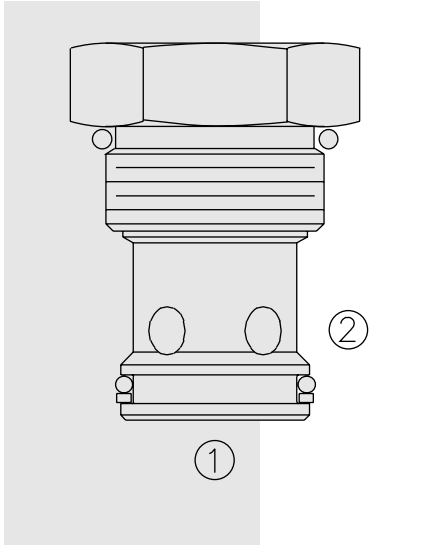


# DIRECTIONAL VALVES

## 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:** See page 9.010.1

**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 9.020.1

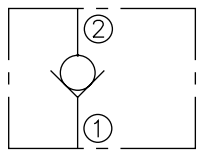
**Cavity:** VC16-2; See page 9.116.1

**Cavity Tool:** CT16-2XX; See page 8.600.1

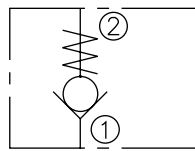
**Seal Kit:** SK16-2X-T; See page 8.650.1

### SYMBOLS

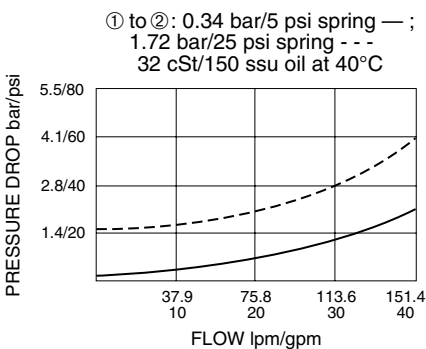
#### USASI:



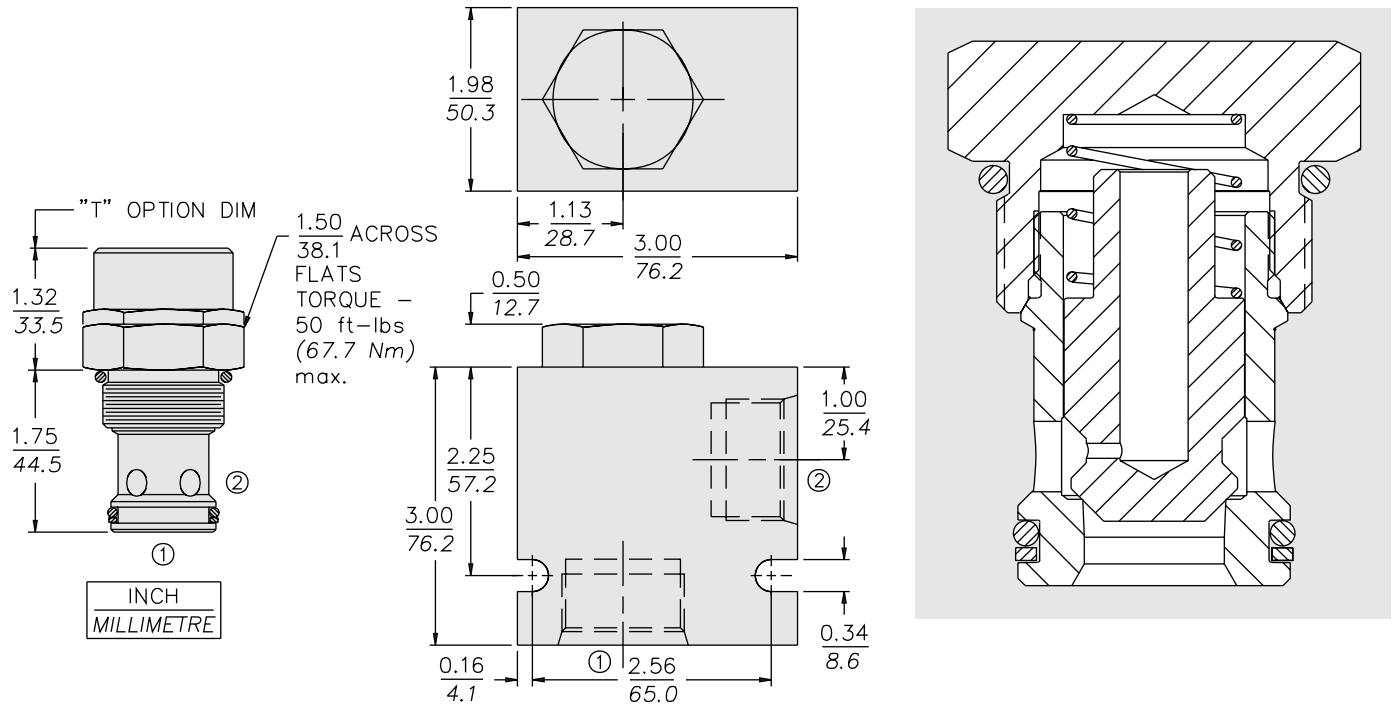
#### ISO:



### PERFORMANCE (Cartridge Only)



**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 8.016.1. Ductile iron and steel bodies available; dimensions may differ; consult factory.

**TO ORDER**

**CV16-20 -**

**"T" Option\*** T  
\*Required for 100 psi Spring

**Porting**  
Cartridge Only 0  
SAE 12 12T  
SAE 16 16T  
3/4 in. BSP\* 6B  
1 in. BSP\* 8B

\*BSP Body; U.K. Mfr. Only

**Bias Spring (Crack)**  
5 0.35 bar (5 psi)  
25 1.7 bar (25 psi)  
60 4.1 bar (60 psi)  
100 6.9 bar (100 psi)\*  
\*Requires "T" Option

**Seals**  
N Buna N (Std.)  
V Fluorocarbon