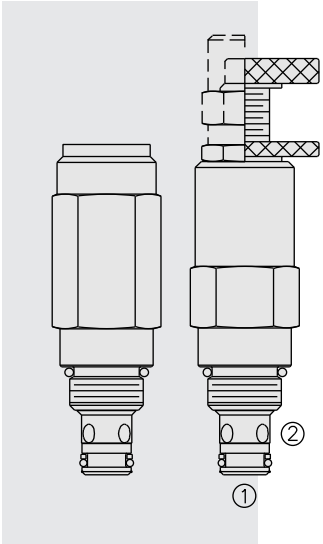


RV08-20 Relief, Direct-Acting Poppet



DESCRIPTION

A screw-in, cartridge-style, direct-acting, poppet-type, hydraulic relief valve intended for lower flow circuits requiring low internal leakage.

OPERATION

The RV08-20 blocks flow from 1 to 2 until sufficient pressure is present at 1 to force the spring-opposed poppet from its seat.

Note: The RV08-20 may be used in cross-over relief applications (back pressure on 2) with the use of the "C" double back-up ring seal option. See Ordering Table.

FEATURES

- Adjustments cannot be backed out of the valve.
- Variety of pressure adjustment options including non-adjustable factory pre-set.
- Adjustment options A, B, and C: positive stops prevent springs from going solid.
- Optional bi-directional pressure (requires bi-directional pressure seal option).
- Optional spring ranges to 248 bar (3600 psi).
- Rapid response to pressure changes.
- Compact size.

RATINGS

Operating Pressure: 275.8 bar (4000 psi)

Proof Pressure: 482.6 bar (7000 psi)

Burst Pressure: 896.3 bar (13000 psi)

Flow Rating: 22.7 lpm (6 gpm) at maximum pressure

Relief Pressure Setting Defined: Bar (psi) evident at 0.95 lpm (0.25 gpm)

Internal Leakage: 0.25 ml/minute (5 drops/minute) max. to 75% of nominal setting

Reseat Pressure: Nominal 80% of crack pressure

Standard Spring Ranges: 3.4 to 248.2 bar (50 to 3600 psi)

Shown in To Order section. Due to manufacturing tolerances, it may be possible to adjust the valve either lower or higher than the nominal ratings shown. **If the valve is adjusted beyond the recommended maximum pressure range for F and H style adjuster options, the valve may not open to relieve pressure.**

Temperature: -40 to 100°C (-40 to 212°F) with standard Buna seals;

-26 to 204°C (-15 to 400°F) with fluorocarbon seals;

-54 to 107°C (-65 to 225°F) with polyurethane 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

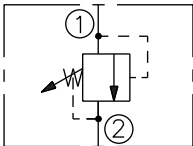
Installation: No restrictions; See page 9.020.1

Cavity: VC08-2; See page 9.108.1

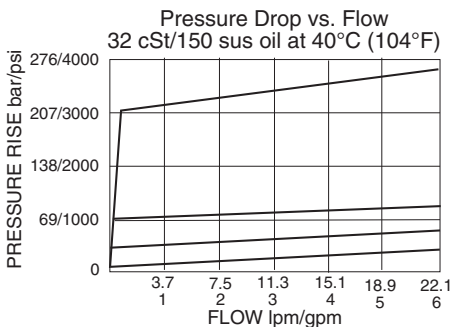
Cavity Tool: CT08-2XX; See page 8.600.1

Seal Kit: SK08-2X-B; SK08-2X-M (for cross-over relief application); See page 8.650.1

ISO SYMBOL

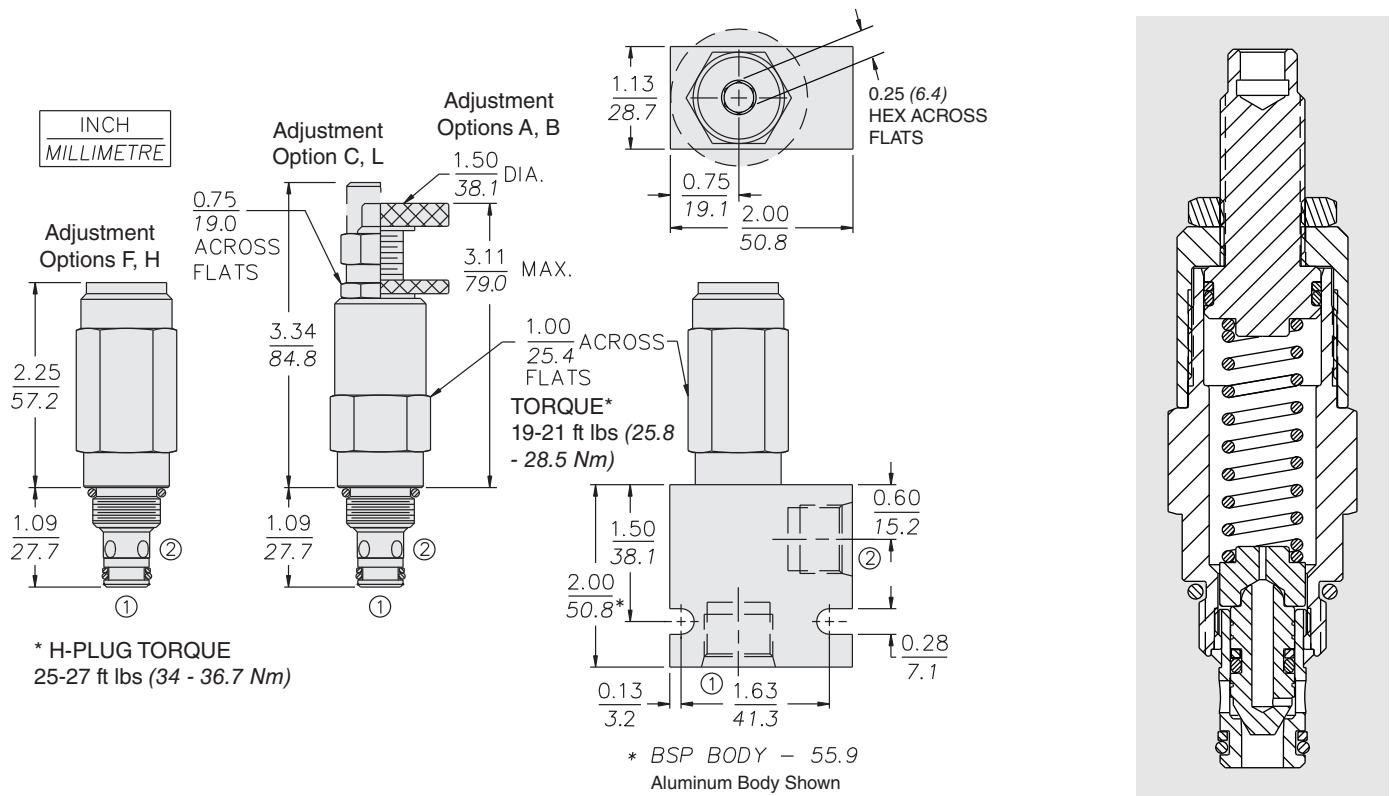


PERFORMANCE (Cartridge Only)



RV08-20

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.16 kg (0.35 lb) to 0.22 kg (0.47 lb) depending on adjustment option. Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings standard. Anodized aluminum knobs and caps.

Standard Ported Body: Weight: 0.16 kg (0.35 lb); Anodized high-strength aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.008.1

TO ORDER

RV08-20 - - - /

<p>Adjustment Option</p> <p>1/4 in. Hex Allen Head A 1-1/2 in. Dia. Alum. Knob B Option A w/ Cover Cap C Factory Preset Non-Adj. F* Factory Preset Hidden Adj. H* Option C w/ Lockwire Holes L</p> <p>Porting</p> <p>Cartridge Only 0 SAE 4 4T SAE 6 6T SAE 6 6TD SAE 8 8T SAE 8 8TD 1/4 in. BSP* 2B 3/8 in. BSP* 3B 3/8 in. BSP* 3BD</p>	<p>Seals</p> <p>Pressure on Port 1 Only:</p> <p>N Buna N (Std.) V Fluorocarbon P Polyurethane</p> <p>Bidirectional Pressure:</p> <p>NC Buna N VC Fluorocarbon PC Polyurethane</p>	<p>Setting in bar</p> <p>(Blank)[†] for Adjustable, or Specify, for example: M150 150 bar</p> <p>Setting in psi</p> <p>(Blank)[†] for Adjustable, or Specify, for example: 03.5 350 psi</p> <p>Spring Range</p> <p>5 3.4 to 34.4 (50 to 500) 9 6.9 to 75.8 (100 to 1100) 18 17.2 to 158.5 (250 to 2300) 33 17.2 to 248.2 (250 to 3600)</p>
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*** If the valve is adjusted beyond the recommended maximum pressure range for the F and H style adjuster options, the valve may not open to relieve system pressure.**

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

NOTE: Due to manufacturing tolerances, it may be possible to adjust the valve either lower or higher than the nominal ratings shown above.

*BSP Body; U.K. Mfr. Only