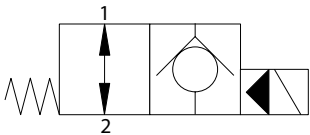


# SV3-8-O/OP/OS - Solenoid Valve

Poppet type, normally open solenoid valve  
23 L/min (6 USgpm) • 210 bar (3000 psi)



### Operation

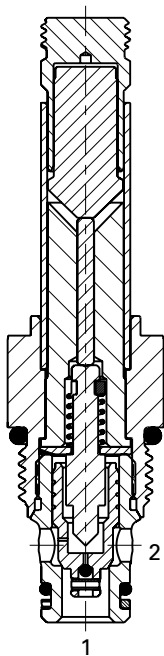
In the de-energized position the valve allows free flow in both directions.

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	23 L/min (6 USgpm)
Internal leakage	less than 5 drops/min, max @ 210 bar (3000 psi) with valve energized
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: 24 ms. De-Energize: 25 ms
Cavity	C-8-2
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	0,28 kg (0.62 lbs)
Seal kit	02-165875 (Buna-N) 02-165877 (Viton®)

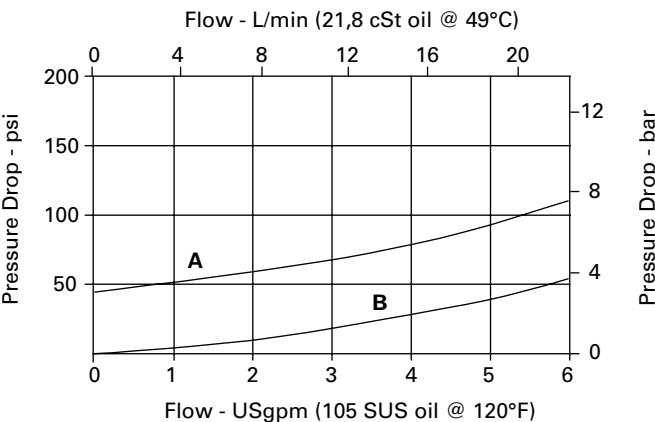
Viton is a registered trademark of E.I. DuPont

### 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



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

# SV3-8-O/OP/OS - Solenoid Valve

Poppet type, normally open solenoid valve  
23 L/min (6 USgpm) • 210 bar (3000 psi)

## Model Code

<b>SV3</b>	<b>- 8</b>	<b>(V)</b>	<b>- O</b>	<b>(*)</b>	<b>(F)</b>	<b>- (A)</b>	<b>**</b>	<b>- ****</b>	<b>*</b>	<b>S</b>	<b>- 00</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>

**1 Function**  
**SV3** - Solenoid valve

**2 Size**  
**8** - 8 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

## 8 Port Size

Code	Port Size	Housing Number
<b>0</b>	Cartridge only	
<b>2G</b>	1/4" BSPP	02-160727
<b>3G</b>	3/8" BSPP	02-160728
<b>4T</b>	SAE 4	02-160730
<b>6T</b>	SAE 6	02-160731
<b>8T</b>	SAE 8	02-160732

See section J for housing details.

## 9 Voltage Rating

**00** - No coil  
**12D** - 12VDC  
**24D** - 24VDC  
**36D** - 36VDC

**7 Valve Housing Material**  
Omit for cartridge only  
**A** - Aluminum

**24A** - 24VAC  
**115A** - 115VAC  
**230A** - 230VAC  
**12B** - 12VDC/w diode\*  
**24B** - 24VDC/w diode\*  
\*Optional arc suppression diode.

## 10 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)

## 11 Coil Series

**S** - 8 series, 20 W  
For coil part numbers and dimensions see section C.

## 12 Special Features

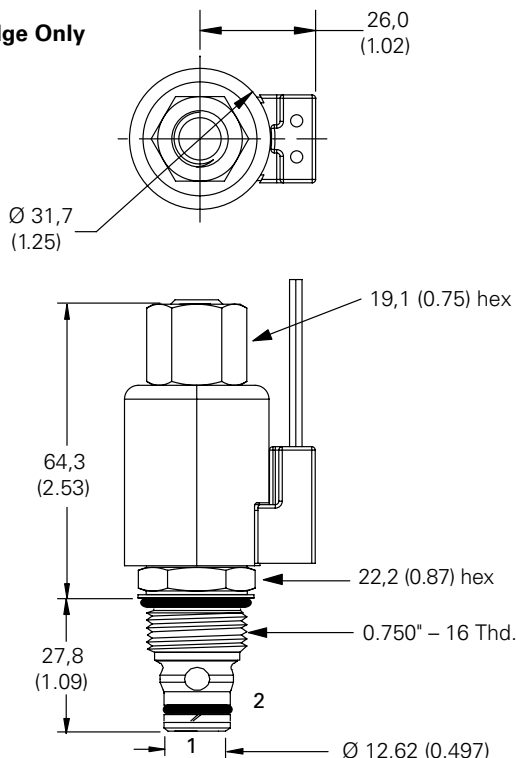
**00** - None  
(Only required if valve has special features, omitted if "00".)

## Dimensions

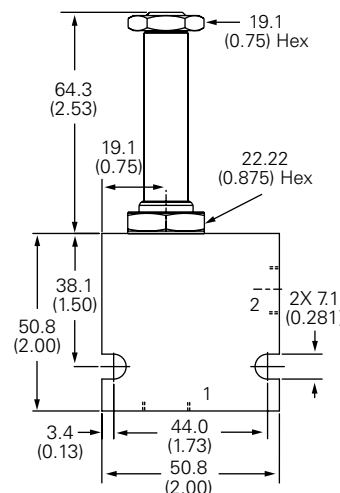
mm (inch)

Torque cartridge in aluminum housing 34-41 Nm (25-30 ft lbs)

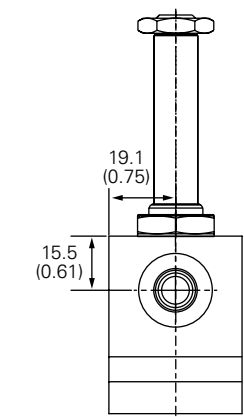
## Cartridge Only



## Installation Drawing



**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.