**DESCRIPTION**
An in-line-housed, double-pilot-operated, hydraulic check valve with optional thermal reliefs for use in blocking or load holding circuits.

**OPERATION**
The DCV10 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 at least 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 2 bar (30 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. Optional thermal reliefs are preset to 348 bar (5050 psi) as standard.

**NOTE:** Thermal reliefs cannot be used with sealed pistons.

**FEATURES**
- Hardened seat for long life and low leakage.
- Check section serviceable as a cartridge.
- Optional cartridge thermal relief(s).
- Optional sealed piston.
- Optional spring ranges.
- Low pressure drop.

**RATINGS**
**Flow:** up to 76 lpm (20 gpm)

**Optional Thermal Relief Factory Setting:** 348 ±38 bar (5050 ±550 psi)

**Thermal Relief Reseat:** 207 bar (3000 psi)

**Internal Leakage:**
- Cx to Vx: 0.25 cc/minute (5 drops/minute) maximum at 207 bar (3000 psi);
- V1 to V2: (without sealed piston): 328 cc/minute (20 cu. in./minute) maximum at 240 bar (3500 psi)

**Pilot Ratio:** 4:1

**Check Spring Bias:** 2 bar (30 psi); with sealed piston option, 6.9 bar (100 psi)

**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 CV10-2x):** SK10-2x-T (2 required); See page 8.650.1

**Pilot Piston Service Part Numbers:**
- O-Ring (1) – Buna 6001014, Fluorocarbon 6003014
- Back-up (2) – Buna 6011014, Fluorocarbon 6011014
**DIMENSIONS**

**MATERIALS**

**Cartridge:** (CV10-20): 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. See page 8.010.1

**Product Weight:** 0.68 kg. (1.5 lbs.)

**TO ORDER**

**DCV10-**

<table>
<thead>
<tr>
<th>Porting</th>
<th>Seals</th>
<th>Options</th>
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<tbody>
<tr>
<td>SAE 6</td>
<td>Buna N (Std.)</td>
<td>None (Blank)</td>
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<tr>
<td>SAE 8</td>
<td>Fluorocarbon</td>
<td>Thermal Relief on C1 1</td>
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<thead>
<tr>
<th>Bias Spring</th>
<th>Thermal Relief (65 psi only)</th>
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<thead>
<tr>
<th>Spring Value</th>
<th>Thermal Relief</th>
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<td>0.28</td>
<td>7.1</td>
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<th>Notes</th>
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<tr>
<td>Buna N (Std.)</td>
<td>Thermal reliefs are not to be used with sealed pistons (NS and VS).</td>
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<tr>
<td>Fluorocarbon</td>
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<tr>
<td>Buna N w/Sealed Piston</td>
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<tr>
<td>Fluorocarbon w/Sealed Piston</td>
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**Note:** Both check valves must have same spring value.

* DCV10 valves built with standard 30 psi spring are not stamped with spring rating. Other spring ratings are stamped on valve.