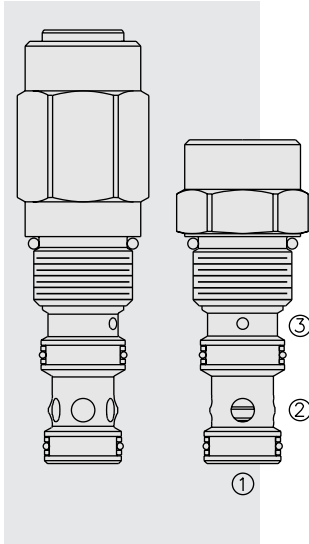


DIRECTIONAL VALVES

EP12-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 EP12-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.
- Manual override option available with 80 psi spring only.

RATINGS

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

Flow: See Performance Chart

Internal Leakage: 131 cc/minute (8 cu. in./minute) max. at 350 bar (5000 psi)

Bias Spring Pressure Options:

- 0.7 bar (10 psi)
- 5.5 bar (80 psi)
- 7.0 bar (100 psi)
- 11.0 bar (160 psi) Tall Cap option required
- 16.5 bar (240 psi) Tall Cap option required

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

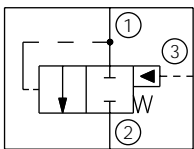
Cavity: VC12-S3; See page 9.112.1

Cavity Tool: CT12-S3xx; See page 8.600.1

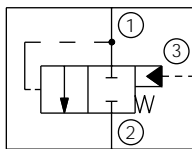
Seal Kit: SK12-S3x-MM; See page 8.650.1

SYMBOLS

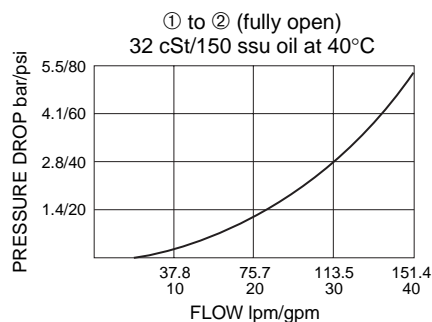
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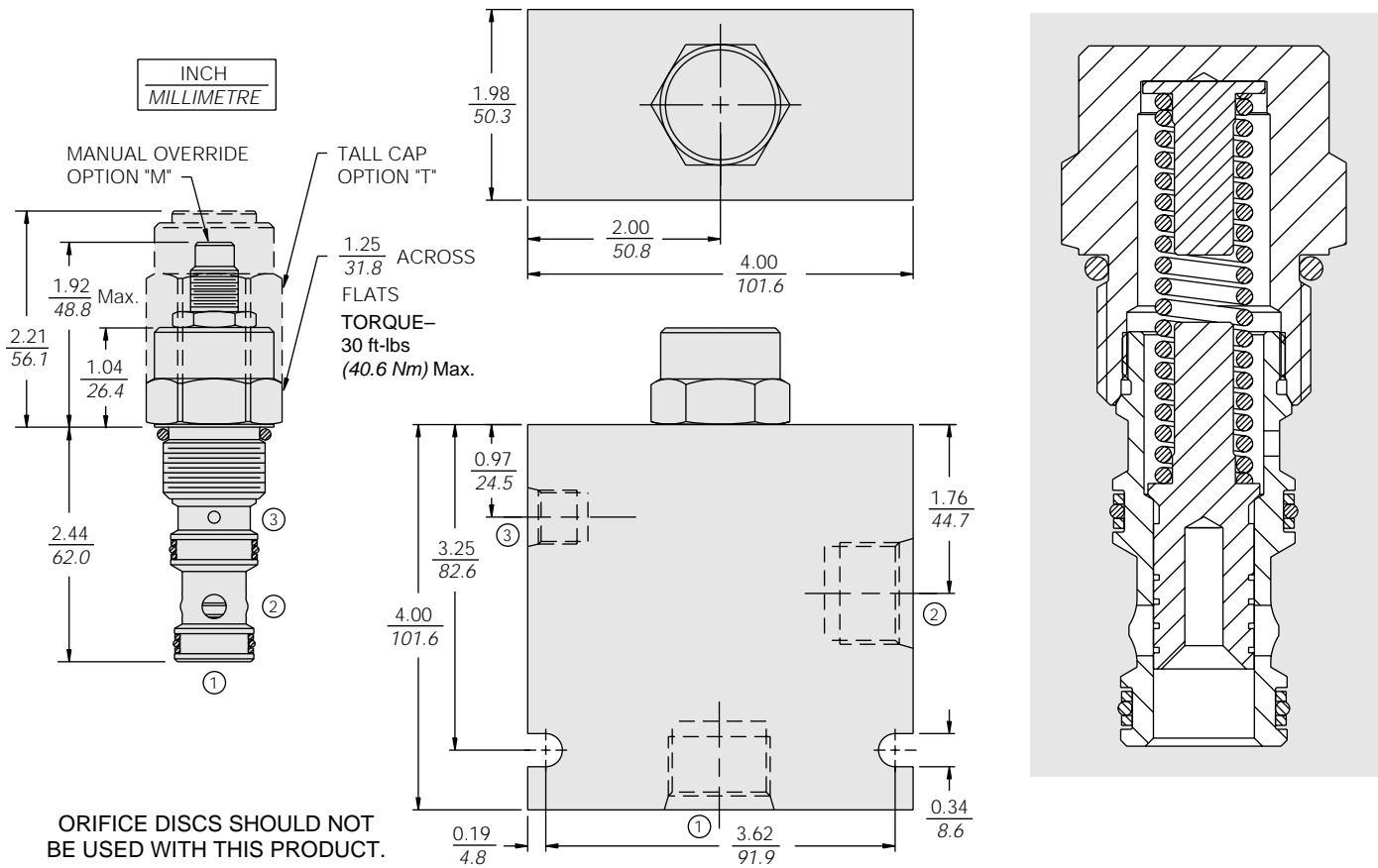
ISO:



PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.23 kg. (0.5 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight: 1.13 kg. (2.5 lbs.)
Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.012.1.

TO ORDER

EP12-S35

Option
None (Blank)
Tall Cap **T**
Manual Override **M**
Manual Override available with 80 psi spring only.

Bias Spring
10 0.7 bar (10 psi)
80 5.5 bar (80 psi)
100 7 bar (100 psi)
‡160 11 bar (160 psi)
‡240 16.5 bar (240 psi)
‡ T Option required

Porting
Cartridge Only **0**
SAE 12* **12T**
*SAE 6 pilot port

Seals
N Buna N (Std.)
V Fluorocarbon
P Polyurethane (for pressures over 240 bar/3500 psi)