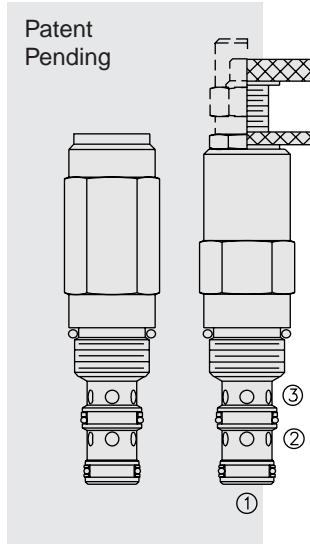


PR50-36 Pressure Reducing/Relieving, Pilot-Operated



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 **PR50-36** 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.

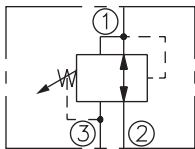
Deadband (from reducing to relieving) pressure rise over reduced pressure setting:
 Non-flow condition: approximately 0.55 bar (8 psi); with flow: approximately 2.1 bar (30 psi).

FEATURES

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Optional spring ranges to 345 bar (5000 psi).
- Hardened spool and cage for long life.
- Industry common cavity.

SYMBOLS

USASI/ISO:



RATINGS

Operating Pressure: 345 bar (5000 psi)

Flow: See Performance Chart

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

Standard Spring Ranges (Reducing Function): 27.6 to 103.4 bar (400 to 1500 psi);
 103.4 to 206.9 bar (1500 to 3000 psi); 206.9 to 344.8 bar (3000 to 5000 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

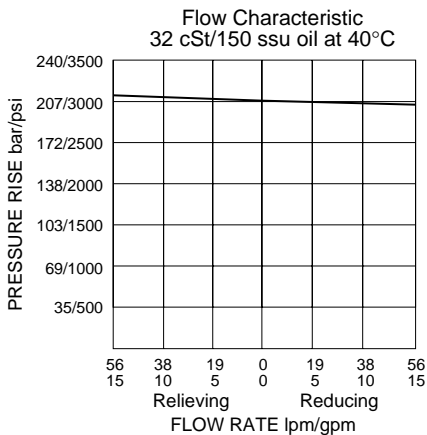
Installation: No restrictions; See page 9.020.1

Cavity: VC10-3; See page 9.110.1

Cavity Tool: CT10-3XX; See page 8.600.1

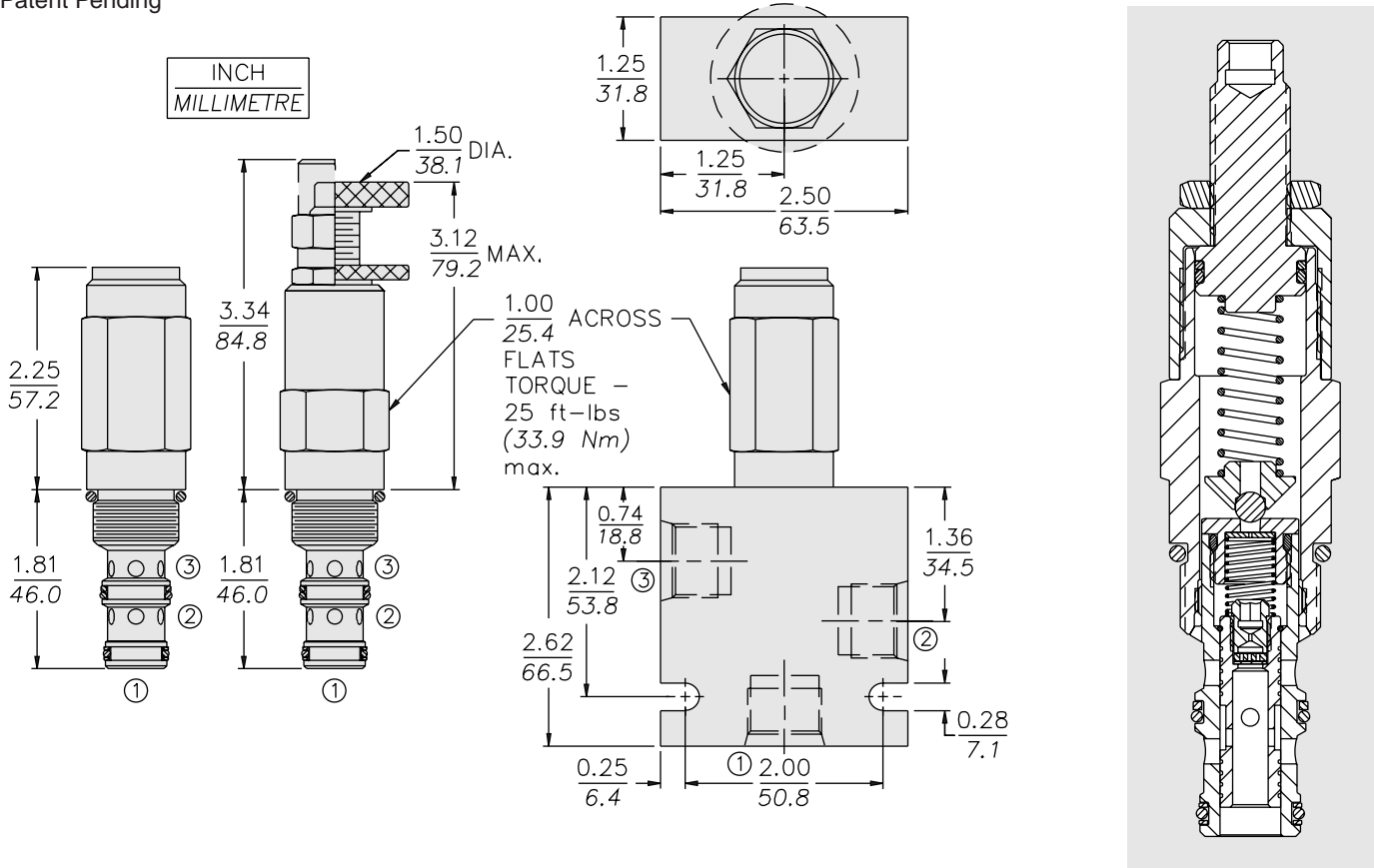
Seal Kit: SK10-3P-BM; See page 8.650.1

PERFORMANCE (Cartridge Only)



DIMENSIONS

Patent Pending



MATERIALS

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

Ported Body: Weight: 0.64 kg.
 (1.41 lbs.) Ductile Iron (code "D")
 standard, consult factory for
 weight, dimensions may differ.
 Rated to 345 bar (5000 psi).
 See page 8.010.1

TO ORDER

PR50-36 - - - /

<p>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. H (See page 6.003.1) Option C w/Lockwire Holes L</p>	<p>Porting Cartridge Only 0 SAE 6 (Ductile) 6TD</p>	<p>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</p>
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[†]Adjustable valves will be preset to approx. 50% of spring max. potential.

<p>Seals Polyurethane P</p>	<p>Spring Range 15 27.6 to 103.4 bar (400 to 1500 psi) 30 103.4 to 206.9 bar (1500 to 3000 psi) 50 206.9 to 344.8 bar (3000 to 5000 psi)</p>
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