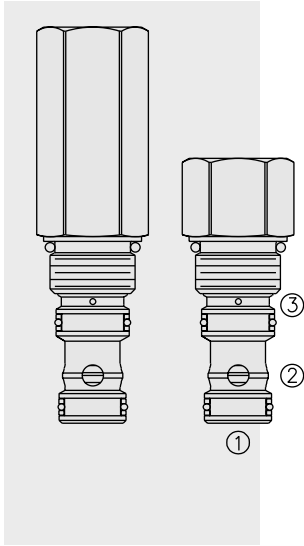


DIRECTIONAL VALVES

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; 240 bar (3500 psi) standard aluminum housing; 350 bar (5000 psi) ductile iron and steel housings.

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 ssu)

Installation: No restrictions; See page 9.020.1

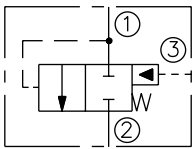
Cavity: VC10-S3; See page 9.110.1

Cavity Tool: CT10-S3XX; See page 8.600.1

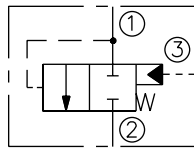
Seal Kit: SK10-3X-MM; See page 8.650.1

SYMBOLS

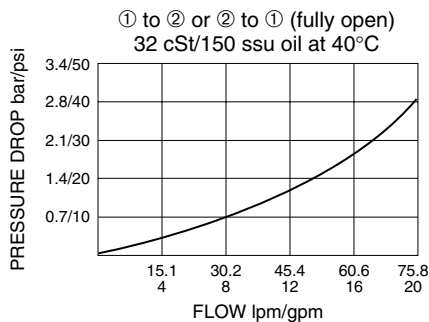
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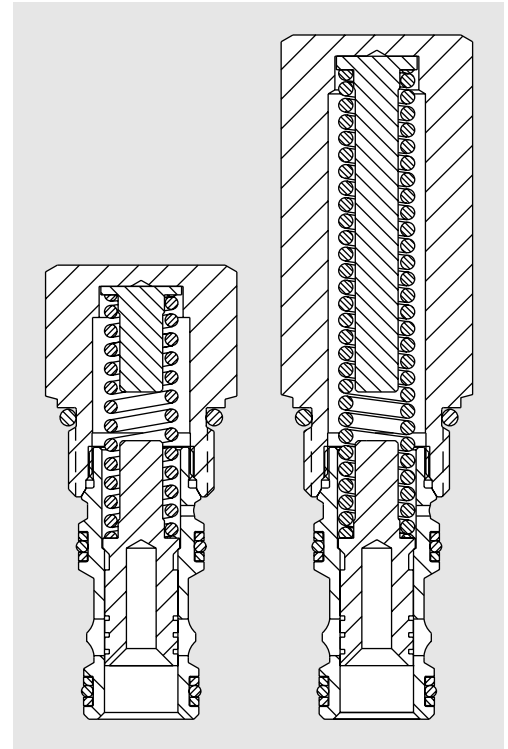
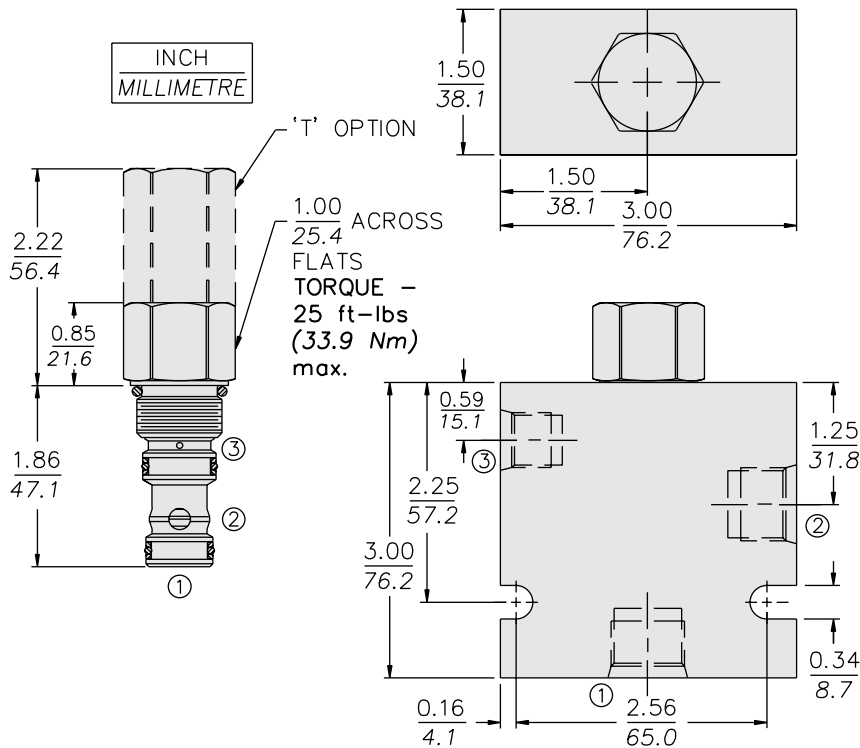


PERFORMANCE (Cartridge Only)



EP10-S35

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 240 bar (3500 psi); see page 8.010.1. Ductile iron (8TD) and steel (8TS) bodies are available for pressures up to 350 bar (5000 psi); Weight and dimensions may differ. Consult factory.

TO ORDER

EP10-S35

Option
None (Blank)
Tall Cap **T**

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

*SAE 6 pilot port

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

Bias Spring

10 0.7 bar (10 psi)
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])