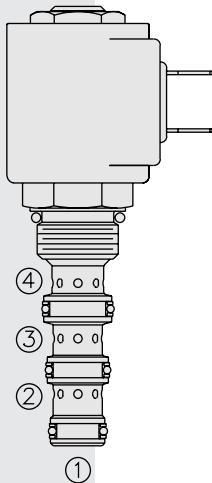


ELECTRO-PROPORTIONAL VALVES—DIRECTIONAL CONTROL

SP08-46R Spool, 4-Way, 2-Position



DESCRIPTION

A proportional, solenoid-operated, four-way, two-position, screw-in hydraulic cartridge valve.

OPERATION

When de-energized, the **SP08-46R** allows flow from ②, ① and ④, while blocking flow at ③. When energized, metered flow is allowed from ③ to ④, as well as metered return flow from ② to ①. Please note that this valve will allow flow from ④ to ③ and from ① to ② but these flows will not be metered.

FEATURES

- Continuous-duty rated solenoid.
- Hardened parts for long life.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Optional waterproof E-Coils rated up to IP69K.
- Good linearity and hysteresis.
- Industry common cavity.

RATINGS

Operating Pressure: 247 bar (3625 psi) with standard Buna N seals

Flow: 11.4 lpm (3 gpm) maximum; see performance chart

Internal Leakage: 328 ml/minute (20 cu. in./minute) max. at 207 bar (3000 psi)

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

Coil Duty Rating: Standard Coils and E-Coils: Continuous from 85% to 115% of nominal voltage

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: VC08-4; See page 9.108.1

Cavity Tool: CT08-4XX; See page 8.600.1

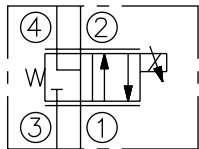
Seal Kit: SK08-4X-MMM; See page 8.650.1

Coil Nut: Part No. 7004400;

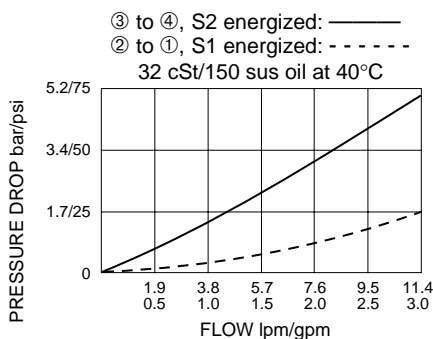
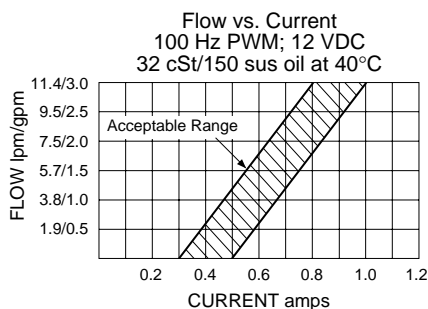
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

SYMBOLS

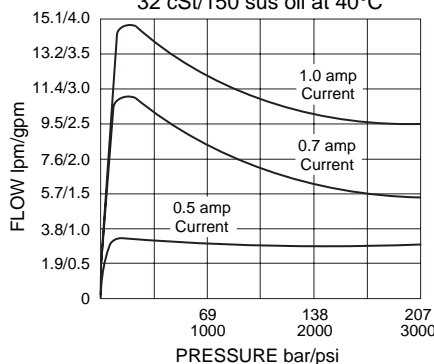
USASI/ISO:



PERFORMANCE (Cartridge Only)

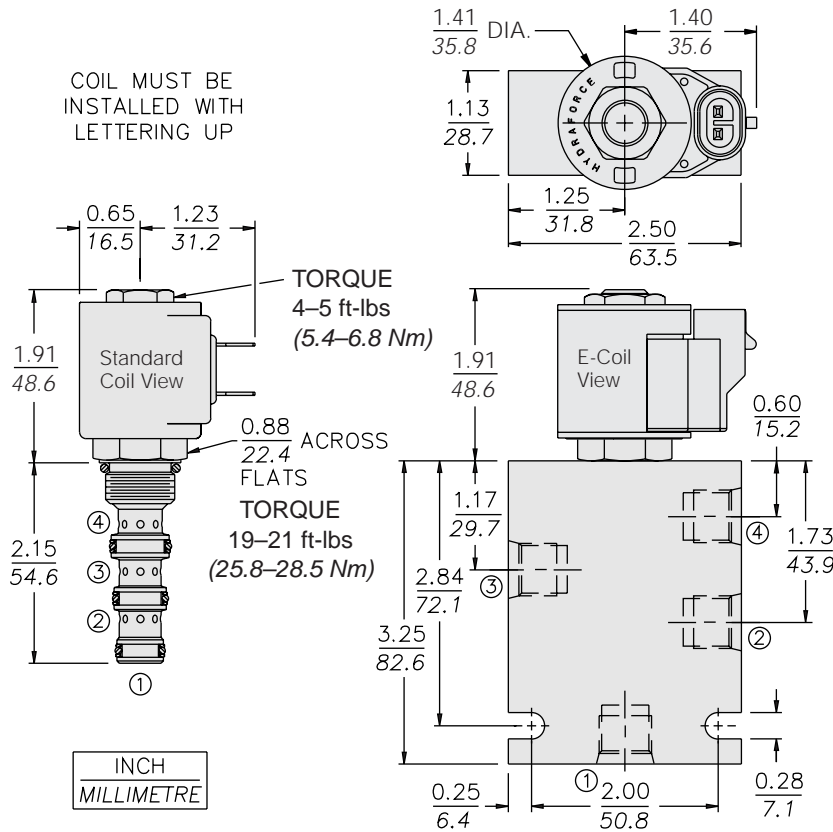


Pressure Compensation, Inlet to Work Port
Typical Differential Pressure
32 cSt/150 sus oil at 40°C



Recommended Electronic Controllers:
See page 2.001.1 or our Electronics catalog.

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.13 kg. (0.28 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 for all E-Coil retrofit applications.

TO ORDER

SP08-46R

- Option**
- None (Blank)
- Porting**
- Cartridge Only **0**
- SAE 6 **6T**
- SAE 8 **8T**
- 1/4 in. BSP* **2B**
- 3/8 in. BSP* **3B**
- *BSP Body; U.K. Mfr. Only
- Seals**
- Buna N (Std.) **N**
- Fluorocarbon **V**

- Voltage Std. Coil**
- 0** Less Coil**
- 12** 12 VDC
- 24** 24 VDC
- **Includes Std. Coil Nut
- E-Coil**
- 12** 12 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 (VDC) E-Coil**
- ER** Deutsch DT04-2P (IP69K Rated)
- EY** Metri-Pack® 150 (IP69K Rated)

Coils with internal diode are available. Consult factory.