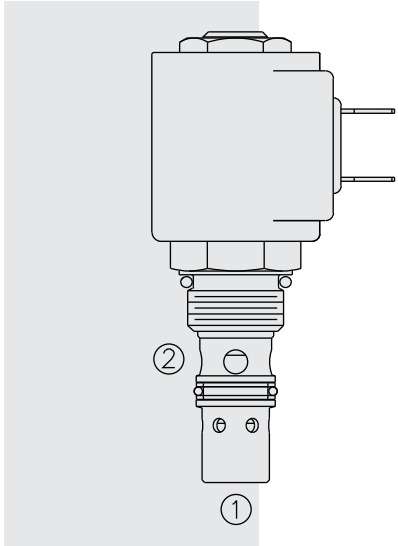


SVCV08-21 Poppet, 2-Way, Normally Open . . .



DESCRIPTION

A solenoid-operated, two-way, pilot-operated, poppet-type, normally open, screw-in hydraulic cartridge valve with outlet flow check, designed for low leakage in load holding applications.

OPERATION

When energized, the **SVCV08-21** blocks flow from ② to ① and from ① to ②.

When de-energized, the cartridge's poppet lifts to open the ② to ① flow path, while continuing to block flow from ① to ②.

The SVCV08-21 is designed to fit into the VC08-3 cavity with the normal inlet at cavity port 3 (valve port ②), the outlet at cavity port ① (valve port ①), and with cavity port ② blocked.

Operation of Manual Override Option: To override, push and hold override button.

FEATURES

- Continuous-duty rated coil.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Cartridges are voltage interchangeable.
- Manual override option.
- Optional waterproof E-Coils rated up to IP69K.
- Industry common cavity.
- Compact size.

RATINGS

Operating Pressure: 207 bar (3000 psi)

Rated Flow: 22.7 lpm (6 gpm)

Reverse Flow Check Valve Spring: 0.69 bar (10 psi)

Maximum Internal Leakage: ② to ①: 5 drops/minute at 207 bar (3000 psi);
① to ②: 10 drops/minute at 207 bar (3000 psi)

Temperature: -40 to 120°C with standard Buna seals

Coil Duty Rating: Continuous from 85% to 115% of nominal voltage

Response Time: First indication of change of state with 100% voltage supplied at 80% of nominal flow rating:
Energized: 40 msec.; De-energized: 46 msec.

Initial Coil Current Draw at 20°C: Standard Coil: 1.2 amps at 12 VDC;
0.13 amps at 115 VAC (full wave rectified);
E-Coil: 1.4 amps at 12 VDC; 0.7 amps at 24 VDC

Minimum Pull-in Voltage: 85% of nominal at 207 bar (3000 psi)

Filtration: See page 9.010.1

Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

Installation: No restrictions; See page 9.020.1

Cavity: VC08-3; See page 9.108.1

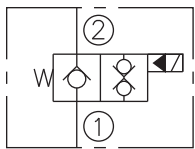
Cavity Tool: CT08-3XX; See page 8.600.1

Seal Kit: SK08-3X-M; See page 8.650.1

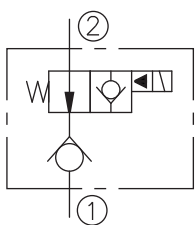
Coil Nut: Part No. 7004400

SYMBOLS

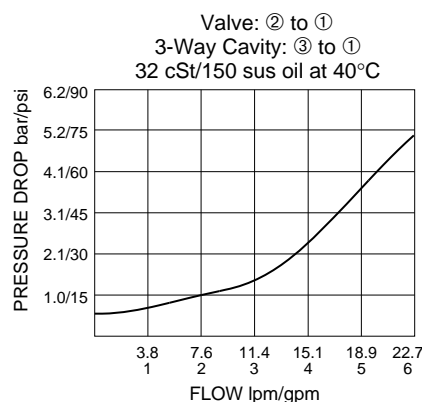
ISO:



Expanded:



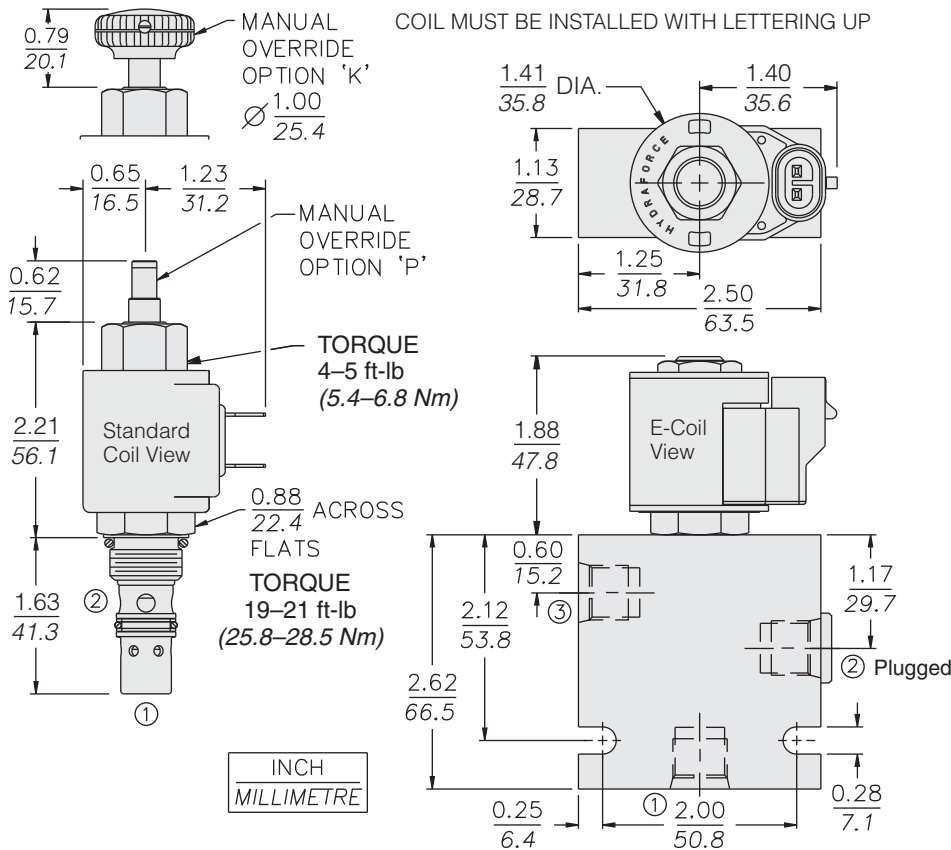
PERFORMANCE (Cartridge Only)



with Outlet Flow Check

SVCV08-21

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.11 kg. (0.25 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard.

Standard Ported Body: Weight: 0.27 kg. (0.60 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi); Ductile iron bodies available; dimensions may differ. See page 8.008.1.

Standard Coil: Weight: 0.11 kg. (0.25 lbs.); Unitized thermoplastic encapsulated, Class H high temperature magnetwire. See page 3.200.1.

E-Coil: Weight: 0.14 kg. (0.3 lbs.); Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors. See page 3.400.1

TO ORDER

SVCV08-21

Option
 None (Blank)
 Manual Override without Knob **P**
 Manual Override with Knob **K**

Porting
 Cartridge Only **0**
 SAE 6 **6T**
 SAE 8 **8T**
 1/4 in. BSP* **2B**
 *BSP Body; U.K. Mfr. Only

Seals
 Buna N (Std.) **N**
 Fluorocarbon **V**

Voltage Std. Coil

0 Less Coil**
10 10 VDC[†]
12 12 VDC
24 24 VDC
36 36 VDC
48 48 VDC
24 24 VAC
115 115 VAC
230 230 VAC

**Includes Std. Coil Nut
[†] DS, DW or DL terminations only.

E-Coil

10 10 VDC
12 12 VDC
20 20 VDC
24 24 VDC

Termination (VDC) Std. Coil

DS Dual Spades
DG DIN 43650
DL Leadwires (2)
DL/W Leads w/Weatherpak® Connectors
DR Deutsch DT04-2P

Termination (VAC) Std. Coil

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.