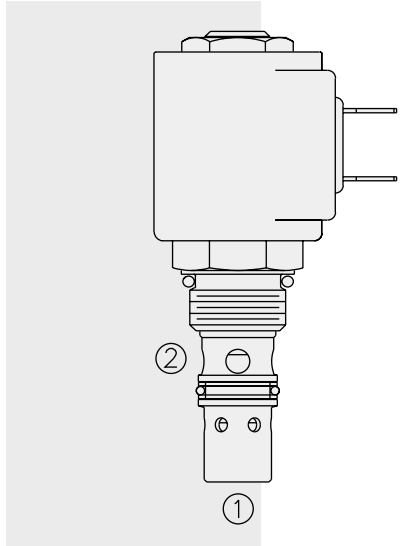


# SOLENOID VALVES

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



### DESCRIPTION

A solenoid-operated, 2-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.

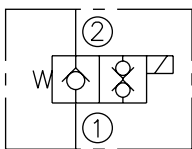
The SVCV08-21 is designed to fit into the VC08-3 cavity with the normal inlet at cavity port ③ (valve port ②), the outlet at cavity port ① (valve port ①), and cavity port ② blocked.

### FEATURES

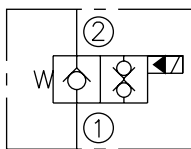
- Continuous-duty rated coil.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Cartridges are voltage interchangeable.
- Optional waterproof E-Coils rated up to IP69K.
- Industry common cavity.
- Compact size.

### SYMBOLS

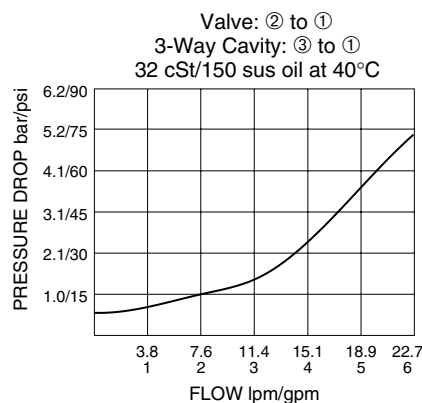
#### USASI:



#### ISO:



### PERFORMANCE (Cartridge Only)



### 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)

**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

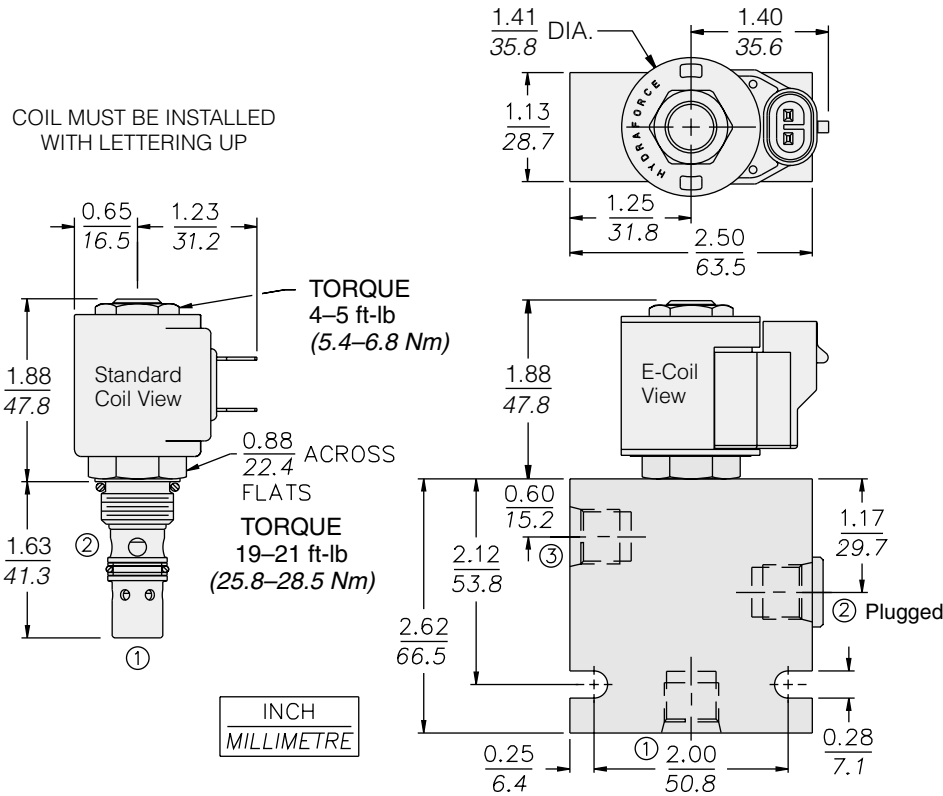
**Seal Kit:** SK08-3X-M; See page 8.650.1

**Coil Nut:** Part No. 7004400

# 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 240 bar (3500 psi); See page 8.008.1. Ductile iron and steel bodies available; dimensions may differ; consult factory.

**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)

**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.