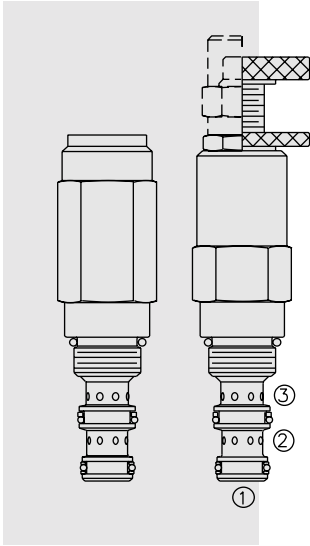


# CR08-38 Bi-Directional Relief Valve, Vented



**DESCRIPTION**

A screw-in, cartridge-style, direct-acting, differential area, poppet-type, bi-directional relief valve, intended for use as a pressure limiting device in demanding hydraulic circuits.

**OPERATION**

The **CR08-38** is a direct-acting, dual cross-over relief valve in a single cartridge format. It blocks flow from ① to ② bi-directionally, with the spring chamber constantly drained at ③.

On attainment of a pre-determined pressure at either ① or ②, the poppet is forced from its seat. Back pressure on port ③ will affect the nominal setting on a 1:1 basis.

**FEATURES**

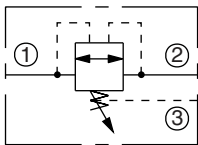
- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Hardened parts for long life.
- Industry common cavity.

**RATINGS**

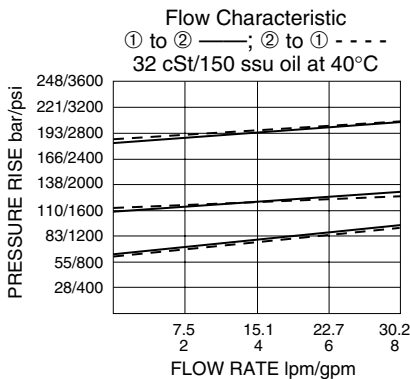
- Maximum Operating Pressure:** 205 bar (3000 psi)
- Adjustable Pressure Range:** 68–205 bar (1000–3000 psi); Pressure is set at port ②
- Proof Pressure:** 345 bar (5000 psi)
- Reseat Pressure:** 80% of Crack; Crack: 0.96 lpm (0.25 gpm)
- Maximum Difference for Crack Pressure in Both Directions:** 20.7 bar (300 psi)
- Flow Range:** 30 lpm (8 gpm); See performance chart
- Maximum Internal Leakage:** When reseal to 75% of crack pressure: 0.4 cc/minute (8 drops/minute maximum)
- Cycle Limitations:** Internal seal life is limited to 300,000 cycles in either direction at maximum setting
- Temperature:** -40 to 120°C with Buna N 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
- Cavity:** VC08-3; See page 9.108.1
- Cavity Tool:** CT08-3XX; See page 8.600.1
- Seal Kit:** SK08-3X-BM; See page 8.650.1

**SYMBOLS**

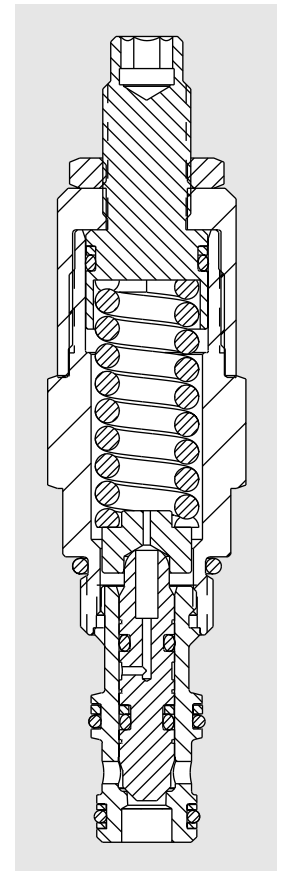
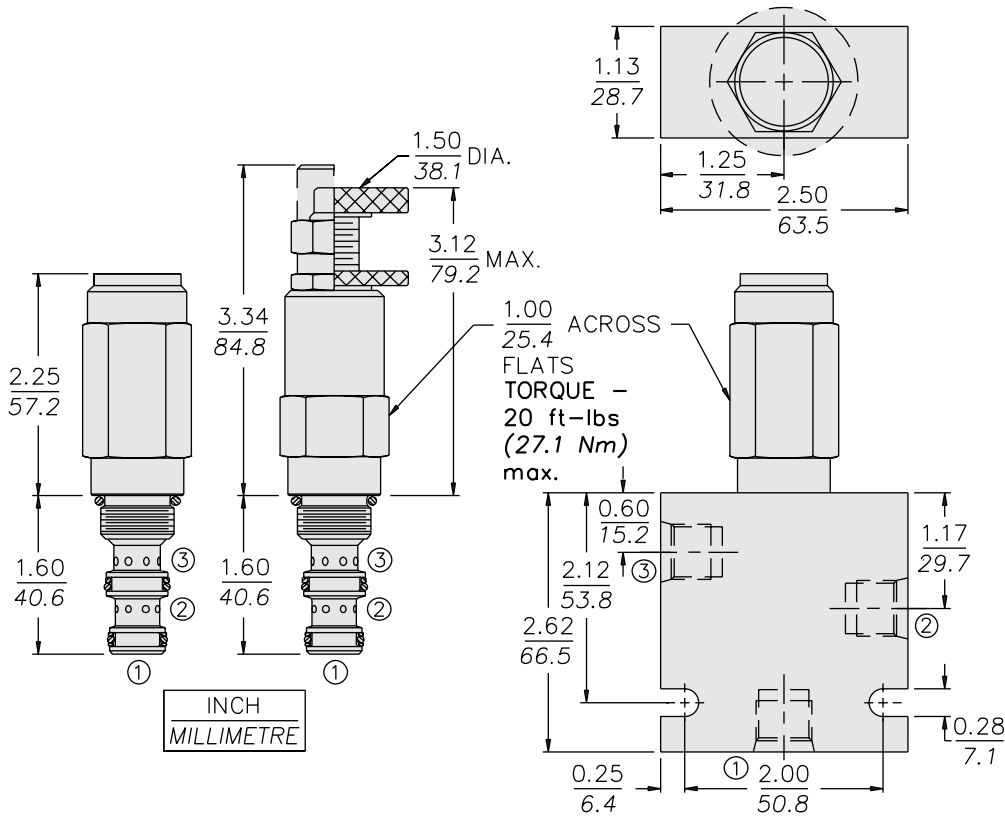
**USASI/ISO:**



**PERFORMANCE (Cartridge Only)**



**DIMENSIONS**



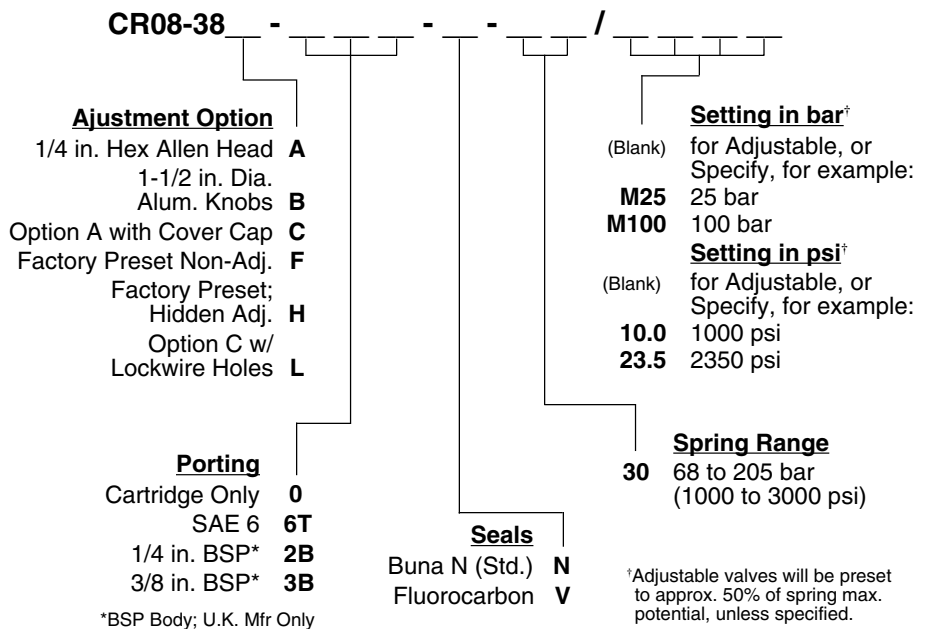
**MATERIALS**

**Cartridge:** Weight: 0.14 kg. (0.30 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and TFE back-ups standard. Anodized aluminum knob.

**Standard Ported Body:** Weight: 0.27 kg. (0.60 lbs.); 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.

**Note:** Orifice Disc should not be used with this valve.

**TO ORDER**



<sup>†</sup>Adjustable valves will be preset to approx. 50% of spring max. potential, unless specified.