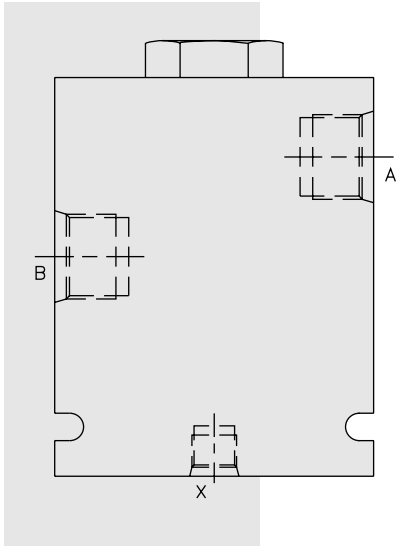


# DIRECTIONAL VALVES

## PCV16 Check, Pilot-to-Open



### 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 ssu)

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

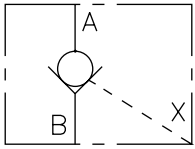
**Seal Kit (for CV16-20):** SK16-2X-T; See page 8.650.1;

**Piston Seals:**

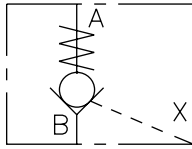
	<b>O-Ring (1)</b>	<b>Back-Ups (2)</b>
Buna	6002119	6010119
Fluorocarbon	6003119	6010119

### SYMBOLS

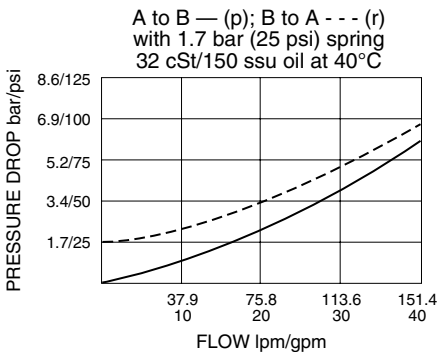
**USASI:**



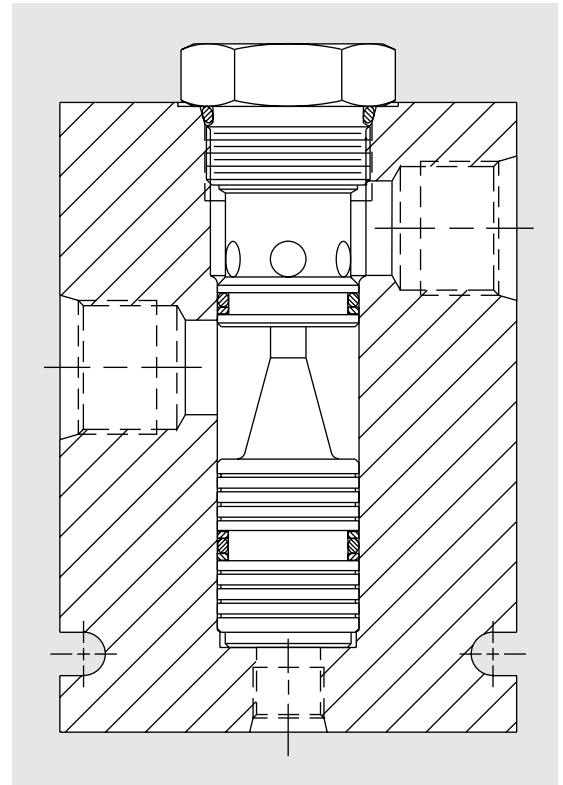
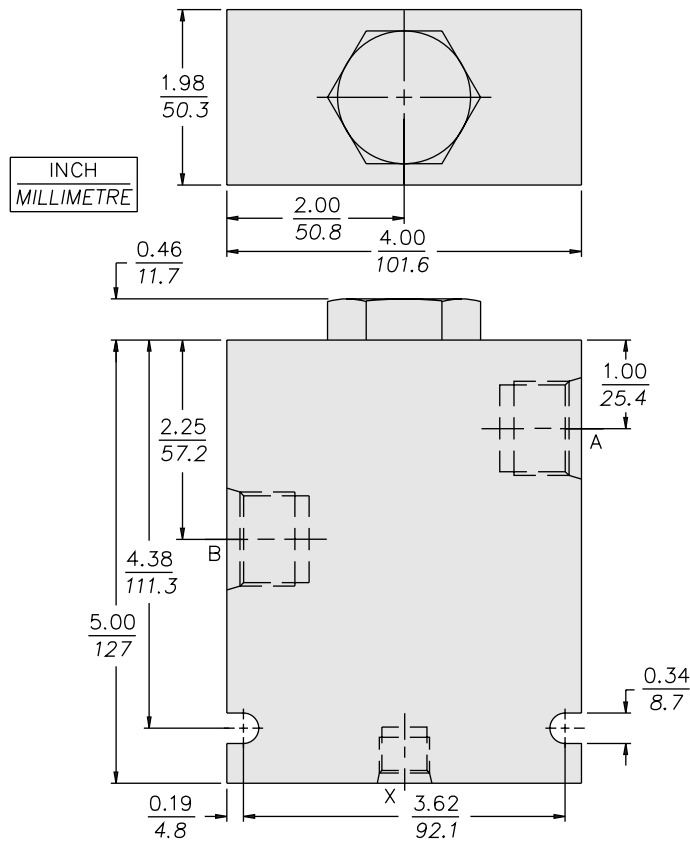
**ISO:**



### PERFORMANCE (Cartridge Only)



## DIMENSIONS



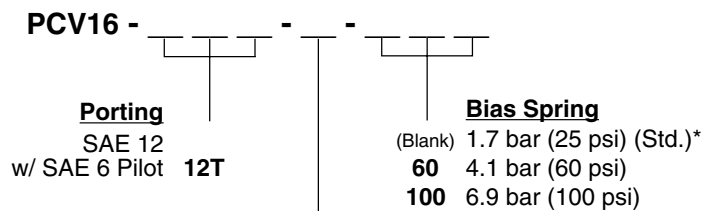
## MATERIALS

**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 240 bar (3500 psi). Ductile iron and steel bodies available; dimensions may differ; consult factory.

## TO ORDER



\* 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)