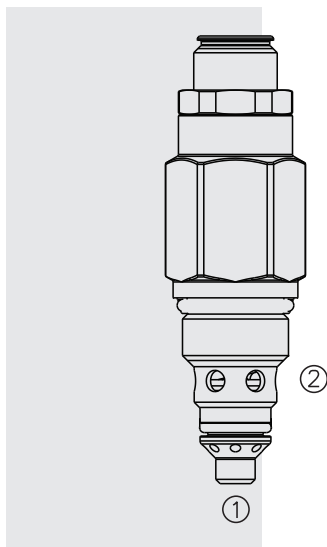


RVD58-20 Relief, Poppet-Type, High Pressure



DESCRIPTION

A screw-in, cartridge-style, direct-acting, poppet-type, hydraulic relief valve intended for use as a pressure limiting device for common hydraulic circuit protection.

OPERATION

The RVD58-20 blocks flow from 1 to 2 until sufficient pressure is present at 1 to force the poppet from its seat. The cartridge offers fast response to load changes in hydraulic circuits requiring low hysteresis, low pressure rise and low internal leakage.

FEATURES

- Compact and economical.
- Dynamic response to pressure surges.
- Hardened poppet and seat for long life.
- Optional spring ranges to 345 bar (5000 psi).
- Embossed QR code provides serial number.
- Optional cap.

RATINGS

Pressure Rating: 344 bar (5000 psi) at port 1; 207 bar (3000 psi) at port 2

Proof Pressure: 413 bar (10,000 psi) at port 1

Burst Pressure: 1379 bar (20,000 psi)

Flow Rating: Port 1 to 2: 37.9 lpm (10 gpm) at max pressure

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.

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

Reseat Pressure: Nominal 90% of crack pressure

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

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

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

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

Standard Spring Ranges: 13.7 - 345 bar (200 - 5000 psi)

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

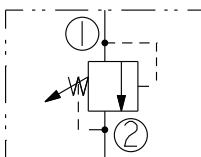
Installation: Use VC08-2 Variation B cavity; See page 9.020.1

Cavity: VC08-2 Variation B; See page 9.108.1

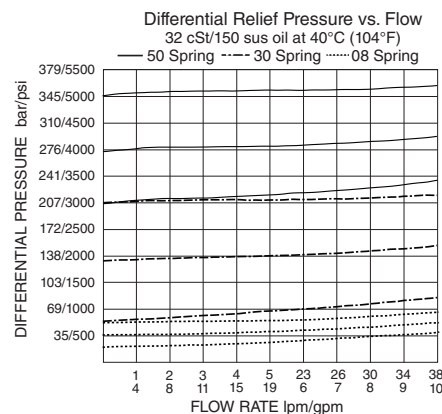
Cavity Tool: CT08-2XX; See page 8.600.1

Seal Kit: SK08-2HN-0; See page 8.650.1

ISO SYMBOL

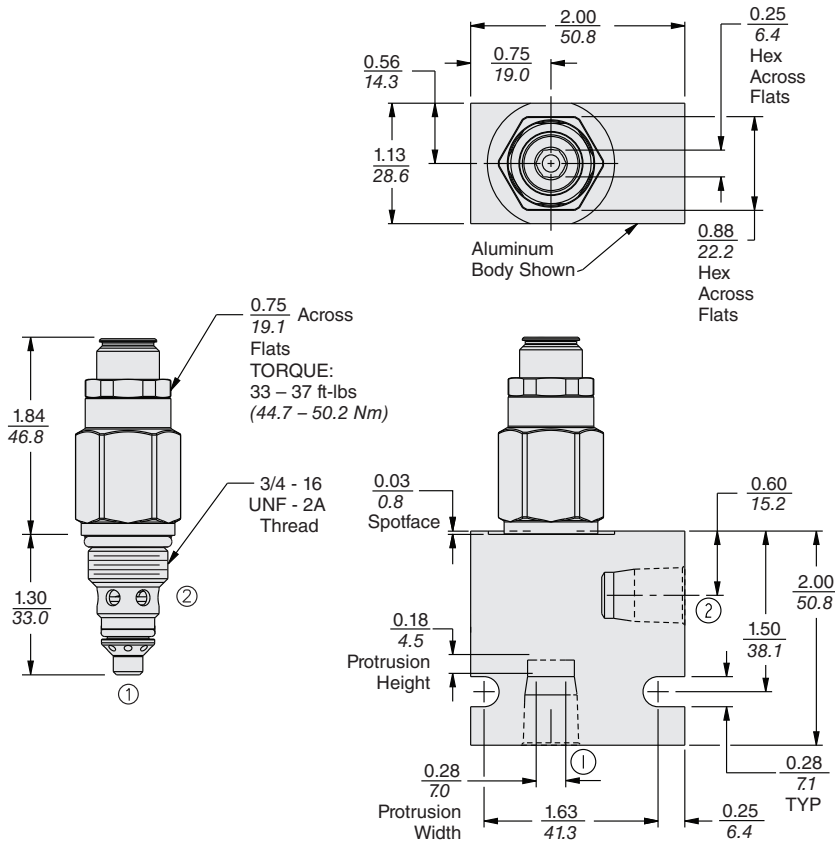


PERFORMANCE (Cartridge Only)



RVD58-20

DIMENSIONS

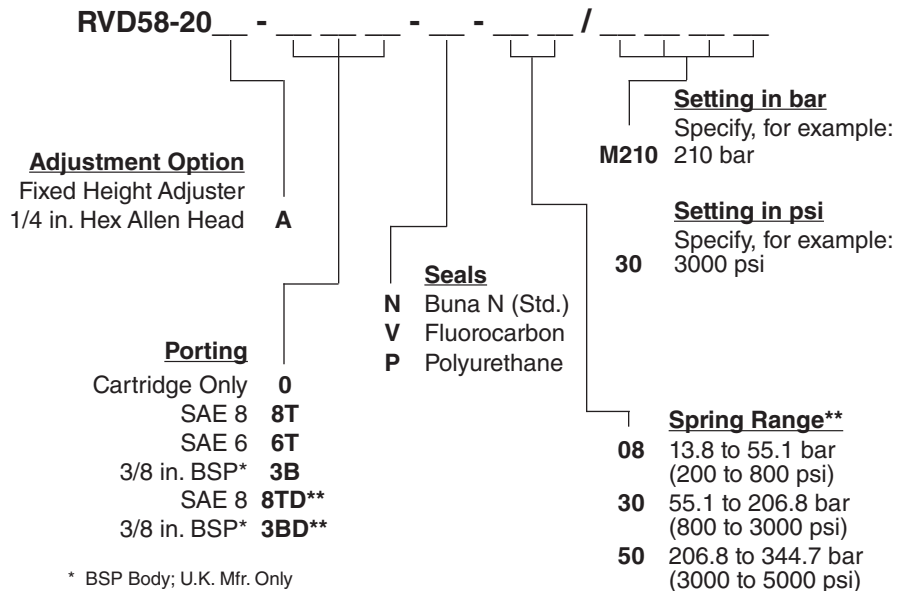


MATERIALS

Cartridge: Weight: 0.13 to 0.28 kg.
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.

Standard Ported Body: Weight: 0.161 kg (0.355 lb). Anodized, high-strength aluminum body rated to 207 bar (3000 psi). Ductile iron (Code D) rated for 350 bar (5,000 psi) also available. Weight 0.625 kg (1.379 lb). See page 8.008.1

TO ORDER



* BSP Body; U.K. Mfr. Only

**Ductile iron bodies required for pressures above 207 bar (3000 psi)

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