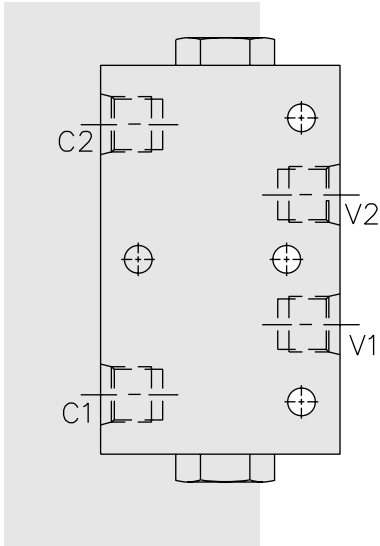


DIRECTIONAL VALVES

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.

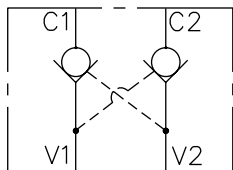
The check is spring-biased at 1.7 bar (25 psi) to assure holding in static or no-load conditions. An optional sealed piston with check spring bias of 6.9 bar (100 psi) is available.

FEATURES

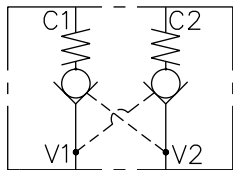
- Hardened seat for long life and low leakage.
- Check section serviceable as a cartridge.
- Optional sealed piston.
- Optional spring ranges.
- Low pressure drop.

SYMBOLS

USASI:



ISO:



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 ssu)

Installation: No restrictions; See page 9.020.1

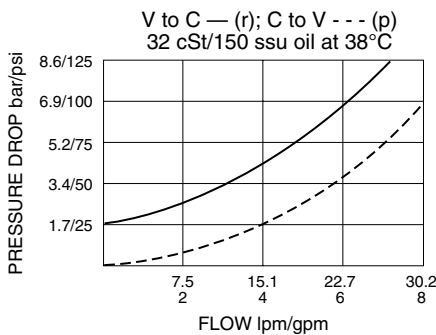
Seal Kit: See CV08-2X, page 4.010.1

Pilot Piston Service Part Numbers:

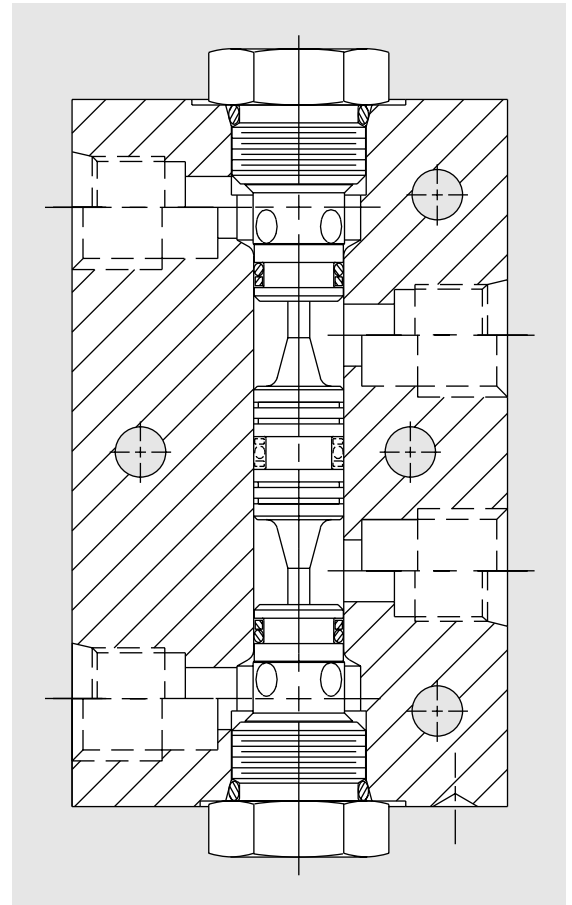
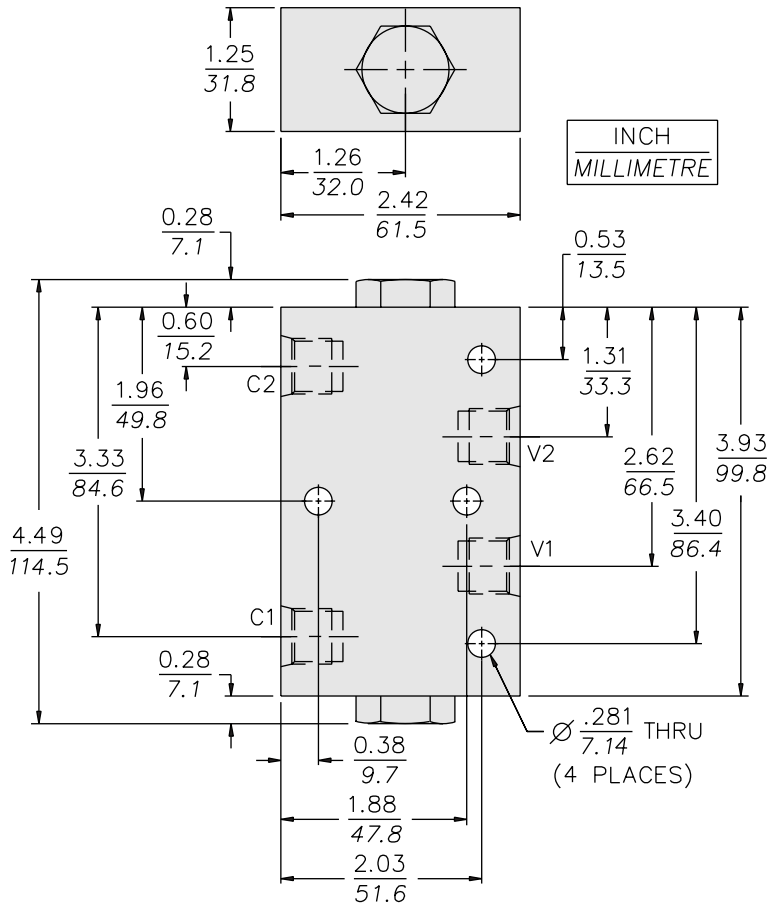
O-Ring (1) – Buna 6001012, Fluorocarbon 6003012

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

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 240 bar (3500 psi). See page 8.008.1. Ductile iron and steel bodies available; dimensions may differ; consult factory.

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**
Fluorocarbon **V**
Buna N w/Sealed Piston **NS**
(100 psi spring minimum required)
Fluorocarbon w/Sealed Piston **VS**
(100 psi spring minimum required)

Bias Spring

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