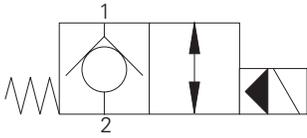


# SV1-16-C/CM/CR - Solenoid Valve

2-way, 2-position, normally closed, poppet type solenoid valve  
 132 L/min (35 USgpm) • 210 bar (3000 psi)

A



## Operation

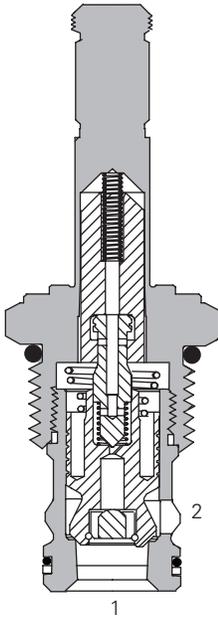
In the de-energized position the valve blocks flow from port 2 to 1 and free flow is allowed from port 1 to 2.

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.

## 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	132 L/min (35 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-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)	Aluminum
Weight including coil	1,15 kg (2.53 lbs)
Seal kit	565810 (Buna-N), 02-889609 (Viton)

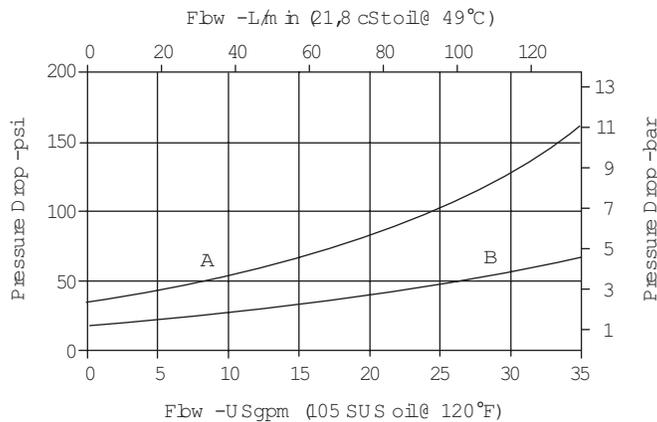
Viton is a registered trademark of E.I. DuPont

## Description

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



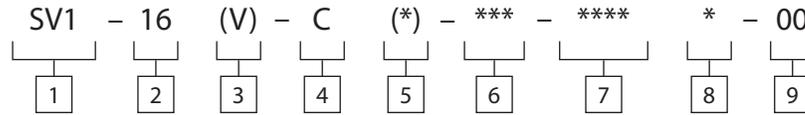
A - Port 2 to port 1 energized  
 B - Port 1 to port 2 de-energized

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

# SV1-16-C/CM/CR - Solenoid Valve

2-way, 2-position, normally closed, poppet type solenoid valve  
132 L/min (35 USgpm) • 210 bar (3000 psi)

## Model Code



**1** Function  
SV1 - 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 - Knob type  
R - Cable type

For valve dimensions with manual override option installed see page A-980.

**6** Port Size

Code	Port Size	Housing Number
0	Cartridge only	
6B	3/4" BSPP	02-175463*
12T	SAE 12	566149*
6G	3/4" BSPP	876717
10H	SAE 10	876717
12H	SAE 12	566113

See section J for housing details.  
\*Light duty housing

**7** 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.

**8** 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.

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

## Dimensions

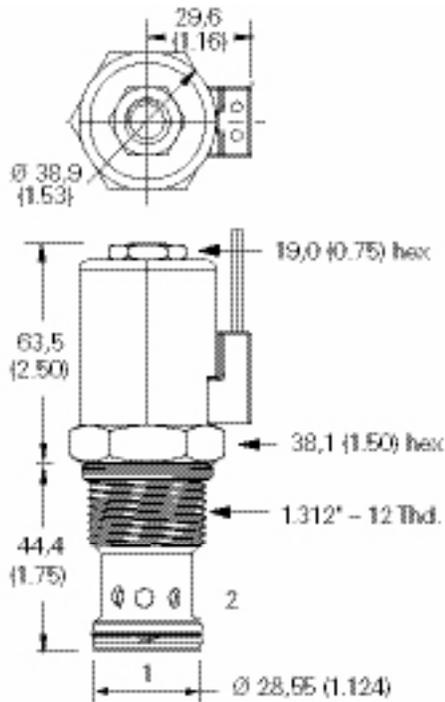
mm (inch)

Torque cartridge in aluminum housing  
108-122 Nm (80-90 ft lbs)

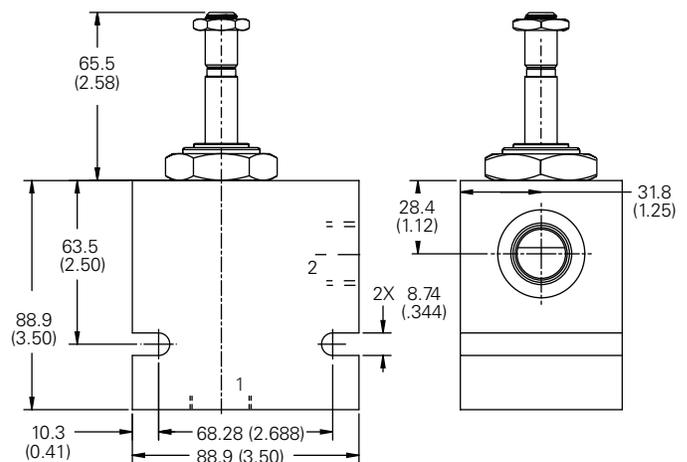
Note: When solenoid valve is ordered as cartridge only, coil nut is included.

Note: Use J series, 23 W coils with this solenoid valve.

## Cartridge Only



## Installation Drawings



**WARNING**  
Maintain 5-8 Nm (4-6 ft lbs) maximum torque on valve tube nut. Over tightening may cause valve failure.