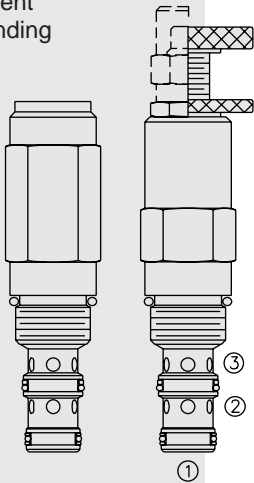


PR10-36 Pressure Reducing/Relieving, Pilot-Operated

Patent Pending



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

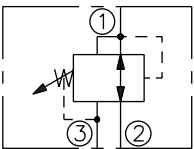
Cavity: VC10-3; See page 9.110.1

Cavity Tool: CT10-3XX; See page 8.600.1

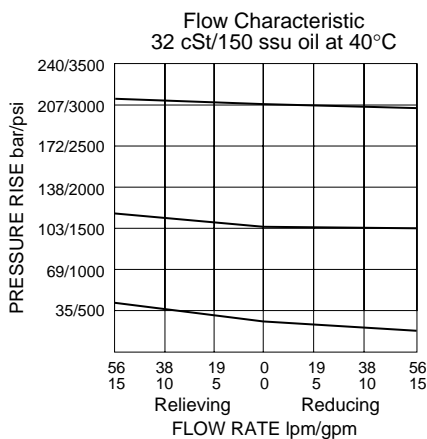
Seal Kit: SK10-3X-BM; See page 8.650.1

SYMBOLS

USASI/ISO:

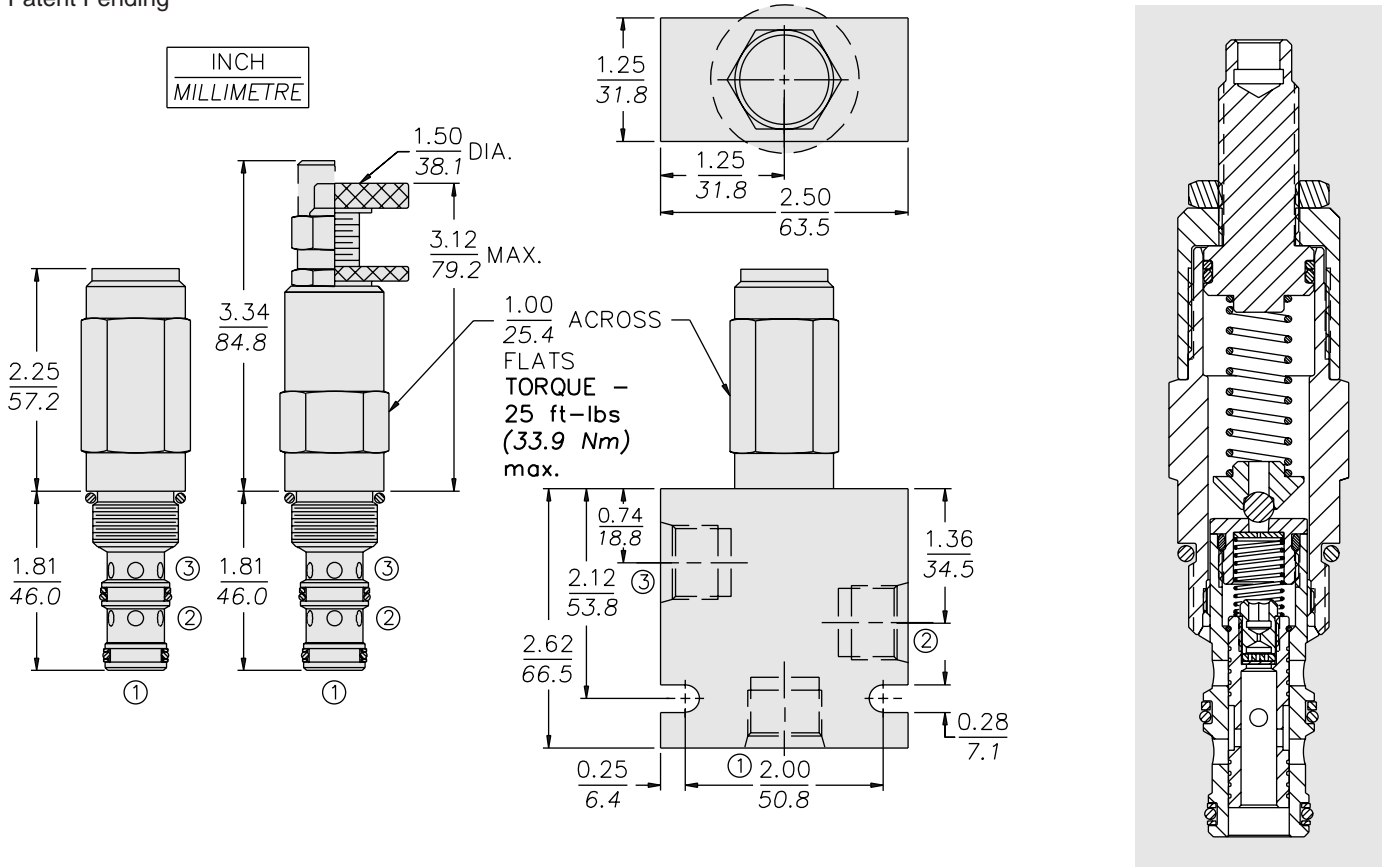


PERFORMANCE (Cartridge Only)



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

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