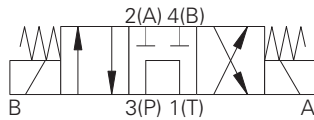


# SV9-8 - Solenoid valve

Spool type, 4-way, 2-position  
Up to 13 L/min (3.5 USgpm) • Up to 210 bar (3000 psi)

## SV9-8-A

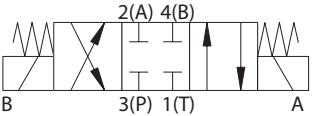


### Operation

In the central de-energized position flow is allowed from inlet port 3 to tank port 1 and ports 2 and 4 are blocked

When solenoid 'A' is energized flow is allowed from ports 3 to 4 and ports 2 to 1. When solenoid 'B' is energized flow is allowed from port 3 to port 2 and from port 4 to port 1.

## SV9-8-E

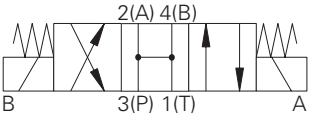


### Operation

In the de-energized (center) position, all ports are blocked. When solenoid A is energized, flow is directed from port 3 to port 4 and from port 2 to port 1.

When solenoid B is energized, flow is directed from port 3 to port 2 and from port 4 to port 1.

## SV9-8-B

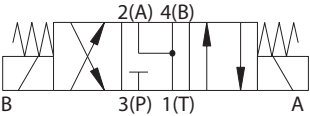


### Operation

In the central de-energized position all ports are open. When solenoid 'A' is energized flow is allowed from port 3 to port 4 and port 2 to port 1.

When solenoid 'B' is energized flow is allowed from port 3 to port 2 and from port 4 to port 1.

## SV9-8-F



### Operation

In the de-energized (center) position, port 1, port 2, and port 4 are open to each other while port 3 is blocked. When solenoid A is energized, flow is directed from port 3 to port 4 and from port 2 to port 1. When solenoid B is energized, flow is directed from port 3 to port 2 and from port 4 to port 1.

## 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)
Fatigue pressure	3,000 psi per NFPA/T2-6-1 R2-2000
Rated burst pressure	11,000 psi per NFPA/T2-6-1 R2-2000
Max flow	13.2 L/min (3.5 USgpm)
Temperature range	-40° to 120°C (-40° to 248°F)
Coil power	23W
Cavity	C-8-4
Weight including coil	(1.2 lbs)
Internal leakage	164 cm <sup>3</sup> /min (10 in <sup>3</sup> /min) max. @ 210 bar (3000 psi)
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20 etc.
Filtration	Cleanliness code 18/16/13
Seal kit	02-160757 (Buna-N), 02-160758 (Viton®)

Viton is a registered trademark of E.I. DuPont

\*AC coils must be used with a rectifying connector

Endurance tested to 1 million cycles at full rated flow and pressure.

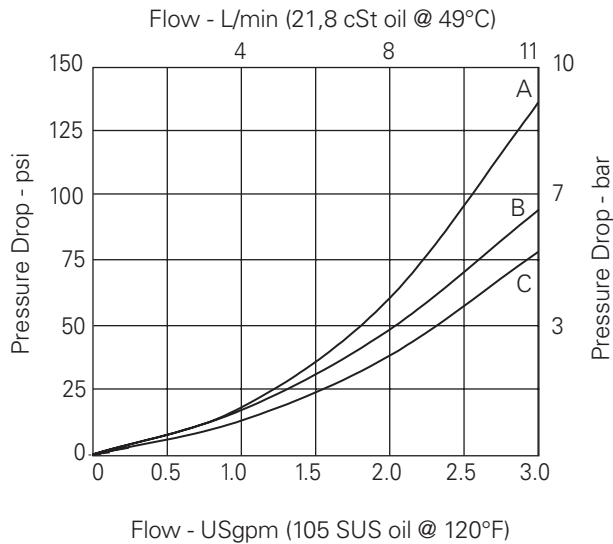
Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

## SV9-8 - Solenoid valve

Spool type, 4-way, 2-position  
Up to 13 L/min (3.5 USgpm) • Up to 210 bar (3000 psi)

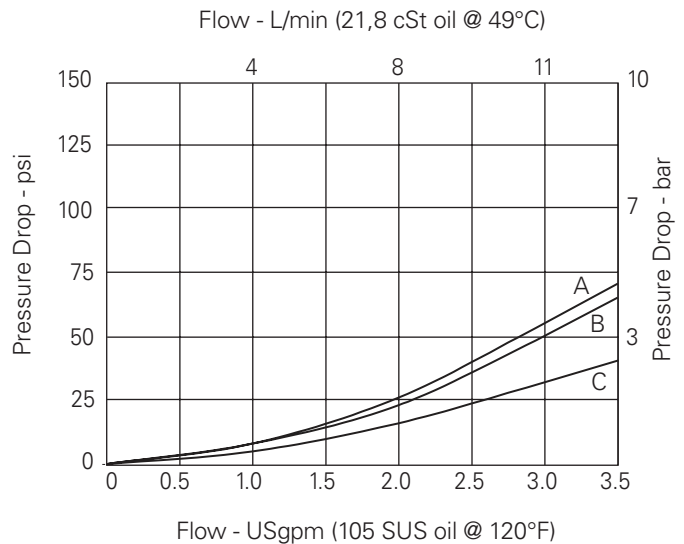
### Pressure drop

#### SV9-8-A



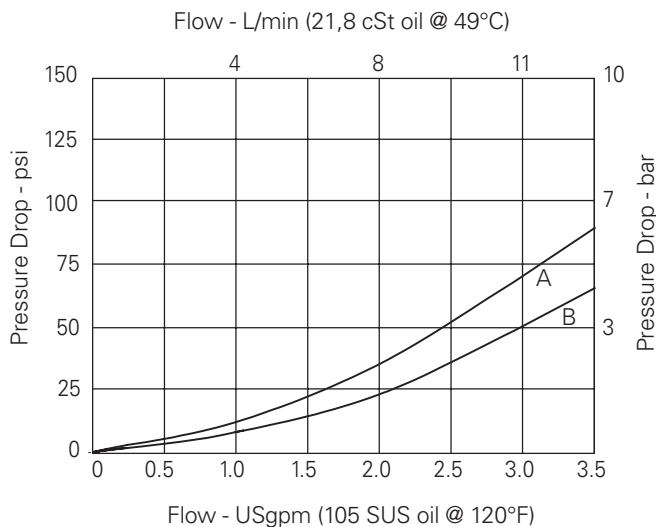
- A** - Port 3 or port 2 or port 4
- B** - Port 3 to port 1 de-energized
- C** - Port 2 or port 4 to port 1

#### SV9-8-B



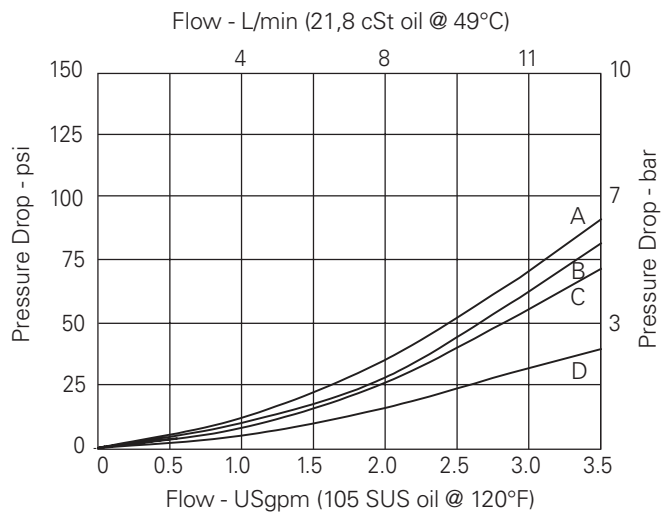
- A** - Port 4 or port 1 to port 4  
Port 3 to port 1 de-energized
- B** - Port 3 to port 2 or port 4
- C** - Port 2 or port 1  
Port 2 or 4 to 1 de-energized

#### SV9-8-E



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

#### SV9-8-F



- A** - Port 4 or port 1 de-energized
- B** - Port 3 to port 2 or port 4 to port 1
- C** - Port 2 or port 1 de-energized
- D** - Port 2 or 1

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

# SV9-8 - Solenoid valve

4-way, 3-position, screw-in cartridge, solenoid valve  
Up to 13 L/min (3.5 USgpm) • Up to 210 bar (3000 psi)

## Model code

**SV9 - 8 \* - \* \* - \* \*\* - \*\*\*\* \* P 00 - 00**

1 2 3 4 5 6 7 8 9 10 11 12

### 1 Function

**SV9** - Solenoid valve

### 2 Size

**8** - 8 size

### 3 Seal material

**N** - Buna-N

**V** - Viton

### 5 Manual override option

**0** - No manual override

**M** - Manual override

For valve dimensions with manual override, see pages A980.

### 6 Housing Material

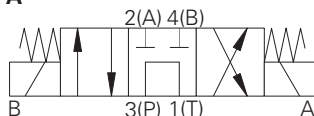
**0** - Cartridge only

**A** - Aluminum

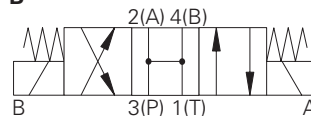
**S** - Steel

### 4 Spool center condition

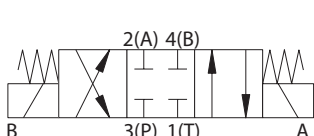
**A**



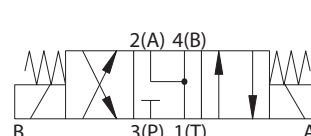
**B**



**E**



**F**



### 7 Port sizes

Code	Port size	Housing number	
		Aluminium	Steel
<b>0</b>	Cartridge only		
<b>2G</b>	1/4" BSPP	02-160747	02-160753
<b>3G</b>	3/8" BSPP	02-160748	02-160754
<b>4T</b>	SAE 4	02-160749	02-160751
<b>6T</b>	SAE 6	02-160750	02-160752

See section J for housing details.

### 8 Voltage rating <sup>1</sup>

**000** - No coil

**012D** - 12VDC

**024D** - 24VDC

**012B** - 12VDC/w diode\*

**024B** - 24VDC/w diode\*

\*Optional arc suppression diode.

### 9 Connector types <sup>1</sup>

**0** - No coil

**G** - ISO 4400 DIN 43650

**N** - Deutsch male

**W** - Leadwire

**C** - Deutsch on Leads

**H** - Metripak 150 on Leads

**F** - Weatherpak Male on Leads

**Y** - Amp JR (DC only)

**D** - Metripak 150 male (DC only)

**J** - Metripak 280 male (DC only)

### 10 Coil series <sup>1</sup>

**0** - No Coil

**P** - 8 series, 23W

### 11 Coil special features <sup>1</sup>

**00** - None

### 12 Valve Special features <sup>1</sup>

**00** - None

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

<sup>1</sup> These model digits are not stamped on the valve.

## SV9-8 - Solenoid valve

Spool type, 4-way, 2-position  
Up to 13 L/min (3.5 USgpm) • 210 bar (3000 psi)

### Dimensions

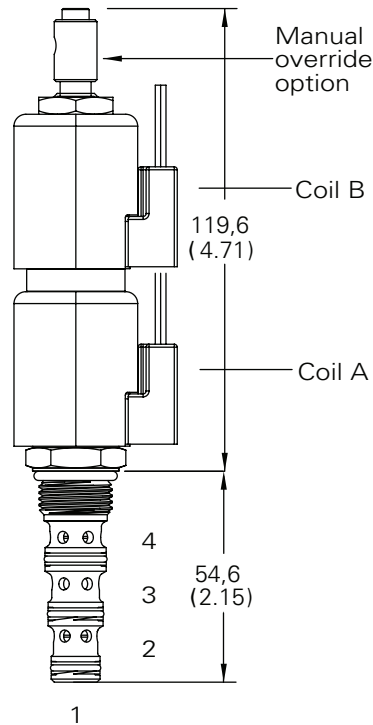
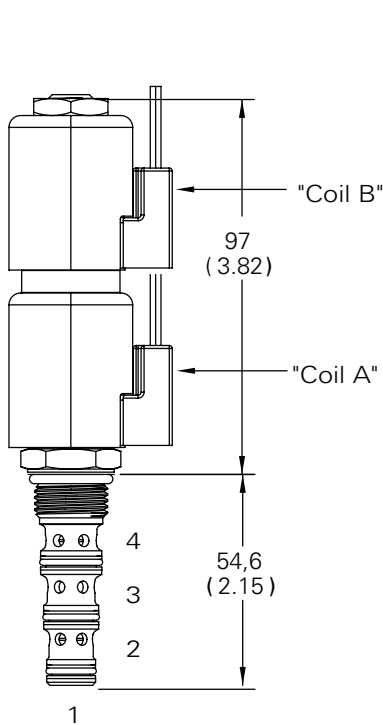
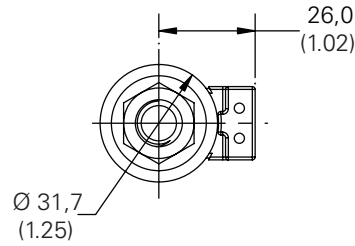
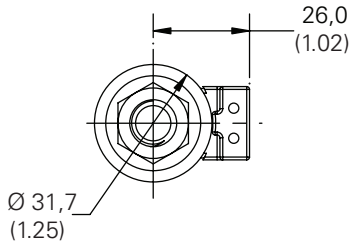
mm (inch)

Valve is shown with "W" coil.  
See other coils in Section C.

This valve uses the P series,  
8 size, 23 W coil.

### Spare Parts

Coil Nut	565558
Coil Spacer	02-186730



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