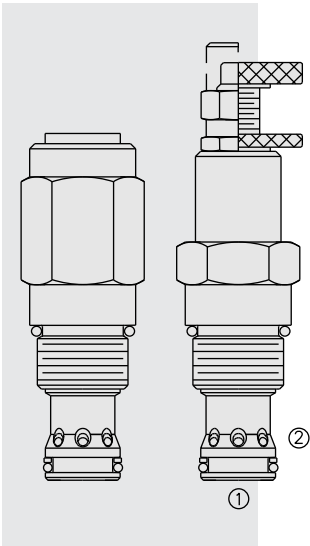


# RV12-26 Relief, Pilot-Operated Spool



## DESCRIPTION

A screw-in, cartridge-style, pilot-operated (two-stage), spool-type hydraulic relief valve, intended for use as a pressure limiting device in demanding hydraulic circuits which require fast response and low hysteresis.

## OPERATION

The RV12-26 blocks flow from ① to ② until sufficient pressure is present at ① to force the piloting relief off its seat, allowing the main (second stage) spool to shift, opening ① to ②.

The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits.

**NOTE: The RV12-26 cannot be used in crossover relief applications.**

## FEATURES

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Hardened spool and cage for long life.
- Optional spring ranges to 241 bar (3500 psi).
- Fast, smooth response to pressure surges.
- Cost effective cavity.

## RATINGS

**Operating Pressure:** 241 bar (3500 psi)

**Proof Pressure:** 420 bar (6090 psi)

**Flow:** See Performance Chart

**Internal Leakage:** 115 cc/minute (7 cu. in./minute) max. to 85% of nominal setting

**Crack Pressure Defined:** bar (psi) evident at 7.6 lpm (2.0 gpm) attained

**Reseat Pressure:** Nominal 90% of crack pressure

**Standard Spring Ranges:**

6.9 to 27.6 bar (100 to 400 psi); 13.8 to 110.3 bar (200 to 1600 psi);

31.0 to 206.9 bar (450 to 3000 psi); 34.5 to 241.4 bar (500 to 3500 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 sus); See Temperature and Oil Viscosity, page 9.060.1

**Installation:** No restrictions; See page 9.020.1

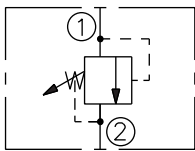
**Cavity:** VC12-2; See page 9.112.1

**Cavity Tool:** CT12-2XX; See page 8.600.1

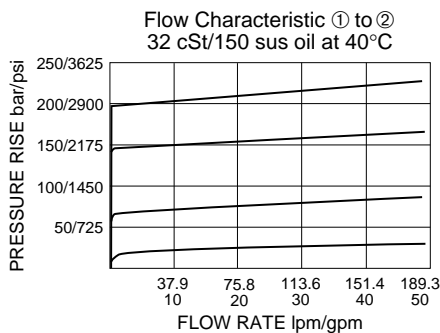
**Seal Kit:** SK12-2X-B; See page 8.650.1

## SYMBOLS

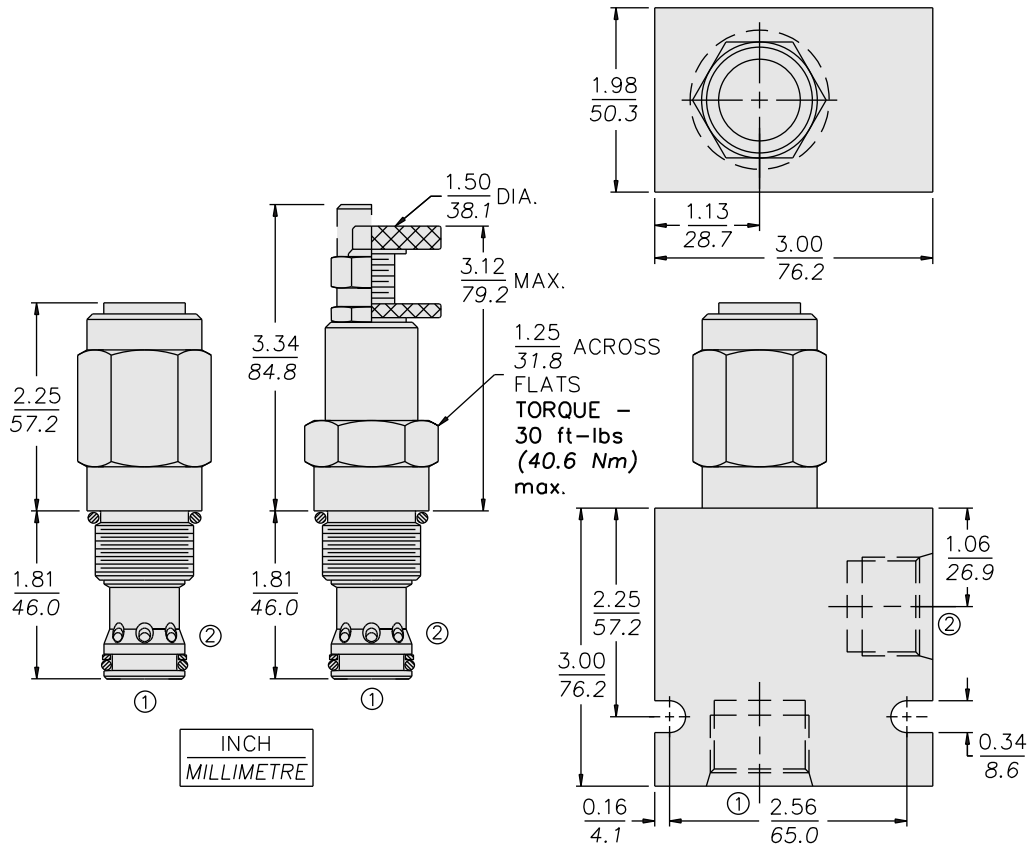
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## PERFORMANCE (Cartridge Only)



**DIMENSIONS**



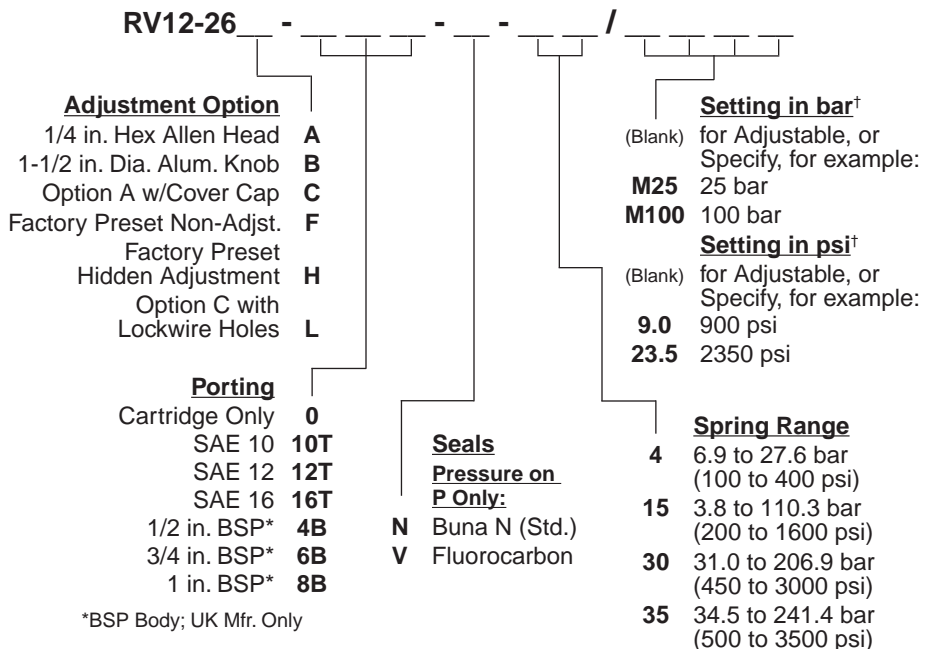
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**MATERIALS**

**Cartridge:** Weight: 0.34 kg. (0.75 lbs.)  
Steel with hardened work surfaces.  
Zinc-plated exposed surfaces.  
Buna N O-rings and polyester elastomer back-up standard.  
Anodized aluminum knobs.

**Standard Ported Body:** Weight: 0.57 kg. (1.25 lbs.) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.012.1

**TO ORDER**



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