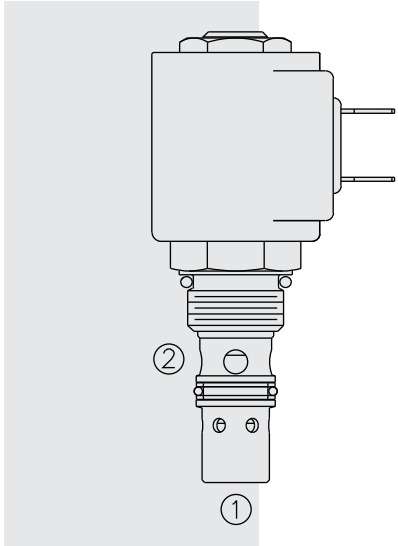


## SVCV08-20 Poppet, 2-Way, Normally Closed . . .



### DESCRIPTION

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

### OPERATION

When de-energized, the **SVCV08-20** blocks flow from ② to ① and from ① to ②. When energized, the cartridge's poppet lifts to open the ② to ① flow path, while continuing to block flow from ① to ②.

The SVCV08-20 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 cavity port ② blocked. The pressure drop will be substantially higher if cavity port ② is selected as an alternate outlet port.

**Operation of Manual Override Option:** To override, push button in, twist counter-clockwise 180°, and release. In this position, the valve will remain open.

To return to normal operation, push button in, twist clockwise 180°, and release. Override will be detented in this position.

### FEATURES

- Continuous-duty rated coil.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Manual override option.
- Cartridges are voltage interchangeable.
- 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

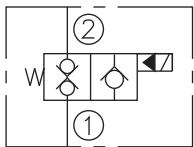
**Cavity Tool:** CT08-3XX; See page 8.600.1

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

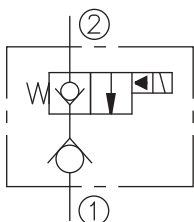
**Coil Nut:** Part No. 7004400

### SYMBOLS

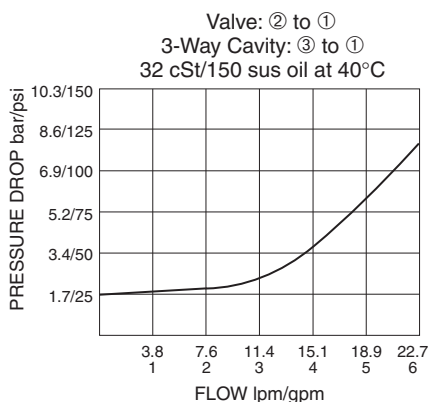
#### ISO:



#### Expanded:



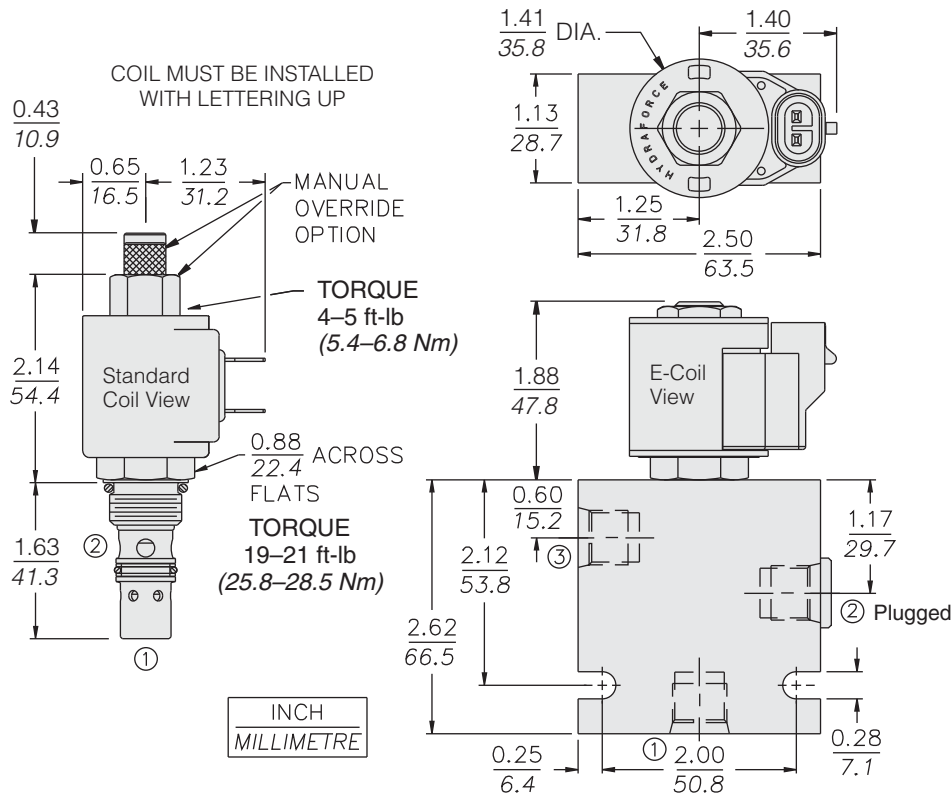
### PERFORMANCE (Cartridge Only)



with Outlet Flow Check

SVCV08-20

**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**

**SVCV08-20**

**Option**  
None (Blank)  
Manual Override **M**

**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.