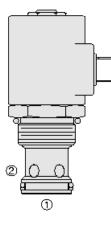
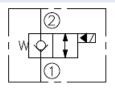


Overview



Symbol



Description

A solenoid-operated, 2 port, normally closed, poppet-type, screw in hydraulic cartridge valve, designed to function as a load-holding or blocking valve in applications requiring low internal leakage. When de-energized, the SV16-22 acts as a check valve, allowing flow from port 1 to port 2, while blocking flow from port 2 to port 1. When energized, the poppet lifts to open the port 2 to port 1 flow path. In this mode, flow is also allowed from port 1 to port 2.

<u>Features</u>

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

Ratings

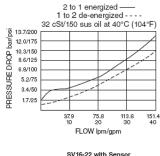
| <u>Pressure Ratings</u> | |
|-----------------------------|---|
| Pressure rating | 241 bar (3500 psi) |
| Flow Ratings | |
| Flow rating | See performance chart |
| Maximum internal leakage | 3 drops/min - Note: Max at 241 bar (3500 psi) |
| <u>Temperature Ratings</u> | |
| Operating fluid temperature | -40 to 120 °C (-40 to 250 °F) -30 to 205 °C (-20 to 400 °F) -50 to 80 °C (-60 to 175 °F) - Note: With buna-n seals - Note: With fluorocarbon seals - Note: With polyurethane seals |
| Properties | |

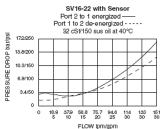
Materials

steel with hardened work surfaces zinc-plated exposed surfaces



Performance



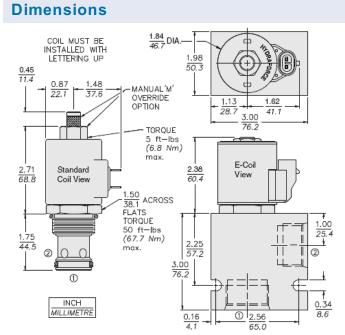


Typical Sensor Output & Flow vs. Valve Shift 151.4 lpm Vco Vco Vco Vco Vco Vco

> 56 VALVE SHIFT %

Hatched Area: Overlapping Stroke, Leakage Flow





0.15 lpm 0.6 gpm

100

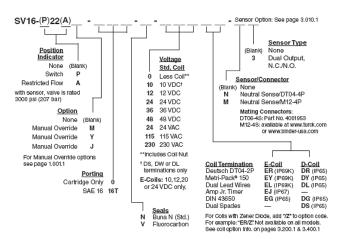
Installation Specifications

Cavity

VC16-2

Order Code





Model Options

SV16-22E-H-J-L

E Manual Override

| CODE | DESCRIPTION |
|-------|--|
| BLANK | NONE |
| J | Momentary Pull Override, #10-32 threads |
| М | Two Position Override, Red Knurled Knob |
| Y | Momentary Pull Override, Red Knurled Knob |

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 |
|------|------------------|
| Ν | Buna-N |
| V | Fluorocarbon |
| Р | 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 |



| CODE | DESCRIPTION |
|----------|---|
| 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 |
| 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 |
| | |



| CODE | DESCRIPTION |
|--------|---|
| 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 |