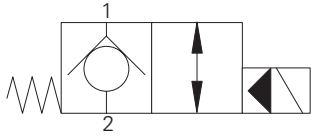


# SV13-16-C/CM - Solenoid Valve

Poppet type, normally closed solenoid valve, (free reverse flow)  
 132 L/min (35 USgpm) • 350 bar (5000 psi)

A



## Operation

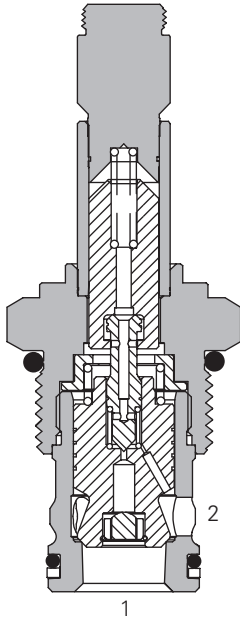
In the de-energized position the valve blocks flow from port 2 to 1 and free flow is allowed from port 1 to 2.

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	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®)

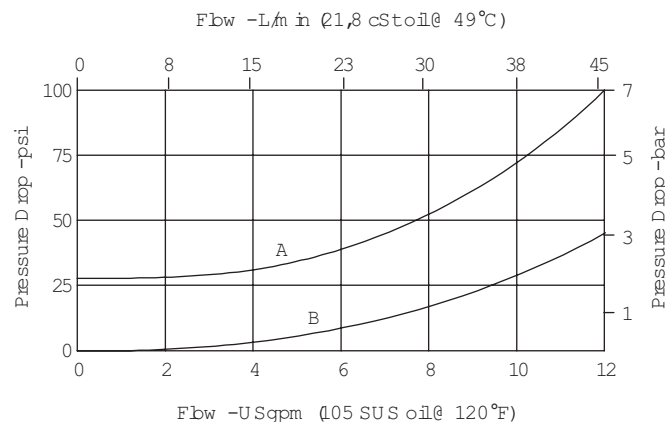
Viton is a registered trademark of E.I. DuPont

## Description

This is a 2-way, 2-position, poppet type, high pressure, pilot operated, normally 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 2 to port 1 energized  
 B - Port 1 to port 2 de-energized

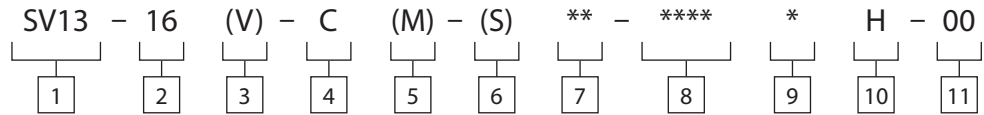


available at:  
 ATP Hydraulik AG  
 Aahusweg 8  
 CH-6403 Küsnacht am Rigi  
[www.atphydraulik.com](http://www.atphydraulik.com)

# SV13-16-C/CM - Solenoid Valve

Poppet type, normally closed solenoid valve, (free reverse flow)  
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  
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	
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	24A - 24VAC
12D - 12VDC	115A - 115VAC
24D - 24VDC	230A - 230VAC
36D - 36VDC	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)

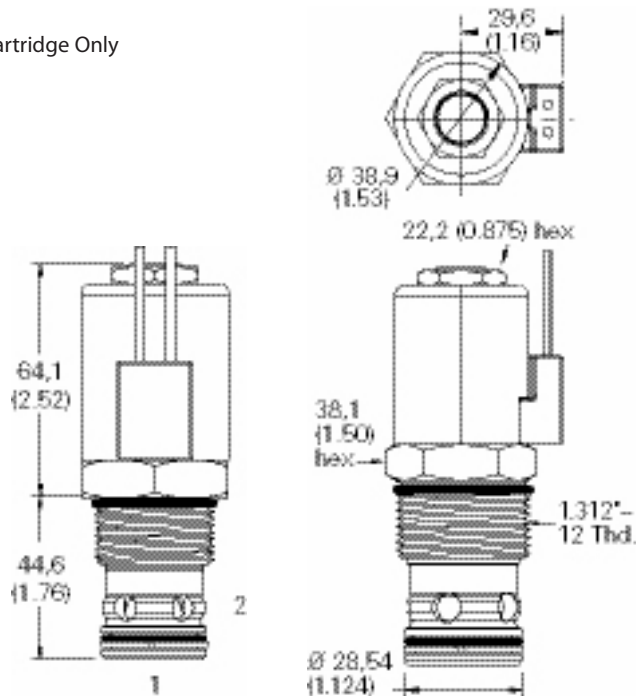
**10** Coil Series  
H - 10 Series, 29 W  
For coil part numbers and dimensions see section C.

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

## Dimensions

mm (inch)

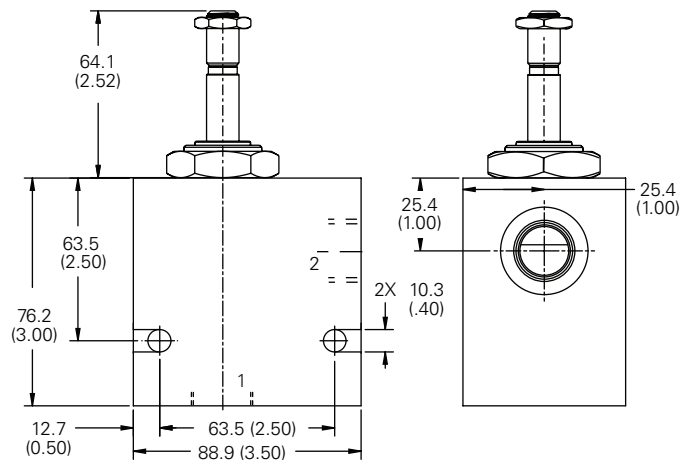
### Cartridge Only



Torque cartridge in steel housing 136-149 Nm (100-110 ft lbs)

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