

Relief Valves

RVC0.S10 Valve Series

SAE10 Cartridge - 350 bar
Direct acting - Poppet Type

Description

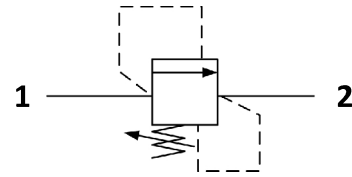
A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis. NOTE: the RVC0 in the standard configuration can be used in crossover relief applications (back pressure on port 2).

Technical Features

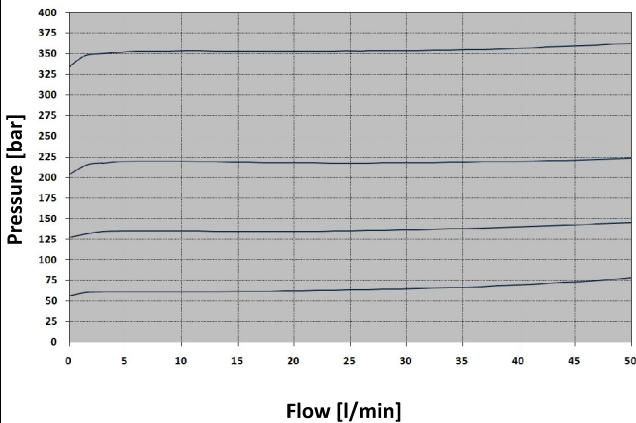
All external surfaces are zinc plated and corrosion-proof. All valve parts are made of high strength steel. Poppet is hardened and ground to guarantee minimal wear and to extend service life. Adjustment screw cannot be backed out of the valve. Positive stop prevents springs from going solid. Optional spring ranges to 350 bar (5000 psi). Back pressure on the tank port (port 2) is directly additive to the valve setting at a 1:1 ratio. Industry common cavity.



Symbols



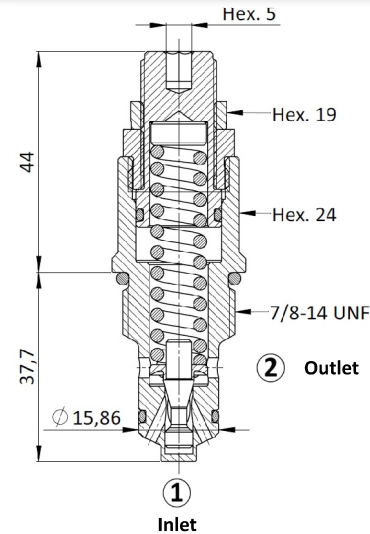
Performance Details



Technical Data

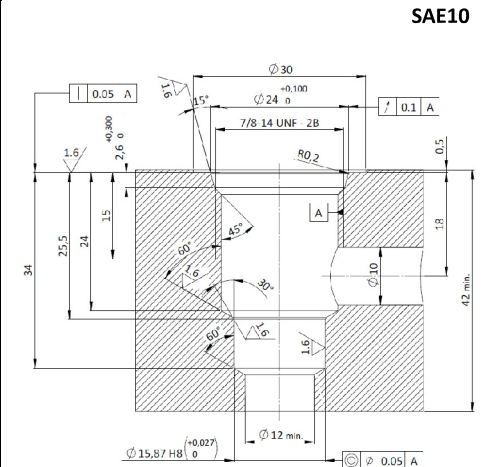
Maximum operating pressure: 350 bar
 Maximum flow: 50 l/min
 Maximum internal leakage: 0.25 cc/min to 80% of nominal set point
 Pressure settings established @ 5 l/min
 Reseat pressure: nominal 90% of crack pressure
 Temperature: -30°C to 110°C
 Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt
 Orientation: no restrictions
 Installation torque: 55-65 Nm
 Seal kit code: SK.001
 Weight: 0.170 kg
 NOTE: The performance chart illustrates flow handling capacity at maximum setting for each spring range option. P/Q curves are recorded at Toil = 40°C and 46 cSt

Cross Section



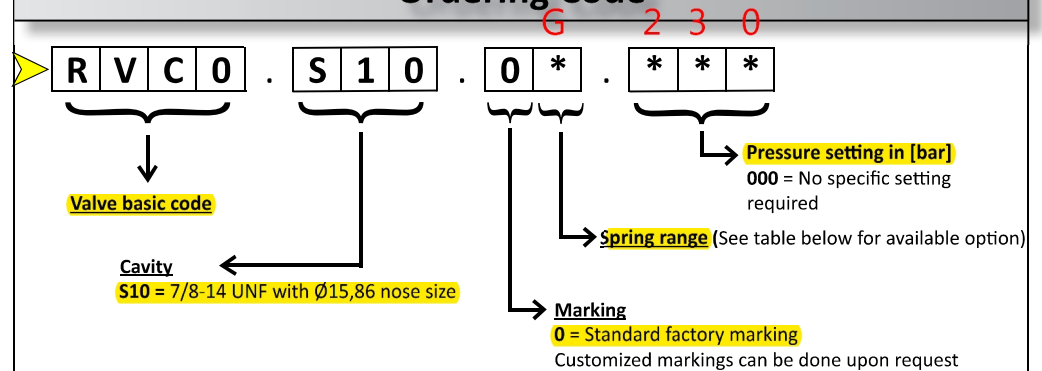
To secure the setting, torque the Hex19 nut with 25-30 Nm

Cavity Details



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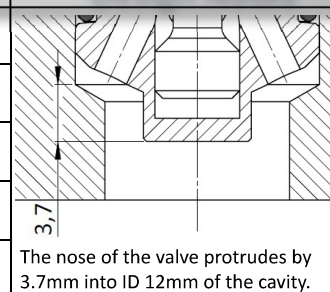
Ordering Code



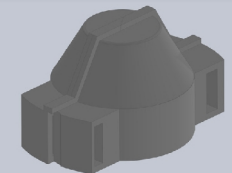
Spring Ranges

Spring Model Code	Pressure setting range [bar]
Y	15 - 60
N	25 - 135
B	50 - 220
G	120 - 350

Design Notes



Options



Plastic tamper proof cap. 2 pieces are needed to build 1 complete cap. Ordering code: CTP.001