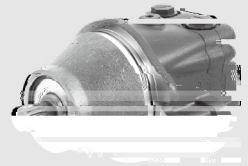




HM3V S RL S

HM3V series Swash Plate Axial Piston 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.



Am I rc I rq

Dc_r spcq

- 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 e f ciency

Technical Data

Q&xc		25	30	38	45
K_v bgqnj_ac k c l r &aa-pct'		25	30	38	45
Kg l bgqnj_ac k c l r &aa-pct'		Can be adjusted according to the requirements			
Bgpcargm l md pmr_rgm l		Clockwise, Counter clockwise			
Pmr_rgm l qnccb &_r k_v bgqnj_ac k c l r'	P_rcb &pn k '	3400	3500	3600	3500
	K_v &pn k '	3950	4150	4000	3900
Pmr_rgm l qnccb &_r k g l bgqnj_ac k c l r'	P_rcb &pn k '	4400	4450	4650	4500
	K_v &pn k '	5000	5150	5200	5050
Npcqqspc	P_rcb &`_p'	210	175	210	175
	K_v &`_p'	415	350	415	350
Am l rpmj Npcqqspc	Kg l &`_p'	14			
	K_v &`_p'	69			
A_qrg l e npcqqspc	P_rcb &`_p'	2			
	K_v &`_p'	6			
Ucpefr & l e'		15.4			
Mjj tgdamqgrw & k k ⁰ -q'		7~1600, Best range: 12~80			
Mjj Rc k ncp_rspc & ' '		-40~100, Best range: 60~85			
Mjj Ajc_l jg l cqg		ISO 4406 20/18/15			

Type introduction

HM3V	38	N	S1	R	N	N	F1513	

Npmb sar qcp g c q

	Swash plate axial piston motor	HM3V
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Q q x c

	Size	25	30	38	45
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Q n c c b q c l q m p

	Without	N
	With 45 pulse/ring	S

R f c g l n s r q f _ d r

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

@ _ a i a m t c p n m p r w n c

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

D j s q f t _ j t c

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

? b h s q r _ ` j c k g l b g q n j _ a c k c l r j g k g r c p

	None	N
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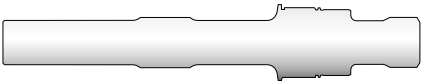
K g l g k s k b g q n j _ a c k c l r q c r

	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

N _ g l r _ l b l _ k c n j _ r c

	HL nameplate and black paint	Blank
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Section view



04

- | | | | |
|-----------------|---------------|--------------------|-----------------|
| 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

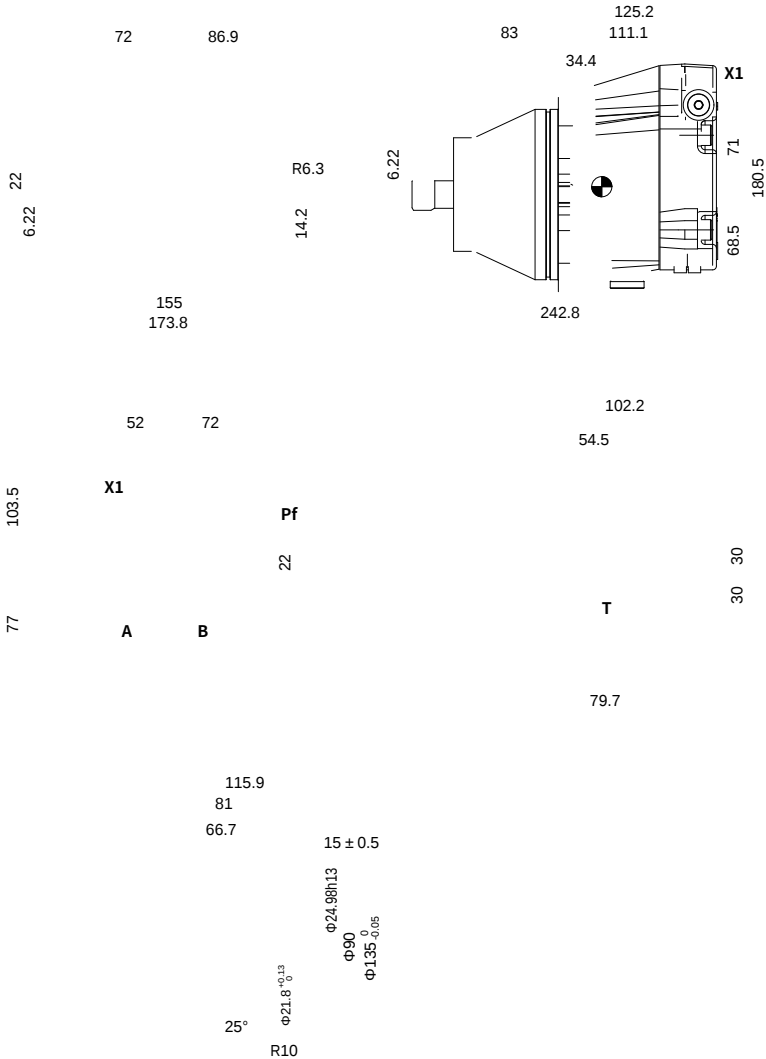
1) Two position variable motor, motor initial work location is maximum displacement location maintained by the bias spring and pressure oil to the motor control can switch the motor to minimum displacement.

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

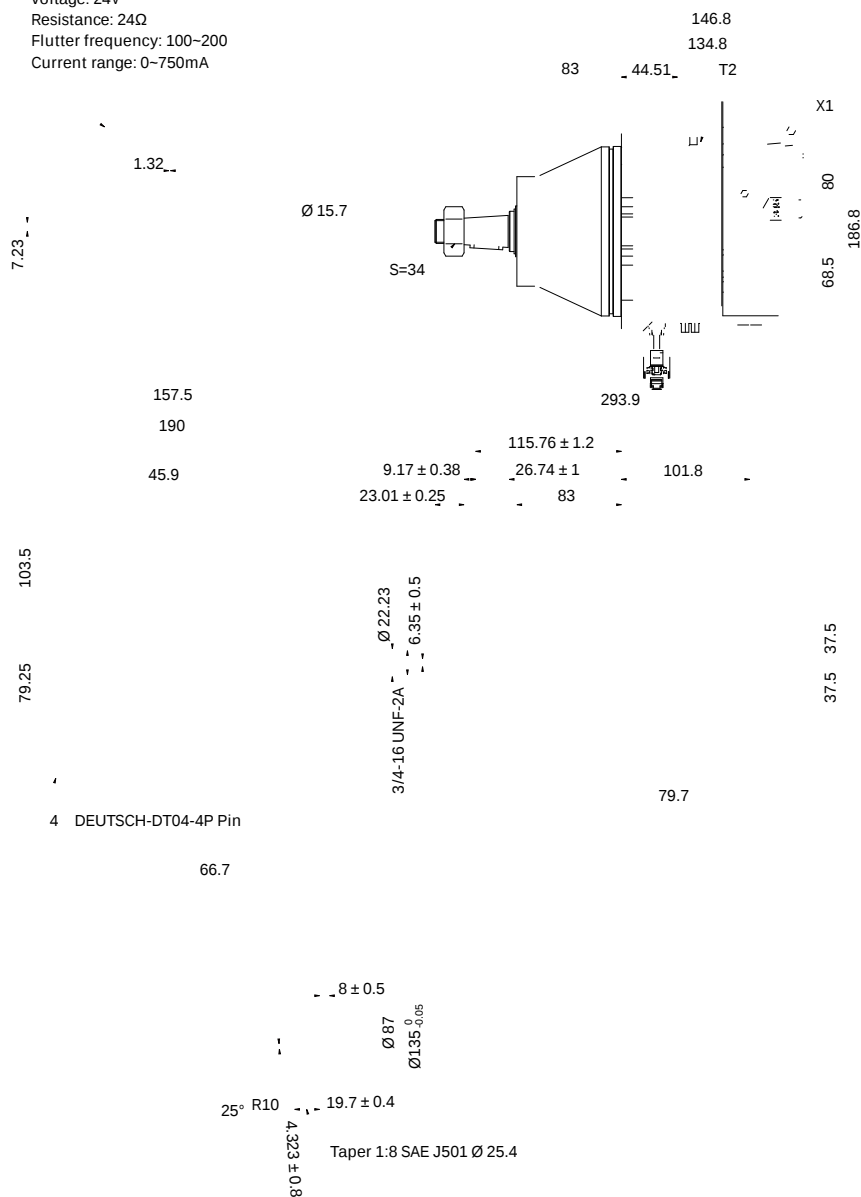
HM3V 30/38/45 Installation size



Installation size

• HM3V 30/38/45 Installation size (reversible)

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



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)

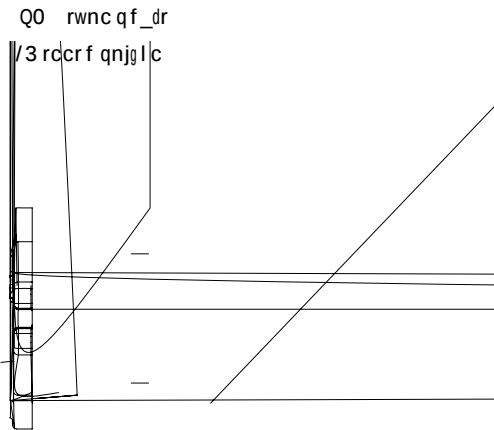
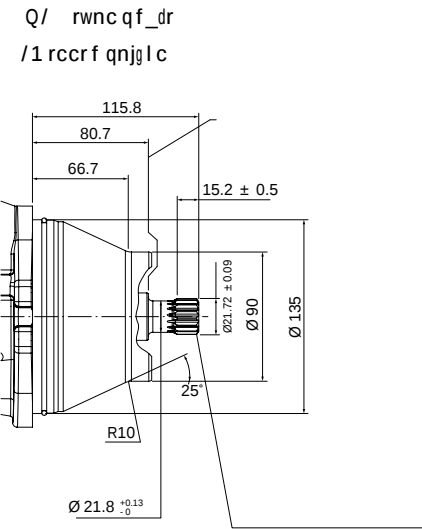
Installation	Rotation
Flow A → B	Clockwise (The electromagnet loses power)
	Counter-clockwise (The electromagnet gets electricity)

• Port details

	Nmpr L_ k c	Nmpr Qpxc _ l b Bcqapgnrgm l	Rjefrc l g l e Rmposc &L+ k '
A	Inlet port and Delivery port	1-1/16-12UN-2B (depth 22mm)	147
B		1-1/16-12UN-2B (depth 22mm)	147
X1	Control port	9 0.470239A223.31-1/16-12O o Ġ Ũ ← Φ29.2Φ4130°B223.31-1/16-12O Ġ Ũ ← Φ29.2Φ41	

Installation size

HM3V 38/45 Input Shaft type



B rwn c qf _dr
/86 conical axis



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