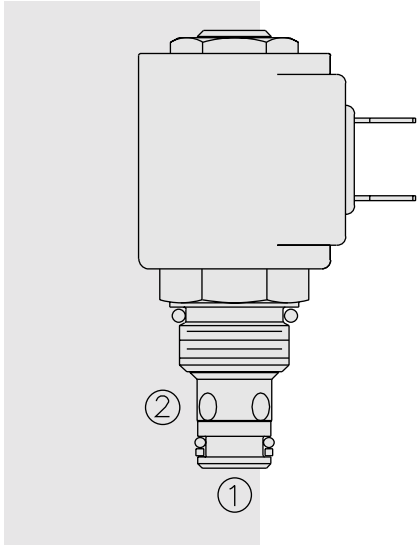


ELECTRO-PROPORTIONAL VALVES—DIRECTIONAL CONTROL

SP08-25 Spool, 2-Way, Normally Open



DESCRIPTION

A proportional solenoid-operated, 2-way, spool-type, normally open, bi-directional, screw-in hydraulic cartridge valve.

OPERATION

When de-energized, the **SP08-25** allows flow from ① to ② or from ② to ①. When partially energized, the valve begins to throttle the flow in either direction. When fully energized, flow is blocked in either direction.

External circuitry is required to ramp current.

Note: If low voltage is expected on the machine, 12 or 24 volt systems will require the use of 10 volt or 20 volt coils respectively. See “SP Valves and Coil Operating Parameters,” page 2.002.1.

FEATURES

- Industry-common cavity.
- Continuous-duty rated coils.
- Hardened precision spool and cage for long life.
- Optional waterproof E-Coils rated up to IP69K.

RATINGS

Operating Pressure: 207 bar (3000 psi)

Operating Voltage: See performance chart

Flow: 0 to 15.4 lpm (0 to 4 gpm)

Internal Leakage: 5 drops per minute at 207 bar (3000 psi)

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

Filtration: Recommend ISO 4406 16/13; 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

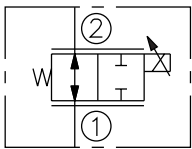
Cavity: VC08-2; See page 9.108.1

Cavity Tool: CT08-2XX; See page 8.600.1

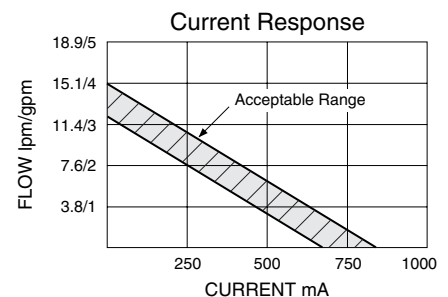
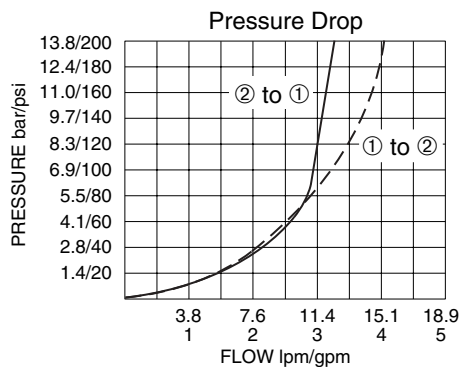
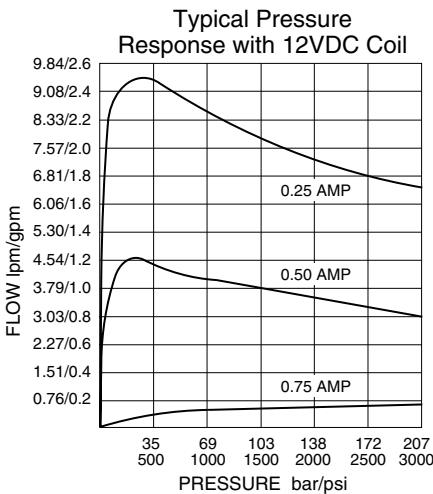
Seal Kit: SK08-2X-T; See page 8.650.1

SYMBOLS

USAS/ISO:



PERFORMANCE

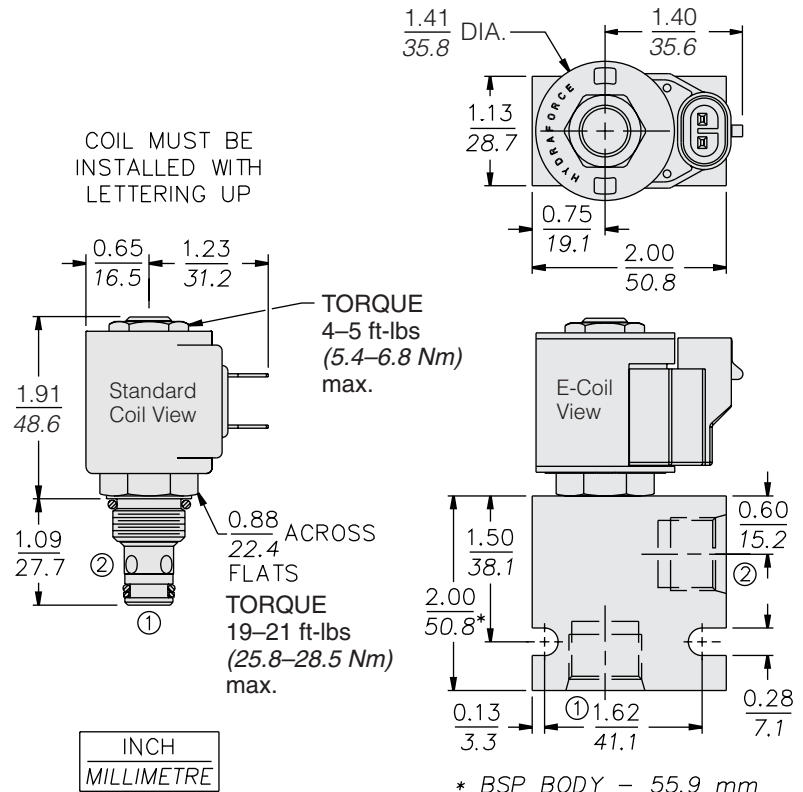


ELECTRONIC CONTROLLERS

Recommended Controllers (See Section 3)

Input Sig. w/12V Coil	DIN Coil Mount	PCB Board	Metal Box	DIN Rail Mount
0-5 VDC	7114950	4000046	4000049	4000136
0-10 VDC	4000070	4000141	4000124	4000137
4-20 mA	4000123	4000143	4000130	4000139
PWM	—	4000144	4000133	4000140
w/24V Coil				
0-5 VDC	4000161	4000194	4000174	4000136
0-10 VDC	4000165	4000141	4000182	4000137
4-20 mA	4000169	4000143	4000186	4000139
PWM	—	4000144	4000133	4000140

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: 0.16 kg. (0.35 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.

TO ORDER

