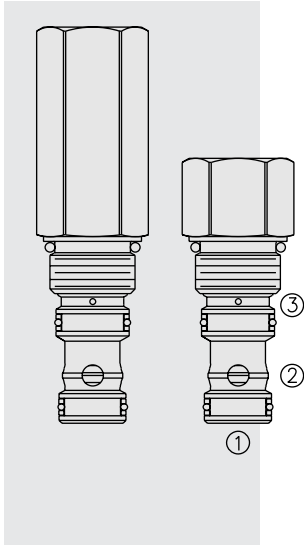


DIRECTIONAL VALVES

EP10-S35 Piloted Spool-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-S35 is a spring-biased blocking valve which will shift to allow full flow from ① to ② only when pressure at ① exceeds the cumulative pressure of ③, plus the bias spring pressure value.

EP10-S35 is a pilot-to-close directional valve.

With no pressure at ③, flow will be allowed from ① to ② once the bias spring force is overcome with pressure at ①.

FEATURES

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

RATINGS

Operating Pressure: 350 bar (5000 psi) cartridge; 207 bar (3000 psi) standard aluminum housing; 350 bar (5000 psi) ductile iron housing.

Flow: See Performance Chart

Internal Leakage: 164 cc/minute (10 cu. in./minute) max. at 207 bar (3000 psi)

Bias Spring Pressure Options:

- 0.7 bar (10 psi);
- 2.8 bar (40 psi);
- 5.5 bar (80 psi);
- 7.6 bar (110 psi);
- 11.0 bar (160 psi)

Note: Tall cap option required for 11.0 bar (160 psi) spring.

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

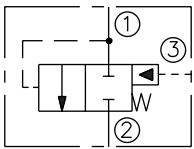
Cavity: VC10-S3; See page 9.110.1

Cavity Tool: CT10-S3xx; See page 8.600.1

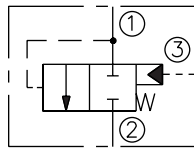
Seal Kit: SK10-S3x-MM; See page 8.650.1

SYMBOLS

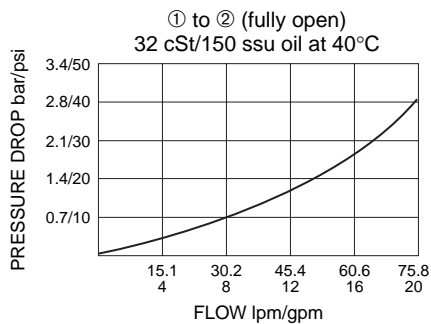
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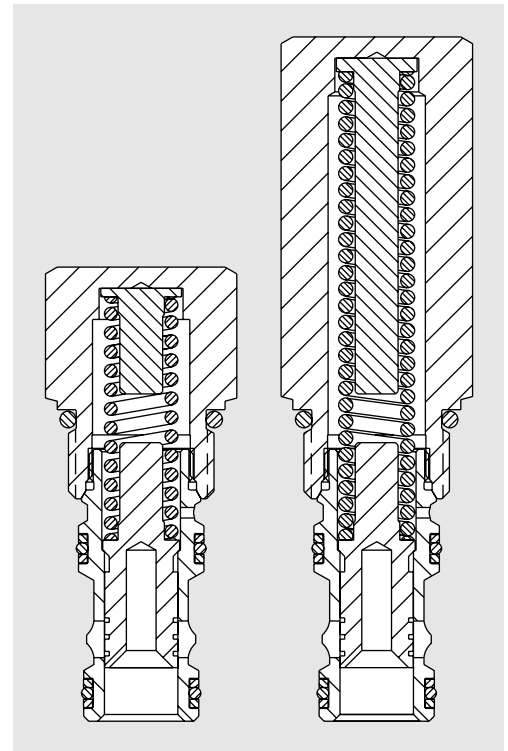
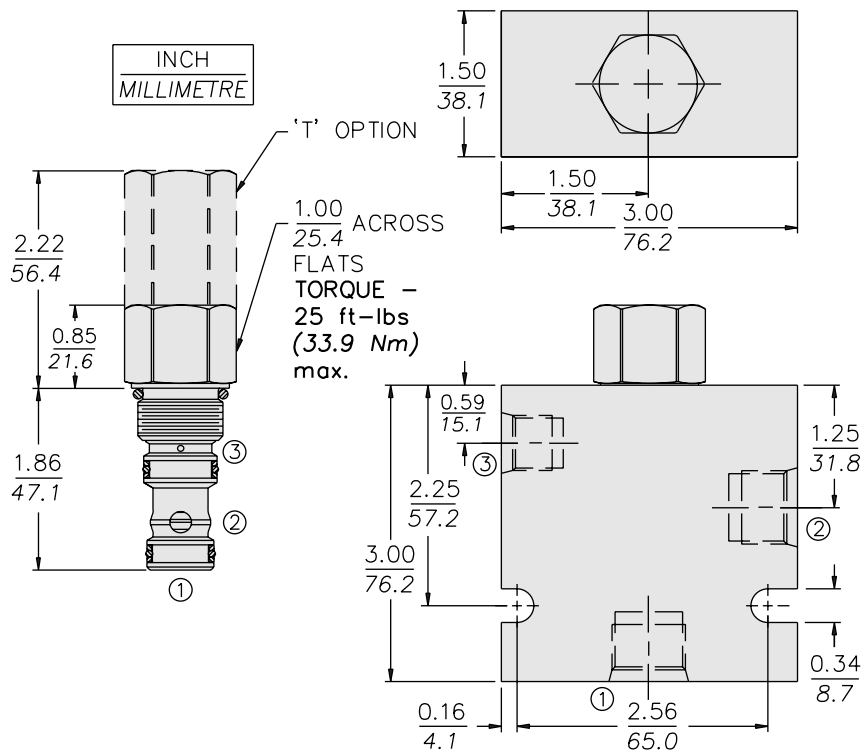
ISO:



PERFORMANCE (Cartridge Only)



DIMENSIONS



ORIFICE DISCS SHOULD NOT BE USED WITH THIS PRODUCT.

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 207 bar (3000 psi). Ductile iron (8TD) bodies are available for pressures up to 350 bar (5000 psi); Weight and dimensions may differ. See page 8.010.1

TO ORDER

EP10-S35 -		-	-	-
Option				Bias Spring
None (Blank)				10 0.7 bar (10 psi)
Tall Cap T				40 2.8 bar (40 psi)
				80 5.52 bar (80 psi)
				110 7.6 bar (110 psi)
				‡160 11.0 bar (160 psi)
				‡230 15.9 bar (230 psi)
				‡ T Option required
				Seals
				N Buna N (Std.)
				V Fluorocarbon
				P Polyurethane (for pressures over 240 bar/3500 psi)

Porting	
Cartridge Only 0	
SAE 8* 8T	
SAE 8* 8TD	
SAE 10* 10T	
SAE 12* 12T	

*SAE 6 pilot port

Ductile iron (8TD) bodies are available for pressures up to 350 bar (5000 psi).