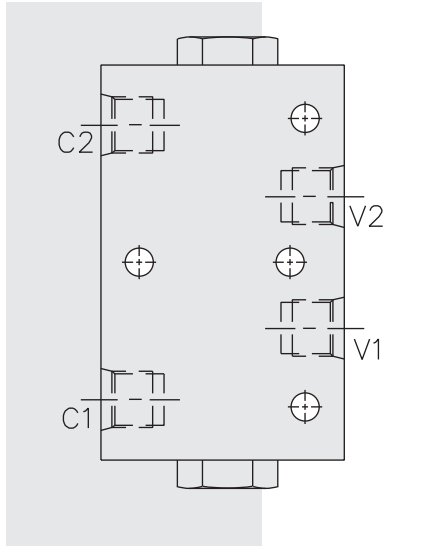


# DCV08 Lock Valve



## DESCRIPTION

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

## OPERATION

The **DCV08** allows flow from V ports to C ports, while normally blocking flow in the opposite direction. Flow will be allowed from C to V when pressure is applied to the opposite side V port.

The valve has a 4:1 pilot ratio, so approximately one-fourth of the load pressure held at either C port is required at the opposite V port to open the flow passage.

The check is spring-biased at 1.7 bar (25 psi) to assure holding in static or no-load conditions. An optional sealed piston with check spring bias of 6.9 bar (100 psi) is available.

## FEATURES

- Hardened seat for long life and low leakage.
- Check section serviceable as a cartridge.
- Optional sealed piston.
- Optional spring ranges.
- Low pressure drop.

## RATINGS

**Flow:** See Performance Chart

**Internal Leakage Cx to Vx:** 0.25 cc/minute (5 drops/minute) max. at 207 bar (3000 psi)

V1 to V2 (without sealed piston): 328 cc/minute (20 cu. in./minute) max. at 240 bar (3500 psi)

**Pilot Ratio:** 4:1

**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 CV08-2x):** SK08-2x-T (2 required); See page 8.650.1

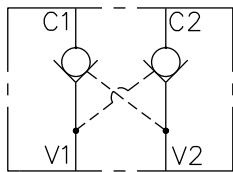
**Pilot Piston Service Part Numbers:**

O-Ring (1) – Buna 6001012, Fluorocarbon 6003012

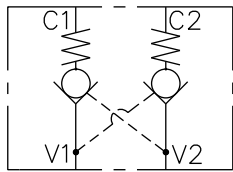
Back-up (2) – Buna 6011012, Fluorocarbon 6011012

## SYMBOLS

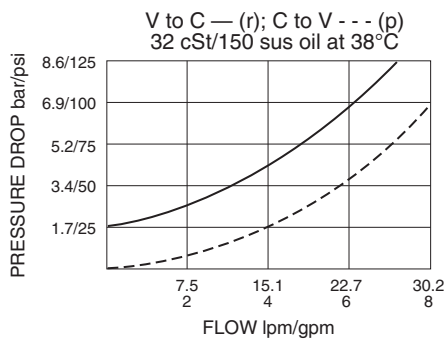
### USASI:



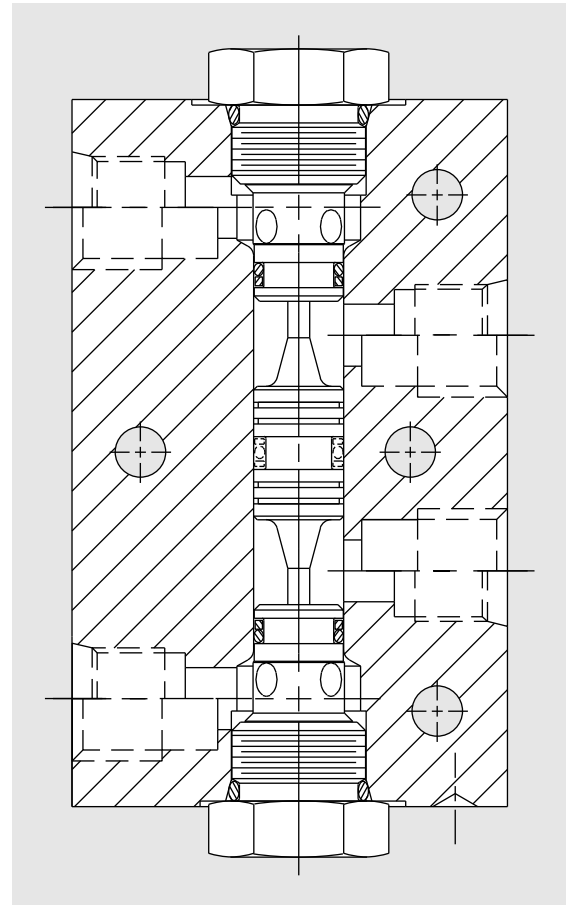
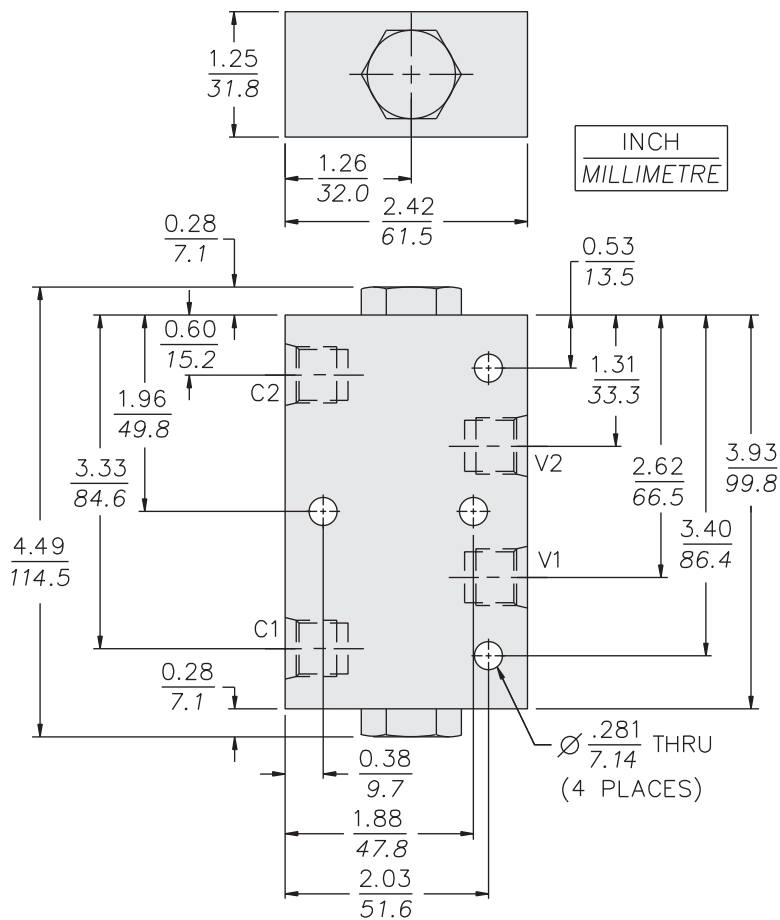
### ISO:



## PERFORMANCE (Cartridge Only)



## DIMENSIONS



## MATERIALS

**Cartridge:** (CV08-20): Steel with hardened work surfaces.  
Zinc-plated exposed surfaces.  
Buna N O-rings and back-up 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.  
See page 8.008.1

**Product Weight:** 0.58 kg. (1.28 lbs.)

## TO ORDER

DCV08-

**Porting**  
SAE 6 **6T**  
SAE 8 **8T**  
1/4 in. BSP\* **2B**  
3/8 in. BSP\* **3B**  
\*BSP Body;  
U.K. Mfr. Only

**Seals**  
Buna N (Std.) **N**  
(1.7 bar/25 psi spring minimum required)  
Fluorocarbon **V**  
(1.7 bar/25 psi spring minimum required)  
Buna N w/Sealed Piston **NS**  
(6.9 bar/100 psi spring minimum required)  
Fluorocarbon w/Sealed Piston **VS**  
(6.9 bar/100 psi spring minimum required)

**Bias Spring**

(Blank) 1.7 bar (25 psi) (Std.)\*  
**60** 4.1 bar (60 psi)  
**80** 5.5 bar (80 psi)  
**100** 6.9 bar (100 psi)  
**150** 10.3 bar (150 psi)  
**200** 13.8 bar (200 psi)  
**270** 18.3 bar (270 psi)

Note: Both check valves must have same spring value.

\* DCV08 valves built with standard 25 psi spring are not stamped with spring rating. Other spring ratings are stamped on valve.