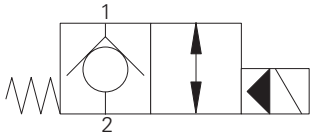


SV3-12-C/CM/CR - Solenoid Valve

2-way, 2-position, normally closed, poppet type solenoid valve
 114 L/min (30 USgpm) • 210 bar (3000 psi)

A



Operation

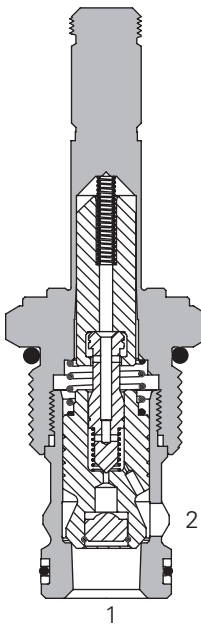
In the de-energized position the valve blocks flow from port 2 to 1 and free flow is allowed from port 1 to 2.

When the solenoid is energized the pilot poppet is pulled off the seat allowing the valve to open in both directions.

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 | 114 L/min (30 USgpm) |
| Internal leakage (port 2 to port 1) | less than 5 drops/min, max @ 210 bar (3000 psi) |
| Temperature range | -40° to 120°C (-40° to 248°F) |
| Coil duty | Continuous from 85% to 110% of nominal voltage |
| Response times (100% rated voltage and flow) | Energize: 75 ms De-Energize: 150 ms |
| Cavity | C-12-2 or C-12-2U Add "U" after number if undercut is required. If undercut is not specified, expect 10 psi @ 15 USgpm and 20 psi @ 30 USgpm higher pressure drop. |
| 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 | 0,336 kg (0.74 lbs) |
| Seal kit | 02-165889 (Buna-N), 02-165888 (Viton) |

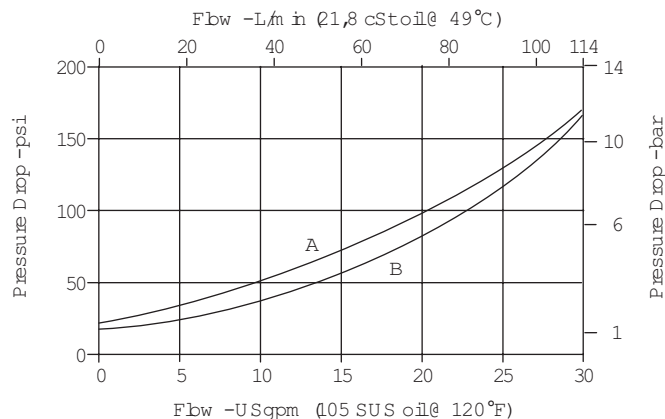
Viton is a registered trademark of E.I. DuPont

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 Curves

Cartridge only

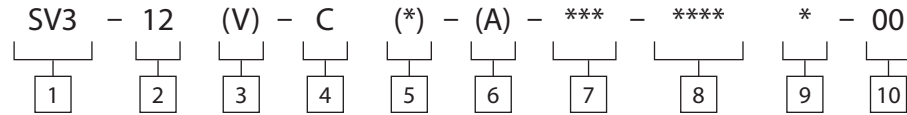


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

SV3-12-C/CM/CR - Solenoid Valve

2-way, 2-position, normally closed, poppet type solenoid valve
114 L/min (30 USgpm) • 210 bar (3000 psi)

Model Code



- 1** Function
SV3 - Solenoid valve

- 2** Size
12 - 12 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

Forvalvedimensionswithmanualover-
rideoptioninstalledseepageA-980.

- 6** Valve Housing Material
Omit for cartridge only
A - Aluminum (standard)
S - Steel

| 7 Port Size | | Housing Number | |
|-------------|----------------|----------------|-----------|
| Code | Port Size | Aluminium | Steel |
| 0 | Cartridge only | | |
| 4G | 1/2" BSPP | 02-161118 | 02-172062 |
| 4GU | 1/2" BSPP | 02-161116 | 02-172512 |
| 6G | 3/4" BSPP | 02-161117 | 02-169665 |
| 6GU | 3/4" BSPP | 02-161115 | 02-162922 |
| 10T | SAE 10 | 02-160640 | 02-169744 |
| 10TU | SAE 10 | 02-160641 | 02-169817 |
| 12T | SAE 12 | 02-160644 | 02-169782 |
| 12TU | SAE 12 | 02-160645 | 02-169790 |

See section J for housing details.

| 8 Voltage Rating | |
|------------------|----------------------------------|
| 00 - No coil | 115A - 115VAC |
| 12D - 12VDC | 230A - 230VAC |
| 24D - 24VDC | 12B - 12VDC/w diode* |
| 36D - 36VDC | 24B - 24VDC/w diode* |
| 24A - 24VAC | *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)

- 10** Special Features
00 - None
(Only required if valve has special features, omitted if "00.")

Dimensions

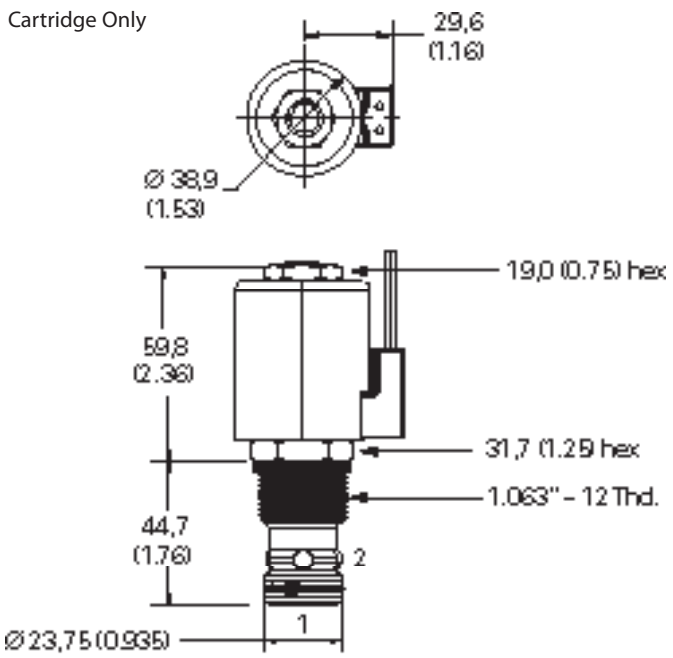
mm (inch)

Torque cartridge in housing
A - 81-95 Nm (60-70 ft lbs)
S - 102-115 Nm (75-85 ft lbs)

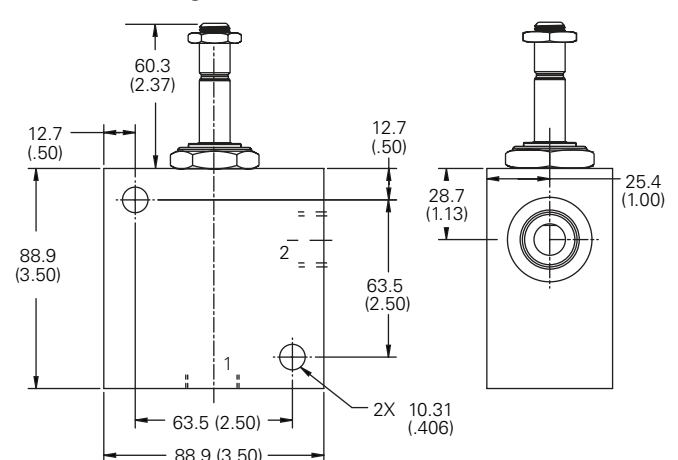
Note: When solenoid valve is ordered as cartridge only, coil nut is included.

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

Cartridge Only



Installation Drawing (Aluminum)



WARNING
Maintain 5-8 Nm (4-6 ft lbs) maximum torque on valve tube nut. Over tightening may cause valve failure.