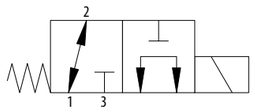
SV1-10-3/3M/3R - Solenoid valve

3-way, 2-position, spool type solenoid valve
Up to 23 L/min (6 USgpm) • 210 bar (3000 psi)



Operation

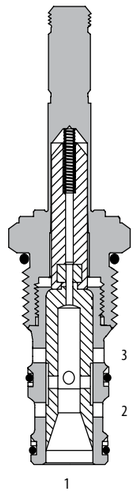
In the de-energized position this valve allows flow from port 1 to 2 while port 3 is blocked.

In the energized position flow is allowed from port 3 to port 1 while port 2 is blocked.

Features

Hardened, ground and honed working parts to limit leakage. IP69K Tough coil compatibility. Continuously rated. Compact design with low Pressure drop. Rated pressure on all ports.

Sectional view



Performance data

Ratings and specifications

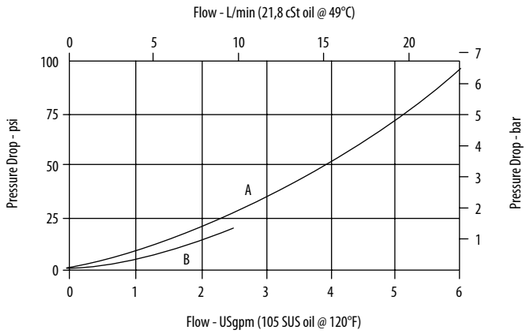
Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49° C (120° F)	
Typical application pressure (all ports)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Rated flow	23L/min (6 USgpm) Max. flow port 1 to 2-10L/min (2.5 USgpm)
Internal leakage	164 cm³/min (10 in³/min) max @ 210 bar (3000 psi)
Temperature range	-40° to 120° C (-40° to 248° F)
Coil duty	Continuous from 85% to 110% of normal voltage
Cavity	C-10-3
Fluids	All general purpose hydraulics fluids such as: MIL-H-5606, SAE 10, SAE 20 etc.
Filtration	Cleanliness code 18/16/13
Housing material (standard)	Aluminum
Weight including coil	0,42 kg (0.93 lbs)
Seal kit	889624 (Buna-N), 889628 (Viton®)

Viton is a registered trademark of E.I. DuPont

Description

This is a 3-way 2-position, direct acting, spool type solenoid valve. This valve can be used in applications requiring separate pressure and tank lines, such as a single acting cylinder or any other application where a three way two position solenoid valve is needed.

Pressure drop



SV1-10-3/3M/3R - Solenoid valve

3-way, 2-position, spool type solenoid valve
Up to 23 L/min (6 USgpm) • 210 bar (3000 psi)

Model code

SV1 – 10 (V) – 3 (*) ** – ** * – 00**

1 2 3 4 5 6 7 8 9

1 Function
SV1 - Solenoid valve

2 Size
10 - 10 size

3 Seal material
Blank - Buna-N
V - Viton®

4 Style
3 - 3-way, 2 position

5 Manual override option
Blank - No manual override
M - Knob type
R - Cable type

For valve dimensions with Manual override option installed see page A-980.

6 Port size

Code	Port size	Housing number
0	Cartridge only	
3B	3/8" BSPP	02-173358*
6T	SAE6	566162*
2G	1/4" BSPP	876705
3G	3/8" BSPP	876714
6H	SAE 6	876704
8H	SAE 8	876711

*Light duty housing
See section J for housings.

7 Voltage rating
00 - No coil
12D - 12VDC
24D - 24VDC
36D - 36VDC
24A - 24VAC
115A - 115VAC
230A - 230VAC
12B - 12VDC/w diode*
24B - 24VDC/w diode*

*Optional arc suppression diode

8 Connector types
Blank - No coil
G - ISO 440 DIN 43650
Q - Spade terminals
W - Flying lead
N - Deutsch (DC only)
Y - Amp JR (DC only)
D - Metripack 150 male (DC only)
J - Metripack 280 male (DC only)

For coil dimensions see section C.

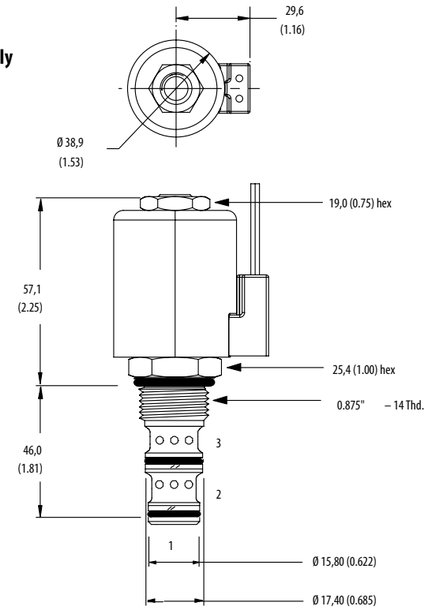
9 Special features
00 - None

(Only required if valve has Special features, omitted if "00".)

Note: Use J series, 23W coils with this solenoid valve.

Dimensions
mm (inch)

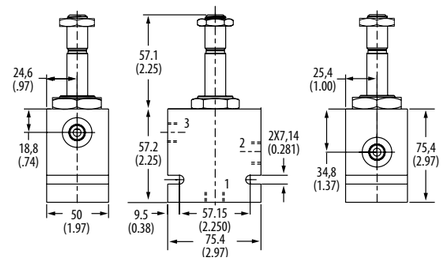
Cartridge only



Torque cartridge in aluminum housing 47-54 Nm (35-40 ft lbs).

Note: When solenoid valve is ordered as Cartridge only, coil nut is included.

Installation drawing (Aluminum)



⚠ Warning
Maintain 5-8 Nm (4-6 ft lbs) maximum torque on valve tube nut.

Over tightening may cause valve failure.