

# Solenoid Valves

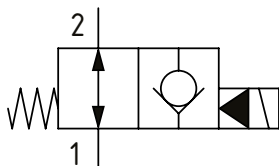
## SV13-20-O

Solenoid Valve, 2-way, Poppet Type, Normally Open, Pilot Operated with Reverse Free Flow  
**350 bar [5000 psi] • 230 l/min [60 US gpm]**

### OPERATION AND DESCRIPTION

This is a 2-way, 2-position, poppet type, pilot operated, normally open solenoid valve. When de-energized, flow can take place from port 2 to 1 and from 1 to 2. In its energized condition flow can take place from port 1 to 2 but is blocked in the other direction. Leakage is kept to a minimum due to the poppet design. These valves can be used to hold loads in position when energized, interrupt a pressure line where flow normally passes in both directions, or bypass excess oil to tank in a fail-safe way.

### SCHEMATIC



### PERFORMANCE DATA

<b>Rated Pressure</b>	<b>350 bar [5000 psi]</b>
<b>Rated flow</b>	<b>230 l/min [60 US gpm]</b>
<b>Leakage</b>	5 drops/min max @ 350 bar [5000 psi]
<b>Coil Options</b>	H series
<b>Weight</b>	0.62 kg [1.37 lb]
<b>Cavity</b>	SDC20-2

### MODEL CODE

**SV13 - 20 - V - O - P - S - 6G - 12D - G - H**

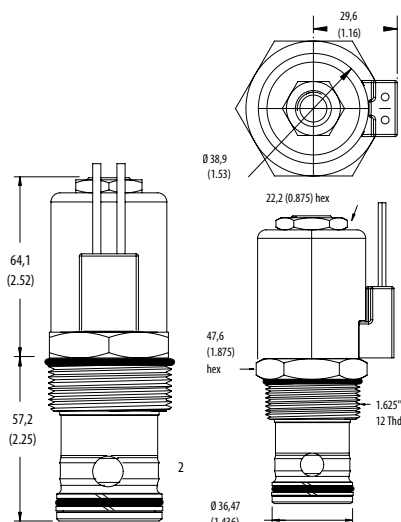
<p><b>Seal Option</b></p> <table border="1"> <thead> <tr> <th>Code</th> <th>Seal kit</th> </tr> </thead> <tbody> <tr> <td>Omit - Buna - N</td> <td>889615</td> </tr> <tr> <td>V - Viton</td> <td>889619</td> </tr> </tbody> </table> <p><b>Manual Override Option</b></p> <p>Omit - No manual override  P - Push type  S - Screw type</p> <p><b>Housing Material</b></p> <p>Omit - No Housing  S - Steel</p> <p><b>Housing</b></p> <table border="1"> <thead> <tr> <th>Code</th> <th>Ports</th> <th>Steel</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>No Housing</td> <td></td> </tr> <tr> <td>6G</td> <td>3/4" BSP</td> <td>02-175110</td> </tr> <tr> <td>8G</td> <td>1" BSP</td> <td>02-175111</td> </tr> <tr> <td>12T</td> <td>#12 SAE</td> <td>02-175108</td> </tr> <tr> <td>16T</td> <td>#16 SAE</td> <td>02-175109</td> </tr> </tbody> </table> <p><small>* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].  * Additional housings available</small></p>	Code	Seal kit	Omit - Buna - N	889615	V - Viton	889619	Code	Ports	Steel	0	No Housing		6G	3/4" BSP	02-175110	8G	1" BSP	02-175111	12T	#12 SAE	02-175108	16T	#16 SAE	02-175109	<p><b>Coil Series</b></p> <p>Omit - No coil  H - 10 series, 29 W</p> <p><b>Connector Type</b></p> <p>Omit - 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)</p> <p><b>Coil Voltage</b></p> <table border="1"> <thead> <tr> <th>Code</th> <th>Coil Voltage</th> </tr> </thead> <tbody> <tr> <td>00</td> <td>No Coil, nut included, (p/n 02-175698)</td> </tr> <tr> <td>12D</td> <td>12 VDC</td> </tr> <tr> <td>24D</td> <td>24 VDC</td> </tr> <tr> <td>115A</td> <td>115 VAC**</td> </tr> <tr> <td>230A</td> <td>230 VAC**</td> </tr> <tr> <td>12B</td> <td>2VDC/w diode*</td> </tr> <tr> <td>24B</td> <td>24 VDC/w diode*</td> </tr> </tbody> </table> <p><small>*Optional arc suppression diode  **Internally rectified  ***Other voltage options available</small></p>	Code	Coil Voltage	00	No Coil, nut included, (p/n 02-175698)	12D	12 VDC	24D	24 VDC	115A	115 VAC**	230A	230 VAC**	12B	2VDC/w diode*	24B	24 VDC/w diode*
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### DIMENSIONS

mm [in]

**Coil nut torque**  
5-8 Nm [4-6 ft. lbs]

**Installation torque**  
163-183 Nm [120-135 ft. lbs]



### PERFORMANCE CURVES

