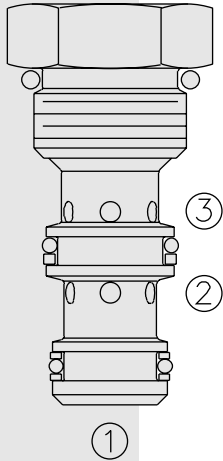


DIRECTIONAL VALVES

PC08-30 Check, Pilot-to-Open



DESCRIPTION

A screw-in, cartridge-style, pilot-operated, hydraulic check valve for use in blocking or load-holding circuits.

OPERATION

The PC08-30 allows flow from ② to ③, while normally blocking flow from ③ to ②. Flow will be allowed from ③ to ② when sufficient pressure is applied at ①.

The cartridge has a 3:1 pilot ratio, meaning that at least one-third of the load pressure held at ③ is required at ① to open the valve.

The check is spring-biased to assure holding in static or no-load conditions. A sealed pilot piston option is available.

FEATURES

- Hardened seat for long life and low leakage.
- Optional sealed piston.
- Optional spring ranges.
- Compact size.

RATINGS

Operating Pressure: 240 bar (3500 psi)

Flow: See Performance Chart

Internal Leakage:

③ to ②: 0.25 cc/minute (2 drops/minute) max. at 240 bar (3500 psi)

② to ① (without sealed piston): 115 cc/minute (7 cu. in./minute) max. at 240 bar (3500 psi)

Pilot Ratio: 3:1

Check Spring Bias: 1.72 bar (25 psi) standard;

With sealed piston option: 6.2 bar (90 psi) minimum

Temperature: -40 to 120°C with standard Buna 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 ssu)

Installation: No restrictions; See page 9.020.1

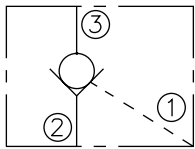
Cavity: VC08-3; See page 9.108.1

Cavity Tool: CT08-3XX; See page 8.600.1

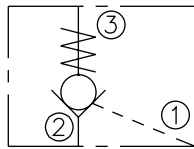
Seal Kit: SK08-3X-TM; See page 8.650.1

SYMBOLS

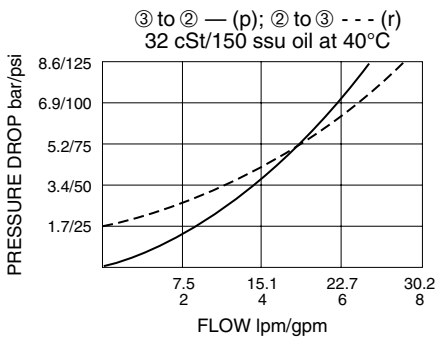
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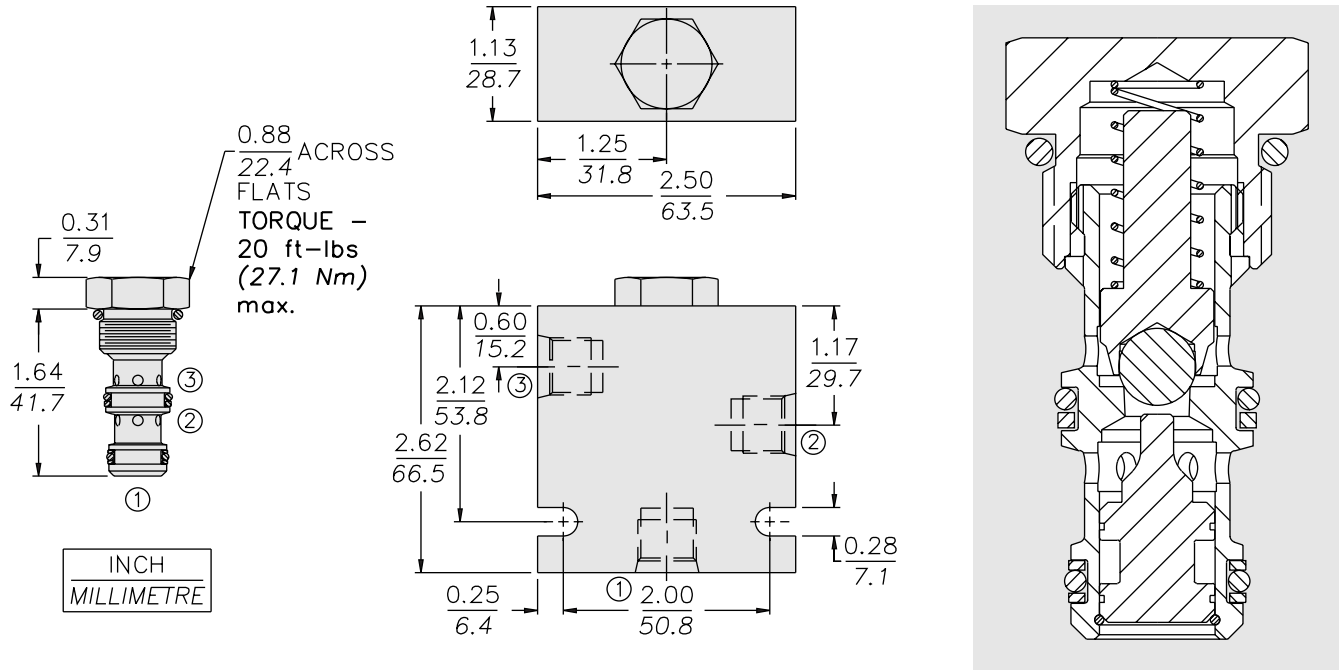
ISO:



PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.08 kg. (0.18 lbs.); Steel with hardened work surfaces; Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard.

Standard Ported Body: Weight: 0.27 kg. (0.60 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); See page 8.008.1. Ductile iron and steel bodies available; consult factory.

TO ORDER

PC08-30

Options

None (Blank)

Porting

Cartridge Only **0**
SAE 6 **6T**
3/8 in. BSP* **3B**

*BSP Body; U.K. Mfr. Only

Bias Spring

(Blank) 1.72 bar/25 psi (Std.)*

70 4.8 bar/70 psi
90 6.2 bar/90 psi
120 8.2 bar/120 psi
270 18.3 bar/270 psi

Note: Other bias spring pressures available for OEM applications. Consult factory.

* PC08-30 valves built with standard 25 psi spring are not stamped with spring rating. Other spring ratings are stamped on valve.

Seals

N Buna N (Std.)
NS Buna N with Sealed Piston: 6.2 bar (90 psi) minimum spring
V Fluorocarbon
VS Fluorocarbon with Sealed Piston: 6.2 bar (90 psi) minimum spring