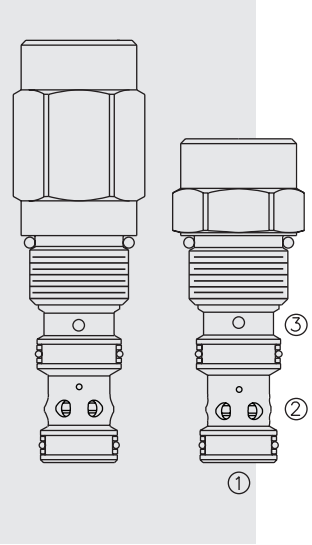
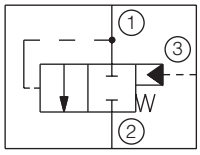
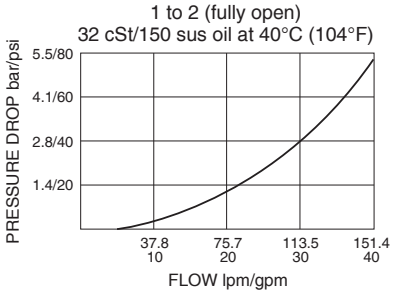
EP12-S35 Piloted Spool-Type Logic Element



ISO SYMBOL



PERFORMANCE (Cartridge Only)



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. The valve can be ordered with a selection of bias springs, manual override option (for 80 psi spring only) and a "G" metering option for metered flow when opening. The tall cap option is required for higher bias springs.

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. The **EP12-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. The EP12-S35 can also be specified with a metering cage ("G" option) to regulate the gain in flow upon opening.

FEATURES

- Multiple function/application potential.
- Low pressure drop.
- Industry common cavity.
- Manual override option available with 80 psi spring only.
- Tall cap required with higher bias spring values.
- "G" metering option for metered flow control when opening.

RATINGS

Operating Pressure: 345 bar (5000 psi) cartridge; 207 bar (3000 psi) standard aluminum housing; 345 bar (5000 psi) ductile iron housing.

Flow Rating: See Performance Chart

Internal Leakage: 131 ml/minute (8 cu. in./minute) max. at 345 bar (5000 psi)

Operating Temperature: -40 to 100°C (-40 to 212°F) with standard Buna seals;
-26 to 204°C (-15 to 400°F) with fluorocarbon seals;
-26 to 204°C (-15 to 400°F) with high durometer fluorocarbon seals;
-52 to 107°C (-65 to 225°F) with polyurethane seals.

Filtration: See page 9.010.1

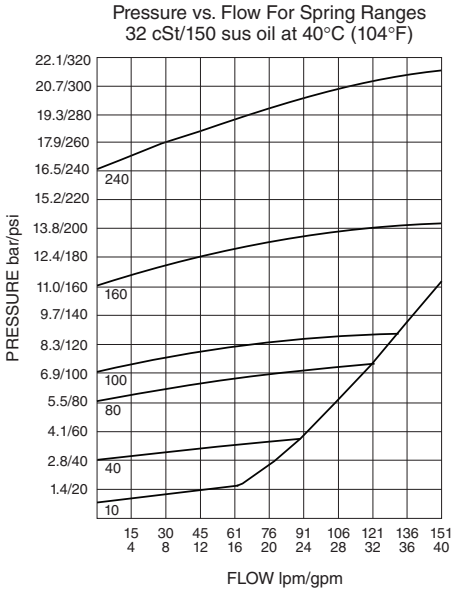
Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

Installation: No restrictions; See page 9.020.1

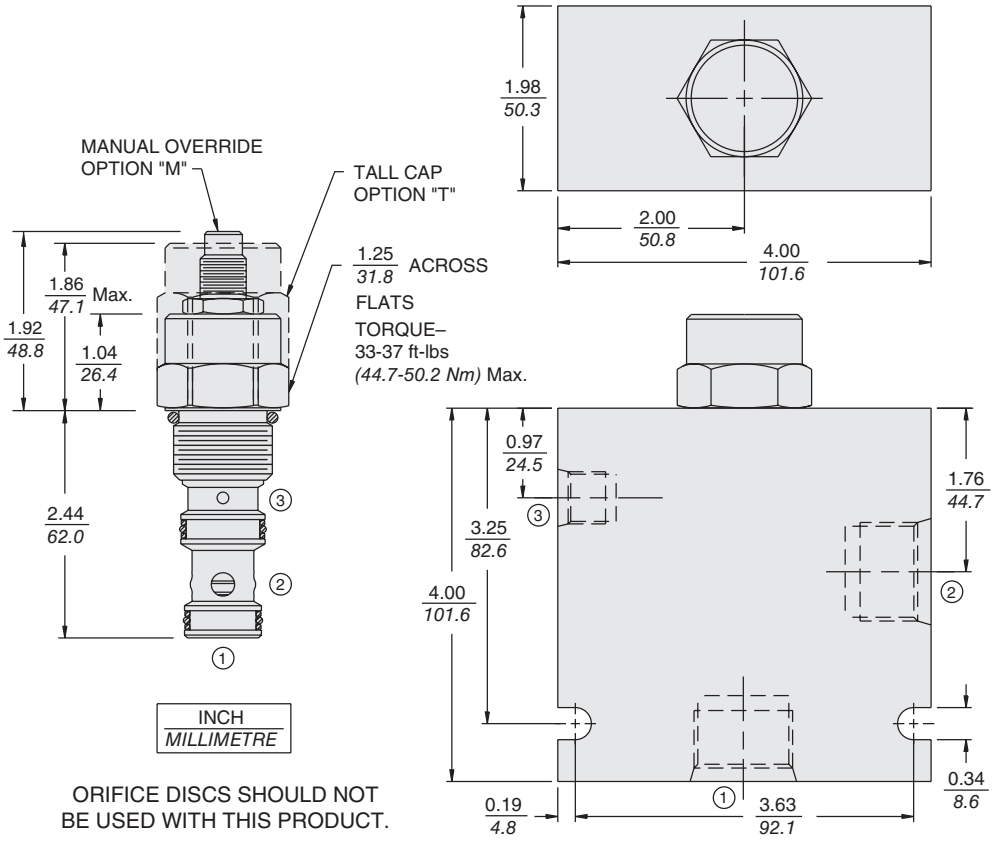
Cavity: VC12-S3; See page 9.112.1

Cavity Tool: CT12-S3xx; See page 8.600.1

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



DIMENSIONS



ORIFICE DISCS SHOULD NOT BE USED WITH THIS PRODUCT.

MATERIALS

Cartridge: Weight: 0.28 kg. (0.61 lb.) With tall cap: 0.44 kg. (0.97 lb.) With manual override: 0.31 kg. (0.69 lb.) Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-seals standard.

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

TO ORDER

EP12-S35__ - __ - __ __ __ - __ - __ __

Manual Override Options

None	(Blank)
Tall Cap	**T**‡
Manual Override	**M***

*Manual Override available with 80 psi spring only.

‡ Tall Cap required for 160 and 240 bias springs

Cage Options

Regular	(Blank)
Metered	**G**

Porting

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

*SAE 6 pilot port

Bias Spring

10	0.7 bar (10 psi)
40	2.8 bar (40 psi)
80	5.5 bar (80 psi)
100	6.9 bar (100 psi)
‡**160**	11 bar (160 psi)
‡**240**	16.5 bar (240 psi)

‡ T Option T Tall Cap required for 160 and 240 bias springs

Seals

N	Buna N (Std.)
V	Fluorocarbon
HV	High Durometer Fluorocarbon
P	Polyurethane (Required for pressures over 240 bar/3500 psi)