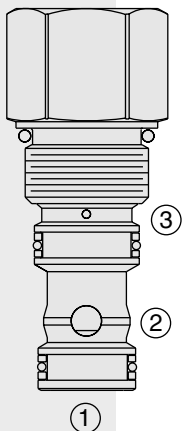


DIRECTIONAL VALVES

EP10-S38 Piloted Poppet-Type Logic Element



DESCRIPTION

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

OPERATION

The EP10-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 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.

For more information about the operation of this valve, see page 9.100.1.

FEATURES

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

RATINGS

Operating Pressure: 350 bar (5000 psi) cartridge; 240 bar (3500 psi) standard aluminum housing

Flow: See Performance Chart

Internal Leakage: 0.2 cc/minute (.01 cu. in./minute) max. at 240 bar (3500 psi)

Bias Spring Pressure: 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 ssu)

Installation: No restrictions; See page 9.020.1

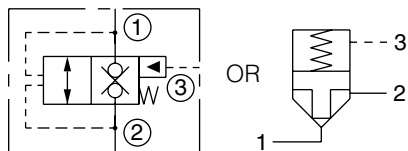
Cavity: VC10-S3; See page 9.110.1

Cavity Tool: CT10-S3XX; See page 8.600.1

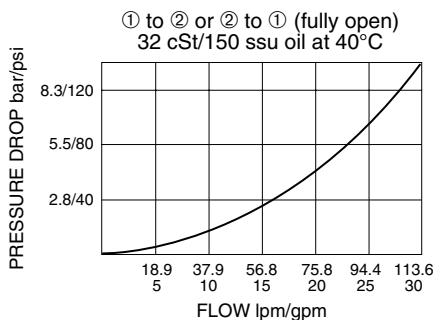
Seal Kit: SK10-3X-MM; See page 8.650.1

SYMBOLS

USASI/ISO:

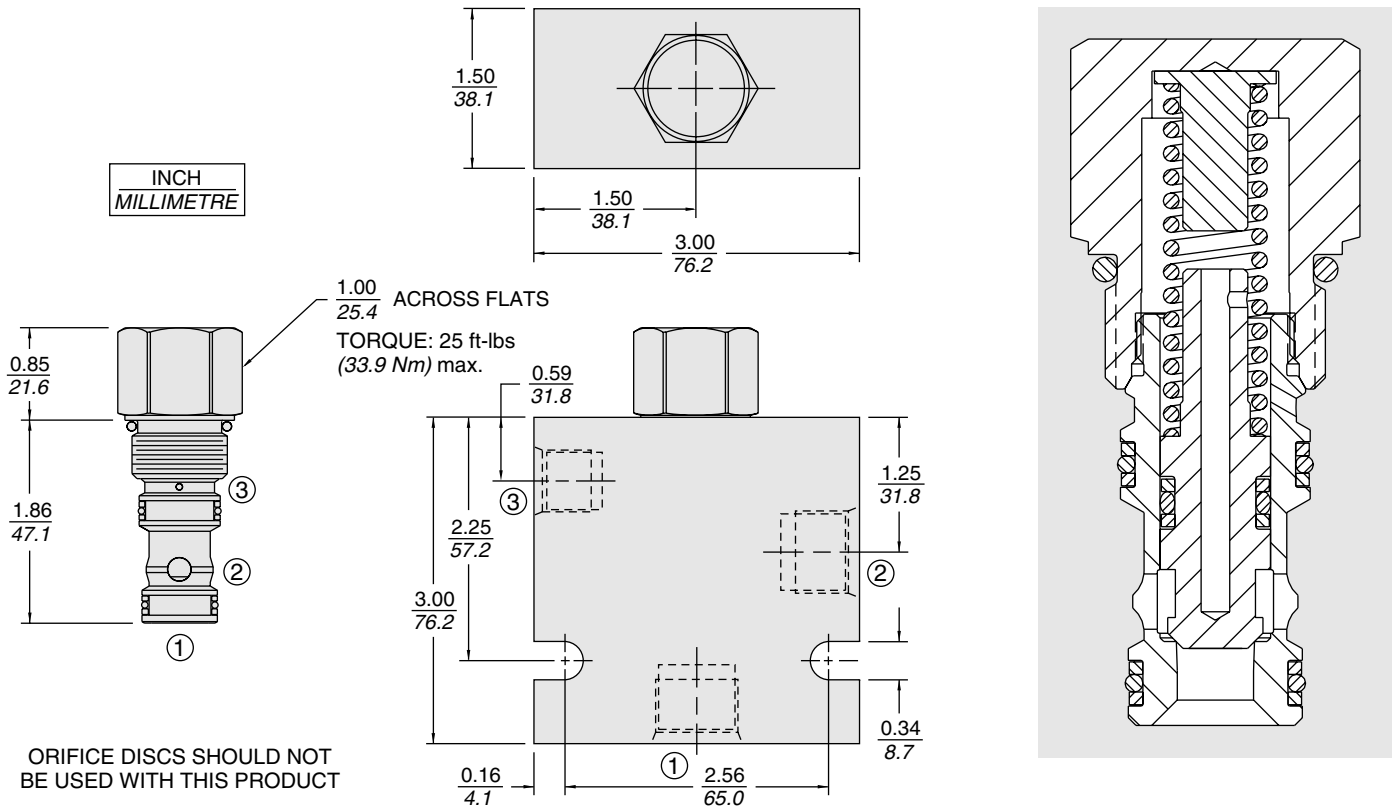


PERFORMANCE (Cartridge Only)



EP10-S38

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.15 kg. (0.32 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight: 0.32 kg. (0.70 lbs.). Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); see page 8.010.1. Ductile iron and steel bodies available; dimensions may differ; consult factory.

TO ORDER

EP10-S38 -

Porting	0	Bias Spring	80	5.52 bar (80 psi)
Cartridge Only	SAE 8*	8T	160	11.0 bar (160 psi)
	SAE 10*	10T		
	SAE 12*	12T		
*SAE 6 pilot port				
		Seals		
		N	Buna N (Std.)	
		V	Fluorocarbon	
		P	Polyurethane	
			(for pressures over 240 bar [3500 psi])	