

# Solenoid Valves

## SBV1-12-C

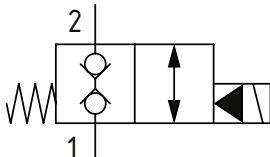
Solenoid Valve, 2-way, Poppet Type, Normally Closed, Pilot Operated, Double Blocking

210 bar [3000 psi] • 114 l/min [30 USgpm]

### OPERATION AND DESCRIPTION

This is a 2-way, 2-position, poppet type, pilot operated, normally closed, bi-directional solenoid valve. In its de-energized condition flow is blocked in both directions. Leakage in either direction is kept to a minimum due to the poppet design. When energized, flow can take place from port 2 to 1 and from 1 to 2. 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 de-energized condition.

### SCHEMATIC



### PERFORMANCE DATA

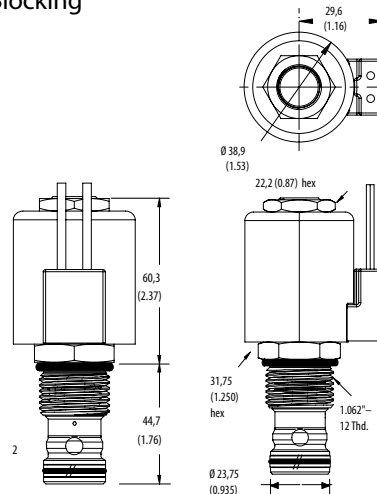
Rated Pressure	210 bar [3000 psi]
Rated flow	114 l/min [30 US gpm]
Leakage	5 drops/ min @ 210 bar [3000 psi]
Coil Options	J series
Weight	0.27 kg [0.59 lb]
Cavity	C-12-2 / C-12-2U

### DIMENSIONS

mm [in]

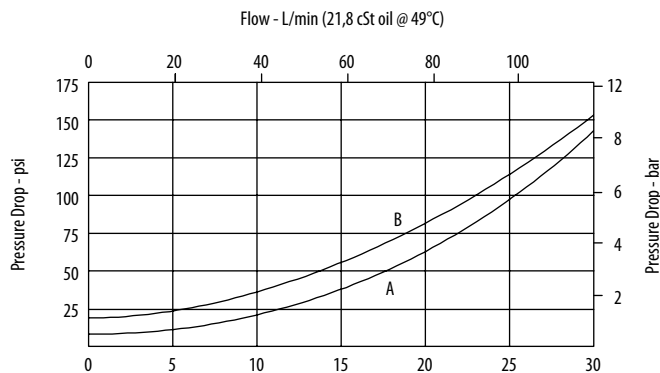
Coil nut torque  
5-8 Nm [4-6 ft. lbs]

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



### PERFORMANCE CURVES

#### Pressure Drop



Flow - USgpm (105 SUS oil @ 120°F)  
A - Port 1 to port 2 • B - Port 2 to port 1

### MODEL CODE

SBV1 - 12 - V - C - A - 4G - U - 12D - N - J

#### Seal Option

Code	Seal kit
Omit-Buna - N	02-165889
V-Viton	02-165888

#### Housing Material

Omit - No Housing  
A - Aluminum  
S - Steel

#### Housing

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

\* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].  
\* Additional housings available

#### Cavity

Omit - Cavity without undercut/No housing  
U - Cavity with undercut

#### Coil Series

Omit - No coil  
J - 10 Series, 23 W

#### Connector Type

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)

#### Coil Voltage

Code	Coil Voltage
00	No Coil, nut included (p/n 565558)
12D	12 VDC
24D	24 VDC
115A	115 VAC**
230A	230 VAC**
12B	2VDC/w diode*
24B	24 VDC/w diode*

\*Optional arc suppression diode  
\*\*Internally rectified  
\*\*\*Other voltage options available