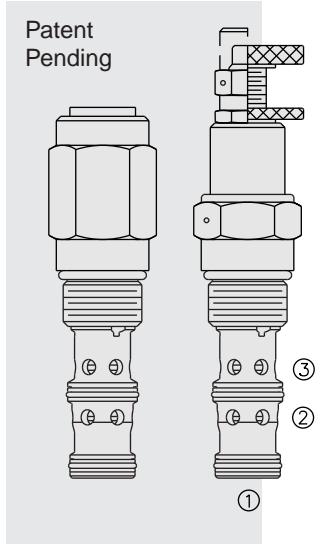


PR12-36 Pressure Reducing/Relieving, Pilot-Operated



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 in secondary circuits.

OPERATION

In its steady state, the **PR12-36** 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 spool shifts to restrict input flow from port ②, thereby regulating pressure at ①. In this mode, the valve will also relieve ① to ③.

Flow Path: Reducing: ② to ①; Relieving: ① to ③.

FEATURES

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Optional spring ranges to 207 bar (3000 psi).

RATINGS

Operating Pressure: Ports ① and ②: 276 bar (4000 psi)

Maximum Tank Pressure: Port ③: 69 bar (1000 psi)

Flow: See Performance Chart

Standard Spring Ranges (Reducing Function):

Code 04: 6.9 to 27.6 bar (100 to 400 psi);

Code 30: 20.7 to 207 bar (300 to 3000 psi)

Maximum Pilot Flow and Leakage: 0.49 lpm (0.13 gpm) with max. control current and with inlet pressure at 276 bar (4000 psi) at regulated flow of 3.8 lpm (1 gpm).

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

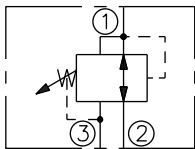
Cavity: VC12-3; See page 9.110.1

Cavity Tool: CT12-3XX; See page 8.600.1

Seal Kit: SK12-3X-BM; See page 8.650.1

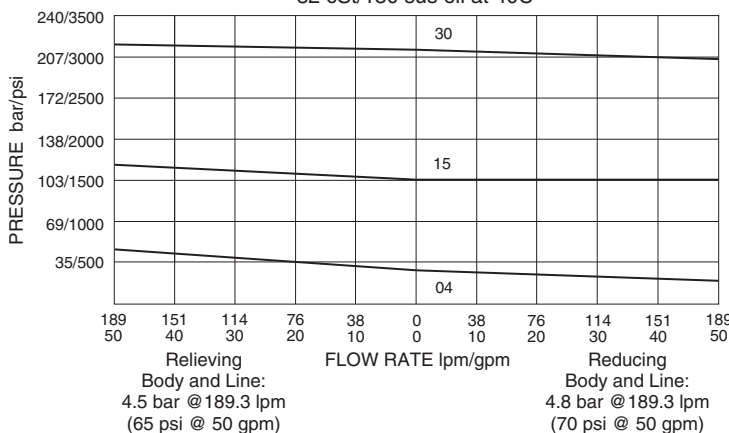
SYMBOL

USASI/ISO:



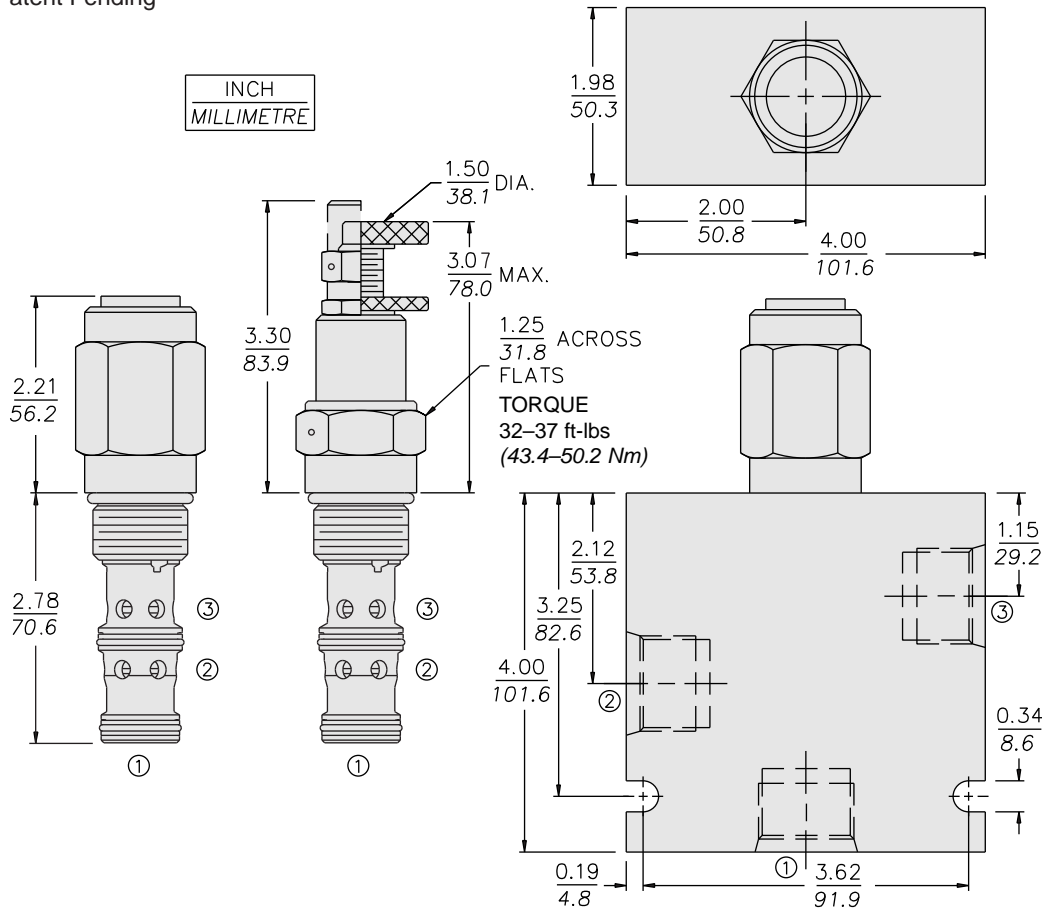
PERFORMANCE (Cartridge Only)

Typical Pressure vs. Flow at Maximum Pressure Setting for Different Spring Ranges
32 cSt/150 sus oil at 40C



DIMENSIONS

Patent Pending



MATERIALS

Cartridge: Weight: 0.39 kg. (0.85 lbs.) with "A" adjustment and "30" spring; 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: 1.13 kg. (2.5 lbs.) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron available; dimensions may differ. See page 8.012.1

TO ORDER

PR12-36 - - - /

<p>Adjustment Option</p> <p>1/4 in. Hex Allen Head A</p> <p>1-1/2 in. Dia. Alum. Knob B</p> <p>Option A w/Cover Cap C</p> <p>Factory Preset Non-Adj. F</p> <p>Factory Preset Hidden Adjustment. (See page 6.003.1) H</p> <p>Option C w/Lockwire Holes L</p>	<p>Porting</p> <p>Cartridge Only 0</p> <p>SAE 8 8T</p> <p>SAE 10 10T</p> <p>SAE 12 12T</p> <p>1/2 in. BSP* 4B</p> <p>3/4 in. BSP* 6B</p>	<p>Seals</p> <p>Buna N (Std.) N</p> <p>Fluorocarbon V</p> <p>Polyurethane P</p>	<p>Setting in bar[†]</p> <p>(Blank) for Adjustable, or Specify, for example:</p> <p>M25 25 bar</p> <p>M100 100 bar</p> <p>Setting in psi[†]</p> <p>(Blank) for Adjustable, or Specify, for example:</p> <p>9.0 900 psi</p> <p>23.5 2350 psi</p>	<p>Spring Range</p> <p>4 6.9 to 27.6 bar (100 to 400 psi)</p> <p>30 20.7 to 207 bar (300 to 3000 psi)</p>
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*BSP Body; U.K. Mfr. Only

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