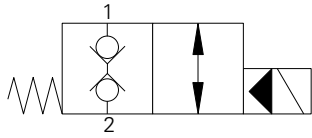


# SBV11-10-C - Solenoid Valve

2-way, 2-position, normally closed, bi-directional, poppet type solenoid valve  
76 L/min (20 USgpm) • 350 bar (5000 psi)

**A**



## Operation

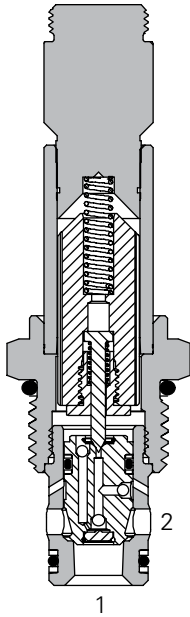
In the de-energized position the valve is blocked in both directions.

When the solenoid is energized the pilot poppet is released from the seat allowing the main poppet to open. A series of internal check valves allows full flow in both directions.

## Features

Hardened and ground working parts. Lapped seat for low leakage. IP69K Tough coil compatibility. Continuously rated. Compact design with low pressure drop. 350 bar working pressure.

## Sectional View



## 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)   | 350 bar (5000 psi)   |
| Cartridge fatigue pressure (infinite life) | 310 bar (4500 psi)   |
| Rated flow                                 | 76 L/min (20 USgpm)  |
| Internal leakage                           | 5 drops/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-10-2   |
| 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)                | Aluminum or steel  |
| Weight cartridge only                      | 0,18 kg (0.39 lbs)   |
| Seal kit                                   | 565806 (Buna-N), 889627 (Viton®)   |

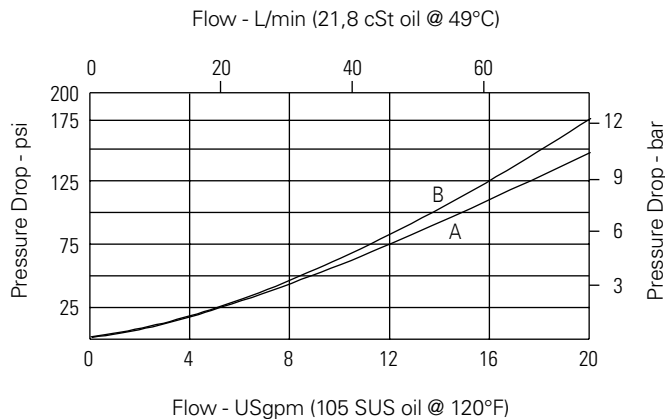
Viton is a registered trademark of E.I. DuPont

## Description

This is a 2-way 2-position, high pressure bi-directional, pilot operated, normally closed poppet type screw in cartridge valve. The valve is ideal for isolating and holding actuators in position.

## Pressure Drop

Cartridge only



**A** - Port 1 to port 2  
**B** - Port 2 to port 1

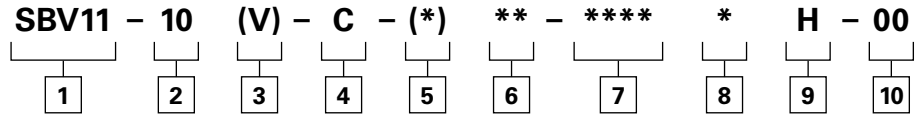


available at:  
ATP Hydraulik AG  
Aahusweg 8  
CH-6403 Küssnacht am Rigi  
www.atphydraulik.com

# SBV11-10-C - Solenoid Valve

2-way, 2-position, normally closed, bi-directional, poppet type solenoid valve  
76 L/min (20 USgpm) • 350 bar (5000 psi)

## Model Code



### 1 Function

**SBV11** - Solenoid bi-directional valve

### 2 Size

**10** - 10 size

### 3 Seal Material

**Blank** - Buna-N  
**V** - Viton®

### 4 Style

**C** - Normally closed

### 5 Valve Housing Material

**Blank** - Cartridge only  
**A** - Aluminum  
**S** - Steel

### 6 Port Size

| Code      | Port Size      | Housing Number |           |
|-----------|----------------|----------------|-----------|
|           |                | Aluminium      | Steel     |
| <b>0</b>  | Cartridge only |                |           |
| <b>2G</b> | 1/4" BSPP      | 876702         | 02-175102 |
| <b>3G</b> | 3/8" BSPP      | 876703         | 02-175103 |
| <b>3B</b> | 3/8" BSPP      | 02-175462      | -         |
| <b>6H</b> | SAE 6          | 876700         | -         |
| <b>6T</b> | SAE 6          | 566151         | 02-175100 |
| <b>8H</b> | SAE 8          | 876701         | -         |
| <b>8T</b> | SAE 8          | -              | 02-175101 |

See section J for housing details.

### 7 Voltage Rating

**00** - No coil  
**12D** - 12VDC  
**24D** - 24VDC  
**36D** - 36VDC

**24A** - 24VAC  
**115A** - 115VAC  
**230A** - 230VAC  
**12B** - 12VDC/w diode\*  
**24B** - 24VDC/w diode\*

\*Optional arc suppression diode.

### 8 Connector Types

**Blank** - 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)

### 9 Coil Series

**H** - 10 series, 29 W

For coil part numbers and dimensions see section C.

### 10 Special Features

**00** - None

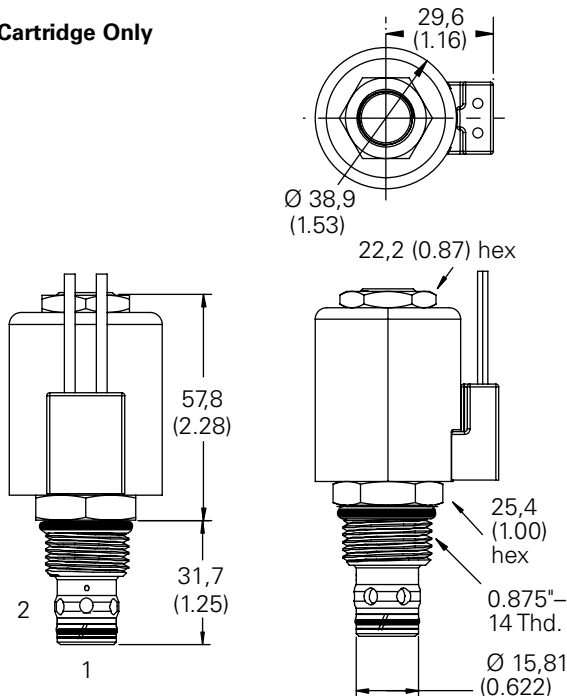
(Only required if valve has special features, omitted if "00.")

## Dimensions

mm (inch)

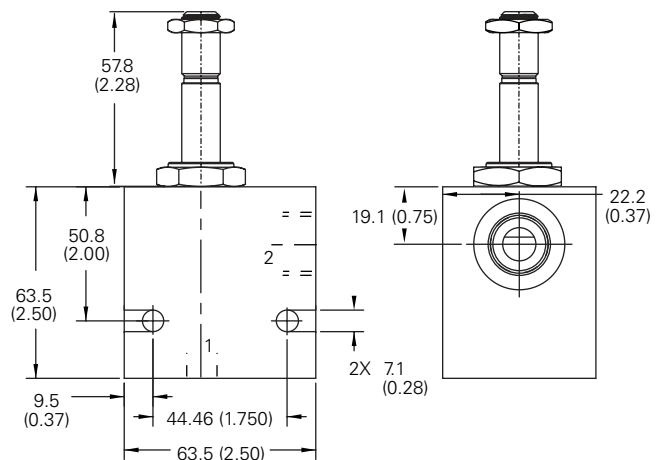
Torque cartridge in housing  
**A** - 47-54 Nm (35-40 ft lbs)  
**S** - 68-75 Nm (50-55 ft lbs)

### Cartridge Only



**Note:** For applications above 210 bar please consult our technical department or use the steel body option.

### Installation Drawing (Steel)



#### WARNING

Maintain 5-8 Nm (4-6 ft lbs) maximum torque on valve tube nut. Over tightening may cause valve failure.



#### WARNING

Aluminum housings can be used for pressures up to 210 bar (3000 psi). Steel housings **must** be used for operating pressures above 210 bar (3000 psi).