**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 ➁ to ➀, with the spring chamber constantly drained at ③.

On attainment of a pre-determined pressure at ➀, the cartridge shifts to restrict input flow at ②, thereby regulating pressure at ➀. In this mode, the valve will also relieve ➀ 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:** 241 bar (3500 psi)
- **Proof Pressure:** 517 bar (7500 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 ssu); 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
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

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)

Seals
Buna N (Std.) N
Fluorocarbon V

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