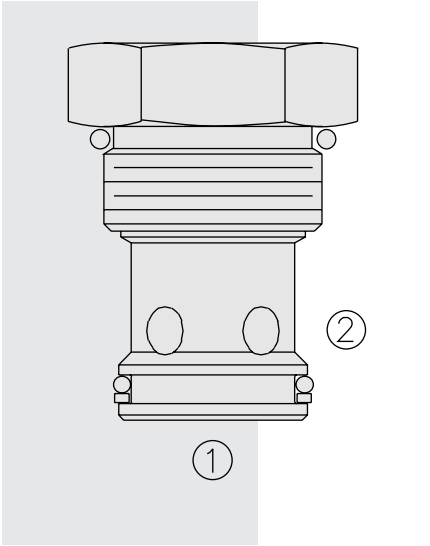


DIRECTIONAL VALVES

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 sus); See Temperature and Oil Viscosity, page 9.060.1

Installation: No restrictions; See page 9.020.1

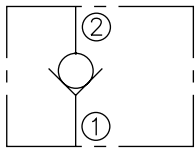
Cavity: VC16-2; See page 9.116.1

Cavity Tool: CT16-2XX; See page 8.600.1

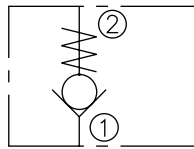
Seal Kit: SK16-2X-T; See page 8.650.1

SYMBOLS

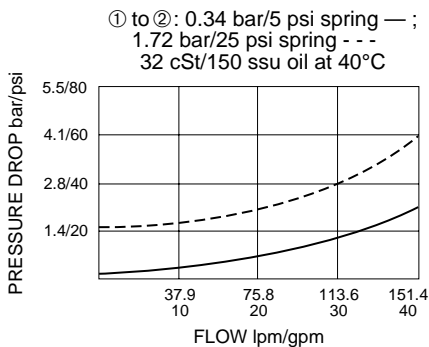
USASI:



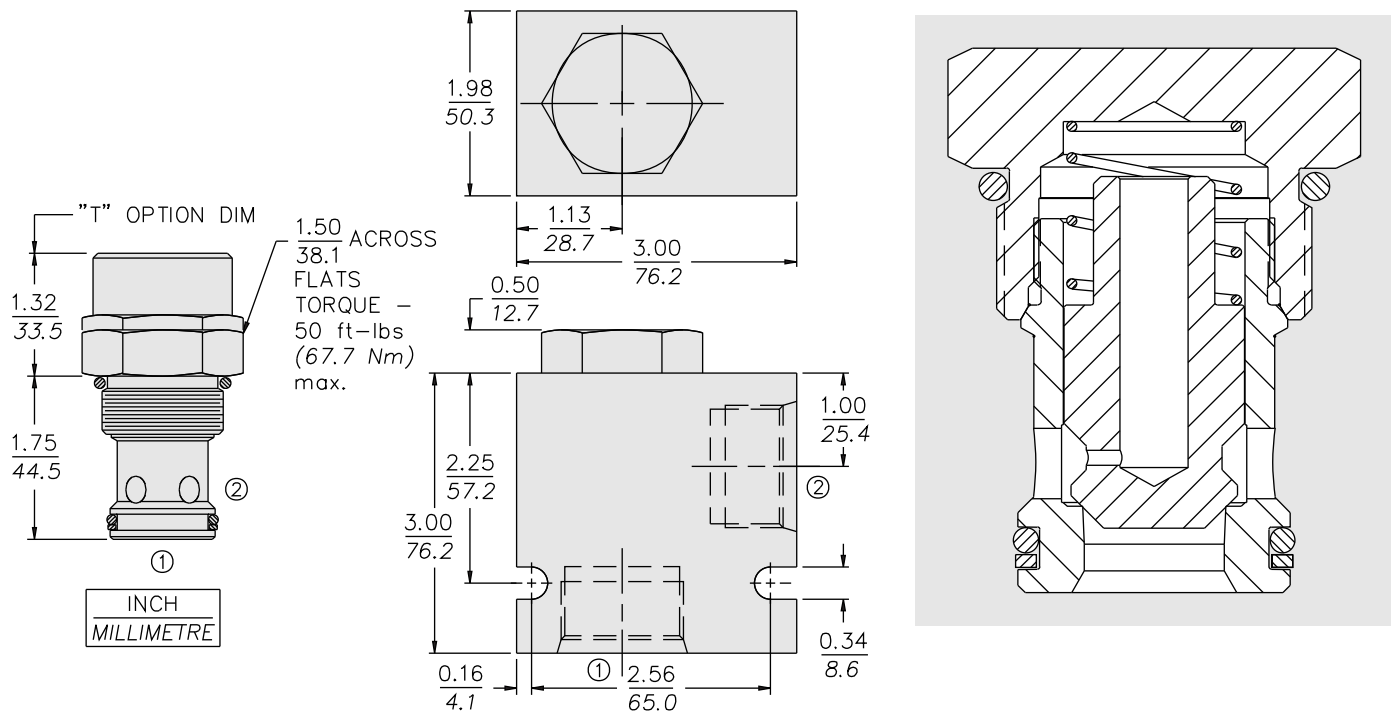
ISO:



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 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.016.1

TO ORDER

CV16-20 - - - -

"T" Option* T

*Required for 100 or 150 psi spring.

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)*
150 10.3 bar (150 psi)*

*Requires "T" Option

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

Seals

N Buna N (Std.)
V Fluorocarbon