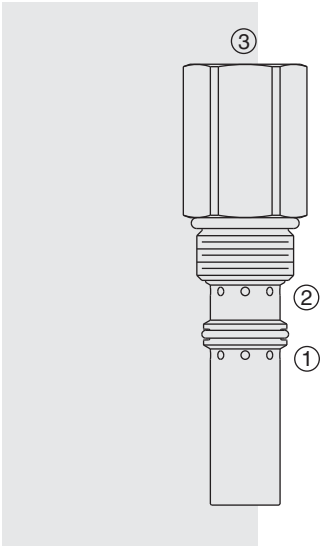


PRES50-30 Pressure Reducing/Relieving



DESCRIPTION

A screw-in, cartridge-style, direct-acting, spool-type reducing/relieving valve 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 **PRES50-30** allows bidirectional flow from ③ to ② with the spring chamber constantly drained at ①. Upon attainment of a predetermined pressure at ②, the valve will shift to block flow at ③, thereby regulating pressure at ②. In this mode, the valve will also relieve port ② to port ① at a variable value over the set reducing pressure.

The tank port pressure is additive to the pressure setting at a ratio of 1:1.

FEATURES

- High Pressure steel adapter on inlet port ③ withstands up to 345 bar (5000 psi).
- Hardened spool and cage for long life.

RATINGS

Maximum Rated Pressure at Supply Port: 345 bar (5000 psi)

Regulated Pressure Range: 31 to 55.2 bar (450 to 800 psi) at no-flow

Maximum Tank Port Pressure: 68.9 bar (1000 psi)

Rated Flow: 11.4 lpm (3 gpm) maximum

Maximum Internal Leakage: 131 ml/minute (8 cu. in./minute)

Temperature: -40 to 100°C with Buna N seals

-26°C to 204°C with Fluorocarbon seals

-54°C to 107°C with Polyurethane 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

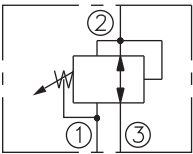
Cavity: VC98-3; See page 9.110.1

Cavity Tool: CT98-3XX; See page 8.600.1

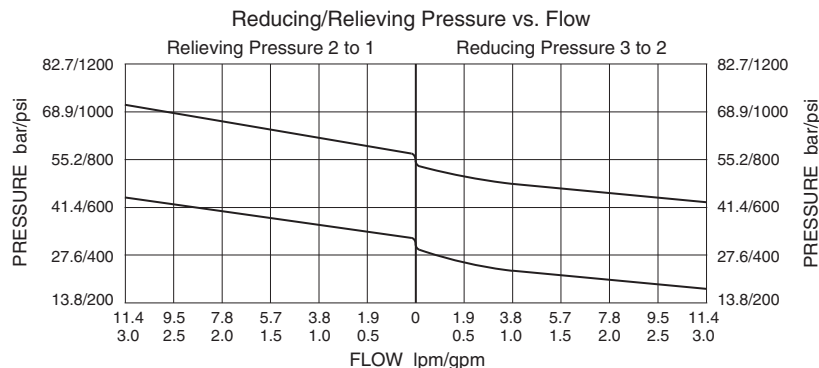
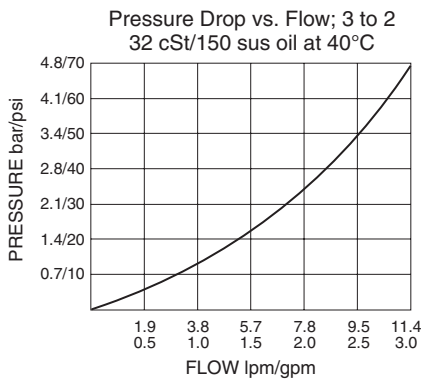
Seal Kit: SK10-2X-0_SPL; See page 8.650.1

SYMBOLS

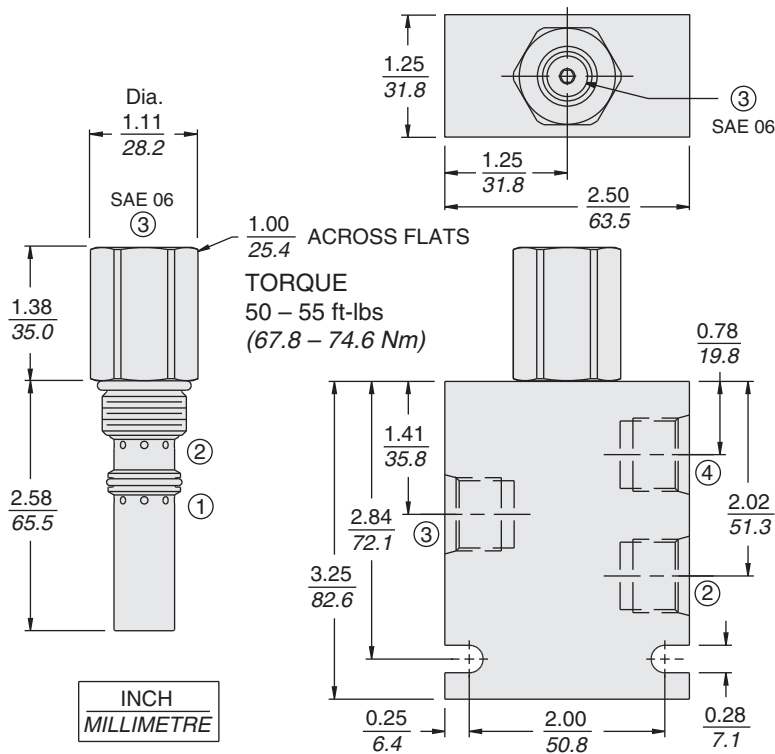
USASI/ISO:



PERFORMANCE (Cartridge Only)



DIMENSIONS



Note: Either body port 2 or body port 3 can be blocked.

MATERIALS

Cartridge: Weight: 0.22 kg. (0.49 lbs.);
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
O-rings standard.

Standard Ported Body: Weight:
0.34 kg. (0.75 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

PRES50-30 - - 08 / 04.5

Porting
Cartridge Only **0**
SAE 6 **6T**
SAE 8 **8T**

Seals
Buna N **N**
Fluorocarbon **V**
Polyurethane **P**

Pressure Setting
04.5 17.2 bar (450 psi)

Spring Range
08 31.0 to 55.2 bar
(450 to 800 psi)

Polyurethane seals are required for
operation over 241 bar/3500 psi.