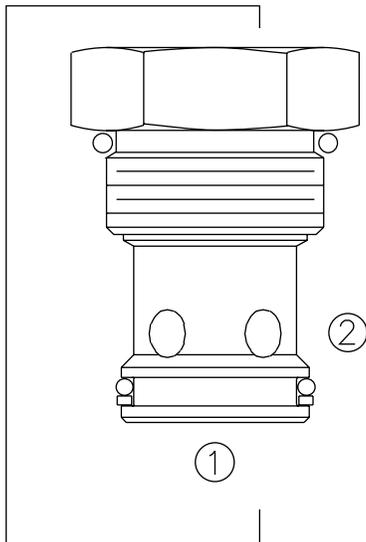


# DIRECTIONAL VALVES

## CV16-20 Check Valve



### DESCRIPTION

A screw-in, cartridge-style, hydraulic check valve for use as a blocking or load-holding device.

### OPERATION

The CV16-20 allows flow from ① to ②, while blocking oil flow in the opposite direction. The cartridge has a fully guided poppet which is spring-biased to closed until sufficient pressure is applied at ① to open to ②.

### FEATURES

- Hardened seat for long life and low leakage.
- Optional bias springs for back-pressure application flexibility.
- Industry common cavity.

### RATINGS

**Operating Pressure:** 240 bar (3500 psi)

**Proof Pressure:** 350 bar (5075 psi)

**Flow:** See Performance Chart

**Internal Leakage:** 0.25 cc/minute (5 drops/minute) max. at 240 bar (3500 psi)

**Crack Pressure Defined:** Gauge pressure evident at ① at 0.95 lpm (0.25 gpm) attained

**Standard Bias Springs at Crack:** 0.34 bar (5 psi); 1.7 bar (25 psi); 4.1 bar (60 psi)

**Temperature:** -40 to 120°C

**Filtration:** Recommend 25µ nominal or better; See page 8.010.1

**Fluids:** Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 ssu)

**Installation:** No restrictions; See page 8.020.1

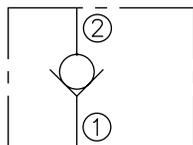
**Cavity:** VC16-2; See page 8.116.1

**Cavity Tool:** CT16-2XX; See page 7.200.1

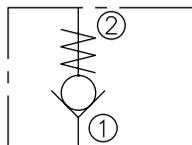
**Seal Kit:** SK16-2X-T; See page 8.500.1

### SYMBOLS

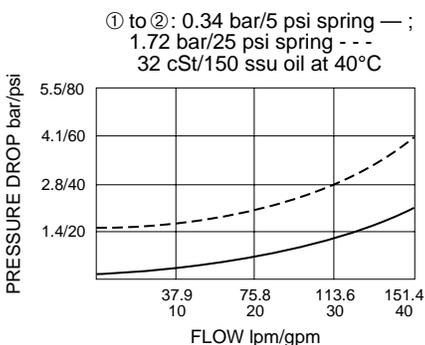
#### USASI:



#### ISO:

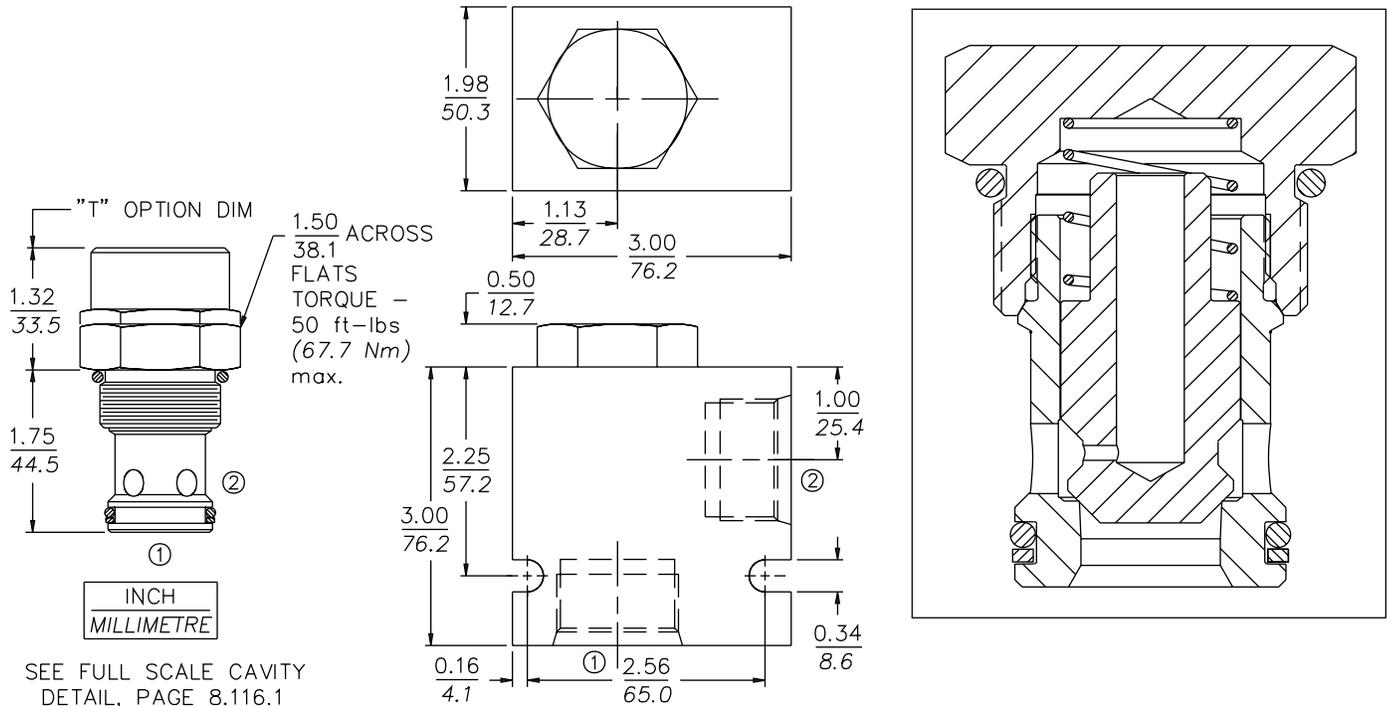


### PERFORMANCE (Cartridge Only)



# CV16-20

## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 0.29 kg. (0.63 lbs.); Steel with hardened work surfaces; Zinc-plated exposed surfaces; Buna N O-rings and polyester elastomer back-ups standard.

**Standard Ported Body:** Weight: 0.57 kg. (1.25 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi). See page 6.046.1. Steel bodies available; consult factory.

## TO ORDER

<b>CV16-20 - - - -</b>			
"T" Option*	<b>T</b>		
*Required for 100 psi Spring			
		<b>Seals</b>	<b>Bias Spring (Crack)</b>
		<b>N</b> Buna N (Std.)	<b>5</b> 0.35 bar (5 psi)
		<b>V</b> Fluorocarbon	<b>25</b> 1.7 bar (25 psi)
			<b>60</b> 4.1 bar (60 psi)
			<b>100</b> 6.9 bar (100 psi)*
			*Requires "T" Option
		<b>Porting</b>	
		Cartridge Only	<b>0</b>
		SAE 12	<b>12T</b>
		SAE 16	<b>16T</b>
		3/4 in. BSP*	<b>6B</b>
		1 in. BSP*	<b>8B</b>
		*BSP Body; U.K. Mfr. Only	