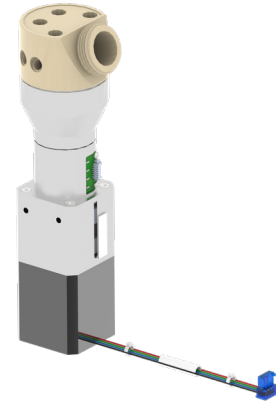


# Rotary shear valve

## 4 port, 3 position

### VD04032PKPK0170

- Rated to 117 bar (1,700 psi)
- High precision position sensing by absolute encoder
- Stepper motor with planetary gearing system
- High performance and cost effective
- Saving space and reducing complexity
- Proven and robust design



#### Technical features

**Type:**  
4 port, 3 position valve

**Pressure rating:**  
117 bar (1,700 psi)

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

**Fitting type:**  
Flat

**Power requirements:**  
1.26A 24V

**Gear box ratio:**  
18.3:1

**Motor specification:**  
2 phase, 1.8° step angle

**Connector:**  
Molex 0151340606

**Communication Protocol:**  
RS-485

**Dimensions:**  
Height: 190.6 mm (7.51 in)  
Width: 42.1 mm (1.66 in)  
Depth: 42.1 mm (1.66 in)

**Flow passage diameters:**  
1.5 mm (0.06 in)

**Port to port volume:**  
P1: (4-3) 79.6 µL,  
(1-C1-C2-2) 410.8 µL,  
P2: (1-2 & 3-4) 101.34 µL,  
P3: (1-2) 79.6 µL,  
(3-C2-C1-4) 410.78 µL

**Stator port volume:**  
(Port 1/4-28) 29.7 µL,  
(Other) 299.9 µL

**Seal volume:**  
16.2 µL

**Rotor channel volume:**  
(1) 3.97 µL,  
(2) 9.54 µL

**Weight:**  
0.61 kg (1.34 lbs)

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

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

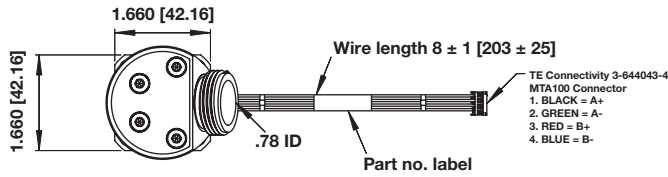
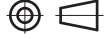
**Storage humidity:**  
< 95% humidity, non-condensing

**Switching time:**  
< 0,25s

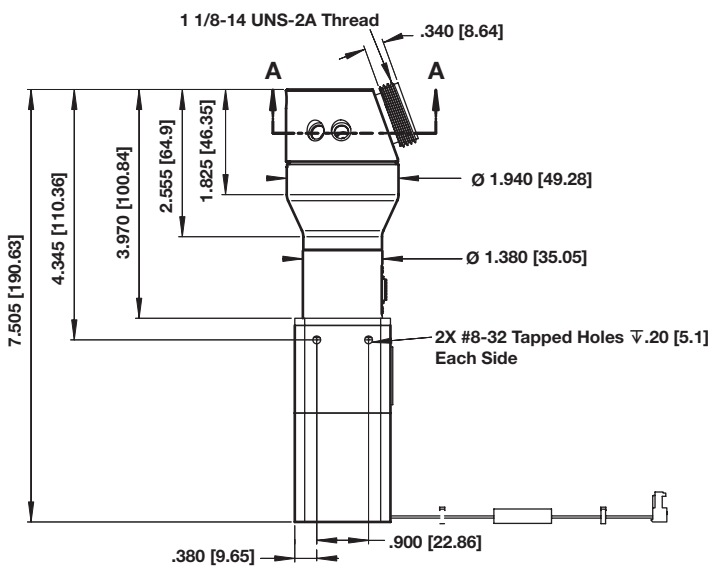
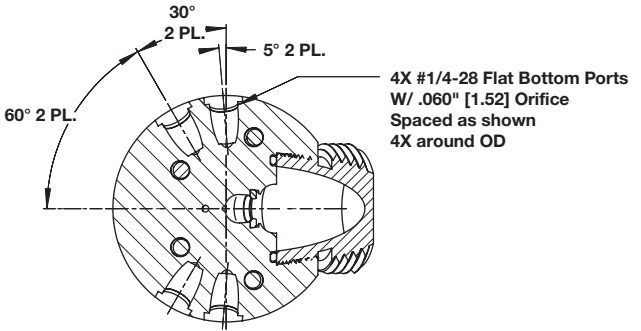
**Wetted materials:**  
Stator: PEEK  
Rotor: PEEK  
Seal: PEEK

**Compliance:**  
RoHS, REACH

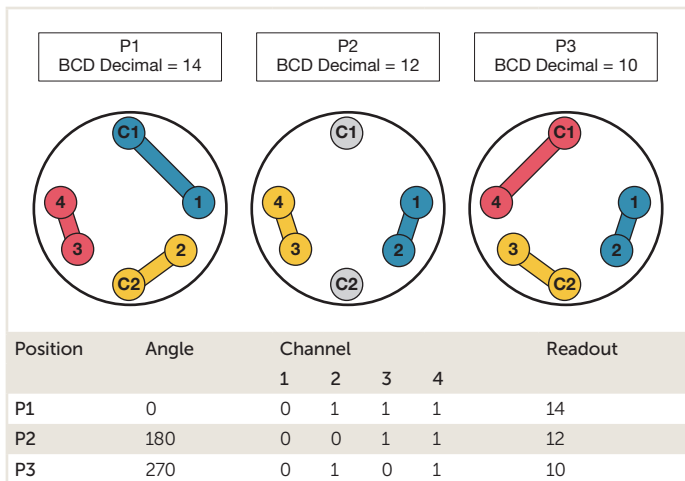
\*Available with PCB Step Master



Section A-A  
2:1 Scale

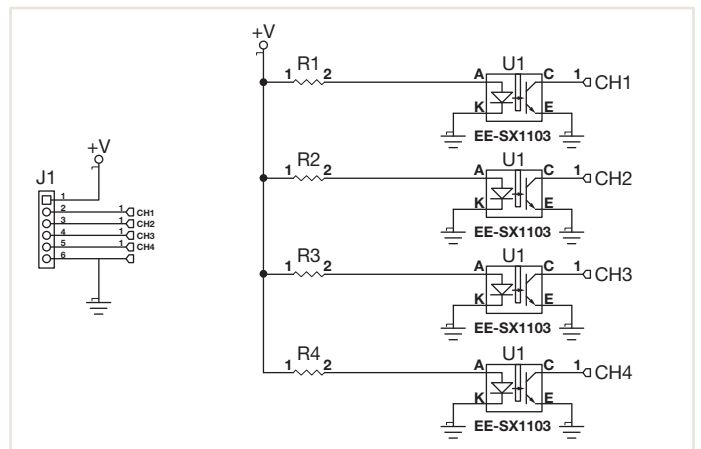


Typical working cycle



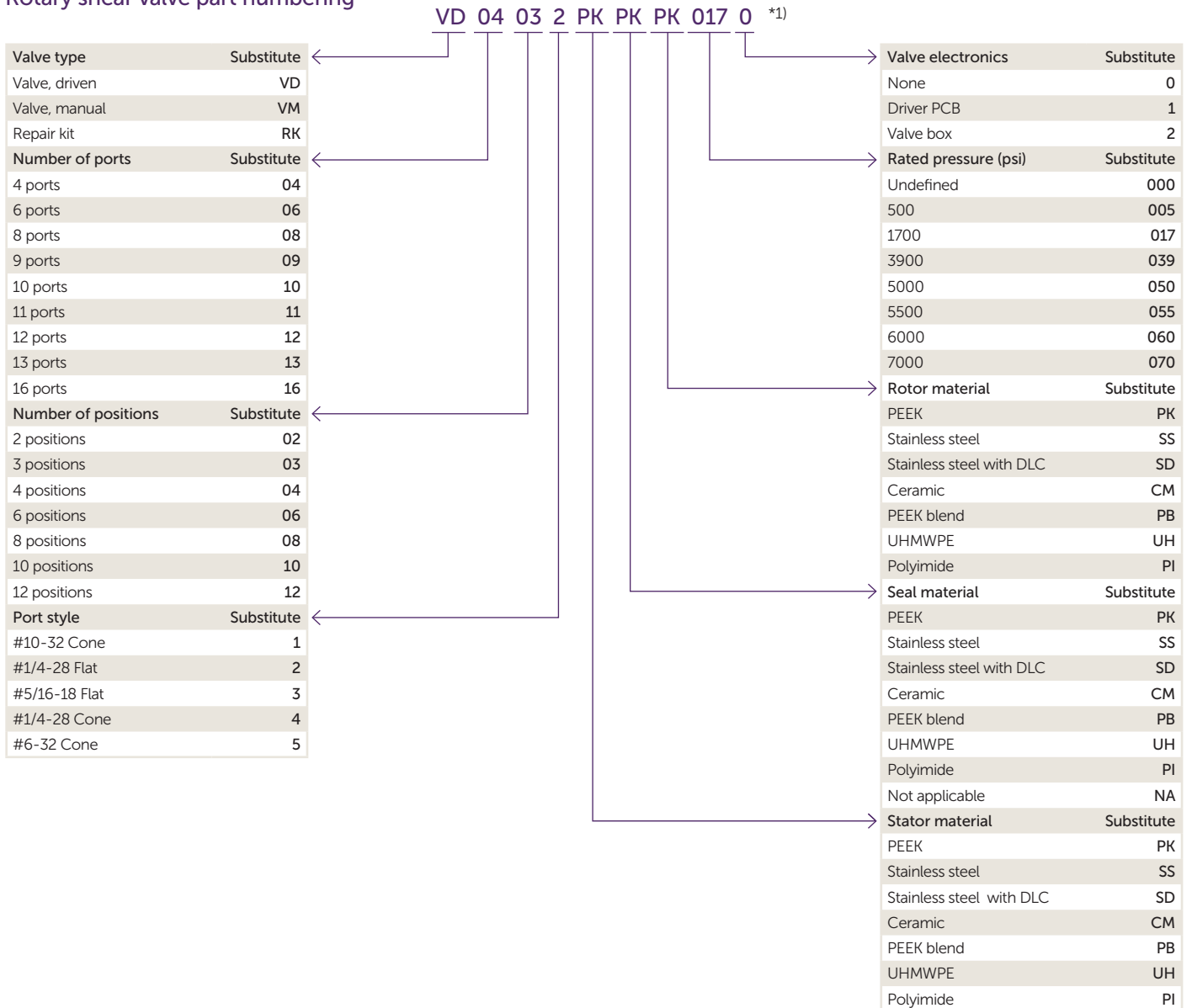
1 = BLOCKED,  
0 = OPEN

Encoder circuit diagram



Connector  
Molex 0151340606

## Rotary shear valve part numbering



## Configurations available

Type	Operating pressure (bar)	Operating pressure (psi)	Part no. *2)
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) Step Master PCB available to all models.

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