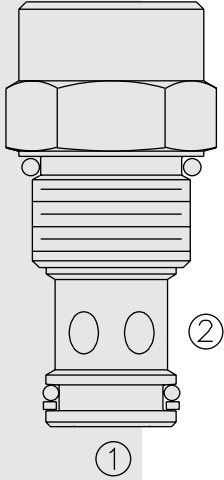


DIRECTIONAL VALVES

CV12-28 Check Valve with Thermal Relief



DESCRIPTION

A screw-in, cartridge-style, hydraulic check valve for use as a blocking or load-holding device. The cartridge incorporates a low flow thermal relief valve intended to prevent cylinder damage resulting from temperature-induced pressure intensification.

OPERATION

The CV12-28 allows flow from ① to ②, while blocking oil flow in the opposite direction. If the pressure at ② exceeds the thermal relief valve setting, a small amount of oil will be allowed to pass from ② to ①, preventing cylinder damage from pressure intensification.

NOTE: The relief valve feature is not intended for use in dynamic pressure limiting applications. Consult factory.

FEATURES

- Hardened seats for long life and low leakage.
- Cost effective cavity.

RATINGS

Thermal Relief Factory Setting: 324 ± 28 bar (4700 ± 400 psi)

Proof Pressure: 390 bar (5700 psi)

Thermal Relief Reseat: 207 bar (3000 psi)

Flow: See Performance Chart

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

Standard Check Bias Spring at Crack: 4.5 bar (65 psi)

Check ① to ② Crack Pressure Defined: Gauge bar (psi) evident at ① at 16.4 cc/minute (1 cu. in./minute) attained at ②

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

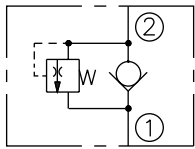
Cavity: VC12-2; See page 9.112.1

Cavity Tool: CT12-2XX; See page 8.600.1

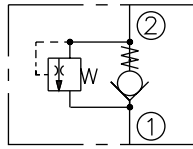
Seal Kit: SK12-2X-T; See page 8.650.1

SYMBOLS

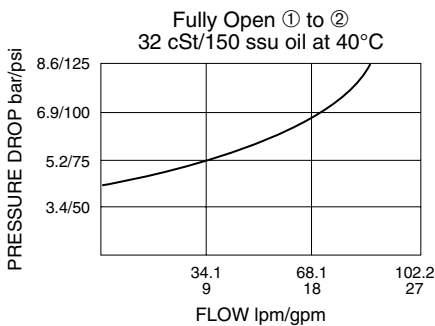
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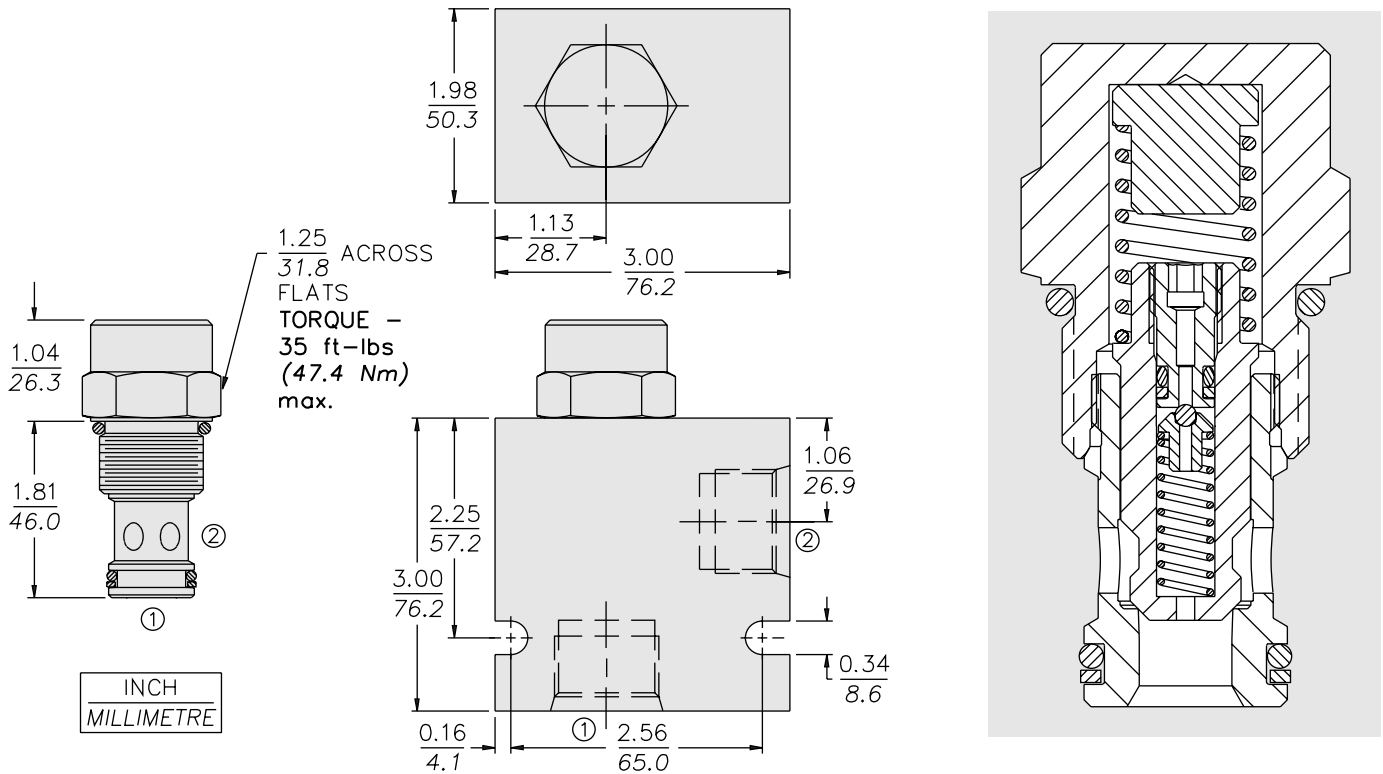


PERFORMANCE (Cartridge Only)



CV12-28

DIMENSIONS



1.25
31.8 ACROSS
FLATS
TORQUE -
35 ft-lbs
(47.4 Nm)
max.

MATERIALS

Cartridge: Weight: 0.18 kg. (0.40 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 8.012.1. Ductile iron and steel bodies available; dimensions may differ; consult factory.

TO ORDER

