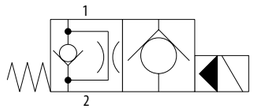
# SV5-10-O/OP/OS - Solenoid valve

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




## Operation

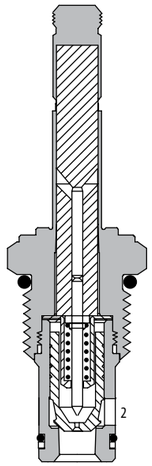
In the de-energized position the valve allows free flow from port 2 to 1 and a restricted flow through the pilot orifice from port 1 to 2.

When the solenoid is energized the pilot poppet closes the orifice and the valve closes blocking flow from port 2 to 1 while allowing free flow from port 1 to 2.

## 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, 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 |
| 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 | 565806 (Buna-N), 566086 (Viton") |

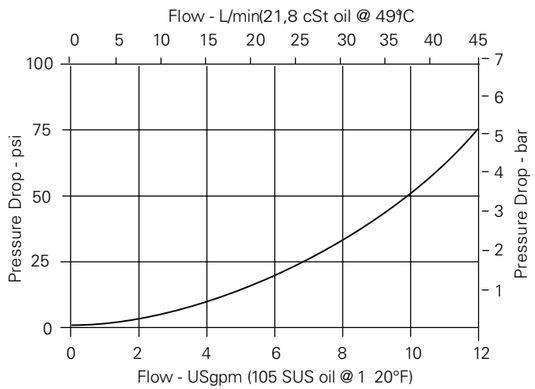
Viton is a registered trademark of E.I. DuPont

## Description

This is a 2-way, 2-position, poppet type, pilot operated, normally open 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




Port 2 to port 1 de-energized

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



SV5-10-O/OP/OS - Solenoid valve

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



## Model code

SV5 – 10 (V) – O (*) (F) – ** – **** * – 00
1 2 3 4 5 6 7 8 9 10

### 1 Function

**SV5** - Solenoid valve

### 2 Size

**10** - 10 size

### 3 Seal material

**Blank** - Buna-N

**V** - Viton®

### 4 Style

**O** - Normally open

### 5 Manual override option

**Blank** - No manual override
**P** - Push type
**S** - Screw 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

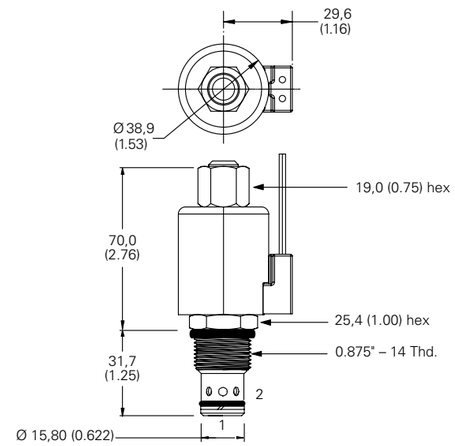
(Only required if valve has special features, omitted if "00".)

**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.*