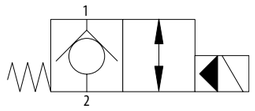
# SV13-10-C/CM - Solenoid valve

**Poppet type, normally closed solenoid valve, (free reverse flow)**
**45 L/min (12 USgpm) • 350 bar (5000 psi)**




## Operation

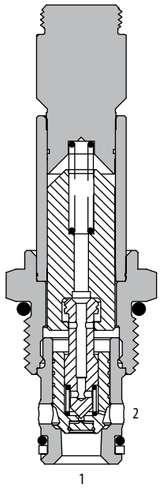
In the de-energized position the valve blocks flow from port 2 to 1 and free flow is allowed from port 1 to 2.

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. 350 bar working pressure.

## 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) | 350 bar (5000 psi) |
| Cartridge fatigue pressure (infinite life) | 310 bar (4500 psi) |
| Rated flow | 45 L/min (12 USgpm) |
| Internal leakage, port 2 to port 1 | 5 drops/min, max @ 350 bar (5000 psi) |
| Temperature range | -40° to 100°C (-40° to 212°F) |
| Coil duty | Continuous from 85% to 110% of nominal voltage |
| 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) | Steel |
| Weight cartridge only | 0,18 kg (0.39 lbs) |
| Seal kit | 565803 (Buna-N), 566086 (Viton®) |

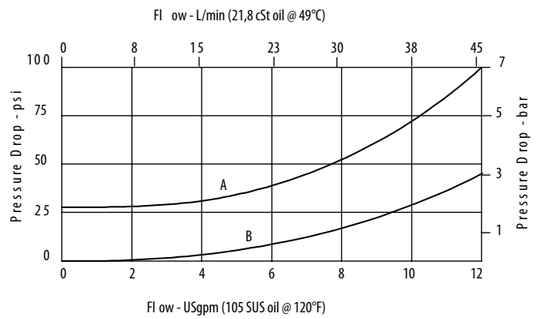
Viton is a registered trademark of E.I. DuPont

## Description

This is a 2-way, 2-position, poppet type, high pressure, 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




**A** - Port 1 to port 2
**B** - Port 2 to port 1 energized



# SV13-10-C/CM - Solenoid valve

**Poppet type, normally closed solenoid valve, (free reverse flow)**
**45 L/min (12 USgpm) • 350 bar (5000 psi)**

## Model code

**SV13 – 10 (V) – C (M) – (S) ** – **** * H – 00**

1 2 3 4 5 6 7 8 9 10 11

### 1 Function

**SV13** - 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** - Manual override

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

### 6 Valve housing material

**Blank** - Cartridge only
**S** - Steel

### 7 Port size

| Code | Port size | Housing number |
|---|---|---|
| **0** | Cartridge only | |
| **2G** | 1/4" BSPP | 02-175102 |
| **3G** | 3/8" BSPP | 02-175103 |
| **6T** | SAE 6 | 02-175100 |
| **8T** | SAE 8 | 02-175101 |

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)

### 10 Coil series

**H** - 10 Series, 29 W

For coil part numbers and dimensions see section C.

### 11 Special features

**00** - None

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

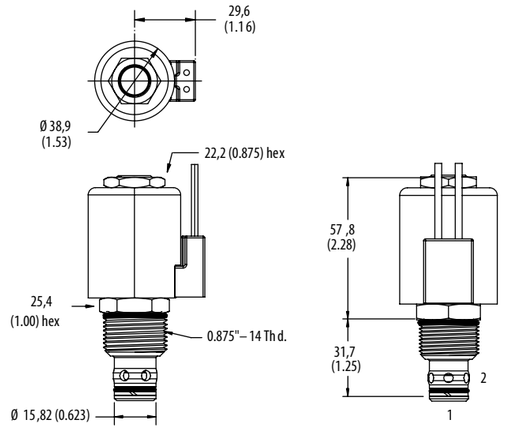
## Dimensions

mm (inch)

Torque cartridge in steel housing 68-75 Nm (50-55 ft lbs)

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

## Cartridge only




**⚠ Warning**

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

Over tightening may cause valve failure.