

Overview

**Description**

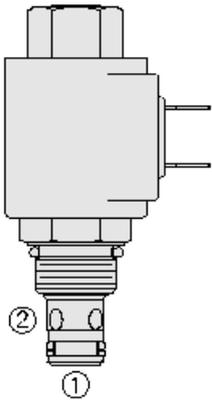
A Solenoid-operated, 2 way, poppet type, normally open, screw-in, hydraulic cartridge valve designed for low leakage in load-holding applications.

**Operation**

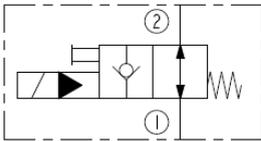
When de-energized, the SV08-23X poppet lifts to open flow from port 2 to port 1. flow is also open from port 1 to port 2. When energized, the cartridge acts as a check valve, allowing flow from port 1 to port 2, while blocking flow from port 2 to port 1 after overcoming the solenoid force (requires 50 to 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.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Manual override option.
- Optional waterproof E-Coils rated up to IP69K.
- Industry common cavity.
- Compact size.



**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)

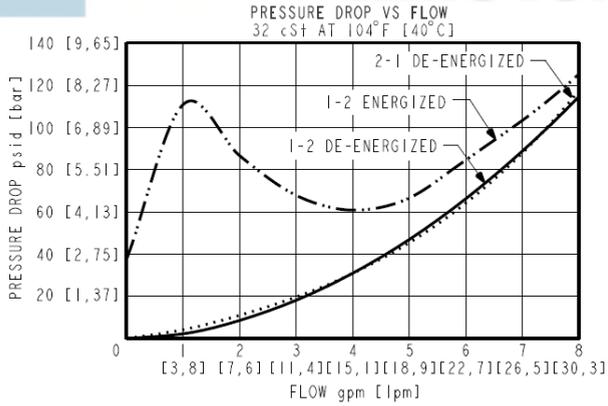
**Temperature Ratings**

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- <b>Note:</b> With buna-n seals
	-26 to 204 °C (-15 to 400 °F)	- <b>Note:</b> With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- <b>Note:</b> With polyurethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

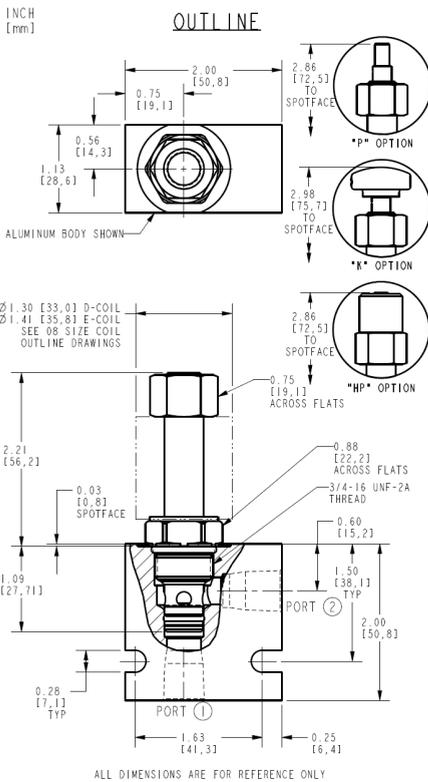
**Properties**

Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties	
Fluid viscosity range	7.4 to 420 cSt	
Maximum operating contamination level	20/18/14 PER ISO 4406	
Unit weight	0.091 kg (0.20 lb)	- <b>Note:</b> SV08-23
	0.122 kg (0.27 lb)	- <b>Note:</b> SV08-23P
	0.132 kg (0.29 lb)	- <b>Note:</b> SV08-23K
	0.150 kg (0.33 lb)	- <b>Note:</b> SV08-23HP
Internal wetted surface area	104 cm <sup>2</sup> (16.1 in <sup>2</sup> )	

## Performance



## Dimensions



## Installation Specifications

Cavity	VC08-2
Cartridge torque	25.8 to 28.5 N-m (19 to 21 ft-lb)
Coil nut torque	5.4 to 6.8 N-m (4 to 5 ft-lb)
Orientation restriction	None

## Accessories

Seal kit	SK08-2X-T	- Note: X = Seal option
----------	-----------	-------------------------

## Order Code

ORDERING INFORMATION

SV08-23X-X-X-XXXX

BASE MODEL NUMBEROVERRIDE OPTION

NONE - BLANK  
WITHOUT KNOB - P  
WITH KNOB - K  
WITH PROTECTIVE NUT - HP

PORTING

CARTRIDGE ONLY - 0

SEAL OPTIONS

BUNA N - N  
FLUOROCARBON - V  
POLYURETHANE - P

COIL VOLTAGE

LESS COIL - 00  
12 VDC COIL - 12  
24 VDC COIL - 24

COIL TERMINATIONS

E-COIL OPTIONS:  
METRI-PACK CONNECTOR - EY  
DEUTSCH CONNECTOR - ER  
D-COIL OPTIONS:  
(2) LEADWIRES 18"  
STANDARD LENGTH - DL  
DUAL SPADES SAE J858d - DS

**Model Options****SV08-23EG-H-J-L****E Manual Override**

CODE	DESCRIPTION
BLANK	NONE
HP	Momentary Push Override, Button with Protective Nut
K	Momentary Push Override, Knob
P	Momentary Push Override, Button

**G Screen**

CODE	DESCRIPTION
BLANK	NONE
S	100 Mesh Screen

**H Line Body**

CODE	DESCRIPTION
0	No Body
4T	Aluminum SAE 4
6T	Aluminum SAE 6
8T	Aluminum SAE 8
6TD	Ductile Iron SAE 6
8TD	Ductile Iron SAE 8
2B	Aluminum BSPP 1/4" (2)
3B	Aluminum BSPP 3/8" (3)
3BD	Ductile Iron BSPP 3/8" (3)

**J Seal**

RM316.RU

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

**L Coil**

CODE	DESCRIPTION
0	No Coil
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, 18 inches long
10EL/36	10 VDC, E-Coil, Dual Lead Wires, 36 inches long
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
12EG/Z	12 VDC, E-Coil, DIN 43650 with Zener Diode
12EJ	12 VDC, E-Coil, AMP Jr.
12EJ/Z	12 VDC, E-Coil, AMP Jr. with Zener Diode
12EL	12 VDC, E-Coil, Dual Lead Wires, 18 inches long
12EL/36	12 VDC, E-Coil, Dual Lead Wires, 36 inches long
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
12EY	12 VDC, E-Coil, Metri-Pack 150
12EY/Z	12 VDC, E-Coil, Metri-Pack 150 with Zener Diode
20DG	20 VDC, D-Coil, DIN 43650
20DS	20 VDC, D-Coil, Dual Spade
20ER	20 VDC, E-Coil, Deutsch
20ER/Z	20 VDC, E-Coil, Deutsch with Zener Diode
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, 18 inches long

CODE	DESCRIPTION
24DL/36	24 VDC, D-Coil, Dual Lead Wires, 36 inches long
24DL/W	24 VDC, D-Coil, Dual Lead Wires with Weatherpak
24DR	24 VDC, D-Coil, Deutsch
24DR/D	24 VDC, D-Coil, Deutsch with Diode
24DR/Z	24 VDC, D-Coil, Deutsch with Zener Diode
24DS	24 VDC, D-Coil, Dual Spade
24EG	24 VDC, E-Coil, DIN 43650
24EG/Z	24 VDC, E-Coil, DIN 43650 with Zener Diode
24EJ	24 VDC, E-Coil, AMP Jr.
24EL/D	24 VDC, E-Coil, Dual Lead Wires with 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
36DG	36 VDC, D-Coil, DIN 43650
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