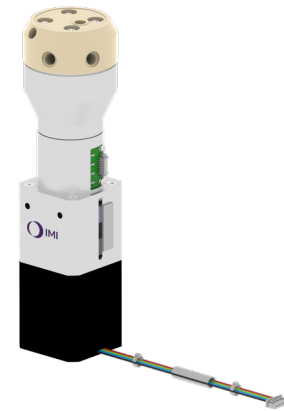


Rotary shear valve

8 port, 4 position

VD08042PKPKPK0390

- Rated to 269 bar (3,900 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:
8 port, 4 position valve

Pressure rating:
269 bar (3,900 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

*Available with PCB Step Master

Dimensions:
Height: 180.9 mm (7.125 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:
P1: (1-2) 28.9 µL, (3-4) 32.5 µL, (7-8) 35.4 µL
P2: (1-7) 36.3 µL, (2-3) 32.4 µL, (4-5) 31.6 µL
P3: (1-2) 30.1 µL, (3-4) 32.2 µL, (5-7) 38.9 µL
P4: (1-5) 32.6 µL, (2-6) 31.6 µL

Stator port volume:
Port 1: 10.7 µL, Port 2: 10.3 µL,
Port 3: 12.7 µL, Port 4: 10.5 µL,
Port 5: 10.3 µL, Port 6: 10.8 µL,
Port 7: 14.7 µL, Port 8: 9.9 µL

Seal volume:
Port 1: 2.6 µL, Port 2: 3.7 µL,
Port 3: 2.9 µL, Port 4: 3.6 µL,
Port 5: 4.6 µL, Port 6: 5.1 µL,
Port 7: 4.9 µL, Port 8: 2.6 µL

Rotor channel volume:
(1) 1.6 µL, (2) 2.8 µL, (3) 1.7 µL,
(4) 3.4 µL, (5) 2.6 µL, (6) 2.6 µL,
(7) 4.4 µL

Weight:
0.56 kg (1.24 lbs)

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

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

Storage humidity:
< 95% humidity, non-condensing

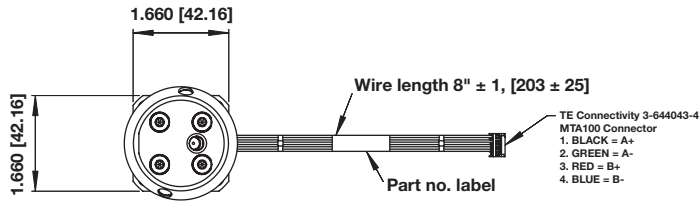
Switching time:
< 0,25s

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

Compliance:
RoHS, REACH

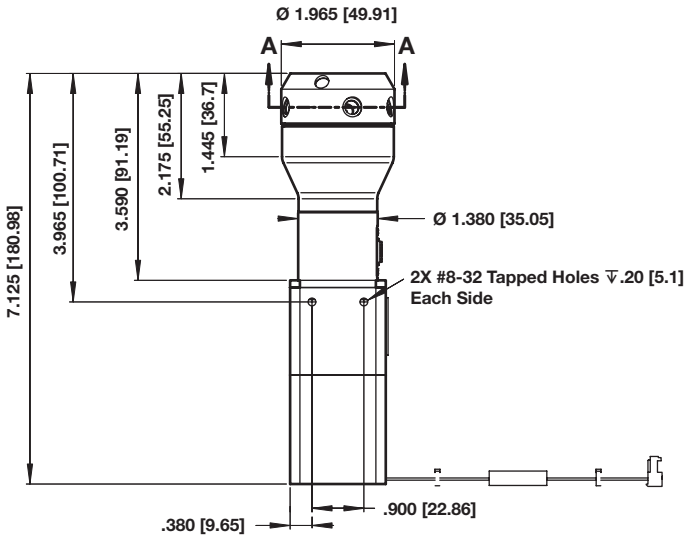
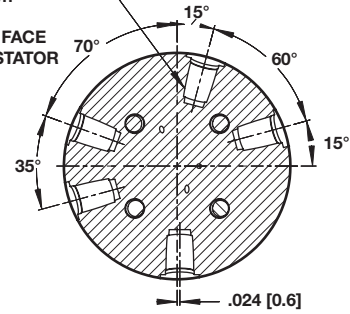
Dimensions

Dimensions in inches [mm]
Projection/third angle

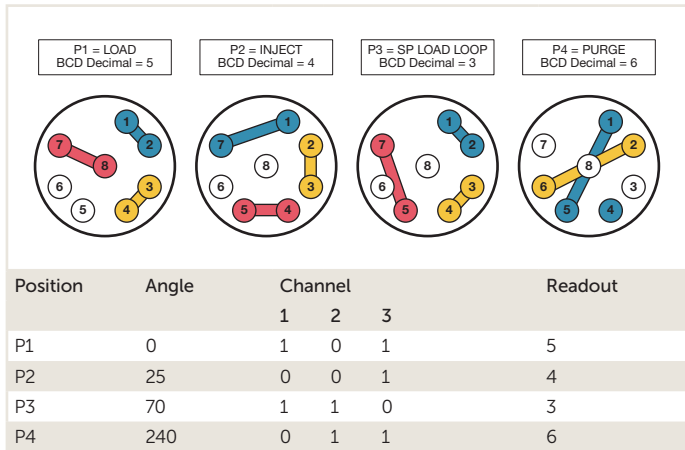


Section A-A 2:1 Scale

8X #1/4-28 Flat Bottom Ports W/ .040" [1.02] Orifice
Spaced as shown
5X AROUND OD
2X ON ANGLED FACE
1X ON TOP OF STATOR

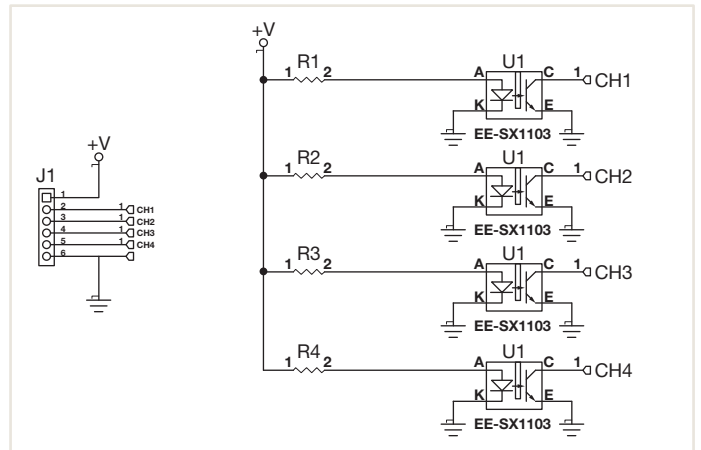


Typical working cycle



1 = BLOCKED,
0 = OPEN

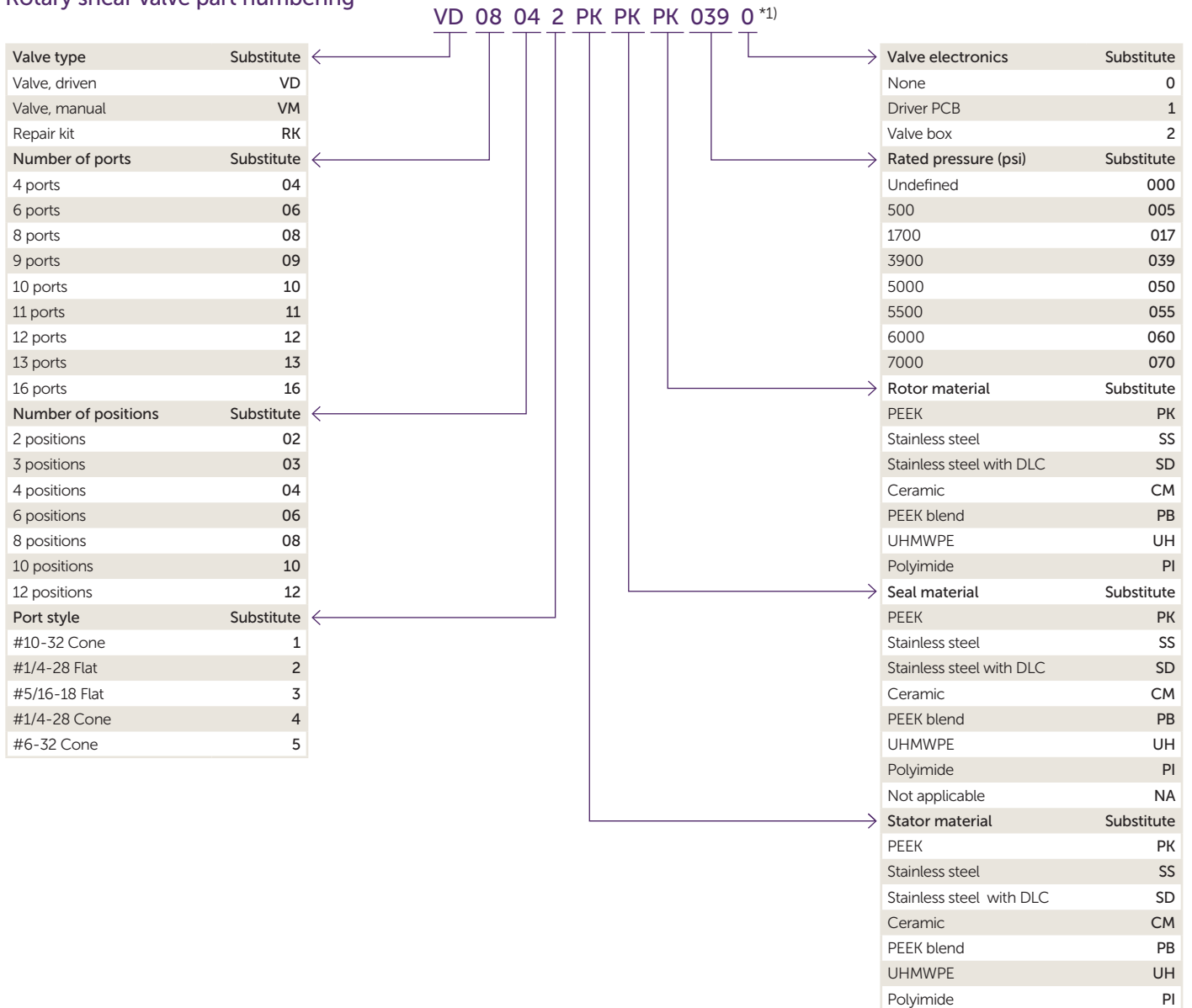
Encoder circuit diagram



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)