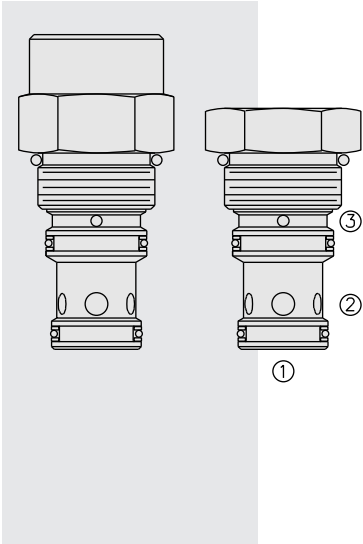


# EV16-S34 Vented Spool-Type Logic Element



## 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 EV16-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.

EV16-S34 is a vent-to-open directional valve. 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.

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

## FEATURES

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

## 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

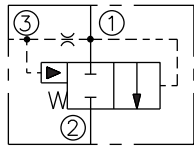
**Cavity:** VC16-S3; See page 9.116.1

**Cavity Tool:** CT16-S3xx; See page 8.600.1

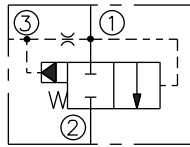
**Seal Kit:** SK16-S3x-MM; See page 8.650.1

## SYMBOLS

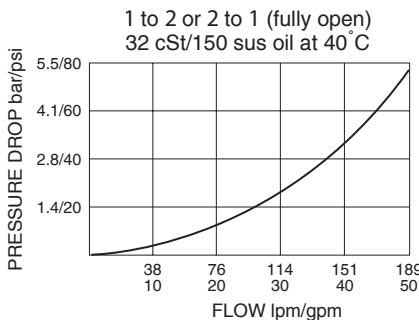
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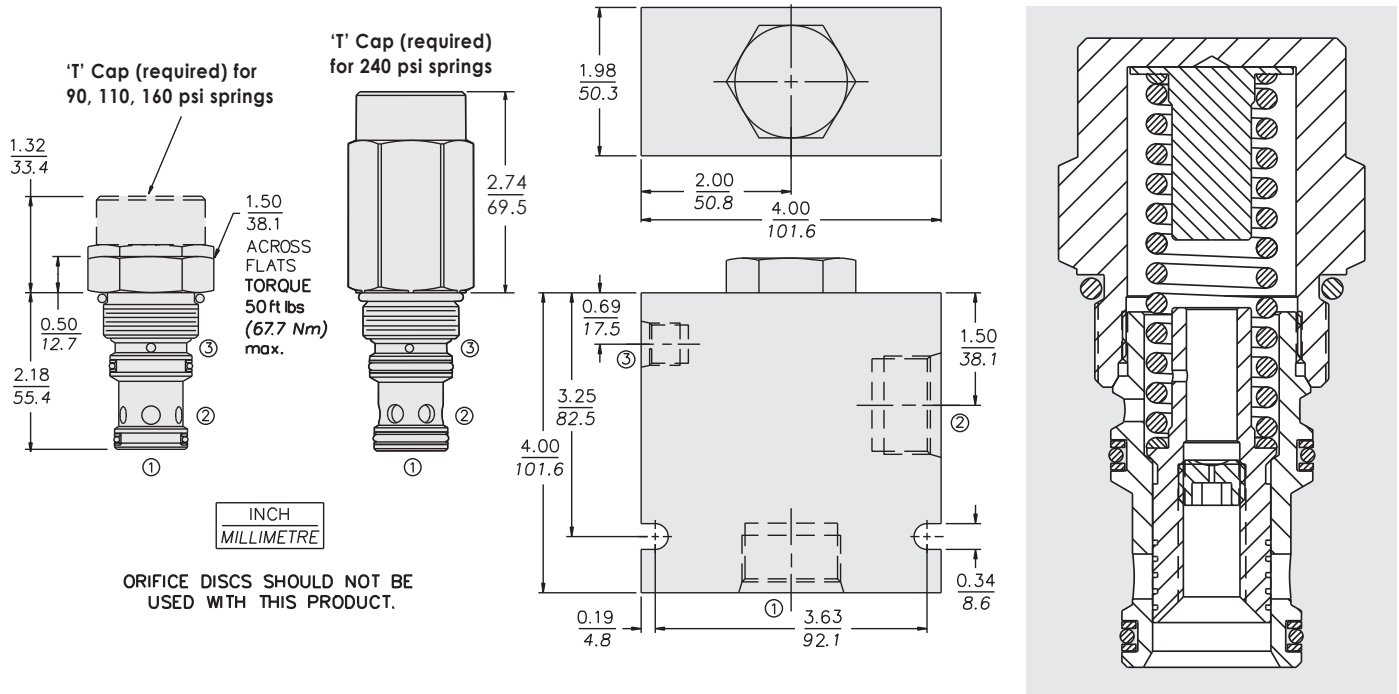


## PERFORMANCE (Cartridge Only)



# EV16-S34

## 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

<b>EV16-S34</b>		-	-	-	-
<b>Option</b>	None (Blank)				
	Tall Cap	<b>T</b>			
<b>Porting</b>					
	Cartridge Only	<b>0</b>			
	SAE 16 w/SAE 6 Vent Port	<b>16T</b>			
					<b>Bias Spring (Crack)</b>
					<b>10</b> 0.7 bar (10 psi)
					<b>20</b> 1.4 bar (20 psi)
					<b>40</b> 2.8 bar (40 psi)
					<b>70</b> 4.8 bar (70 psi)
					<b>*90</b> 6.2 bar (90 psi)
					<b>*110</b> 7.6 bar (110 psi)
					<b>*160</b> 11.0 bar (160 psi)
					<b>*240</b> 16.5 bar (240 psi)

‡ T Tall Cap Option required for 6.2 - 16.5 bar (90 - 240 psi) bias springs.

### Seals

- N** Buna N (Std.)
- V** Fluorocarbon
- P** Polyurethane