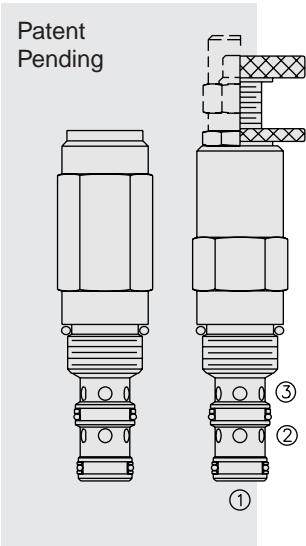


PR10-36 Pressure Reducing/Relieving, Pilot-Operated



DESCRIPTION

A screw-in, cartridge-style, pilot-operated, spool-type, hydraulic pressure reducing/relieving valve with internal pilot and internal spring chamber drain, designed to act as a pressure-regulating device for secondary circuits.

OPERATION

In its steady state, the **PR10-36** allows flow to pass bidirectionally from ② to ①, with the spring chamber constantly drained at ③.

On attainment of a pre-determined pressure at ①, the cartridge shifts to restrict input flow at ②, thereby regulating pressure at ①. In this mode, the valve will also relieve ① to ③.

Deadband (from reducing to relieving) pressure rise over reduced pressure setting:
Non-flow condition: approximately 0.55 bar (8 psi); with flow: approximately 2.1 bar (30 psi).

FEATURES

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Optional spring ranges to 207 bar (3000 psi).
- Hardened spool and cage for long life.
- Industry common cavity.

RATINGS

Operating Pressure: 21 F bar (31 00 psi)

Proof Pressure: 1 F bar (1 500 psi)

Flow: See Performance Chart

Pilot Orifice: Pilot-operated through 0.51 mm (0.020 inch) hole

Standard Spring Ranges (Reducing Function):

- 6.9 to 27.6 bar (100 to 400 psi);
- 10.3 to 103 bar (150 to 1500 psi);
- 27.6 to 207 bar (400 to 3000 psi)

Temperature: -40 to 120°C with standard Buna 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

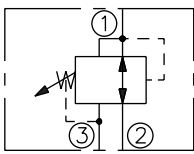
Cavity: VC10-3; See page 9.110.1

Cavity Tool: CT10-3XX; See page 8.600.1

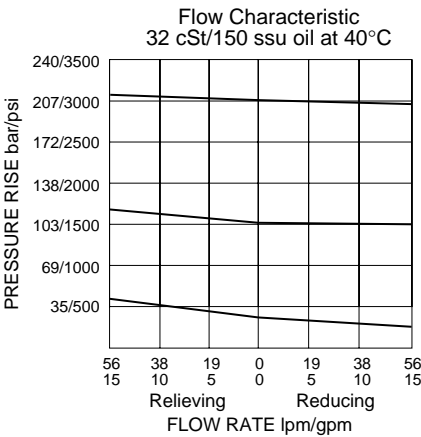
Seal Kit: SK10-3X-BM; See page 8.650.1

SYMBOLS

USASI/ISO:

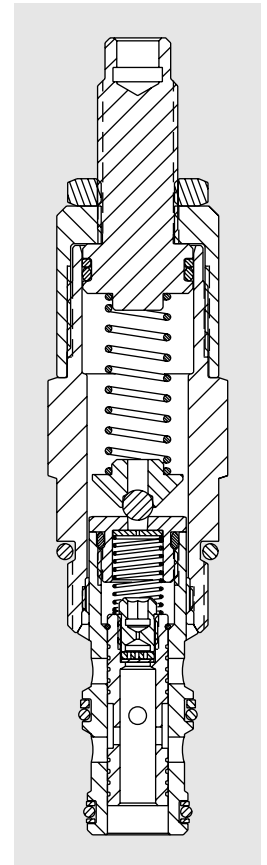
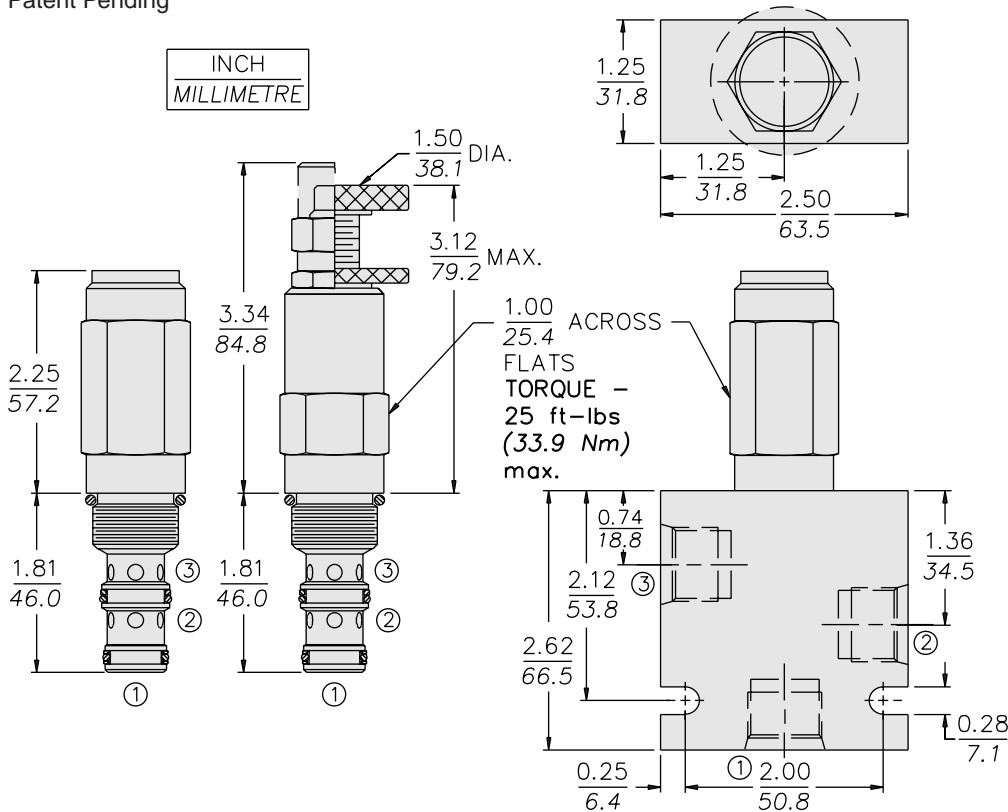


PERFORMANCE (Cartridge Only)



DIMENSIONS

Patent Pending



MATERIALS

Cartridge: Weight: 0.27 kg. (0.60 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings and polyester elastomer back-ups standard.
Anodized aluminum knobs and caps.

Standard Ported Body: Weight: 0.36 kg. (0.80 lbs.) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.010.1

TO ORDER

PR10-36

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 Adjust. See page 6.003.1 **H**
Option C w/Lockwire Holes **L**

Porting
Cartridge Only **0**
SAE 6 **6T**
SAE 8 **8T**
1/4 in. BSP* **2B**
3/8 in. BSP* **3B**

*BSP Body;
U.K. Mfr Only

Seals
Buna N (Std.) **N**
Fluorocarbon **V**

Setting in bar[†]
(Blank) for Adjustable, or Specify, for example:
M25 25 bar
M100 100 bar
Setting in psi[†]
(Blank) for Adjustable, or Specify, for example:
9.0 900 psi
23.5 2350 psi

Spring Range
4 6.9 to 27.6 bar (100 to 400 psi)
15 10.3 to 103 bar (150 to 1500 psi)
30 27.6 to 207 bar (400 to 3000 psi)

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