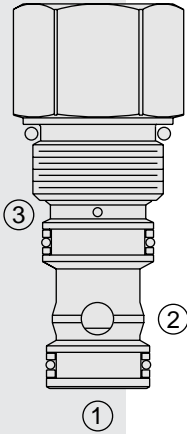


# DIRECTIONAL VALVES

## EP20-S38 Piloted Poppet-Type Logic Element



### DESCRIPTION

A poppet-type, screw-in, cartridge-style, hydraulic directional element, with multi-function potential when used with other directional, pressure, or flow control devices.

### OPERATION

The EP20-S38 is a spring-biased poppet valve which will block ① to ② or ② to ① until pressure at ① or ② exceeds the cumulative pressure at ③ and bias spring. With no pressure at ③, flow will be allowed from ① to ② or ② to ① once the bias spring force is overcome with pressure at ① or ②. When the element is in the closed state, the ratio of areas ① and ② is 1:1, and the ratio of areas ① or ② to ③ is 1:2.

### FEATURES

- Multiple function/application potential.
- Low pressure drop.
- Industry common cavity.

### RATINGS

**Maximum Operating Pressure:** Cartridge Only: Ports ① & ②, 241 bar (3500 psi)

**Flow:** See Performance Chart

**Internal Leakage:** 0.6 cc/minute (12 drops/minute) max. at 241 bar (3500 psi)

**Bias Spring Pressure Options:** 2.8 bar (40 psi); 11.0 bar (160 psi)

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

**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

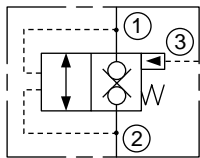
**Cavity:** VC20-S3; See page 9.120.1

**Cavity Tool:** CT20-S3xx; See page 8.600.1

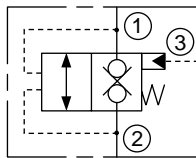
**Seal Kit:** SK20-S3x-MM; See page 8.650.1

### SYMBOLS

#### USASI:



#### ISO:



### PERFORMANCE (Cartridge Only)

