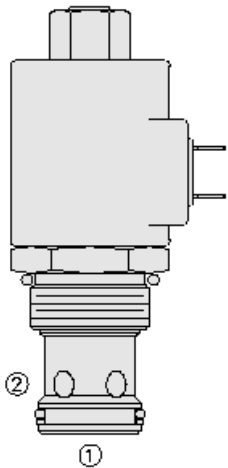




Overview



Description

The SV16-23 is a solenoid operated, 2 way, normally open, poppet type, screw-in hydraulic cartridge valve designed to function as load holding or blocking valve in applications requiring low internal leakage.

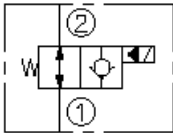
Operation

When de-energized, the SV16-23 poppet lifts to open flow from port 2 to port 1 flow path. In this mode, flow from port 1 to port 2 is also allowed. When energized, the cartridge acts as a check valve, allowing flow to pass from port 1 to port 2, while blocking flow in the reverse direction after overcoming the solenoid force (requires 50-150 psi [3.4 to 10.3 bar]).

Features

- Continuous-duty rated coil.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Manual override option.
- Optional waterproof E-Coils rated up to IP69K.
- Industry-common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating 207 bar (3000 psi)

Flow Ratings

Flow rating See performance chart

Maximum internal leakage 3 drops/min - **Note:** Max at 207 bar (3000 psi)

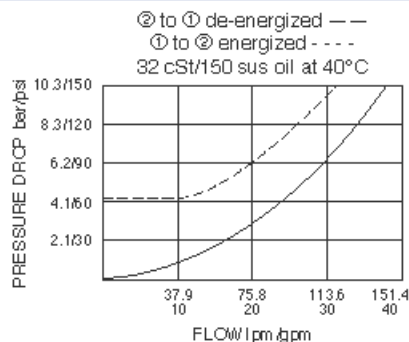
Temperature Ratings

Operating fluid temperature -40 to 120 °C (-40 to 250 °F) - **Note:** With buna N seals
-30 to 205 °C (-20 to 400 °F) - **Note:** With fluorocarbon seals

Properties

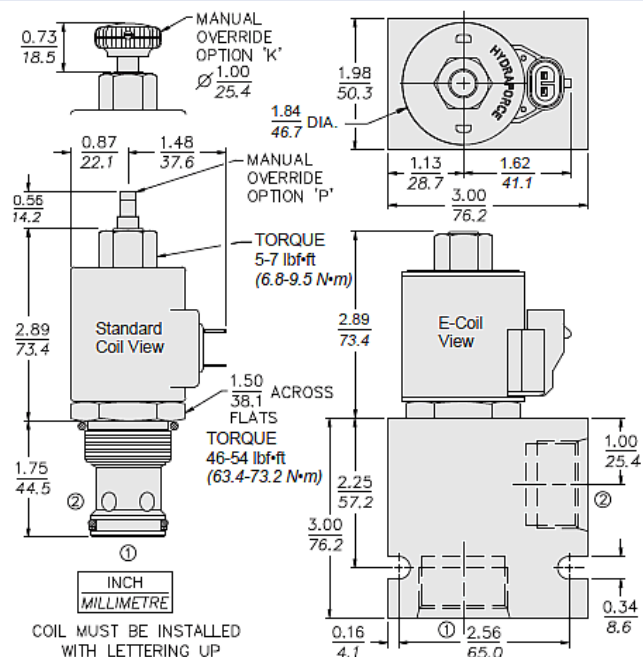
Materials steel with hardened work surfaces zinc plated exposed surfaces

Performance





Dimensions



Installation Specifications

Cavity	VC16-2
Cartridge installation torque	62.4 to 73.2 N-m (46 to 54 ft-lb)
Coil nut torque	6.8 to 9.5 N-m (5 to 7 ft-lb)

Accessories

Seal kit	SK16-2X-T
----------	-----------

Order Code

SV16-23			
Option		Voltage	Termination (VDC)
None (Blank)		Std. Coil	Std. Coil
Manual Override without knob	P	0 Less Coil**	DS Dual Spades
Manual Override with knob	K	10 10 VDC†	DG DIN 43650
For Manual Override options see page 1.001.1		12 12 VDC	DL Leadwires (2)
		24 24 VDC	DL/W Leads w/Weatherpak® Connectors
		36 36 VDC	DR Deutsch DT04-2P
		48 48 VDC	
		24 24 VAC	Termination (VAC)
		115 115 VAC	Std. Coil
		230 230 VAC	AG DIN 43650
			AP 1/2 in. Conduit
			Termination (VDC)
			E-Coil
			ER Deutsch DT04-2P (IP69K Rated)
			EY Metri-Pack® 150 (IP69K Rated)
			Coils with internal diode are available. Consult factory.
Porting		E-Coil	
Cartridge Only	0	10 10 VDC	
SAE 16	16T	12 12 VDC	
		20 20 VDC	
		24 24 VDC	
Seals			
Buna N (Std.)	N		
Fluorocarbon	V		

Model Options

SV16-23E-H-J-L

E Manual Override

CODE	DESCRIPTION
BLANK	NONE
K	Momentary Push Override, Knob
P	Momentary Push Override, Button

H Line Body



CODE	DESCRIPTION
0	No Body
12T	Aluminum SAE 12
16T	Aluminum SAE 16
12TD	Ductile Iron SAE 12
16TD	Ductile Iron SAE 16
6B	Aluminum BSPP 3/4" (6)
8B	Aluminum BSPP 1" (8)
8BD	Ductile Iron BSPP 1" (8)

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane
U	PPDI Urethane

L Coil

CODE	DESCRIPTION
0	No Coil
10DG	10 VDC, D-Coil, DIN 43650
10DL	10 VDC, D-Coil, Dual Lead Wires
10DR/D	10 VDC, D-Coil, Deutsch with Diode
10DS	10 VDC, D-Coil, Dual Spade
10EL	10 VDC, E-Coil, Dual Lead Wires
10ER	10 VDC, E-Coil, Deutsch
10ER/Z	10 VDC, E-Coil, Deutsch with Zener Diode
12DG	12 VDC, D-Coil, DIN 43650
12DL	12 VDC, D-Coil, Dual Lead Wires, 18 inches long
12DL/36	12 VDC, D-Coil, Dual Lead Wires, 36 inches long
12DL/W	12 VDC, D-Coil, Dual Lead Wires with Weatherpak
12DL/W/D	12 VDC, D-Coil, Dual Lead Wires with Weatherpak with Diode
12DR	12 VDC, D-Coil, Deutsch
12DR/D	12 VDC, D-Coil, Deutsch with Diode
12DR/Z	12 VDC, D-Coil, Deutsch with Zener Diode
12DS	12 VDC, D-Coil, Dual Spade
12EG	12 VDC, E-Coil, DIN 43650
12EJ	12 VDC, E-Coil, AMP Jr.
12EL	12 VDC, E-Coil, Dual Lead Wires, 18 inches long
12EL/36	12 VDC, E-Coil, Dual Lead Wires, 36 inches long
12EL/W/Z	12 VDC, E-Coil, Dual Lead Wires with WeatherPak and Zener Diode
12EL/Z	12 VDC, E-Coil, Dual Lead Wires with Zener Diode
12ER	12 VDC, E-Coil, Deutsch
12ER/Z	12 VDC, E-Coil, Deutsch with Zener Diode



CODE	DESCRIPTION
12EY	12 VDC, E-Coil, Metri-Pack 150
12EY/Z	12 VDC, E-Coil, Metri-Pack 150 with Zener Diode
20DR/D	20 VDC, D-Coil, Deutsch with Diode
20DS	20 VDC, D-Coil, Dual Spade
20ER	20 VDC, E-Coil, Deutsch
24AG	24 VDC, D-Coil, DIN 43650
24AP	24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires
24DG	24 VDC, D-Coil, DIN 43650
24DL	24 VDC, D-Coil, Dual Lead Wires
24DL/W	24 VDC, D-Coil, Dual Lead Wires with Weatherpak
24DL/W/D	24 VDC, D-Coil, Dual Lead Wires with Weatherpak with Diode
24DP	24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires
24DR	24 VDC, D-Coil, Deutsch
24DR/D	24 VDC, D-Coil, Deutsch with Diode
24DS	24 VDC, D-Coil, Dual Spade
24EG	24 VDC, E-Coil, DIN 43650
24EJ	24 VDC, E-Coil, AMP Jr.
24EL	24 VDC, E-Coil, Dual Lead Wires, 18 inches long
24EL/36	24 VDC, E-Coil, Dual Lead Wires, 36 inches long
24EL/W/Z	24 VDC, E-Coil, Dual Lead Wires with WeatherPak and Zener Diode
24ER	24 VDC, E-Coil, Deutsch
24ER/Z	24 VDC, E-Coil, Deutsch with Zener Diode
24EY	24 VDC, E-Coil, Metri-Pack 150
24EY/Z	24 VDC, E-Coil, Metri-Pack 150 with Zener Diode
36DS	36 VDC, D-Coil, Dual Spade
115AG	115 VAC, D-Coil, DIN 43650
115AP	115 VAC, D-Coil, 1/2" Conduit and Dual Lead Wires
230AG	230 VAC, D-Coil, DIN 43650
230AP	230 VAC, D-Coil, 1/2" Conduit and Dual Lead Wires