

Operation

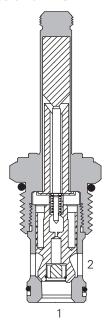
In the de-energized position the valve allows free flow in both directions.

When the solenoid is energized the pilot poppet closes the orifice and the valve closes blocking flow from port 2 to 1 while allowing free flow from port 1 to 2.

Features

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

Sectional View



Performance

Ratings	and	Spe	cific	catic	n

Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49° C (120° F)					
Typical Application pressure (all ports)	210 bar (3000 psi)				
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)				
Rated Flow	132 L/min (35 USgpm)				
Internal leakage, port 2 to port 1	less than 5 drops/min, max @ 210 bar (3000 psi)				
Temperature range	-40° to 120°C (-40° to 248°F)				
Coil duty	Continuous from 85% to 110% of nominal voltage				
Cavity	C-16-2				
Fluids	All general purpose hydraulics fluids such as: MIL-H-5606, SAE 10, SAE 20 etc.				
Filtration	Cleanliness code 18/16/13				
Housing material (standard)	Aluminum				
Weight including coil	0,9 kg (1.98 lbs)				
Seal kit	565810 (Buna-N), 889609 (Viton [®])				

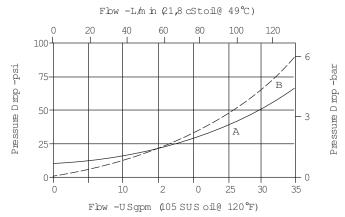
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Description

This is a 2-way, 2-position, poppet type, pilot operated, normally open solenoid valve. This valve is used in applications requiring low leakage, such as load holding applications or as a general purpose diverter or dump valve.

Pressure Drop

Cartridge only



- A Port 1 to port 2 energized
- B Port 2 to port 1 de-energized





SV3-16-O/OP/OS - Solenoid Valve

Poppet type, normally open solenoid valve 132 L/min (35 USgpm) • 210 bar (3000 psi)

Model Code

16 (A) 00 7 8 10

Function SV3 - Solenoid valve

2 Size 16 - 16 size

3 Seal Material Blank - Buna-N Viton*

4 Style

O - Normally open

Manual Override Option

Blank - No manual override

Push type P -S-Screw type

For valve dimensions with manual override option installed see page A-980.

Valve Housing Material Omit for cartridge only A - Aluminum

7	Port	Size

Code	Port Size	Housing Number	
0	Cartridge only		
6B	3/4" BSPP	02-175463*	
12T	SAE 12	566149*	
6G	3/4" BSPP	876718	
10H	SAE 10	876717	
12H	SAE 12	566113	

*Light duty housing See section J for housings.

29,6

(1.16)

@28,54 (1.124)

Voltage Rating

00 -No coil 24VAC 24A -12D -12VDC 115A - 115VAC 24VDC 24D -230A - 230VAC

36D -36VDC 12VDC/w diode* 12B -24B -24VDC/w diode*

*Optional arc suppression diode.

Connector Types

Blank - No coil

G-ISO 4400 DIN 43650 Spade terminals 0 -W-Flying lead N -Deutsch (DC only)

Υ -Amp JR (DC only) Metripack 150 male D-

(DC only) Metripack 280 male

(DC only) For coil dimensions see section C.

10 Special Features

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

Dimensions mm (inch)

Cartridge Onl

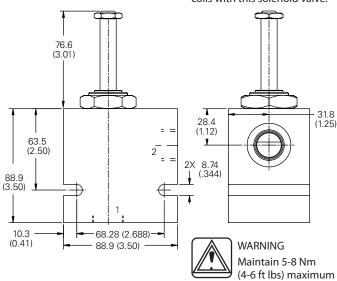
Ø 38,9 19.0 (0.75) hex 76,2 (3.00)→ 38,1 (1.50) hex 1.312" - 12 Thd. 44,€ (1.75)

Torque cartridge in aluminum housing 108-122 Nm (80-90 ft lbs)

Installation Drawing

Note: When solenoid valve is ordered as cartridge only, coil nut is included.

Note: When J series, 23 W coils with this solenoid valve.





torque on valve tube nut. Over tightening may cause valve failure.



