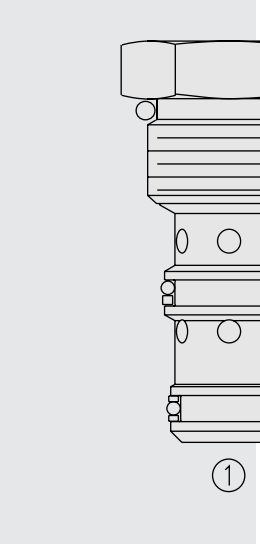
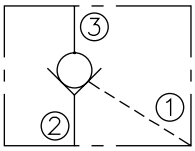
Blue rectangles are links to other catalog pages.

PC10-30 Check, Pilot-to-Open



SYMBOLS

USASI:



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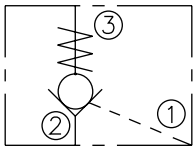
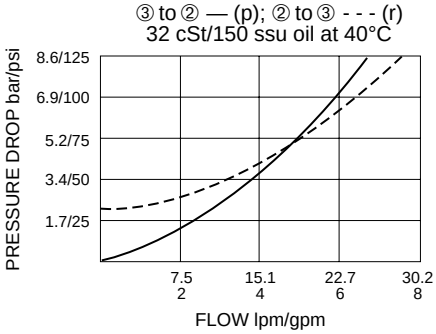


PERFORMANCE (Cartridge Only)



DESCRIPTION

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

OPERATION

The **PC10-30** allows flow passage from ② to ③, while normally blocking flow from ③ to ②. Flow will be allowed from ③ to ② when pressure is applied at ①.

The cartridge has a 4:1 pilot ratio, meaning that at least one-fourth 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.

Note: Special higher bias spring values available. Consult factory.

FEATURES

- Hardened seat for long life and low leakage.
- Optional sealed piston.
- Optional spring ranges.
- Industry common cavity.

RATINGS

Operating Pressure: 240 bar (3500 psi)

Flow: See Performance Chart

Maximum Internal Leakage at 207 bar (3000 psi):

③ to ②: 0.25 ml/minute (5 drops/minute)

② to ① without sealed piston: 115 ml/minute (7 cu. in./minute)

② to ① with sealed piston: zero leakage

Pilot Ratio: 4:1

Check Bias Spring: 2.07 bar (30 psi);
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 sus); See Temperature and Oil Viscosity, page 9.060.1

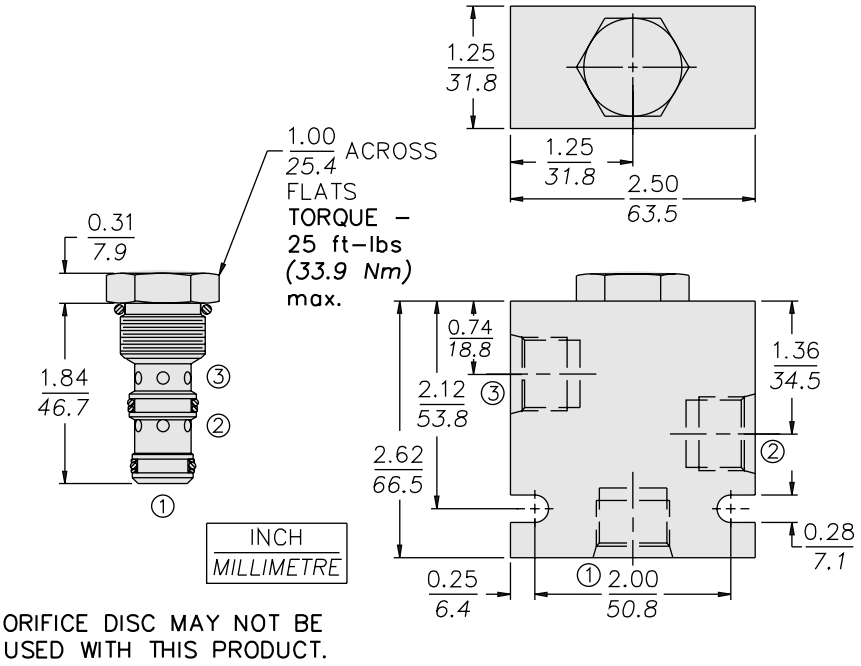
Installation: No restrictions; See page 9.020.1

Cavity: VC10-3; See page 9.110.1

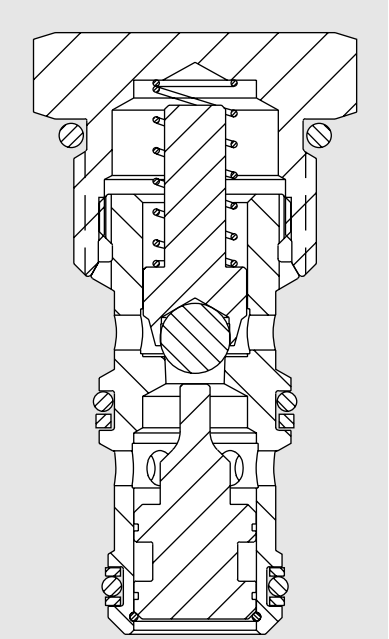
Cavity Tool: CT10-3XX; See page 8.600.1

Seal Kit: SK10-3X-TM; See page 8.650.1

DIMENSIONS



ORIFICE DISC MAY NOT BE USED WITH THIS PRODUCT.



MATERIALS

Cartridge: Weight: 0.09 kg. (0.20 lbs.) Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and back-ups standard.

Standard Ported Body: Weight: 0.36 kg. (0.80 lbs.) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.010.1

TO ORDER

PC10-30- ___ ___ ___ **-** ___ **-** ___ ___ ___

Porting

Cartridge Only	**0**
SAE 6	**6T**
SAE 8	**8T**
1/4 in. BSP*	**2B**
3/8 in. BSP*	**3B**

*BSP Body; U.K. Mfr. Only

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

Bias Spring

(Blank)	2.07 bar/30 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.

* PC10-30 valves built with standard 30 psi spring are not stamped with spring rating. Other spring ratings are stamped on valve.