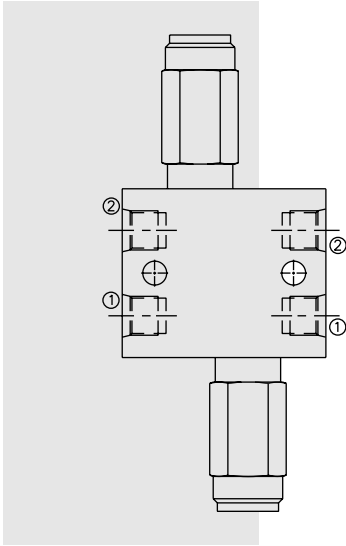


CRV08-22 Cross-Over Relief, Differential Area Poppet



DESCRIPTION

The **CRV08-22** cross-port relief uses two RV08-22 cartridges in an in-line plumbed housing. It is typically used to protect a hydraulic cylinder or motor from load-induced pressure surges. The cartridges used are screw-in, differential area, poppet-type valves, intended for use in lower flow circuits requiring low internal leakage.

OPERATION

The CRV08-22 manifold allows flow to pass through the separated ① to ② passages at low pressure loss. If pressure in either passage exceeds the valve setting, flow will cross over to the opposite passage.

Note: Back-pressure at the outlet port of the relief cartridges will increase the nominal setting of the valve on a 1:1 basis (i.e. 6.9 bar [100 psi] back-pressure increases the nominal setting by 6.9 bar [100 psi]).

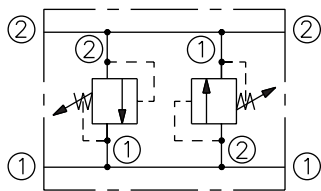
See catalog page 6.045.1 for cartridge specifications.

FEATURES

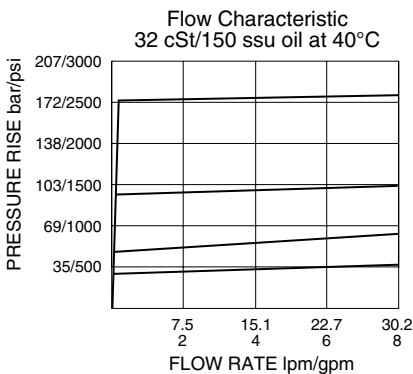
- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Hardened poppet and cage for long life.
- Optional spring ranges to 180 bar (2600 psi).
- Smooth response to pressure surges.
- Industry common cavity.
- Compact size.

SYMBOLS

USASI/ISO:



PERFORMANCE (Cartridge Only)



RATINGS

Operating Pressure: 180 bar (2600 psi)

Flow: The Performance Chart illustrates flow handling capacity at maximum setting for each spring range option. Pressure rise will vary with spring (range) and with setting within range due to flow forces. Consult factory for specific flow characteristic values.

Internal Leakage: 0.25 cc/minute (5 drops/minute) max. to 85% of nominal setting

Crack Pressure Defined: bar (psi) evident at 0.95 lpm (0.25 gpm) attained

Reseat Pressure: Nominal 90% of crack pressure

Standard Spring Ranges:

- 3.4 to 27.6 bar (50 to 400 psi);
- 6.9 to 48.3 bar (100 to 700 psi);
- 10.3 to 89.7 bar (150 to 1300 psi);
- 13.8 to 179.3 bar (200 to 2600 psi)

Temperature: -40 to 120°C

Filtration: See page 9.010.1

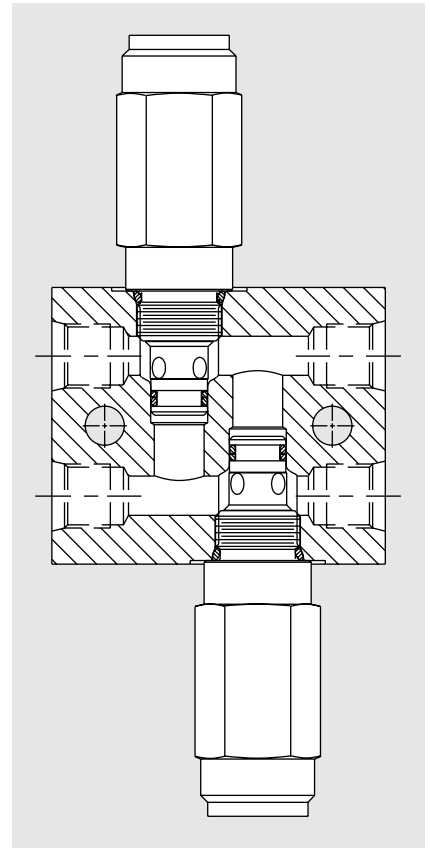
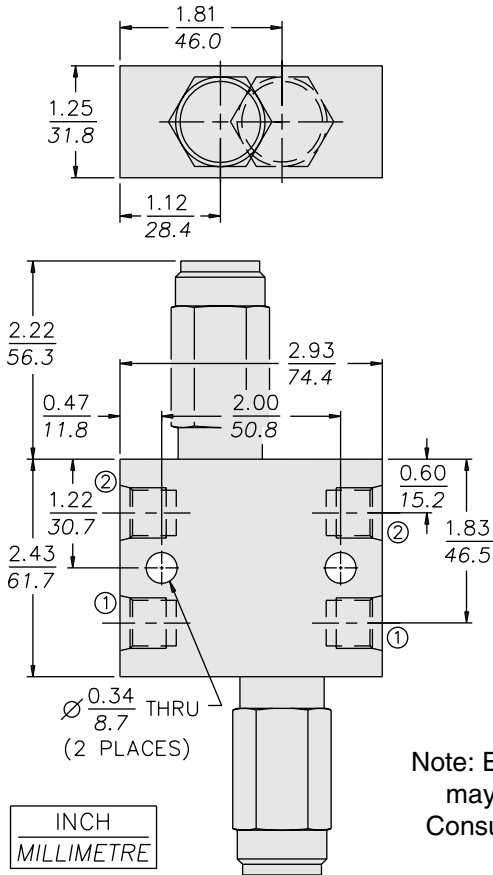
Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 ssu)

Installation: No restrictions; See page 9.020.1

Seal Kit: SK08-2X-M (for cross-over relief application) (2 required)

Body Part Number: 7070160

DIMENSIONS



Note: European manufactured version may differ in design/dimensions. Consult HydraForce Hydraulics Ltd.

MATERIALS

Cartridges: (2 Required) Weight: 0.22 kg. (0.48 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and Fluorocarbon back-ups standard. Anodized aluminum knob.

Standard Ported Body: Weight: 0.36 kg. (0.80 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi).

TO ORDER

CRV08-22 - 6T - - / - /

<p>Adjustment Option</p> <p>A 1/4 in. Hex Allen Head</p> <p>B 1-1/2 in. Dia. Alum. Knob</p> <p>C Option A w/ Cover Cap</p> <p>F Factory Preset Non-Adj.</p> <p>H Factory Preset Hidden Adj.</p> <p>L Option C w/ Lockwire Holes</p>	<p>Setting in bar[†]</p> <p>(Blank) for Adjustable, or Specify, for example:</p> <p>M25 25 bar</p> <p>M100 100 bar</p> <p>Setting in psi[‡]</p> <p>(Blank) for Adjustable, or Specify, for example:</p> <p>9.0 900 psi</p> <p>23.5 2350 psi</p>	<p>Repeat</p> <p>to supply setting group if both valves are not to be set at the same pressures.</p>
<p>Porting</p> <p>6T SAE 6</p>	<p>Seals</p> <p>Bidirectional Pressure:</p> <p>NC Buna N</p> <p>VC Fluorocarbon</p>	<p>Spring Range</p> <p>4 3.4 to 27.6 bar (50 to 400 psi)</p> <p>7 6.9 to 48.3 bar (100 to 700 psi)</p> <p>13 10.3 to 89.7 bar (150 to 1300 psi)</p> <p>26 13.8 to 179.3 bar (200 to 2600 psi)</p>

[†]Adjustable valves will be preset to approx. 50% of spring max. potential.