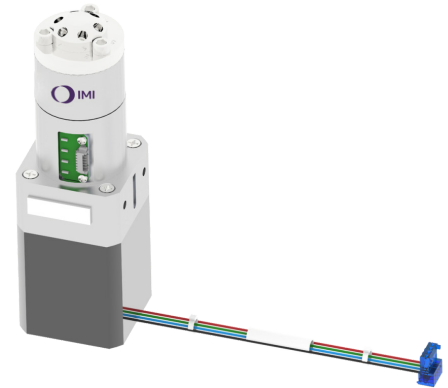


Rotary shear valve 6 port, 2 position VD06021SSNAPI0550



- Rated to 380 bar (5,500 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:
6 port, 2 position valve

Pressure rating:
379 bar (5,500 psi)

Port threads:
10-32,
1/4-28,
5/16-18

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: 175 mm (6.89 in)
Width: 42.1 mm (1.66 in)
Depth: 42.1 mm (1.66 in)

Flow passage diameters:
1.3 mm (0.05 in)

Port to port volume:

Position 1:	Position 2:
(1-2) 26.6 µL,	(2-3) 17.8 µL,
(3-4) 12 µL,	(1-6) 17.8 µL,
(5-6) 12.0 µL,	(4-5) 15.0 µL

Stator port volume:
(Port 10-32) 5.5 µL,
(Port 5/16-18) 2.5 µL,
(Port 1/4-28) 11.3 µL

Rotor channel volume:
4.0 µL

Weight:
0.57 kg (1.25 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

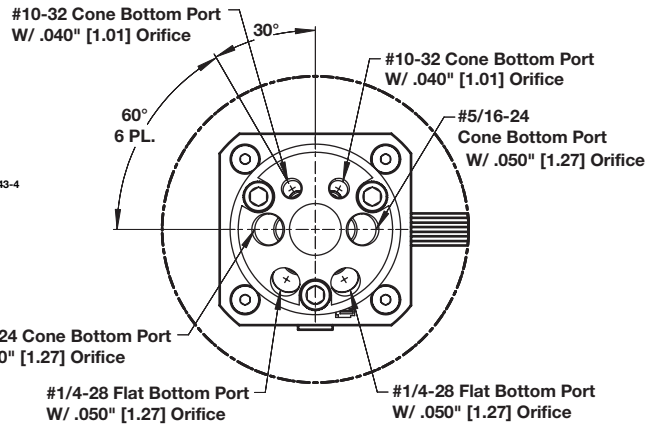
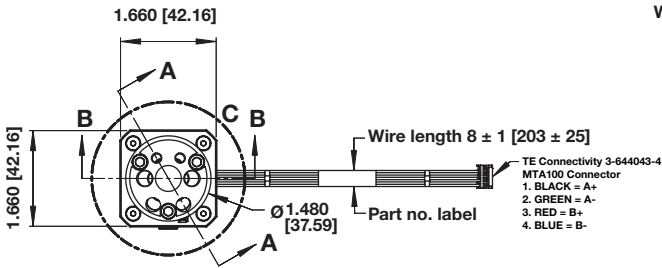
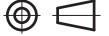
Wetted materials:
Stator: Stainless steel
Rotor: Polyimide

Compliance:
RoHS, REACH

Dimensions

Dimensions in inches [mm]
Projection/third angle

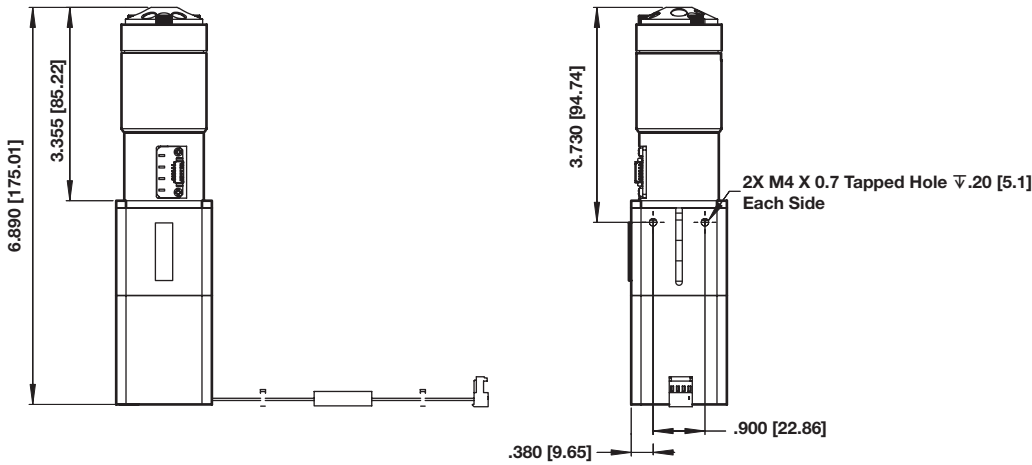
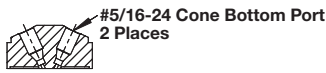
Detail C 2:1 Scale



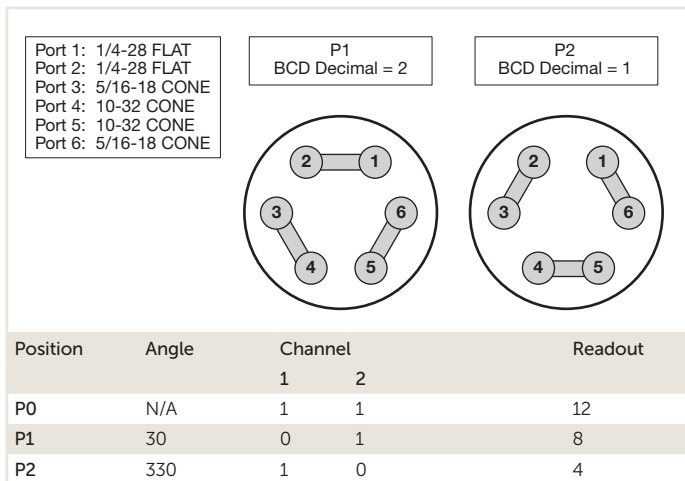
Section A-A



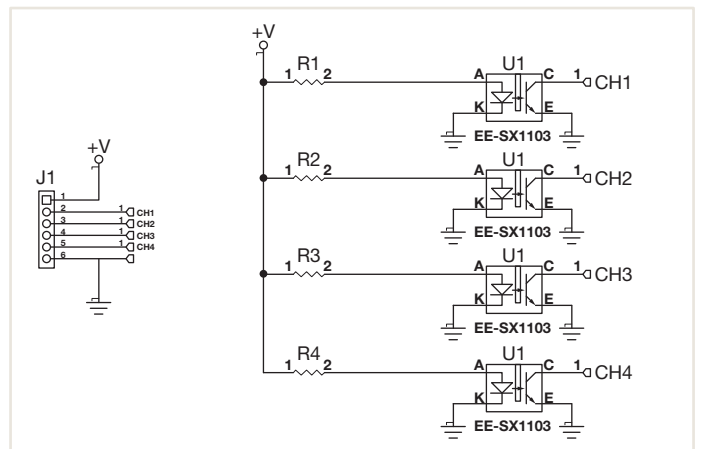
Section B-B



Typical working cycle



Encoder circuit diagram



Connector

Molex 0151340606

Rotary shear valve part numbering

VD 06 02 1 SS NA PI 055 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

Valve electronics	Substitute
None	0
Driver PCB	1
Valve box	2
Rated pressure (psi)	Substitute
Undefined	000
500	005
1700	017
3900	039
5000	050
5500	055
6000	060
7000	070
Rotor material	Substitute
PEEK	PK
Stainless steel	SS
Stainless steel with DLC	SD
Ceramic	CM
PEEK blend	PB
UHMWPE	UH
Polyimide	PI
Seal material	Substitute
PEEK	PK
Stainless steel	SS
Stainless steel with DLC	SD
Ceramic	CM
PEEK blend	PB
UHMWPE	UH
Polyimide	PI
Not applicable	NA
Stator material	Substitute
PEEK	PK
Stainless steel	SS
Stainless steel with DLC	SD
Ceramic	CM
PEEK blend	PB
UHMWPE	UH
Polyimide	PI

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)