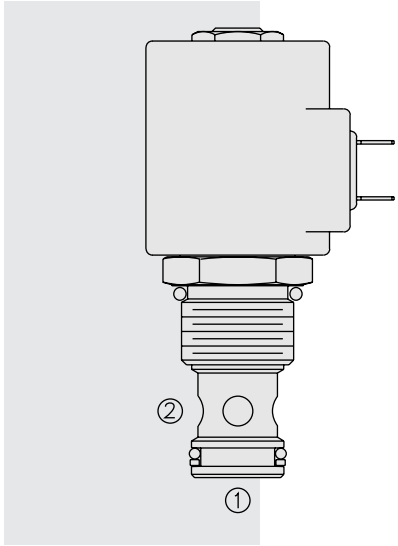


ELECTRO-PROPORTIONAL VALVES—DIRECTIONAL CONTROL

SP12-20 Poppet, 2-Way, Normally Closed



DESCRIPTION

A proportional solenoid-operated, two-way, poppet-type, normally closed, screw-in hydraulic cartridge valve for low-leakage blocking and load-holding applications.

OPERATION

When de-energized, the **SP12-20** acts as a check valve, allowing flow from ① to ②, and blocking flow from ② to ①. When energized, the ② to ① flow path opens. Flow is proportional to current applied to the coil. Flow varies with manual override options.

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.
- Manual override option.
- Efficient wet-armature construction.
- Optional waterproof E-Coils rated up to IP69K.
- Metering Option.

RATINGS

Operating Pressure: 250 bar (3625 psi)

Flow: Without Manual Override: 100 lpm (27 gpm) at 34.5 bar (500 psi)
 With Manual Override M or T: 95.6 lpm (25.25 gpm) at 34.5 bar (500 psid)
 With Manual Override Y or J: 68.1 lpm (18 gpm) at 34.5 bar (500 psid)

Minimum Operating Dither/Pulse Frequency: 70 Hz

Hysteresis: Less than 5% below 60% of I-max.; Less than 10% above 60% of I-max.

Max. Internal Leakage: 5 drops per minute at 250 bar (3625 psi)

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

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

Filtration: See page 9.010.1; **Installation:** No Restrictions. See page 9.020.1

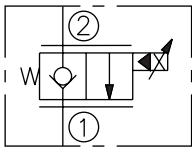
Cavity: VC12-2; See page 9.112.1; **Cavity Tool:** CT12-2XX; See page 8.600.1

Seal Kit: SK12-2X-T; See page 8.650.1

Coil Nut: Part No. 7004400; for E-coils manuf. prior to 1-1-04, see page 3.400.1.

SYMBOLS

USAS/ISO:



PERFORMANCE

