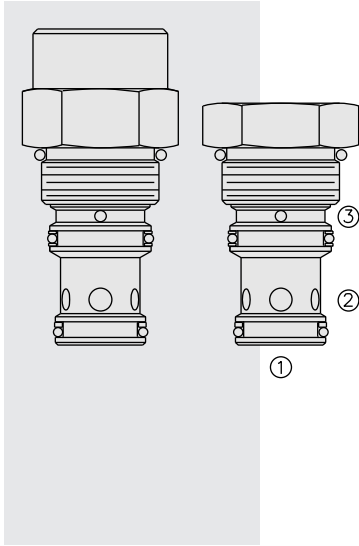


EP16-S35 Piloted Spool-Type Logic Element



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 **EP16-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.

EP16-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.

It requires a tall cap when specified with bias springs from 6,2 to 16,5 bar (90 to 240 psi). The 240 psi spring requires an extra tall cap. A manual override option is also available for valves with bias springs from 6,2 to 16,5 bar (90-240 psi).

NOTE: Orifice discs should not be used with this valve.

FEATURES

- Multiple function/application potential.
- Low pressure drop.
- Industry common cavity.
- Manual override available with 90, 110, 160 and 240 psi bias springs.

RATINGS

Operating Pressure: 240 bar (3500 psi)

Proof Pressure: 420 bar (6090 psi)

Flow: See Performance Chart

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

Temperature: -40 to 100°C (-40 to 212° F) with standard Buna seals;

-26 to 204°C (-15 to 400° F) with Fluorocarbon seals;

-54 to 104°C (-65 to 225° F) with Polyurethane 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

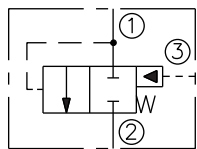
Cavity: VC16-S3; See page 9.116.1

Cavity Tool: CT16-S3xx; See page 8.600.1

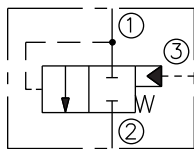
Seal Kit: SK16-S3x-MM; See page 8.650.1

SYMBOLS

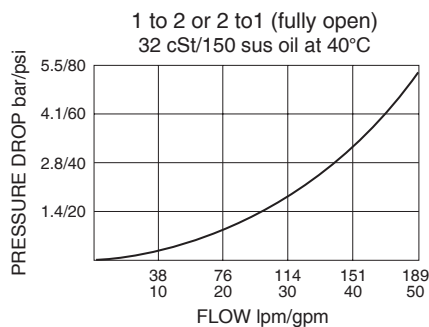
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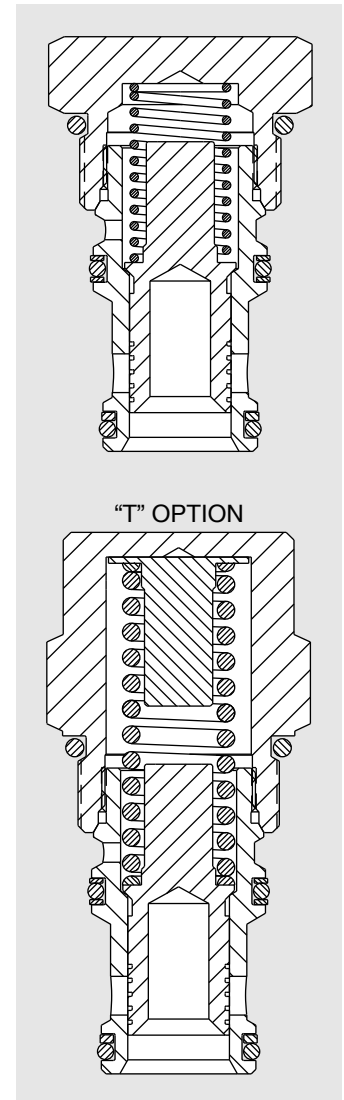
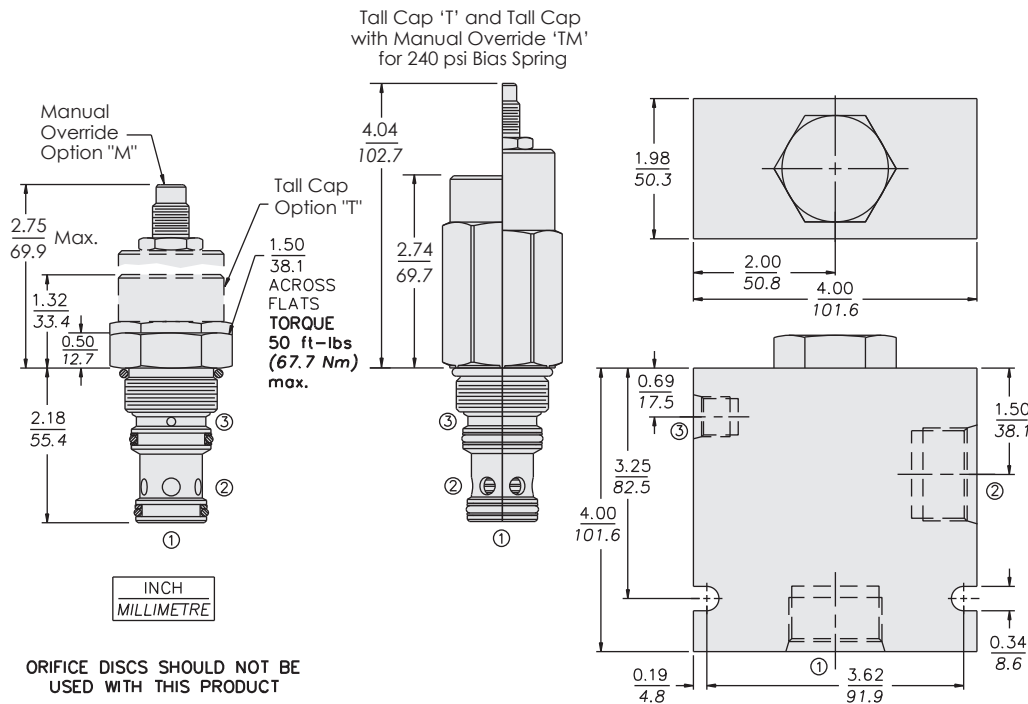
ISO:



PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.27 kg. (0.60 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight: 1.50 kg. (3.3 lbs.) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.016.1.

TO ORDER

EP16-S35

Option
None (Blank)
Tall Cap T
Manual Override M

Manual Override available only with 6.2, 7.6, 11.0 and 16.5 bar (90, 110, 160 and 240 psi) bias springs.

Porting
Cartridge Only 0
SAE 16 w/SAE 6 Pilot Port 16T

Bias Spring

10 0.7 bar (10 psi)
20 1.4 bar (20 psi)
40 2.8 bar (40 psi)
70 4.8 bar (70 psi)
‡ 90 6.2 bar (90 psi)
‡ 110 7.6 bar (110 psi)
‡ 160 11.0 bar (160 psi)
‡ 240 16.5 bar (240 psi)

‡ T Tall Cap Option required for larger springs.

Seals

N Buna N (Std.)
V Fluorocarbon
P Polyurethane