

→ AVAILABLE ON REQUEST

Rotary shear valve 8 port, 2 position VD08021PKPKPK0050

- Rated to 34 bar (500 psi)
- Dynamically alternating between two fluid paths without manually disconnecting plumbing
- High precision position sensing by absolute encoder
- Stepper motor with planetary gearing system
- Saving space and reducing complexity
- High performance and cost effective
- Proven and robust design



Technical features

Type:
8 port, 2 position switching valve

Pressure rating:
34 bar (500 psi)

Port threads:
10-32 UNF-2B

Fitting type:
Cone

Power requirements:
1.26A 24V

Gear box ratio:
3.66:1

Motor specification:
2 phase, 1.8° step angle

Connector:
Molex 0151340606

Communication Protocol:
RS-485

*Available with PCB Step Master

Dimensions:
Height: 141.7 mm (5.58 in)
Width: 42.1 mm (1.66 in)
Depth: 42.1 mm (1.66 in)

Flow passage diameters:
0.3 mm (0.01 in)

Port to port volume:
0.7 µL

Stator port volume:
0.1 µL

Seal volume:
0.2 µL

Rotor channel volume:
0.1 µL

Weight:
0.35 kg (0.78 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

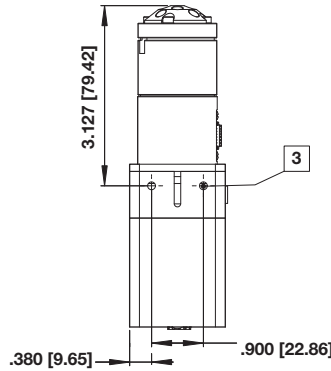
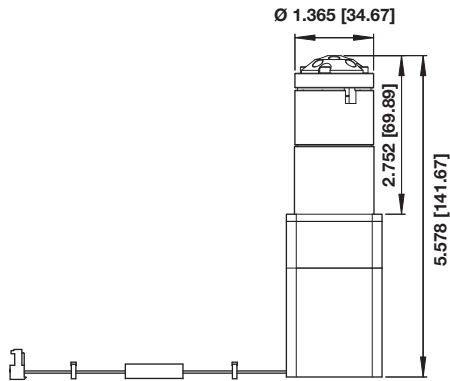
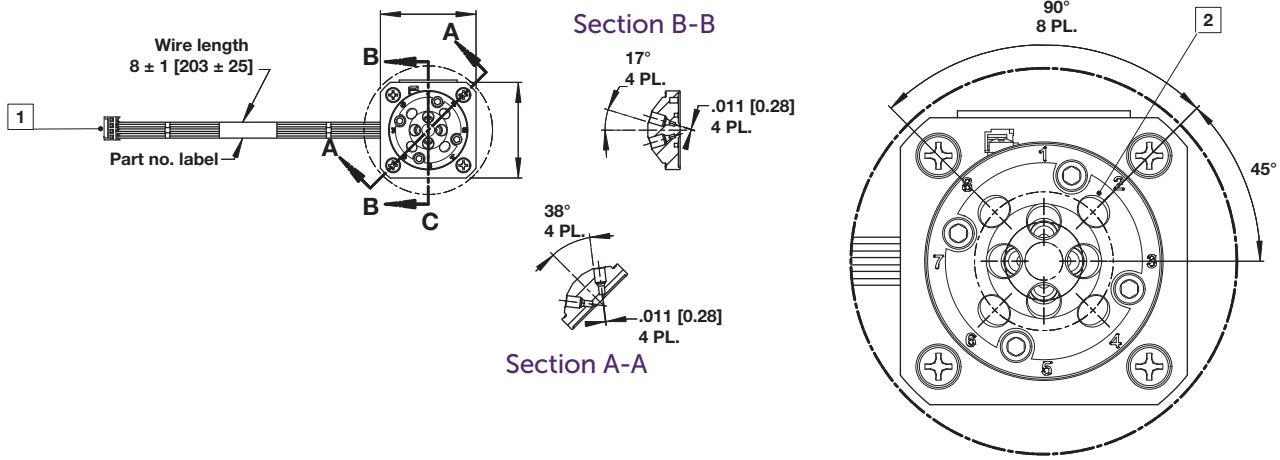
Wetted materials:
Stator: PEEK
Rotor: PEEK
Seal: PEEK

Compliance:
RoHS, REACH

Dimensions

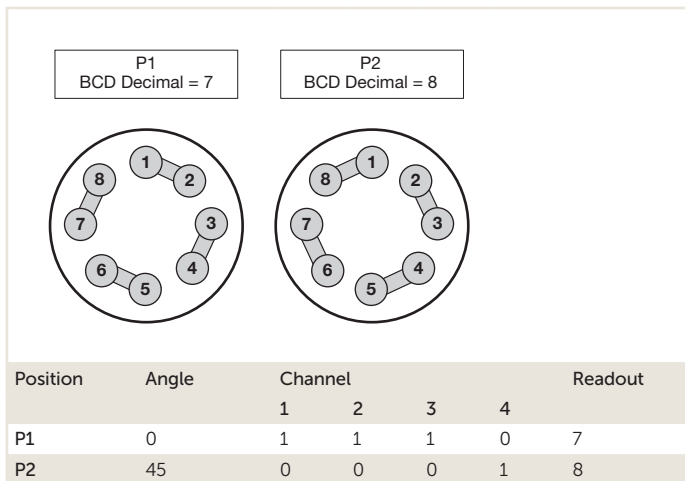
Dimensions in inches [mm]
Projection/third angle

Detail C 3:1 Scale



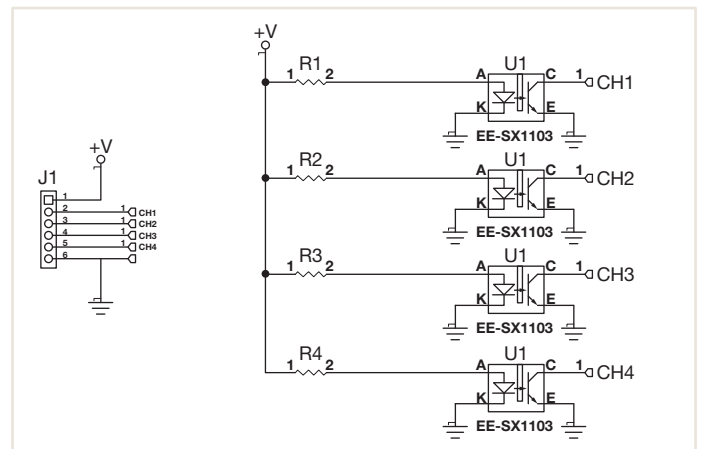
- 1 TE Connectivity 3-644043-4 MTA100 Connector
1. BLACK = A+
2. GREEN = A-
3. RED = B+
4. BLUE = B-
- 2 #10-32 cone bottom port
W/ .011" orifice
8 PL.
- 3 Mounting holes:
2x M4 x 0.7 tapped hole ∇ .20 [5.1]
Each side

Typical working cycle



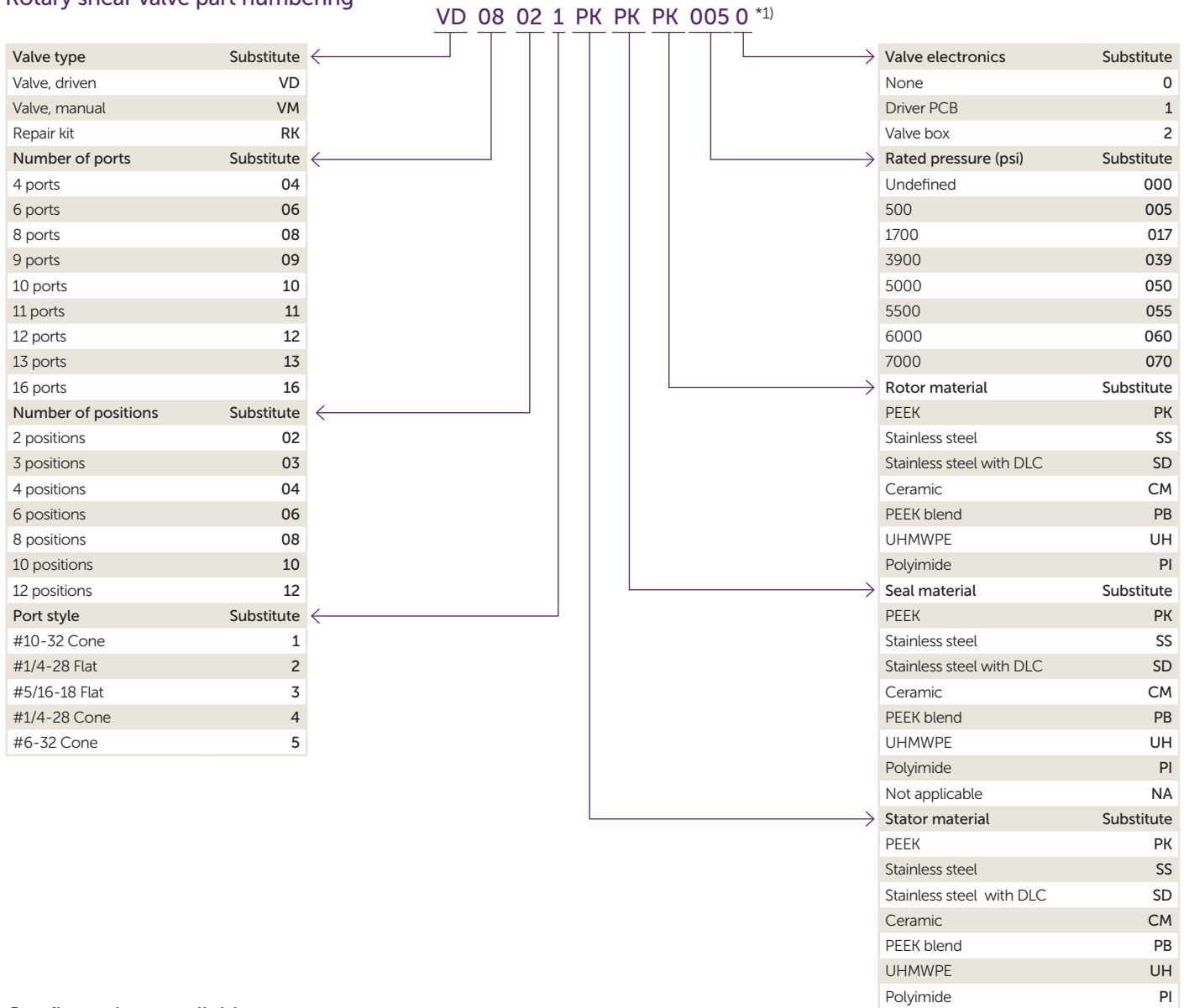
1 = BLOCKED,
0 = OPEN

Encoder circuit diagram



Connector
Molex 0151340606

Rotary shear valve part numbering



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

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.