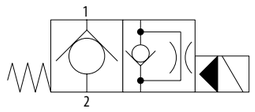
SV1-10-C/CM/CR - Solenoid valve

Poppet type, normally closed solenoid valve
45 L/min (12 USgpm) • 210 bar (3000 psi)

A



Operation

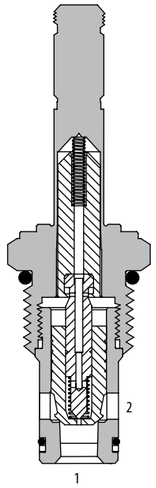
In the de-energized position the valve blocks flow from port 2 to 1 and free flow is allowed from port 1 to 2.

When the solenoid is energized the pilot poppet is pulled off the seat allowing the valve to open from port
2 to 1. in the reverse direction the flow is restricted by the pilot orifice.

Features

Hardened and ground working parts. Lapped seat for low leakage. IP69K Tough coil compatibility. Continuously rated. Compact design with low pressure drop.

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	45 L/min (12 USgpm)
Internal leakage	Less than 5 drops/min. max @ 210 bar (3000 psi)
Coil duty	Continuous from 85% to 110% of nominal voltage
Response times (100% rated voltage and flow)	Energize: 18 ms, de-energize: 46 ms
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-10-2
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20 etc.
Filtration	Cleanliness code 18/**16/13**
Housing material (standard)	Aluminum
Weight including coil	0,4 kg (0.087 lbs)
Seal kit	565803 (Buna-N), 566086 (Viton®)

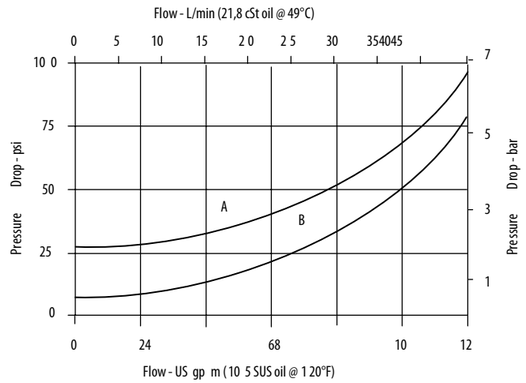
Viton is a registered trademark of E.I. DuPont

Description

This is a 2-way, 2-position, poppet type, pilot operated, normally closed solenoid valve. This valve is used in applications requiring low leakage, such as load holding applications or as a general purpose diverter or dump valve.

Pressure drop

Cartridge only



Pressure drop vs. Flow

A - Port 1 to port 2 de-energized

B - Port 2 to port 1 energized

Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

SV1-10-C/CM/CR - Solenoid valve

Poppet type, normally closed solenoid valve
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A

Model code

SV1 – 10 (V) – C (*) (F) – ** – ** * – 00**

1 2 3 4 5 6 7 8 9 10

1 Function

SV1 - Solenoid valve

2 Size

10 - 10 size

3 Seal material

Blank - Buna-N
V - Viton®

4 Style

C - Normally closed

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 Filter option

Blank - None
F - Filter screen

7 Port size

Code	Port size	Housing number
0	Cartridge only	
3B	3/8" BSPP	02-175464*
6T	SAE 6	566151*
2G	1/4" BSPP	876702
3G	3/8" BSPP	876703
6H	SAE 6	876700
8H	SAE 8	876701

*Light duty housing.
See section J for housing details.

8 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.

9 Connector types

Blank - No coil
G - ISO 4400 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 part numbers and dimensions see section C.

10 Special features

00 - None

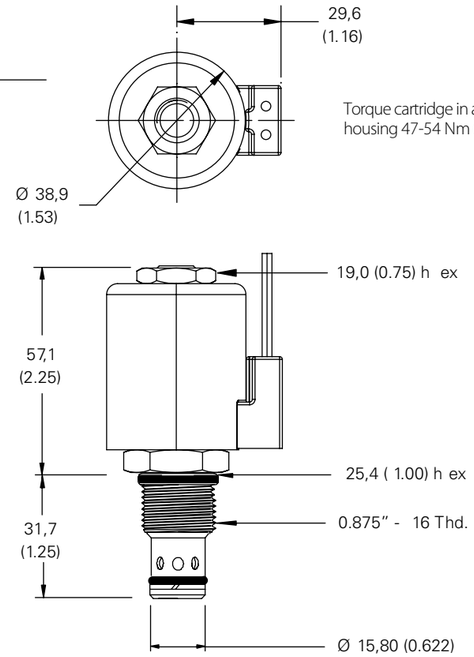
(Only required if valve has special features, omitted if "00".)

Note: Use J series, 23 W 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.

⚠ Warning

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

Over tightening may cause valve failure.

Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.