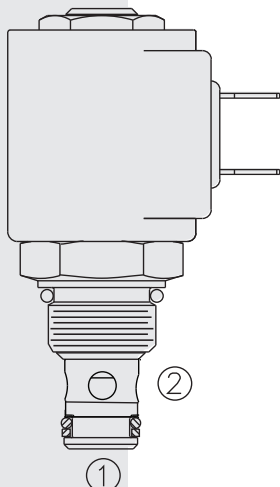


SF08-20 Poppet, 2-Way, N.C., High Pressure



DESCRIPTION

A solenoid-operated, 2-way, normally closed, piloted poppet-type, screw-in hydraulic cartridge valve, intended to act as a blocking or load-holding device for low flow circuits.

OPERATION

When de-energized, the **SF08-20** acts as a check valve, allowing flow from 1 to 2, while blocking flow from 2 to 1.

When energized, the cartridge's poppet lifts to open the 2 to 1 flow path. In this mode, flow from 1 to 2 is severely restricted. If this path is required, see model SF08-22, page 1.042.1.

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.
- Optional waterproof E-Coils rated up to IP69K.
- Corrosion-resistant plating.
- Industry common cavity.
- Compact size.

RATINGS

Operating Pressure: 345 bar (5000 psi)

Proof Pressure: 483 bar (7000 psi)

Burst Pressure: 965 bar (14000 psi)

Flow: See Performance Chart

Internal Leakage: 0.15 cc/minute (3 drops/minute) max. at 345 bar (5000 psi)

Temperature: -54 to 107°C (-65 to 225°F) with standard polyurethane seals

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

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 345 bar (5000 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: VC08-2; See page 9.108.1

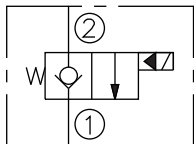
Cavity Tool: CT08-2XX; See page 8.600.1

Seal Kit: SK08-2P-T; See page 8.650.1

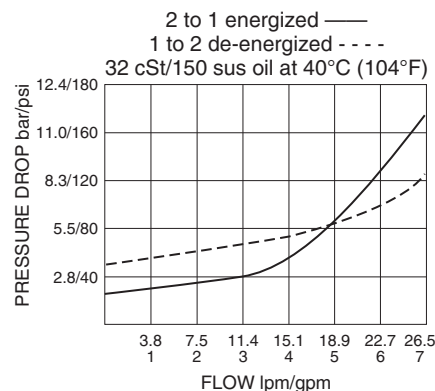
Coil Nut: Part No. 7004400;

For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

ISO SYMBOL

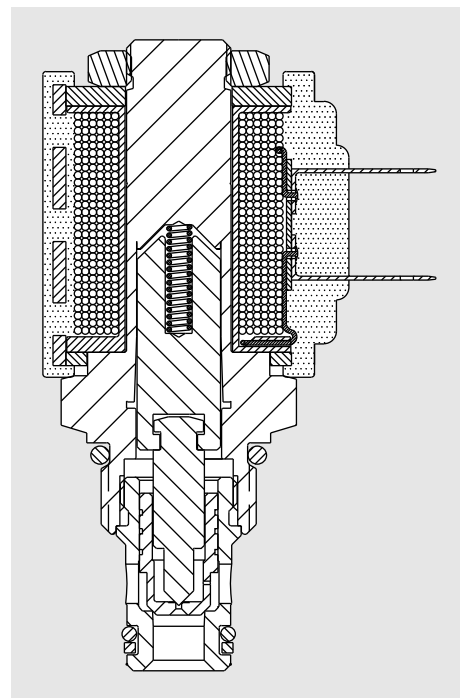
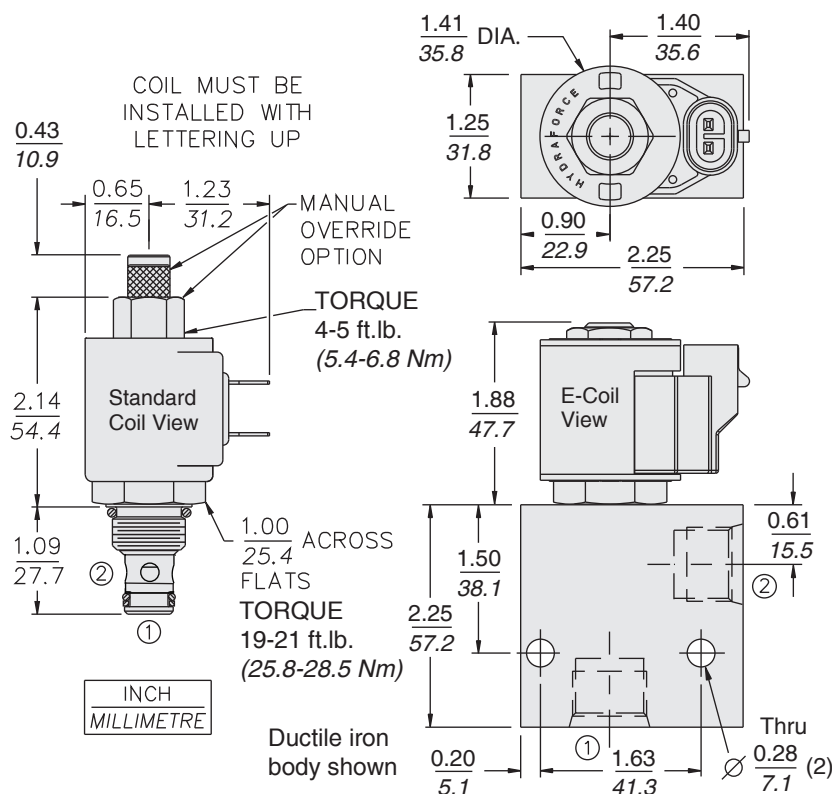


PERFORMANCE (Cartridge Only)



SF08-20

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.01 kg (0.22 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Polyurethane seals standard.

Ported Body: Weight: 0.54 kg (1.2 lb), ductile iron standard; rated to 345 bar (5000 psi); See page 8.008.1.

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

E-Coil: Weight: 0.14 kg (0.3 lb); Fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors;

Note: See page 3.400.1 for all E-Coil retrofit applications.

TO ORDER

SF08-20

Option

None (Blank)

Manual

Override **M**

Porting

Cartridge Only **0**

Aluminum

SAE 8 **8T**

3/8 in. BSP* **3B**

Ductile Iron

SAE 6 **6TD**

3/8 in. BSP* **3BD**

*BSP Body; U.K. Mfr. Only

Seals

Polyurethane (Std.) **P**

Polyurethane seals recommended for 345 bar (5000 psi) operation. Contact factory for additional seal options.

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.