

Solenoid Valves

SBV11-12-O

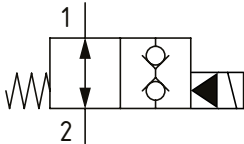
Solenoid Valve, 2-way, Poppet Type, Normally Open, Pilot Operated, Double Blocking

350 bar [5000 psi] • 114 l/min [30 US gpm]

OPERATION AND DESCRIPTION

This is a 2-way, 2-position, poppet type, pilot operated, normally open, bi-directional solenoid valve. When de-energized, flow can take place from port 2 to 1 and from 1 to 2. In its energized condition, flow is blocked in both directions. Leakage in either direction is kept to a minimum due to the poppet design. These valves can be used to hold loads in position or interrupt a pressure line where flow is expected to pass in both directions in the energized condition.

SCHEMATIC



PERFORMANCE DATA

Rated Pressure	350 bar [5000 psi]
Rated flow	114 l/min [30 US gpm]
Leakage	5 drops/ min @ 350 bar [5000 psi]
Coil Options	H series
Weight	0.27 kg [0.59 lb]
Cavity	C-12-2 / C-12-2U

MODEL CODE

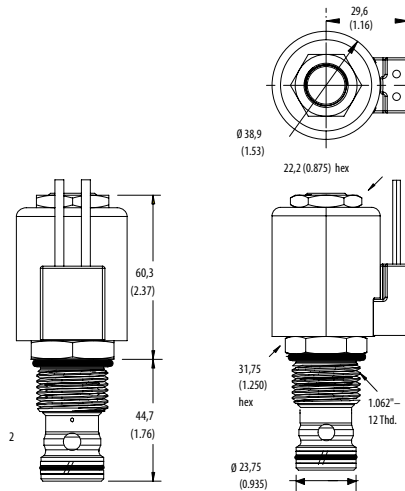
SBV11 - 12 - V - O - A - 4G - U - 12D - G - H

<p>Seal Option</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Code</th> <th>Seal kit</th> </tr> <tr> <td>Omit - Buna - N</td> <td>02-165889</td> </tr> <tr> <td>V - Viton</td> <td>02-165888</td> </tr> </table> <p>Housing Material</p> <p>Omit - No Housing A - Aluminum S - Steel</p> <p>Housing</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Code</th> <th>Ports</th> <th>C-12-2 Aluminum Heavy Duty</th> <th>C-12-2U Aluminum Heavy Duty</th> <th>C-12-2 Steel Heavy Duty</th> <th>C-12-2U Steel Heavy Duty</th> </tr> </thead> <tbody> <tr> <td>Omit</td> <td>No Housing</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4G</td> <td>1/2" BSP</td> <td>02-161118</td> <td>02-161116</td> <td>02-172062</td> <td>02-172512</td> </tr> <tr> <td>6G</td> <td>3/4" BSP</td> <td>02-161117</td> <td>02-161115</td> <td>02-169665</td> <td>02-162922</td> </tr> <tr> <td>10T</td> <td>#10 SAE</td> <td>02-160640</td> <td>02-160641</td> <td>02-169744</td> <td>02-169817</td> </tr> <tr> <td>12T</td> <td>#12 SAE</td> <td>02-160644</td> <td>02-160645</td> <td>02-169782</td> <td>02-169790</td> </tr> </tbody> </table> <p>* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi]. * Additional housings available</p> <p>Cavity</p> <p>Omit - Cavity without undercut/No housing U - Cavity with undercut</p>	Code	Seal kit	Omit - Buna - N	02-165889	V - Viton	02-165888	Code	Ports	C-12-2 Aluminum Heavy Duty	C-12-2U Aluminum Heavy Duty	C-12-2 Steel Heavy Duty	C-12-2U Steel Heavy Duty	Omit	No Housing					4G	1/2" BSP	02-161118	02-161116	02-172062	02-172512	6G	3/4" BSP	02-161117	02-161115	02-169665	02-162922	10T	#10 SAE	02-160640	02-160641	02-169744	02-169817	12T	#12 SAE	02-160644	02-160645	02-169782	02-169790	<p>Coil Series</p> <p>Omit - No coil H - 10 series, 29 W</p> <p>Connector Type</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>Coil Voltage</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <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>*Optional arc suppression diode **Internally rectified ***Other voltage options available</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.]

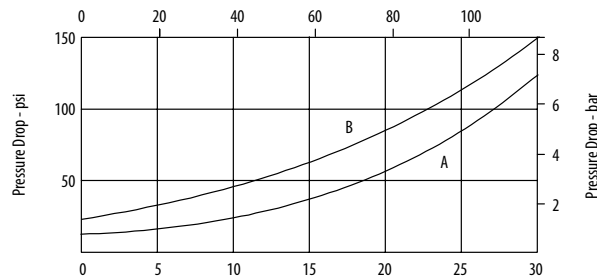


Installation torque
A - 81-95 Nm [60-70 ft. lbs.]
S - 102-115 Nm [75-85 ft. lbs.]

PERFORMANCE CURVES

Pressure Drop

Flow - L/min (21,8 Ct oil @ 49°C)



Flow - USgpm (105 SUS oil @ 120°F)

A - Port 1 to 2 • B - Port 2 to 1