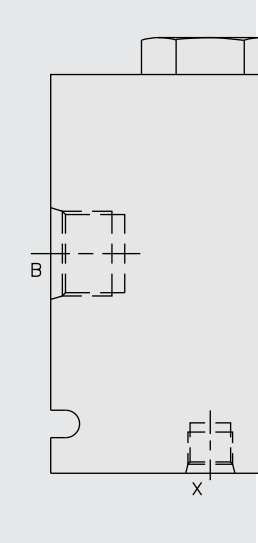
PCV16 Check, Pilot-to-Open



SYMBOLS

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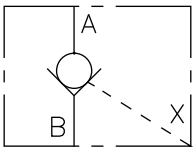

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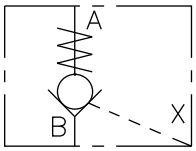
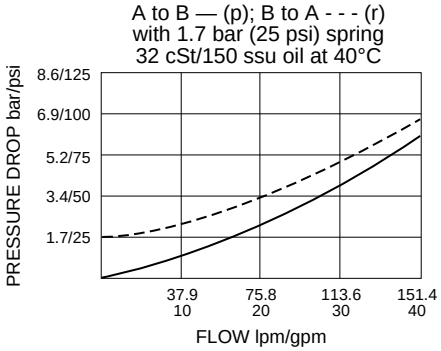


PERFORMANCE (Cartridge Only)



DESCRIPTION

An in-line-housed, pilot-operated, hydraulic check valve for use in blocking or load-holding circuits.

OPERATION

The **PCV16** allows flow from B to A, while normally blocking flow from A to B. Flow will be allowed from A to B when pressure is applied at X.

The check valve has a 3.8:1 pilot ratio, meaning that at least one-fourth of the load pressure held at A is required at X to open the valve.

The check is spring-biased at 1.7 bar (25 psi) 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 pilot piston.
- Optional spring ranges.
- Check section is serviceable as a cartridge.

RATINGS

Operating Pressure: 240 bar (3500 psi)

Flow: See Performance Chart

Internal Leakage:

A to B: 0.25 cc/minute (5 drops/minute) max. at 240 bar (3500 psi);

B to X (without sealed piston): 245 cc/minute (15 cu. in./minute) max. at 240 bar (3500 psi)

Pilot Ratio: 3.8:1

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

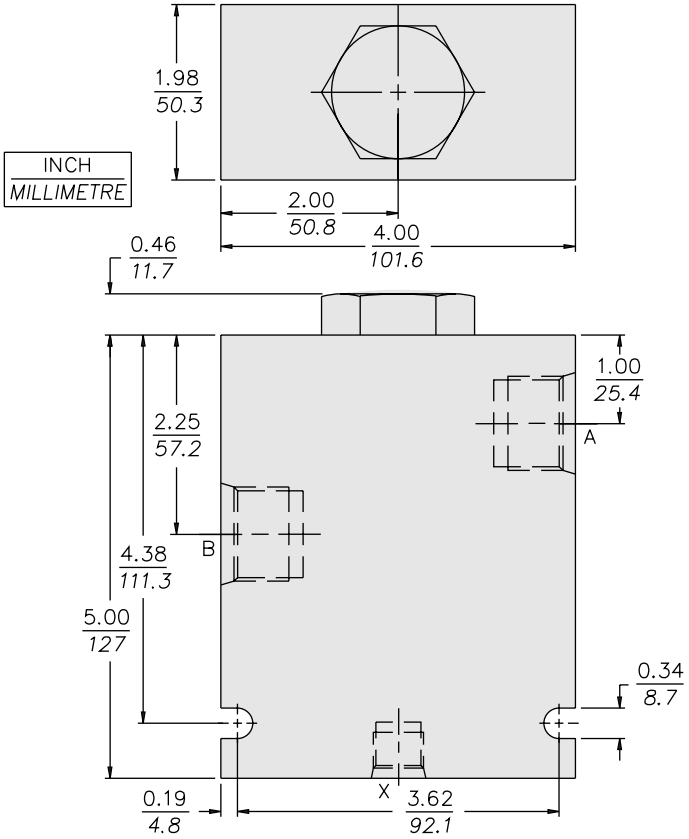
Installation: No restrictions; See page 9.020.1

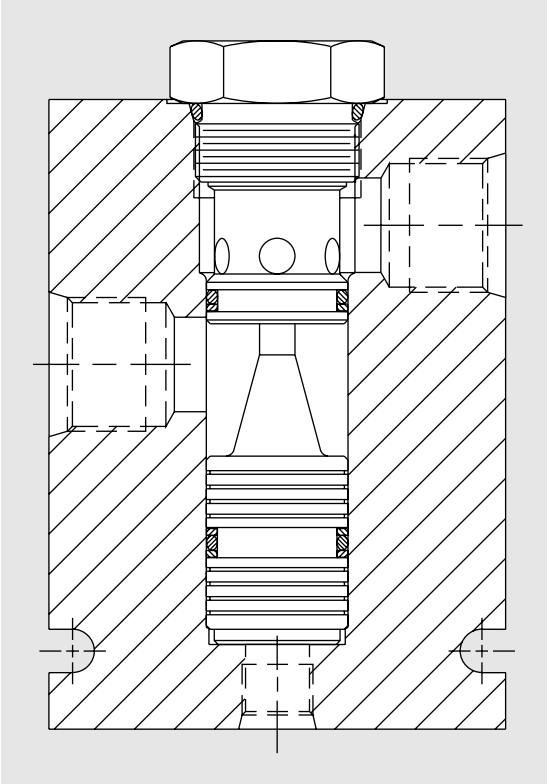
Seal Kit (for CV16-20): SK16-2X-T; See page 8.650.1;

Piston Seals:

	O-Ring (1)	Back-Ups (2)
Buna	6001119	6010119
Fluorocarbon	6003119	6010119

DIMENSIONS





MATERIALS

Cartridge (CV16-20): 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.

Pilot Piston: Hardened steel.

Standard Ported Body: Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. Consult factory.

TO ORDER

PCV16 - _____ - ___ - _____

Porting

SAE 12 w/ SAE 6 Pilot	**12T**

Bias Spring

(Blank)	1.7 bar (25 psi) (Std.)*
60	4.1 bar (60 psi)
100	6.9 bar (100 psi)

* PCV16 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 Pilot Piston (60 psi spring minimum required)
V	Fluorocarbon
VS	Fluorocarbon with Sealed Pilot Piston (60 psi spring minimum required)