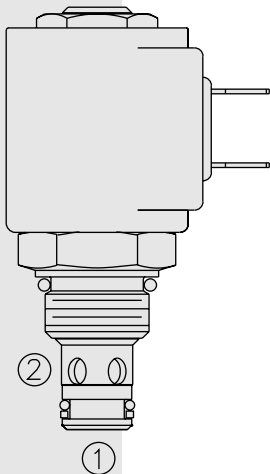


SOLENOID VALVES

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.

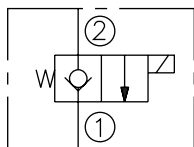
When energized, the cartridge's poppet lifts to open the ② to ① flow path. In this mode, flow from ① to ② is severely restricted. If this path is required, see model SF08-22, page 1.042.1.

FEATURES

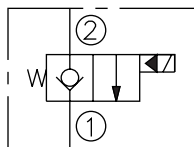
- Continuous-duty rated coil.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Optional waterproof E-Coils rated up to IP69K.
- Industry common cavity.
- Compact size.

SYMBOLS

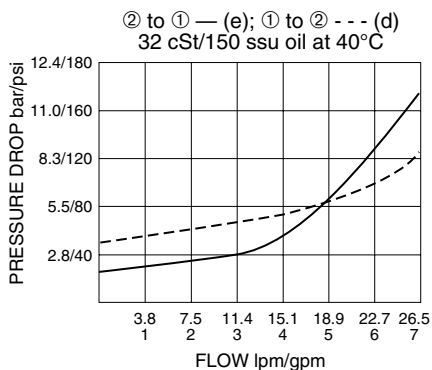
USASI:



ISO:



PERFORMANCE (Cartridge Only)



RATINGS

Operating Pressure: 345 bar (5000 psi)

Flow: See Performance Chart

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

Temperature: -40 to 120°C 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 ssu)

Installation: No restrictions; See page 9.020.1

Cavity: VC08-2; See page 9.108.1

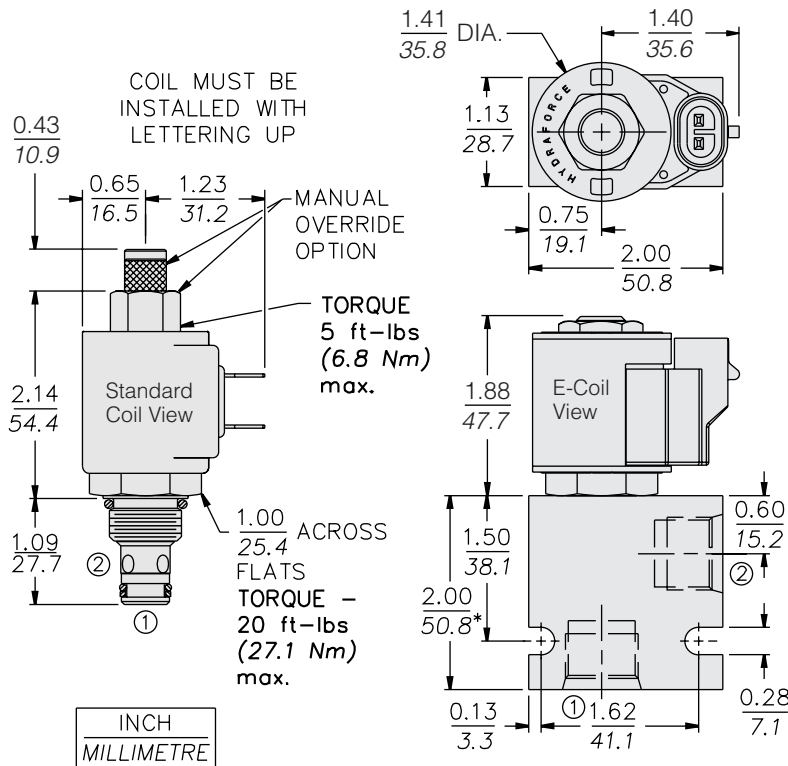
Cavity Tool: CT08-2XX; See page 8.600.1

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

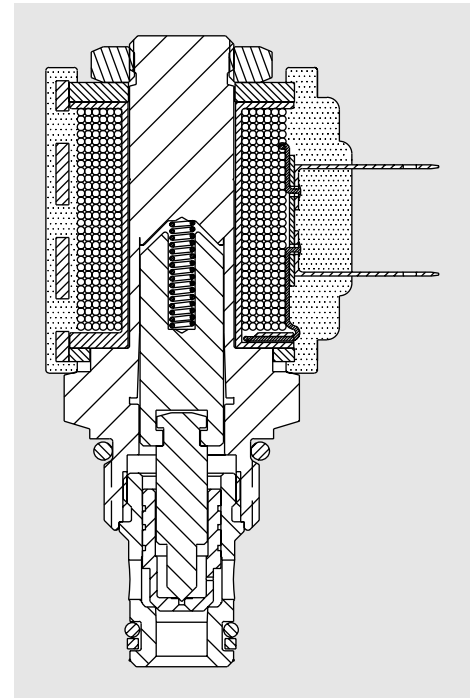
Coil Nut: Part No. 7004400;

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

DIMENSIONS



* BSP BODY - 55.9 mm



MATERIALS

Cartridge: Weight: 0.15 kg. (0.33 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Polyurethane cast O-rings and Fluorocarbon back-up standard.

Ported Body: Weight: 0.54 kg. (1.2 lbs.); Steel, zinc-plated (code "S"); or **Ductile Iron (code "D") standard**, consult factory for weight, dimensions may differ; rated to 345 bar (5000 psi); 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.); 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		
SAE 6	6TD		
SAE 6	6TS		
SAE 8	8TD		
SAE 8	8TS		
1/4 in. BSP*	2BD		
1/4 in. BSP*	2BS		
3/8 in. BSP*	3BD		
3/8 in. BSP*	3BS		
	*BSP Body; U.K. Mfr. Only		
Seals			
Polyurethane (Std.)	P		
		Voltage Std. Coil	Termination (VDC) Std. Coil
		0 Less Coil**	DS Dual Spades
		10 10 VDC [†]	DG DIN 43650
		12 12 VDC	DL Leadwires (2)
		24 24 VDC	DL/W Leads w/Weatherpak® Connectors
		36 36 VDC	DR Deutsch DT04-2P
		48 48 VDC	
		24 24 VAC	Termination (VAC) Std. Coil
		115 115 VAC	AG DIN 43650
		230 230 VAC	AP 1/2 in. Conduit
		**Includes Std. Coil Nut	Termination (VDC) E-Coil
		[†] DS, DW or DL terminations only	ER Deutsch DT04-2P (IP69K Rated)
		E-Coil	EY Metri-Pack® 150 (IP69K Rated)
		10 10 VDC	
		12 12 VDC	
		20 20 VDC	
		24 24 VDC	

Coils with internal diode are available. Consult factory.