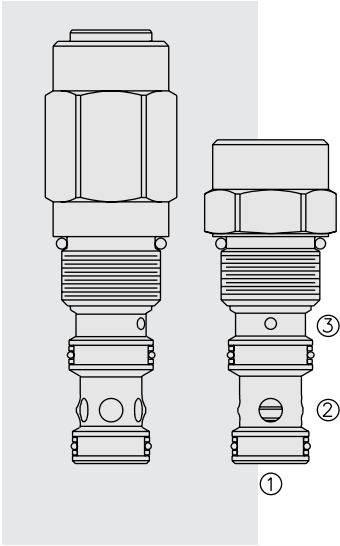


DIRECTIONAL VALVES

EV12-S34 Vented 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 **EV12-S34** is a spring-biased blocking valve which will shift to allow full flow from ① to ② only when ③ is vented to create a pressure drop across the internal orifice which exceeds the pressure value of the selected bias spring force.

EV12-S34 is a vent-to-open directional valve.

FEATURES

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

RATINGS

Operating Pressure: 345 bar (5000 psi) cartridge; 240 bar (3500 psi) standard aluminum housing

Flow: See Performance Chart

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

Bias Spring Pressure: 7.6 bar (110 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 sus); See Temperature and Oil Viscosity, page 9.060.1

Installation: No restrictions; See page 9.020.1

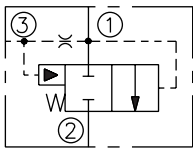
Cavity: VC12-S3; See page 9.112.1

Cavity Tool: CT12-S3xx; See page 8.600.1

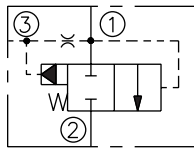
Seal Kit: SK12-S3x-MM; See page 8.650.1

SYMBOLS

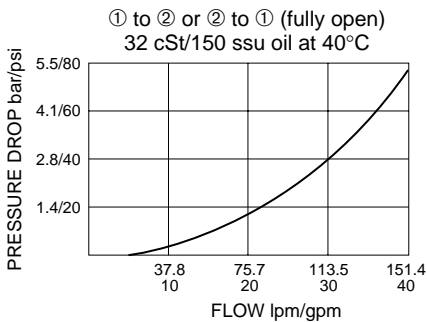
USASI:



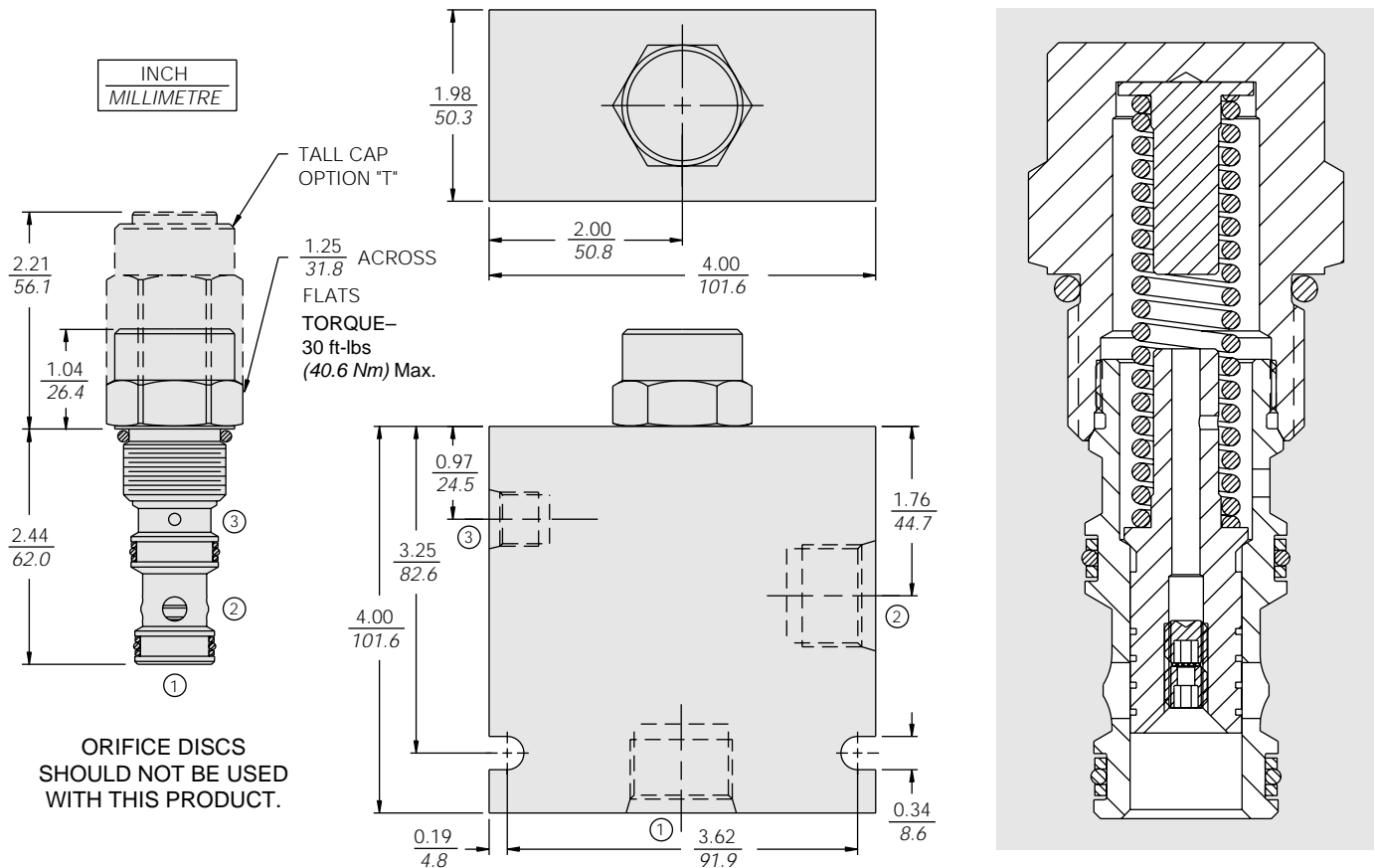
ISO:



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 8.010.1

TO ORDER

EV12-S34

Option

None (Blank)
Tall Cap **T**

Porting

Cartridge Only **0**
SAE 12* **12T**

*SAE 6 vent port

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

Seals

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