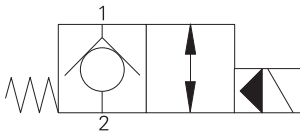


# SV13-20-C/CM - Solenoid valve

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

A



## Operation

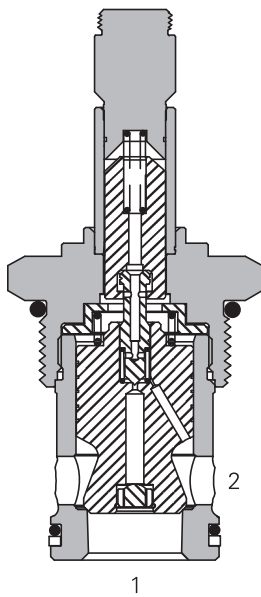
In the de-energized position the valve blocks flow from port 2 to 1 and free flow is allowed from port 1 to 2.

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	227 L/min (60 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-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®)

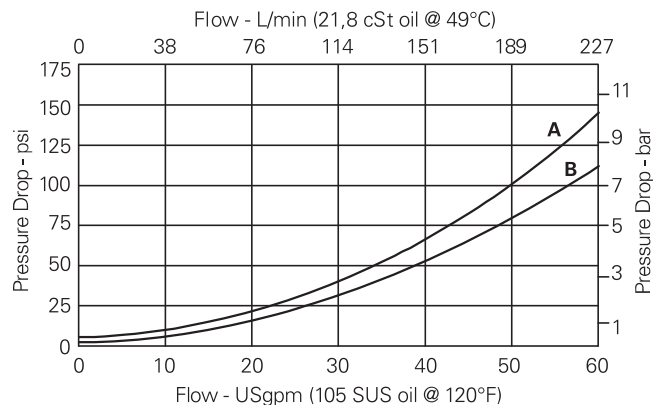
Viton is a registered trademark of E.I. DuPont

## 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



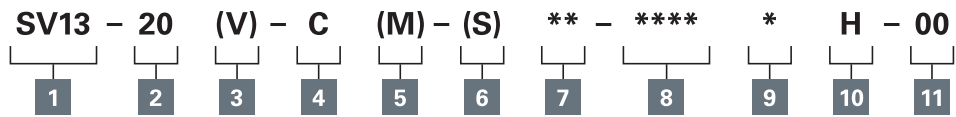
- A** - Port 2 to port 1 energized
- B** - Port 1 to port 2 de-energized

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

# SV13-20-C/CM - Solenoid valve

Poppet type, pilot operated 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

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

### Dimensions

mm (inch)

### 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

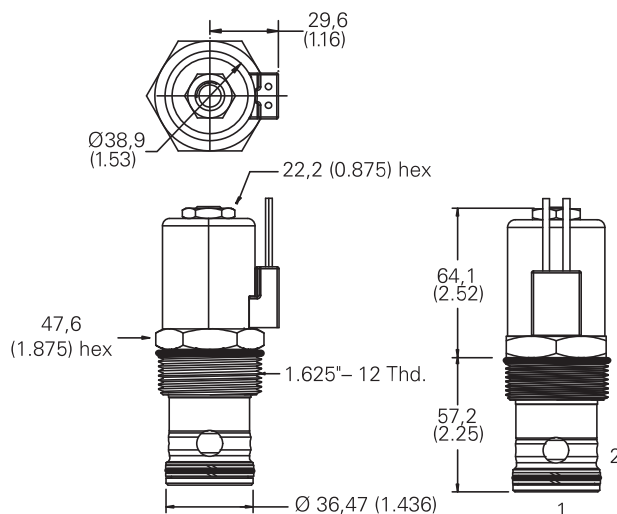
00 - None

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

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

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

### Cartridge only



### 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.