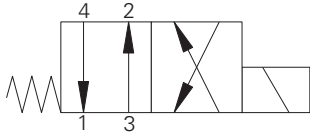


# SV1-8-4/4M - Solenoid Valve

4-way, 2-position, spool type solenoid valve  
Up to 11 L/min (3 USgpm) • 210 bar (3000 psi)

A



## Operation

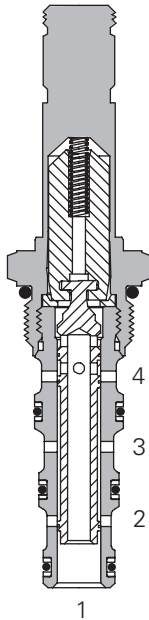
In the de-energized position this valve allows flow from port 4 to port 1 and from port 3 to port 2.

In the energized position flow is allowed from port 3 to port 4 and from port 2 to port 1.

## Features

Hardened, ground and honed working parts to limit leakage. IP69K Tough coil compatibility. Continuously rated. Compact design with low pressure drop. Rated pressure on all ports.

## 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	11 L/min (3 USgpm)
Internal leakage (per land)	82 cm <sup>3</sup> /min (5 in <sup>3</sup> /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-8-4
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	0,31 kg (0.69 lbs)
Seal kit	02-160757 (Buna-N), 02-160758 (Viton <sup>®</sup> )

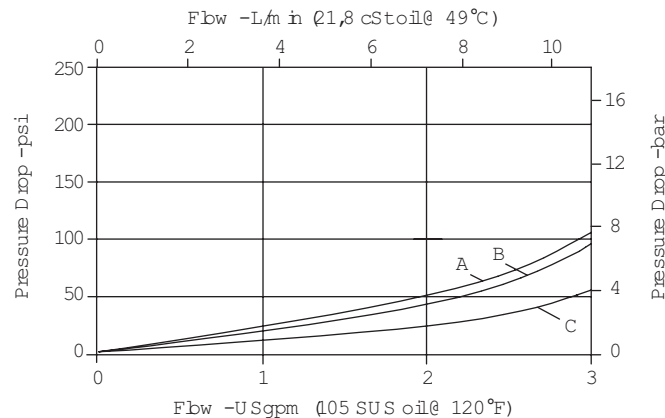
Viton is a registered trademark of E.I. DuPont

## Description

This is a 4-way 2-position, direct acting, spool type solenoid valve. This valve can be used in applications where the motion of a double acting cylinder or a motor needs to be reversed.

## Pressure Drop

Cartridge only



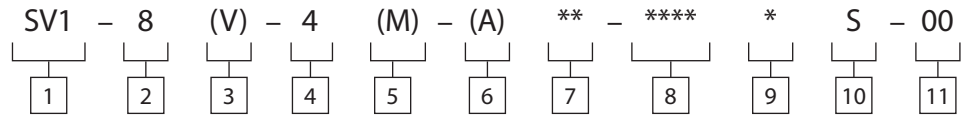
- A - Port 3 to port 4 or port 3 to port 2
- B - Port 4 to port 1
- C - Port 2 to port 1

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

# SV1-8-4/4M - Solenoid Valve

4-way, 2-position, spool type solenoid valve  
Up to 11 L/min (3 USgpm) • 210 bar (3000 psi)

## Model Code



**1** Function  
SV1 - Solenoid valve

**2** Size  
8 - 8 size

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

**4** Style  
4 - 4-way, 2 position

**5** Manual Override Option  
Blank - No manual override  
M - Manual override  
For valvedimensionswithmanualover-  
rideoptioninstalled,seepageA-980.

**6** Valve Housing Material  
Omit for cartridge only  
A - Aluminum

**7** Port Size

Code	Port Size	Housing Number
0	Cartridge only	
2G	1/4" BSPP	02-160747
3G	3/8" BSPP	02-160748
4T	SAE 4	02-160749
6T	SAE 6	02-160750

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)

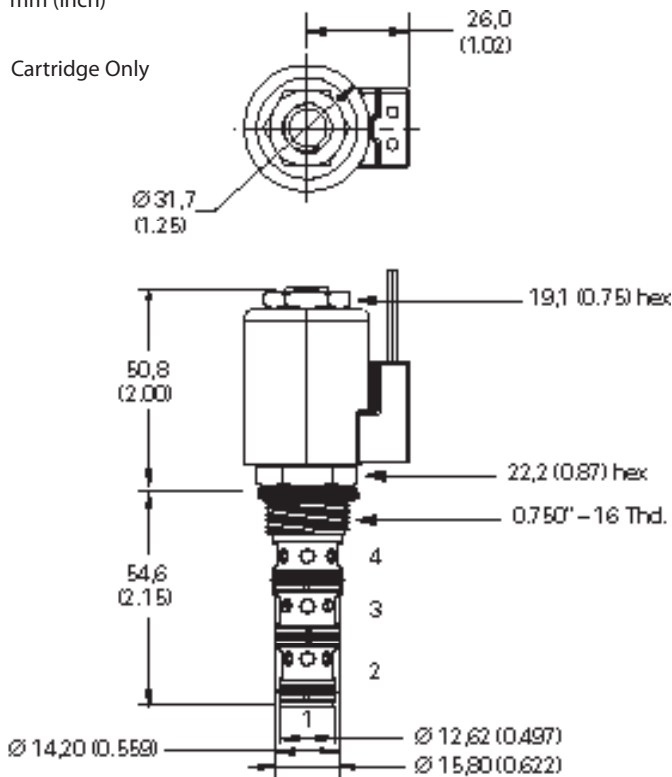
**10** Coil Series  
S - 8 series, 20 W  
Forcoilpartnumbersanddimensions  
see section C.

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

## Dimensions

mm (inch)

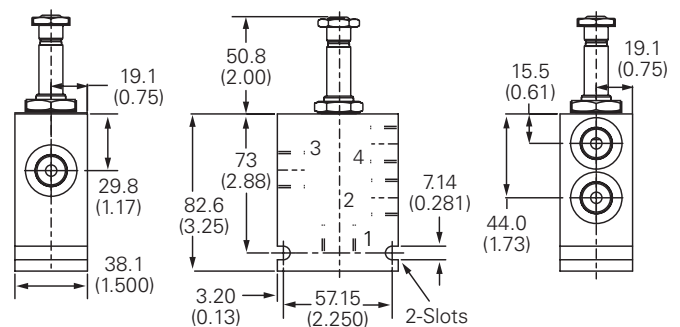
Cartridge Only



Torque cartridge in steel  
housing 34-41 Nm (25-30 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.