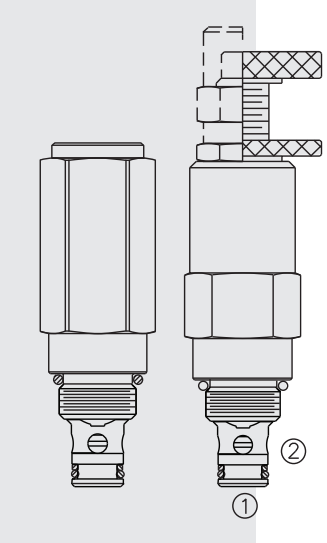
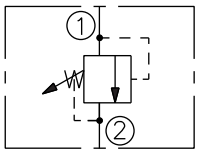
Blue rectangles are links to other catalog pages.

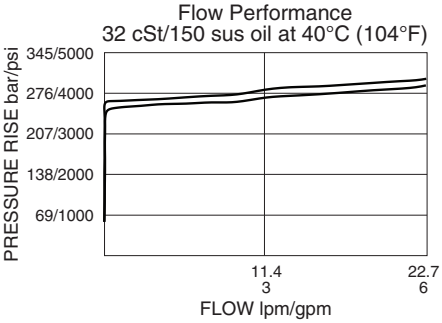
RV58-20 Relief, Direct-Acting Poppet, High Pressure



ISO SYMBOL:



PERFORMANCE (Cartridge Only)



DESCRIPTION

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

OPERATION

The **RV58-20** blocks flow from 1 to 2 until sufficient pressure is present at 1 to force the spring-opposed poppet from its seat.

Note: The RV58-20 may not be used in cross-over relief applications (back pressure on 2).

FEATURES

- Rated for higher operating pressure of 345 bar (5000 psi).
- Bi-directional pressure option available.
- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Variety of adjustment options available.
- Rapid response to pressure changes.
- Compact size.

RATINGS

Operating Pressure: 345 bar (5000 psi)

Flow Rating: See Performance Chart

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

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

Reseat Pressure: Nominal 80% of crack pressure

Standard Spring Range: 55.2 to 317.2 bar (800 to 4600 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 rating shown. **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.**

Operating Temperature: -54 to 107°C (-65 to 225°F) with standard 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

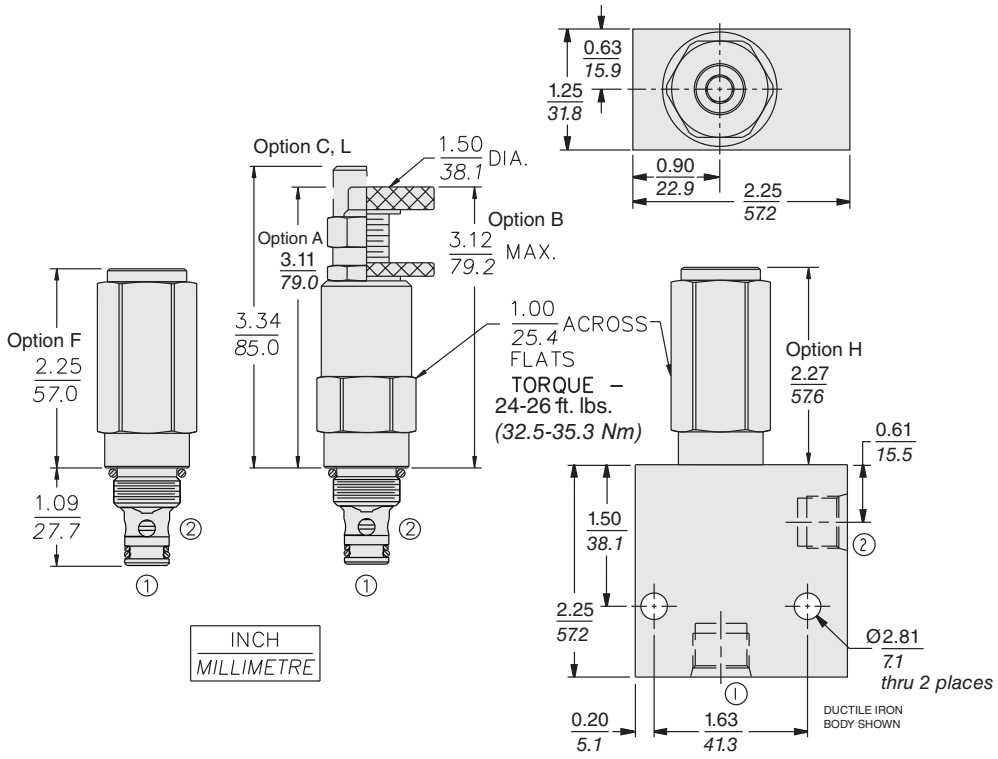
Installation: No restrictions; See page 9.020.1

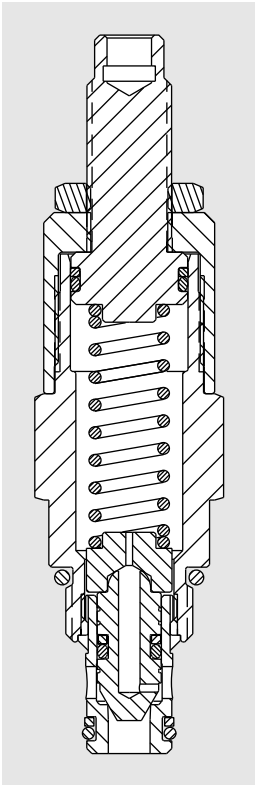
Cavity: VC08-2; See page 9.108.1

Cavity Tool: CT08-2XX; See page 8.600.1

Seal Kit: SK08-2X-B for polyurethane, fluorocarbon or Buna N seals; for bi-directional pressure applications use SK08-2X-M (polyurethane). See page 8.650.1

DIMENSIONS





MATERIALS

Cartridge: Weight: 0.23-0.28 kg (0.50-0.61 lb) depending on adjustment option. Steel with hardened work surfaces. Zinc-plated exposed surfaces. Polyurethane O-rings standard. Anodized aluminum knobs and caps.

Ported Body: Weight: 0.54 kg (1.20 lb); Ductile iron (code "D") standard, consult factory for weight. Rated to 345 bar (5000 psi). See page 8.008.1.

TO ORDER

RV58-20__ - __ __ __ - __ - 4 6 / __ __ __ __

Adjustment Option

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**

* 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.

Porting

Cartridge Only	**0**
Ductile Iron Body	
SAE 6	**6TD**
SAE 8	**8TD**
3/8 in. BSP*	**3BD**
Aluminum Body	
SAE 4	**4T**
SAE 6	**6T**
SAE 8	**8T**

*BSP Body; U.K. Mfr. Only

Seals

Pressure on Port 1 Only:
P Polyurethane (Std.)

Bidirectional Pressure:
PC Polyurethane (Std.)

***NOTE:** Contact manufacturer for additional seal options.*

Spring Range

46 55.2 to 317.2 bar (800 to 4600 psi)

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

Setting in bar

(Blank)† for Adjustable, or Specify, for example:
M240 240 bar

Setting in psi

(Blank)† for Adjustable, or Specify, for example:
08 800 psi

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