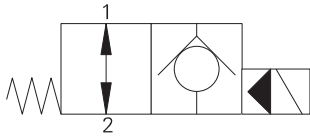


# SV13-20-O/OP/OS - Solenoid valve

Poppet type, normally open solenoid valve  
227 L/min (60 USgpm) • 350 bar (5000 psi)

A



## Operation

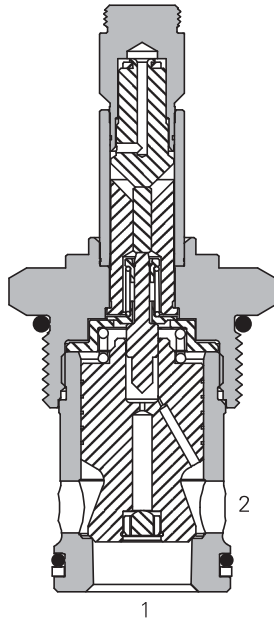
In the de-energized position the valve allows free flow in both directions.

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. 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	227 L/min (60 USgpm)
Internal leakage, port 2 to port 1	less than 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-20-2
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	0,62 kg (1.37 lbs)
Seal kit	889615 (Buna-N), 889619 (Viton®)

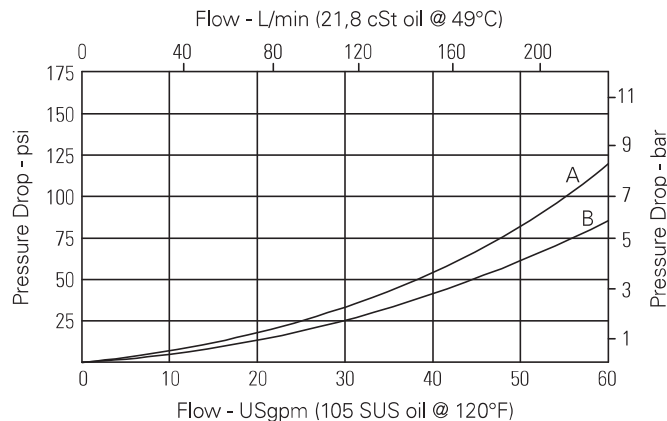
\*For application pressure over 280 bar (4000 psi) consult factory  
Viton is a registered trademark of E.I. DuPont

## Description

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



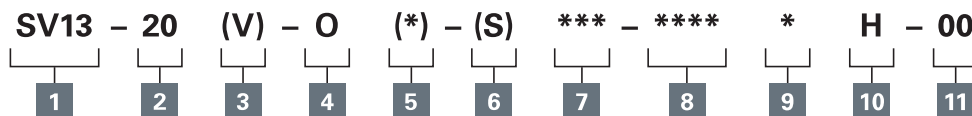
- A** - Port 2 to port 1 de-energized
- B** - Port 1 to port 2

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

# SV13-20-O/OP/OS - Solenoid valve

Poppet type, normally open solenoid valve  
227 L/min (60 USgpm) • 350 bar (5000 psi)

## Model code



A

### 1 Function

SV13 - Solenoid valve

### 2 Size

20 - 20 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 Valve housing material

Blank - Cartridge only  
S - Steel

### 7 Port size

Code	Port size	Housing number
0	Cartridge only	
6G	3/4" BSPP	02-175110
8G	1" BSPP	02-175111
12T	SAE 12	02-175108
16T	SAE 16	02-175109

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

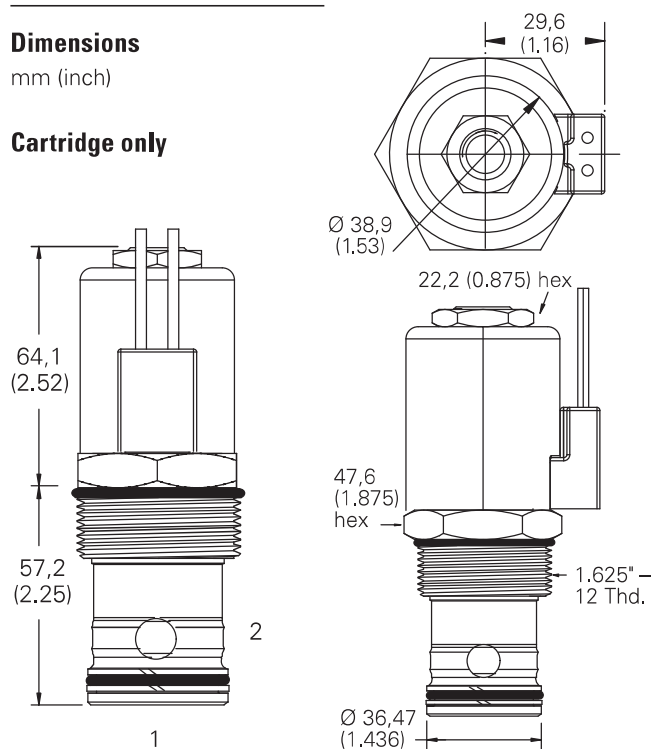
00 - None

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

## Dimensions

mm (inch)

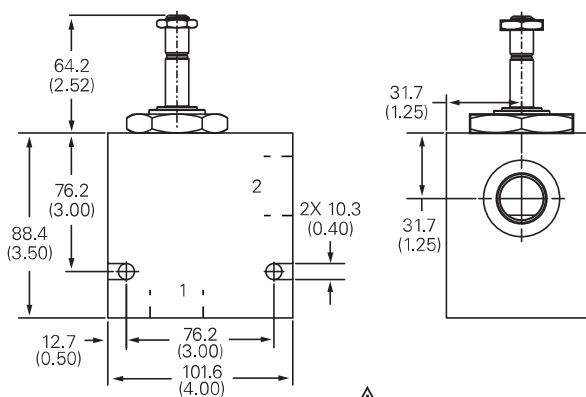
### Cartridge only



Torque cartridge in steel housing 163-183 Nm (120-135 ft lbs)

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

### Installation drawing



### 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.