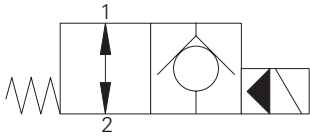


# SV13-16-O/OP/OS - Solenoid Valve

Poppet type normally open solenoid valve  
132 L/min (35 USgpm) • 350 bar (5000 psi)

A



## Operation

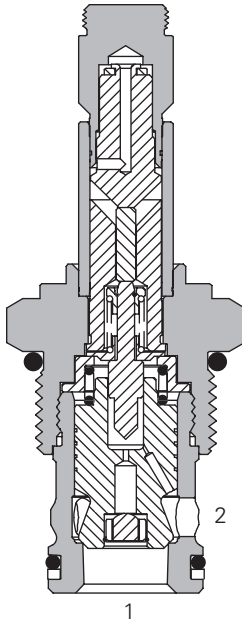
In the de-energized position the valve allows free flow in both directions.

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	132 L/min (35 USgpm)
Internal leakage	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-16-2
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	0,39 kg (0.85 lbs)
Seal kit	565810 (Buna-N), 889609 (Viton®)

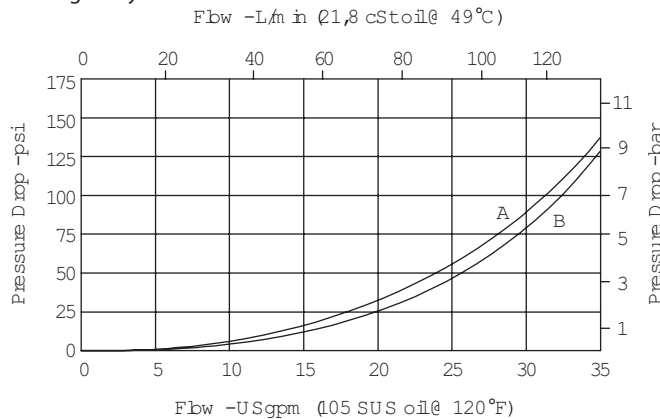
Viton is a registered trademark of E.I. DuPont

## Description

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



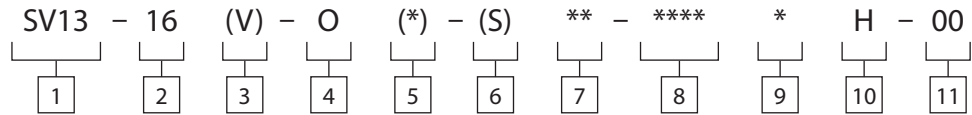
available at:  
ATP Hydraulik AG  
Aahusweg 8  
CH-6403 Küssnacht am Rigi  
[www.atphydraulik.com](http://www.atphydraulik.com)

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

# SV13-16-O/OP/OS - Solenoid Valve

Poppet type normally open solenoid valve  
132 L/min (35 USgpm) • 350 bar (5000 psi)

## Model Code



**1** Function  
SV13 - Solenoid valve

**2** Size  
16 - 16 size

**3** Seal Material  
Blank - Buna-N  
V - Viton\*

**4** Style  
O - Normally open

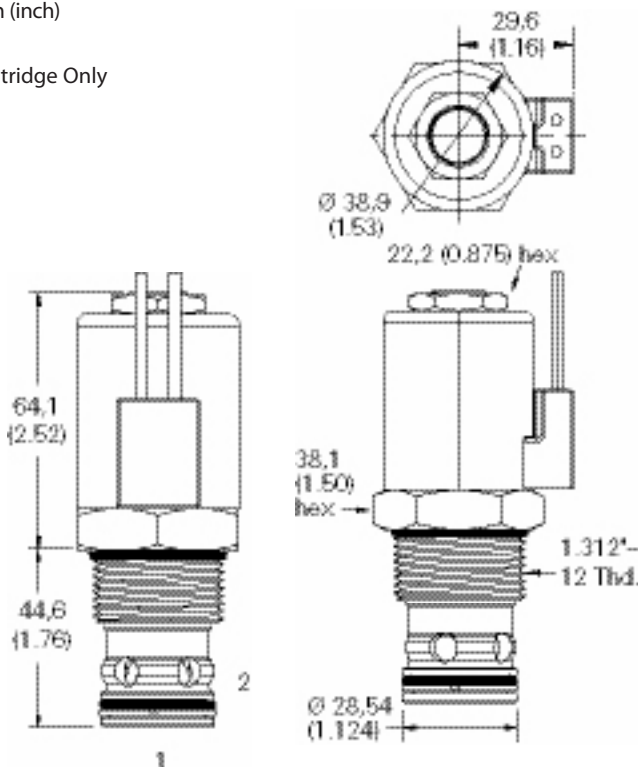
**5** Manual Override Option  
Blank - No manual override  
P - Push type  
S - Screw type  
For valve dimensions with manual override option installed see page A-980.

**6** Valve Housing Material  
Blank - Cartridge only

## Dimensions

mm (inch)

Cartridge Only



**7** Port Size

Code	Port Size	Housing Number
0	Cartridge only	
4G	1/2" BSPP	02-175106
6G	3/4" BSPP	02-175107
10T	SAE 10	02-175104
12T	SAE 12	02-175105

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)

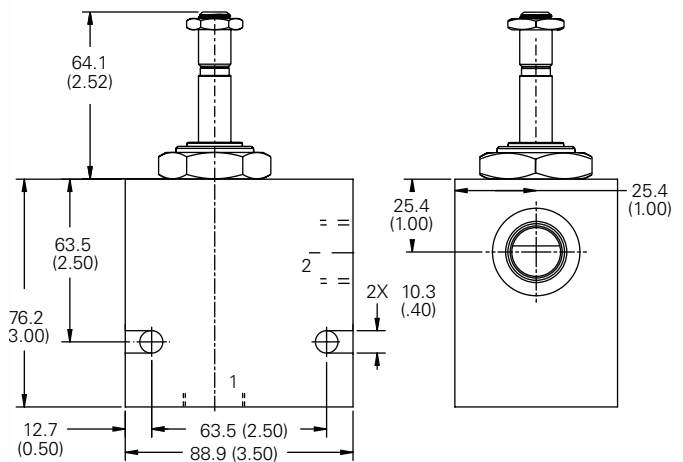
**10** Coil Series  
H - 10 series, 29 W  
For coil part numbers and dimensions see section C.

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

Torque cartridge in steel housing  
136-149 Nm (100-110 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.