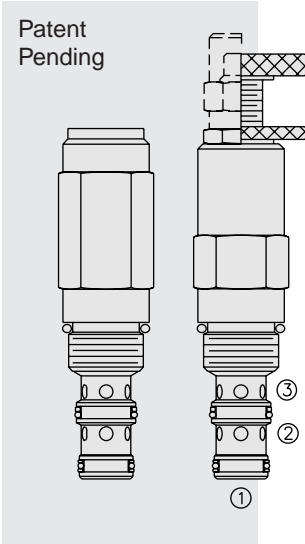


# PR10-36 Pressure Reducing/Relieving, Pilot-Operated



## 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 (15 00 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

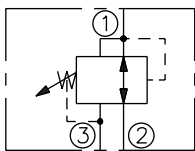
**Cavity:** VC10-3; See page 9.110.1

**Cavity Tool:** CT10-3XX; See page 8.600.1

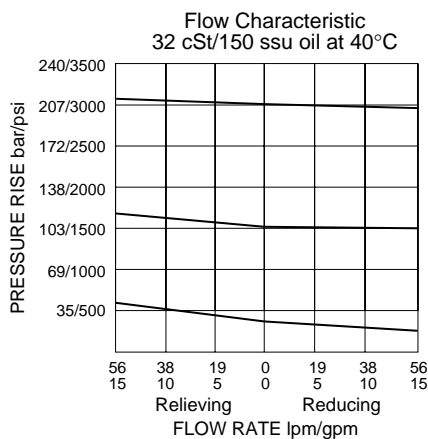
**Seal Kit:** SK10-3X-BM; See page 8.650.1

## SYMBOLS

### USASI/ISO:

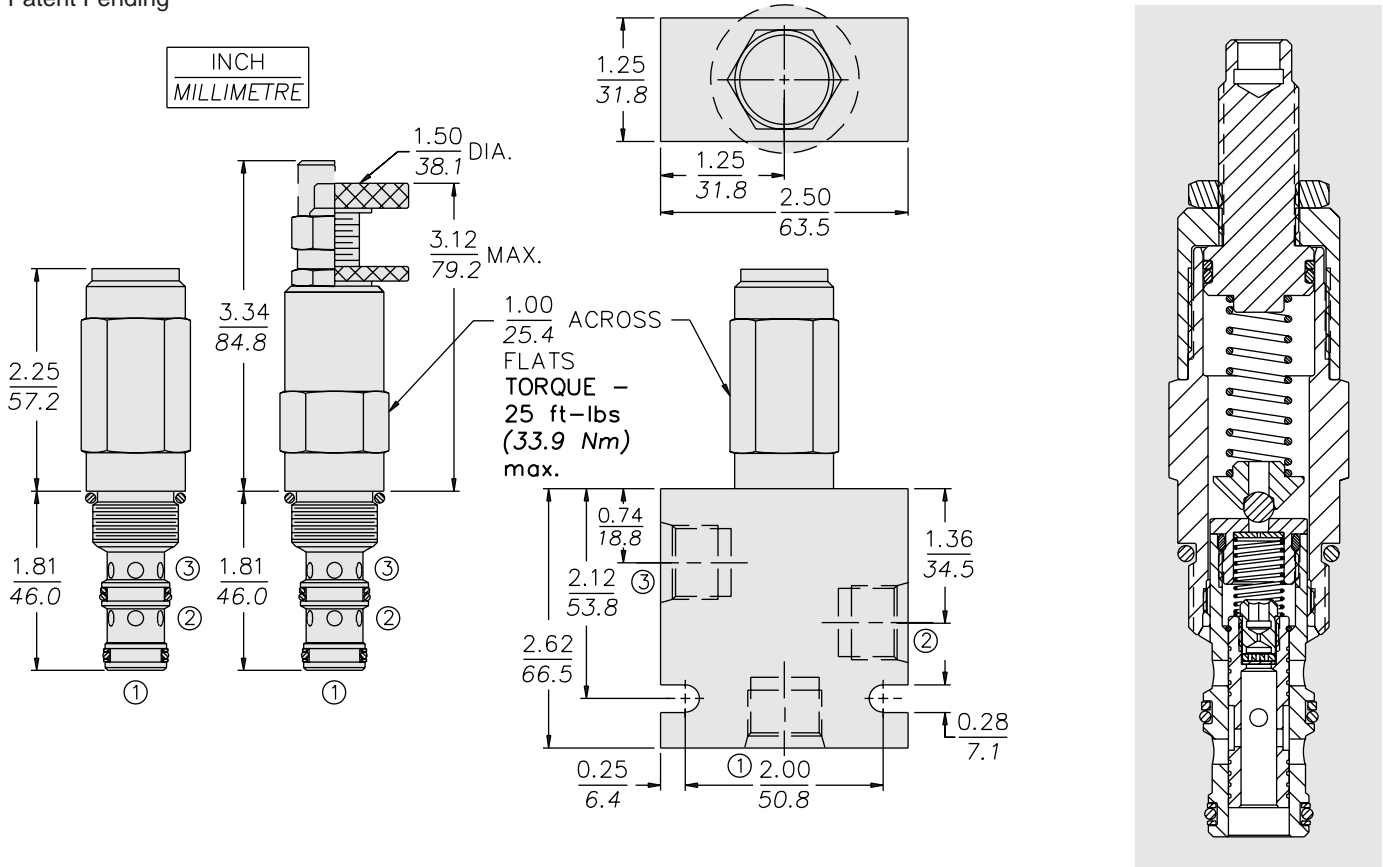


## PERFORMANCE (Cartridge Only)



**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** - - - /

<b>Adjustment Option</b>		<b>Setting in bar<sup>†</sup></b>
1/4 in. Hex Allen Head	<b>A</b>	(Blank) for Adjustable, or Specify, for example:
1-1/2 in. Dia. Alum. Knob	<b>B</b>	<b>M25</b> 25 bar
Option A w/Cover Cap	<b>C</b>	<b>M100</b> 100 bar
Factory Preset Non-Adj.	<b>F</b>	<b>Setting in psi<sup>†</sup></b>
Factory Preset Hidden	<b>H</b>	(Blank) for Adjustable, or Specify, for example:
Adjust. See page 6.003.1	<b>L</b>	<b>9.0</b> 900 psi
Option C		<b>23.5</b> 2350 psi
w/Lockwire Holes		
<b>Porting</b>		<b>Spring Range</b>
Cartridge Only	<b>0</b>	<b>4</b> 6.9 to 27.6 bar (100 to 400 psi)
SAE 6	<b>6T</b>	<b>15</b> 10.3 to 103 bar (150 to 1500 psi)
SAE 8	<b>8T</b>	<b>30</b> 27.6 to 207 bar (400 to 3000 psi)
1/4 in. BSP*	<b>2B</b>	
3/8 in. BSP*	<b>3B</b>	
<b>Seals</b>		
*BSP Body; U.K. Mfr Only	Buna N (Std.)	<b>N</b>
	Fluorocarbon	<b>V</b>

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