

### Life Science

Our product brands: IMI Adaptas IMI FAS

## Rotary shear valve 4 port, continuously rotating **VD04002PKNAUH0050**

Rated to 34 bar (500 psi)

cost effective

- Stepper motor with

- High performance and

planetary gearing system

- Saving space and reducing complexity
- Proven and robust design
- Continuously rotating valve acting like a pump



#### **Technical features**

Type: 4 port, continuously rotating

Pressure rating: 34 bar (500 psi)

Port threads: 1/4-28 UNF-2B

Fitting type: Flat

Power requirements: 1.26A 24V

Gear box ratio: 3.66:1

Motor specification: 2 phase, 1.8° step angle

Communication Protocol: RS-485

\*Available with PCB Step Master

#### Dimensions:

Height: 143.3 mm (5.64 in) Width: 42.1 mm (1.66 in) Depth: 42.1 mm (1.66 in)

Flow passage diameters: 1.0 mm (0.04 in)

Port to port volume: (1) 10.6 μL, (2) 2.4 μL

Stator port volume: (1) 10.3 μL, (2) 2.1 μL

Rotor channel volume: 0.3 µL Weight: 0.35 kg (0.77 lbs)

Operating temperature: +4 ... +80°C (+39 ... +176°F)

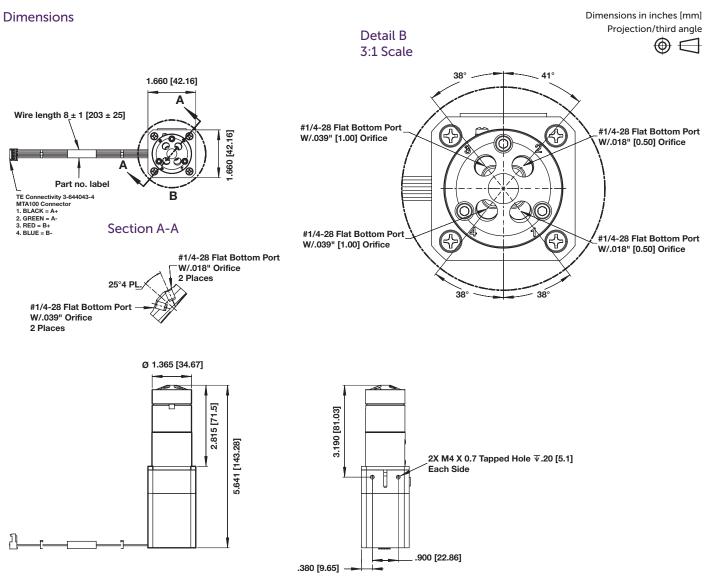
Storage temperature: -30 ... +80°C (-86 ... +176°F)

Storage humidity: < 95% humidity, non-condensing

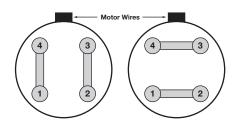
Switching time: < 0,25s Wetted materials: Stator: PEEK Rotor: UHMW

Compliance: RoHS, REACH





#### Typical working cycle



# IMI

#### Rotary shear valve part numbering

#### VD 04 00 2 PK NA UH 005 0 \*1)

Valve type	Substitute
Valve, driven	VD
Valve, manual	VM
Repair kit	RK
Number of ports	Substitute
4 ports	04
6 ports	06
8 ports	08
9 ports	09
10 ports	10
11 ports	11
12 ports	12
13 ports	13
16 ports	16
Number of positions	Substitute
2 positions	02
3 positions	03
4 positions	04
6 positions	06
8 positions	08
10 positions	10
12 positions	12
Port style	Substitute
#10-32 Cone	1
#1/4-28 Flat	2
#5/16-18 Flat	3
#1/4-28 Cone	4
#6-32 Cone	5

#### Configurations available

Туре	Operating pressure		Part no. *2)		
	(bar)	(psi)			
6 port, 2 position manual	483	7000	VM06021SSPKPI0700		
6 port, 2 position	379	5500	VD06021SSNAPI0550		
4 port, 3 position	117	1700	VD04032PKPKPK0170		
8 port, 4 position	269	3900	VD08042PKPKPK0390		
9 port, 8 position	117	1700	VD09082PKPKPK0170		
13 port, 12 position	117	1700	VD13122PKPKPK0170		
4 port shuttle valve	38	550	VD04002PKNAUH0050		
Available on request:					
4 port, 2 position	269	3900	VD04022PKPKPK0390		
8 port, 2 position	34	500	VD08021PKPKPK0050		
Coming soon:					
VALVE BOX (6/2)	483	7000	VD06021SDNAPB0702-1		
6 port, 2 position	483	7000	VD06021SDNAPB0700-1		
6 port, 2 position	483	7000	VD06021SDNAPB0700-2		
+2) Char Master DCD available to all mandale					

\*2) Step Master PCB available to all models.

\*1) Modifier (if needed, at the end): "-000" (tbd)

Stator material

Stainless steel

Ceramic

PEEK blend

UHMWPE

Polyimide

Stainless steel with DLC

 $\rightarrow$ PEEK

"-KIT" (accessories included)

Substitute

ΡК

SS

SD

СМ

PB

UH

ΡI