow A → B	Clockwise
Flow B → A	

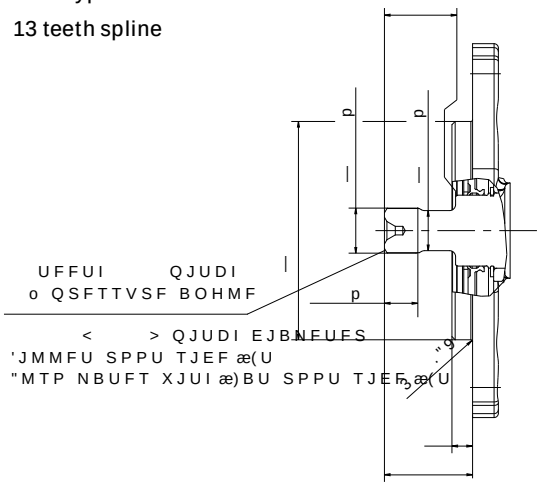
·Port details

Installation size

Input Shaft type

" S1 " type shaft

13 teeth spline



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