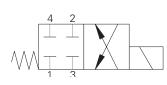
## SV12-8-4/4M - Solenoid Valve

4-way, 2-position spool type solenoid valve Up to 11 L/min (3 USgpm) • 350 bar (5000 psi)



#### Operation

In the de-energized position all ports are blocked.

# 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. Working pressure 350 bar.

#### Sectional View



| Performance data is typical with fluid at 21,8 cST (10 | 95 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   | 11 L/min (3 USgpm)  |  |
| Internal leakage, port 2 to port 1                     | 82 cm³/min (5 in³/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-8-4   |  |
| Fluids   | All general purpose hydraulic fluids such as:<br>MIL-H-5606, SAE 10, SAE 20, etc. |  |
| Filtration   | Cleanliness code 18/16/13   |  |
| Housing material (standard)                            | Steel   |  |
| Weight - cartridge only                                | 0,14 kg (0.30 lbs)  |  |
| Seal kit   | 02-160757 (Buna-N), 02-160758 (Viton <sup>°</sup> )                               |  |
| Viton is a registered trademark of EL DuPont           |   |  |

Viton is a registered trademark of E.I. DuPont

### Description

This is a 4-way 2-position, high pressure, direct acting, spool type solenoid valve. This valve can be used in applications where a double acting actuator needs to be isolated.

1

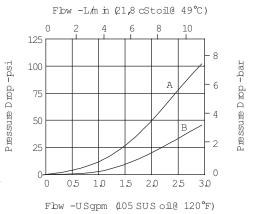
3

2



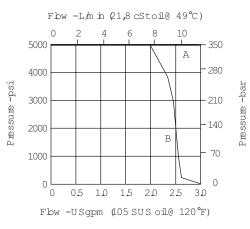
available at: ATP Hydraulik AG Aahusweg 8 CH-6403 Küssnacht am Rigi www.atphydraulik.com Pressure Drop

### Cartridge only



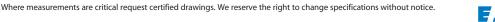
### Pressure Drop vs. Flow

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



#### **Operating Limits**

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







А

## SV12-8-4/4M - Solenoid Valve

4-way, 2-position spool type solenoid valve Up to 11 L/min (3 USgpm) • 350 bar (5000 psi)

| Model Code   | SV12 8 (V) - 4<br>1 2 3 4   | (M) – (S) ** – ****<br>5 6 7 8  | * * P – 00<br>9 10 11  |
|--|---|---|--|
| 1 Function<br>SV12 - Solenoid valve  | 7     Port Size       Code     Port Size  | Housing Number  | 9 Connector Types<br>Blank - No coil<br>G - ISO 4400 DIN 43650   |
| 2 Size<br>8 - 8 size   | 0Cartridge only2G1/4" BSPP3G3/8" BSPP   | 02-160751<br>02-160752  | Q - Spade terminals<br>W - Flying lead<br>N - Deutsch (DC only)  |
| 3 Seal Material<br>Blank - Buna-N<br>V - Viton   | 4TSAE 46TSAE 6See section J for housing details.  | 02-160753<br>02-160754  | Y - Amp JR (DC only)<br>D - Metripack 150 male<br>(DC only)<br>J - Metripack 280 male  |
| 4 Style<br>4 - 4-way, 2 position   | 8 Voltage Rating<br>00 - No coil<br>12D - 12VDC<br>24D - 24VDC  | 24A - 24VAC<br>115A - 115VAC<br>230A - 230VAC   | (DC only)<br>Forcoilpartnumbersanddimensions<br>see section C.   |
| 5 Manual Override Option<br>Blank - No manual override<br>M - Manual override<br>Forvalvedimensionswithmanualover- | 36D - 36VDC   | 12B - 12VDC/w diode*<br>24B - 24VDC/w diode*<br>*Optional arc suppression diode.  | P - 8 series, 23 W<br>Forcoilpartnumbersanddimensions<br>see section C.  |
| rideoptioninstalled,seepageA-980.<br>6 Valve Housing Material<br>Blank - Omit for cartridge only<br>A - Aluminum   |   |   | 11 Special Features<br>00 - None<br>(Only required if valve has special<br>features omitted if "00".)                          |
| Dimensions<br>mm (inch)  | Torque cartridge in steel or<br>aluminum housing 34-41 Nm<br>(25-30 ft lbs)                                   | Note: When solenoid valve<br>is ordered as cartridge only,<br>nut is included.  |  |
| Cartridge Only   | Ø 38,9<br>(1.53)  | Installation Drawing  | 15.5<br>(0.61)   |
|  | (1.55)<br>(1.55)<br>(1.55)<br>(1.55)<br>(0.62)<br>bex<br>22,2<br>(0.87)<br>bex<br>bex<br>-0.750"<br>- 16 Thd. | 29.8<br>(1.17)<br>38.1<br>(1.500)<br>3.20<br>(0.13)<br>3.20<br>(2.88)<br>3.20<br>(2.48)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.88)<br>(2.8 | 7.14<br>(0.281)<br>44.0<br>(1.73)<br>7.15<br>250)<br>2-Slots   |
| $ \begin{array}{c c} 54,5 \\ (2.15) \\ \hline  \\ 1 \end{array} $  | Ø 12.6<br>(0.500) Ø 14.2<br>Ø 15.8 (0.559)<br>(0.622)   |   | WARNING<br>Maintain 5-8 Nm<br>(4-6 ft lbs) maximum<br>torque on valve tube nut.<br>Over tightening may cause<br>valve failure. |





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