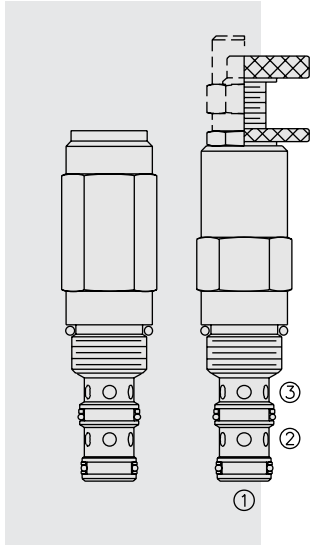


# PR10-32 Pressure Reducing/Relieving



## DESCRIPTION

A screw-in, cartridge-style, direct-acting, 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. It is intended for use in stable input flow circuits.

## OPERATION

In its steady state, the **PR10-32** 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 at approximately 10 bar (150 psi) over the reducing setting.

**Note:** Direct-acting PR series valves may not be suitable for some static load applications. Consult factory.

## FEATURES

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Optional spring ranges to 145 bar (2100 psi).
- Hardened spool and cage for long life.
- Industry common cavity.

## RATINGS

**Operating Pressure:** 207 bar (3000 psi)

**Flow:** See Performance Chart

**Internal Leakage ② to ③:** 82 cc/minute (5 cu. in/minute) max. at ΔP 207 bar (3000 psi)

**Standard Spring Ranges (Reducing Function):**

- 5.5 to 27.6 bar (80 to 400 psi)
- 13.8 to 55.2 bar (200 to 800 psi)
- 20.7 to 103 bar (300 to 1500 psi)
- 27.6 to 145 bar (400 to 2100 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

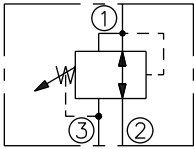
**Cavity:** VC10-3; See page 9.110.1

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

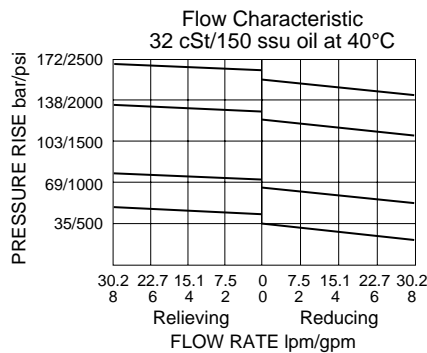
**Seal Kit:** SK10-3X-BM; See page 8.650.1

## SYMBOLS

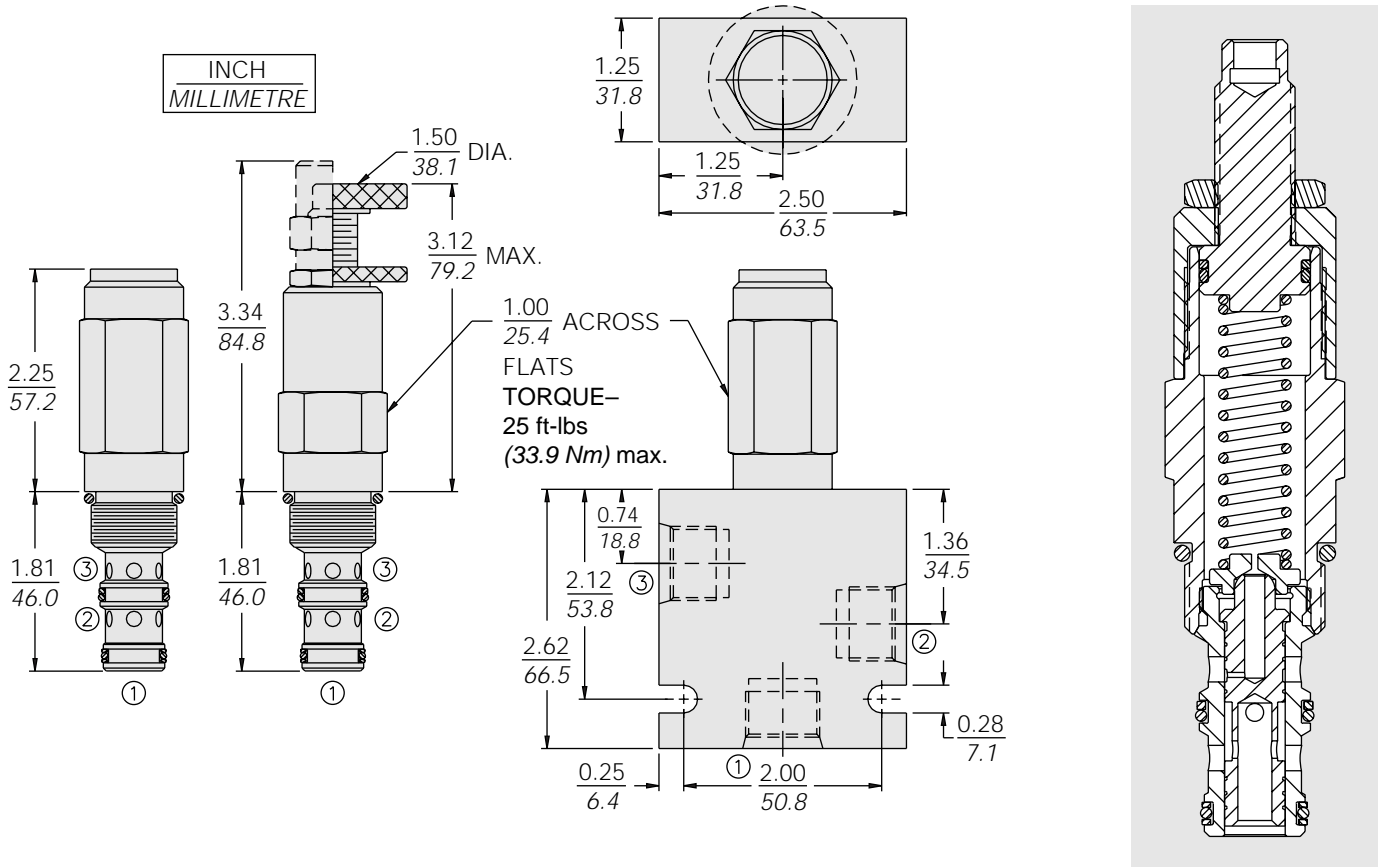
### USASI/ISO:



## PERFORMANCE (Cartridge Only)



**DIMENSIONS**

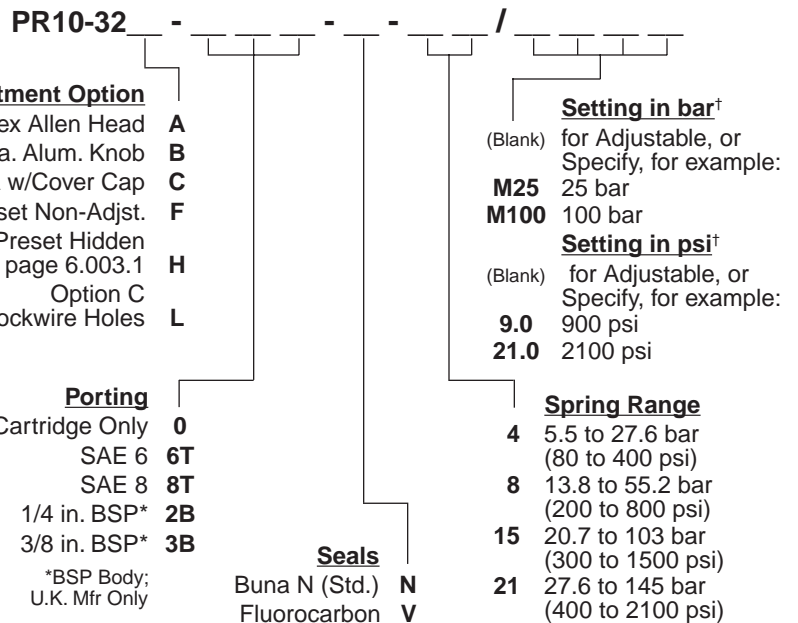


**MATERIALS**

**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 240 bar (3500 psi). Ductile iron bodies available; dimensions may differ. See page 8.010.1.

**TO ORDER**



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