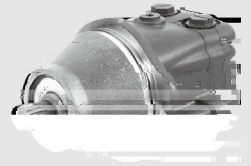


# HM3V S, RL S

## High Pressure Variable Displacement Motor

HM3V series swash plate axial piston motor adopts disassembling type design, small volume, light weight, Compact installation space, applied to the open or closed hydraulic transmission circuits.



5a` fW fe

8V8fgdVé

- Swash plate axial piston motor for open or close circuit.
- Cartridge design, compact installation space, convenient and wheel installed applications.
- Integration of two variable motor, servo variable piston, can set the minimum displacement of the motor.
- Motor oil mouth concentrate in a side, easy to install and oil circuit layout.
- High cliometric ef ciency

## Technical Data

E;I W		25	30	38	45
? S <sub>j</sub> V[eb^SUW_ W f /Uu d/Wfi		25	30	38	45
? [ V[eb^SUW_ W f /Uu d/Wfi		Can be adjusted according to the requirements			
6[dWf[a` aXcbfSf[a`		Clockwise, Counter clockwise			
DafSf[a` ebVWV /Sf_ S <sub>j</sub> V[eb^SUW_ W ffi	DSfVW /cb_ fi	3400	3500	3600	3500
	? S <sub>j</sub> /cb_ fi	3950	4150	4000	3900
DafSf[a` ebVWV /Sf_ [ V[eb^SUW_ W ffi	DSfVW /cb_ fi	4400	4450	4650	4500
	? S <sub>j</sub> /cb_ fi	5000	5150	5200	5050
Bd/WegdW	DSfVW /TSdfi	210	175	210	175
	? S <sub>j</sub> /TSdfi	415	350	415	350
5a` fcb^Bd/WegdW	? [ /TSdfi	14			
	? S <sub>j</sub> /TSdfi	69			
5Sef[ Y bd/WegdW	DSfVW /TSdfi	2			
	? S <sub>j</sub> /TSdfi	6			
I WYZf/=Yfi		15.4			
A[^h[eUae]fk/_ _ ^!efi		7-1600, Best range: 12-80			
A[^FW_ bWbSfgdW fi		-40-100, Best range: 60-85			
A[^5 Vb^ [ Vbe		ISO 4406 20/18/15			

## Type introduction

HM3V	38	N	S1	R	N	N	F1513	

### Swash plate axial piston motor

	Swash plate axial piston motor	HM3V
--	--------------------------------	------

### Size

	Size	25	30	38	45
--	------	----	----	----	----

### Without / With 45 pulse/ring

	Without	N
	With 45 pulse/ring	S

### 13T 16/32 pitch ANSI B92.1-1970 / 15T 16/32 pitch ANSI B92.1-1970 / 1: 8 Conical axis

	13T 16/32 pitch ANSI B92.1-1970	S1
	15T 16/32 pitch ANSI B92.1-1970	S2
	1: 8 Conical axis	D

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

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

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

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

### None

	None	N
--	------	---

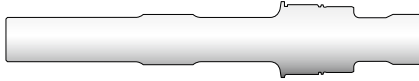
### 9.5 cc/rev / 14.3 cc/rev / 15.13 cc/rev / 30 cc/rev(reverse only HM3V30) / 38 cc/rev(reverse only HM3V38) / 45 cc/rev(reverse only HM3V45)

	9.5 cc/rev	F0950
	14.3 cc/rev	F1430
	15.13 cc/rev	F1513
	30 cc/rev(reverse only HM3V30)	F3000
	38 cc/rev(reverse only HM3V38)	F3800
	45 cc/rev(reverse only HM3V45)	F4500

### HL nameplate and black paint

	HL nameplate and black paint	Blank
--	------------------------------	-------

## Section view



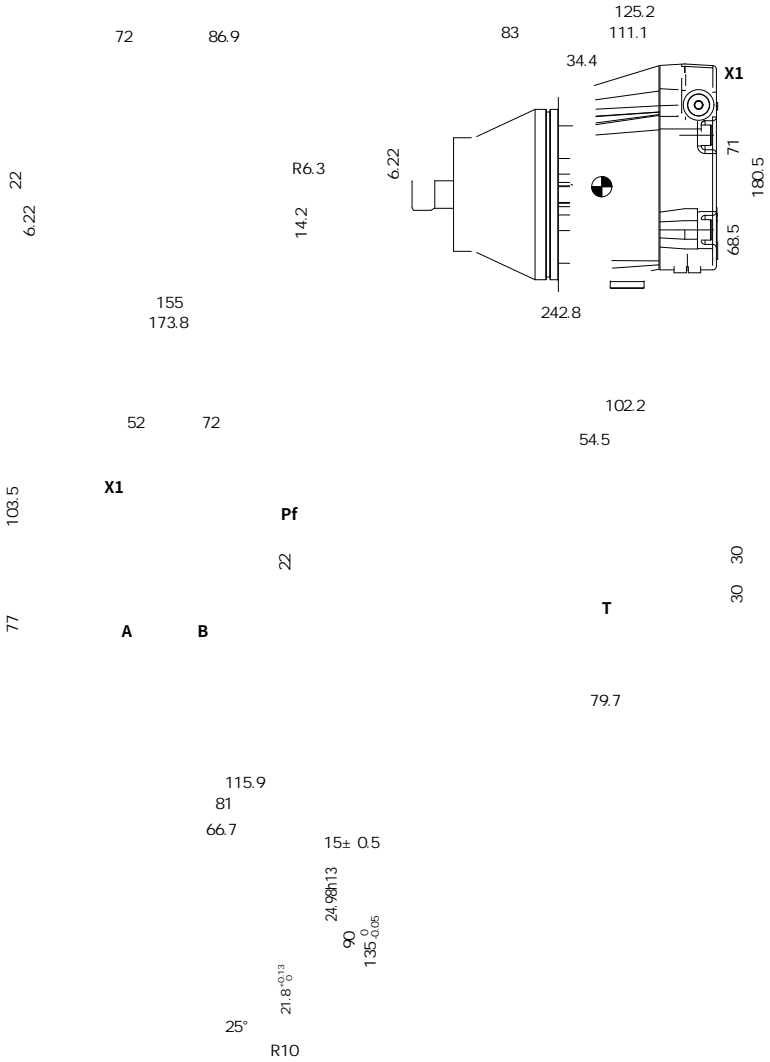
- |                 |               |                    |                  |
|-----------------|---------------|--------------------|------------------|
| 1. Servo piston | 5. Shaft seal | 9. Valve plate     | 13. Speed sensor |
| 2. Bias spring  | 6. Bearing    | 10. Endcap         |                  |
| 3. Swash plate  | 7. Slipper    | 11. Cylinder block |                  |
| 4. Output shaft | 8. Piston     | 12. Dust ring      |                  |

## 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 pressure relief oil line of the brake, this kind of design enables external brake control oil line through the oil duct connection to the brake relief port of the gear reducer brake.
- 3) In open loop, the motor output port maintains a back pressure to ensure lubrication and normal

# Installation size

## HM3V 30/38/45 Installation size

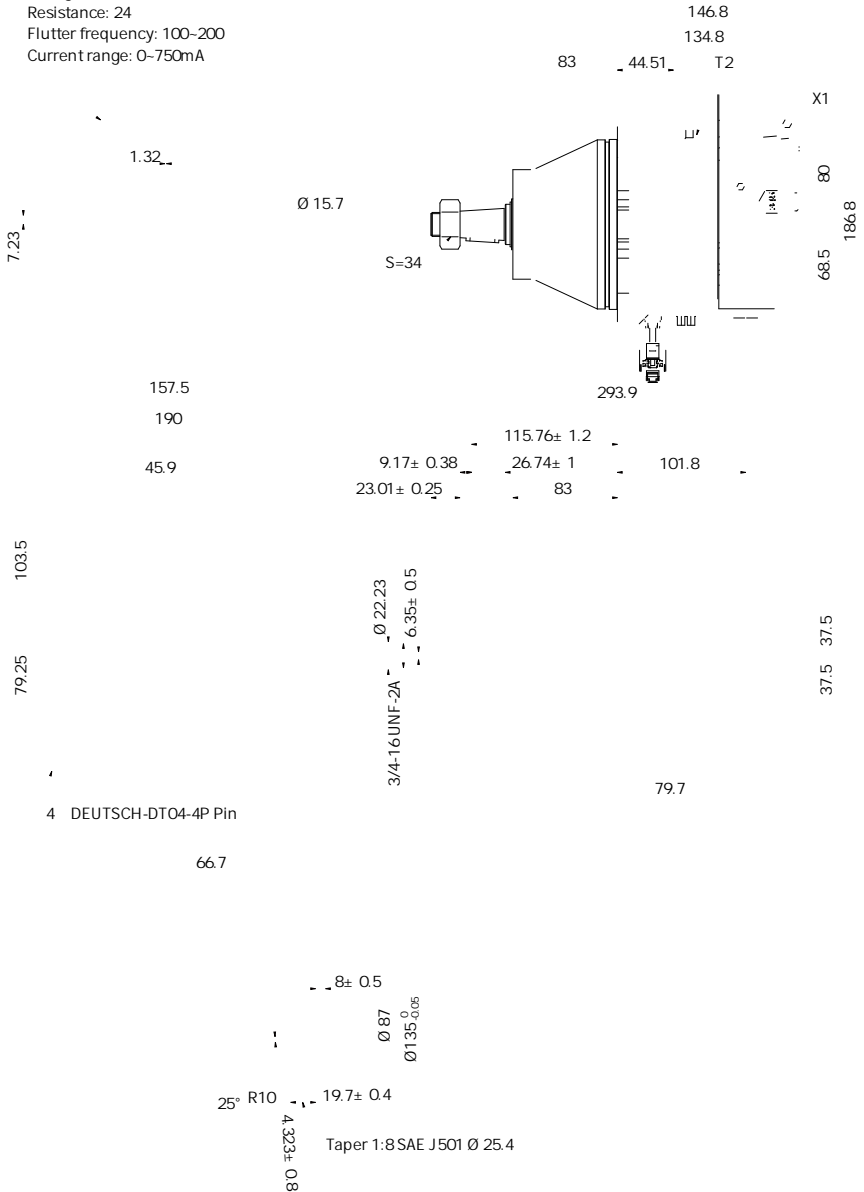


04

# Installation size

## HM3V 30/38/45 Installation size (reverse)

Deutsch conn: DT04-2P  
 voltage: 24V  
 Resistance: 24  
 Flutter frequency: 100-200  
 Current range: 0-750mA



4 DEUTSCH-DT04-4P Pin



04

## Installation size

### • Direction of rotation and oil flow direction

Installation	Rotation
Flow A B	Clockwise
Flow B A	Counter-clockwise

### • Direction of rotation and oil flow direction (reversible)

Installation	Rotation
Flow A B	Clockwise (The electromagnet loses power) Counter-clockwise (The electromagnet gets electricity)

### • Port details

	Port	Thread	Depth
A	Inlet port and Delivery port	1-1/16-12UN-2B	(depth 22mm)
B	Delivery port	1-1/16-12UN-2B	(depth 22mm)
X1	Control port	9	



04



© This brochure can be reproduced, edited, reproduced or transmitted electronically without the authorization of Hengli Hydraulic Company. Due to the continuous development of the product, the information in this brochure is not specific to the specific conditions or applicability of the industry, thus, Hengli does not take any responsibility for any incomplete or inaccurate description.