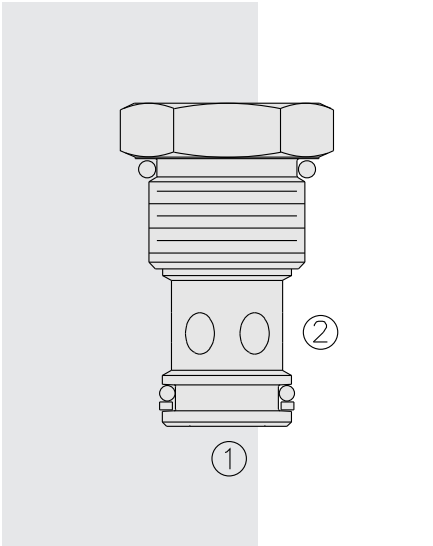
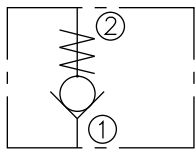


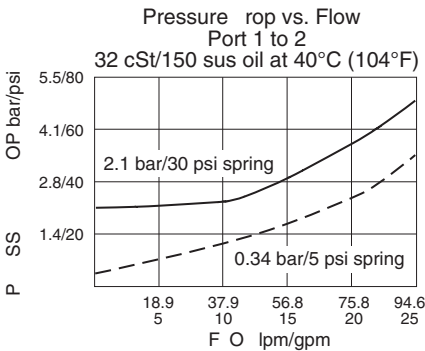
# CV12-20 Check Valve



ISO SYMBOL



PERFORMANCE (Cartridge Only)



DESCRIPTION

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

OPERATION

The CV12-20 allows flow passage from 1 to 2, while normally blocking oil flow in the opposite direction.

The cartridge has a fully guided check which is spring-biased 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.
- Fully guided check assembly.
- Cost-effective cavity.

RATINGS

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

**Proof Pressure:** 420 bar (6090 psi)

**Flow:** See Performance Chart

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

**Crack Pressure Defined:** Gauge bar (psi) evident at 1 at 16.4 cc/minute (1 cu. in./minute) attained

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

**Temperature:** -40 to 100°C (-40 to 212°F) with Buna N seals;

-26 to 204°C (-15 to 400°F) with fluorocarbon seals;

-54 to 107°C (-56 to 225°F) with polyurethane or urethane 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

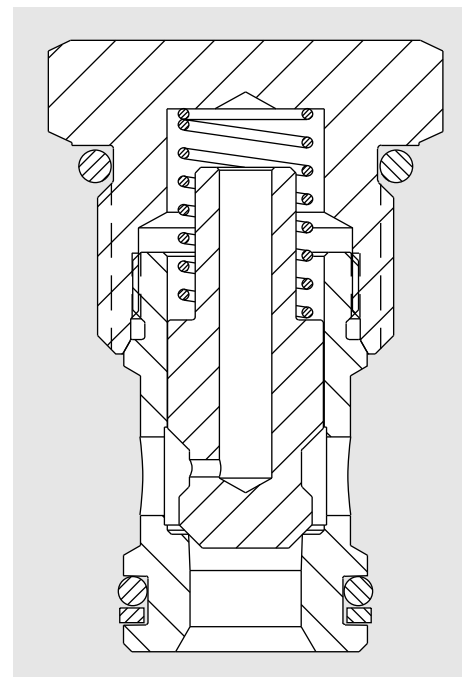
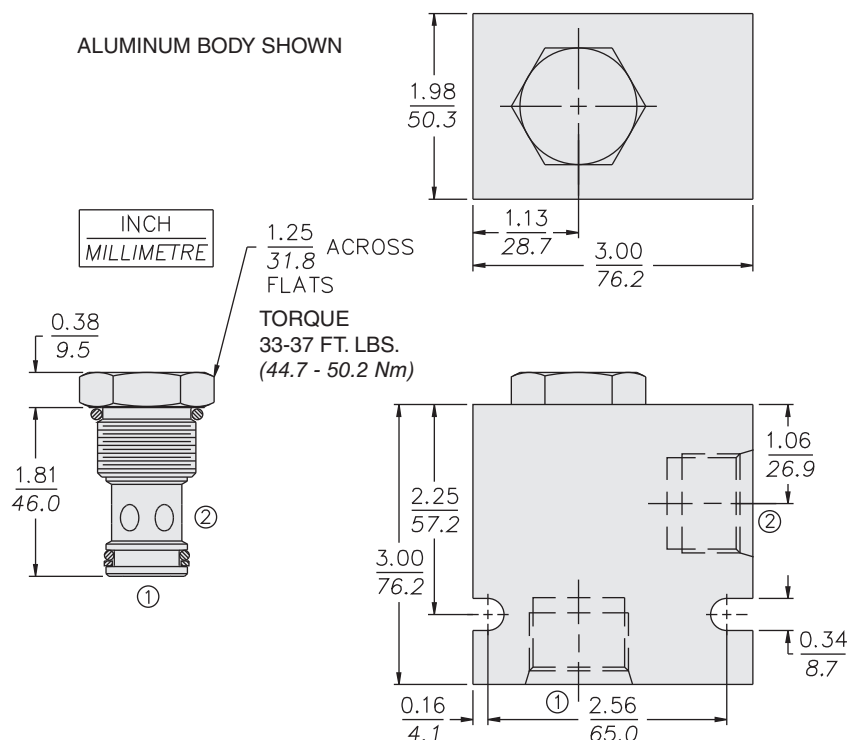
**Installation:** No restrictions; See page 9.020.1

**Cavity:** VC12-2; See page 9.112.1

**Cavity Tool:** CT12-2XX; See page 8.600.1

**Seal Kit:** SK12-2X-T; See page 8.650.1

## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 0.17 kg. (0.38 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 aluminum alloy, rated to  
207 bar (3000 psi). Ductile iron bod-  
ies available; dimensions may differ.  
See page 8.012.1

## TO ORDER

CV12-20 -

**Porting**  
Cartridge Only **0**  
SAE 10 **10T**  
SAE 12 **12T**  
SAE 16 **16T**

**Bias Spring\***  
**05** 0.34 bar (5 psi)  
**25** 1.7 bar (25 psi)  
**30** 2.1 bar (30 psi)  
**40** 2.8 bar (40 psi)  
**50** 3.4 bar (50 psi)  
**60** 4.1 bar (60 psi)  
**80** 5.5 bar (80 psi)

### Seals

**N** Buna N (Std.)  
**V** Fluorocarbon  
**HV** High durometer  
fluorocarbon  
**P** Polyurethane