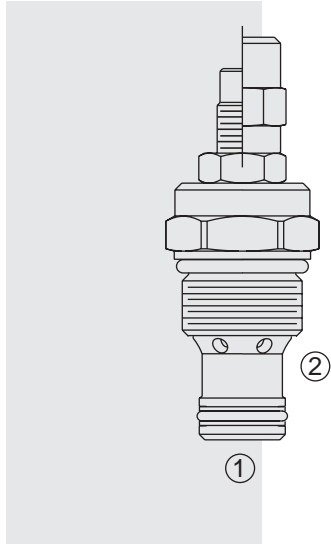


FR50-23 Regulator, Pressure-Compensated,



DESCRIPTION

A screw-in, cartridge-style, adjustable, pressure-compensated, restrictive-type hydraulic flow regulating valve.

OPERATION

The **FR50-23** maintains a constant flow rate out of ② regardless of load pressure changes in the circuit downstream of ② or upstream of ①.

The regulated flow increases from closed to fully open with counter-clockwise rotation of the adjustment screw. The valve will maintain the set flow regardless of pressure variations on the regulated or inlet port. Reverse flow from ② to ① bypasses the control orifice.

FEATURES

- Hardened parts for long life.
- Quiet, modulated response.
- Cost-effective cavity.

RATINGS

Operating Pressure: 345 bar (5000 psi)

Flow Rating: 0.4–11.5 lpm (0.1–3.0 gpm)

Flow Maintenance: ±10% through full pressure range

Internal Leakage ① to ②: 30 ml/minute (1.8 cu. in./minute) at 345 bar (5000 psi)

Temperature: -40 to 120°C

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

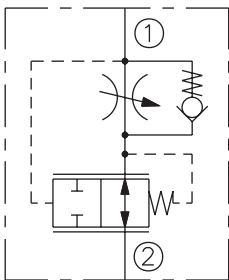
Cavity: VC10-2; See page 9.110.1

Cavity Tool: CT10-2XX; See page 8.600.1

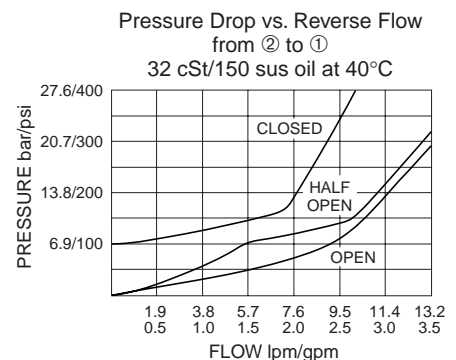
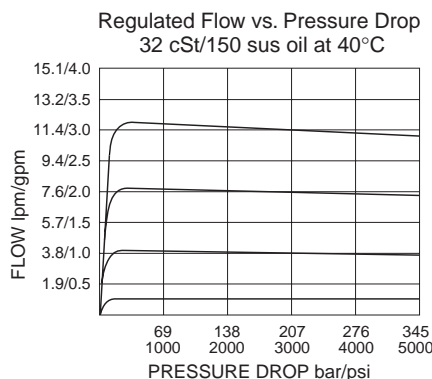
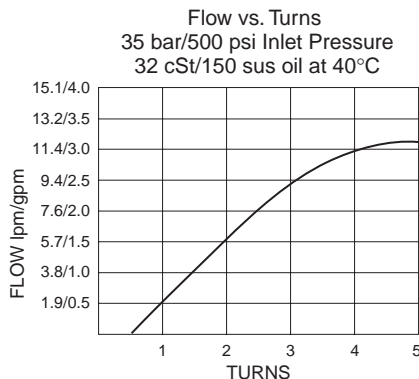
Seal Kit: SK10-2X-M; See page 8.650.1

SYMBOLS

USASI/ISO:



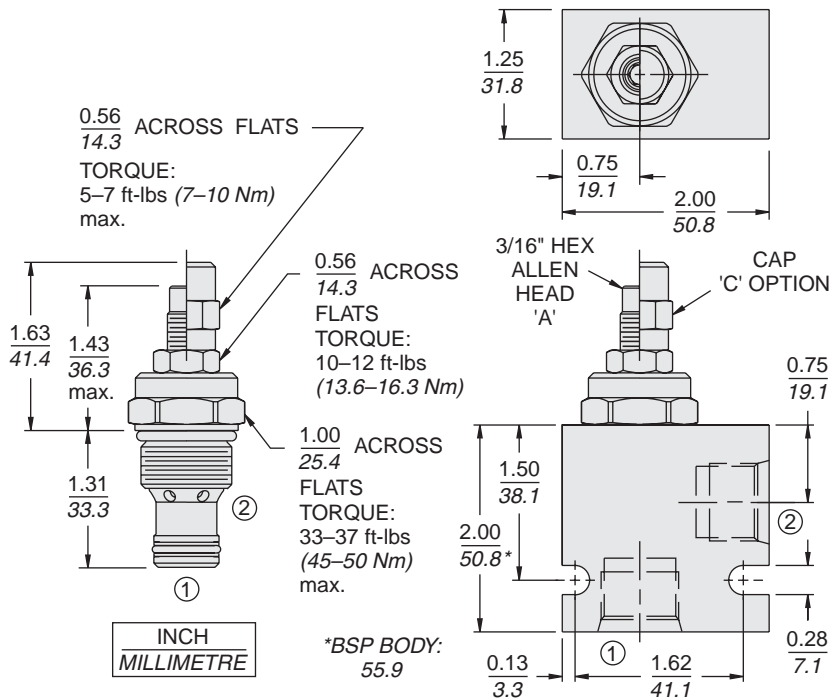
PERFORMANCE



High Pressure

FR50-23

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.14 kg. (0.31 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight:
0.16 kg. (0.35 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

FR50-23

Adjustment Option
3/16" Hex Allen Head
Option 'A' w/Cover Cap



A
C

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

Flow Setting
(Blank) Factory Set at 1.5-2.0 gpm
Setting in gpm
Specify; For example:
1.5 1.5 gpm etc.
Setting in lpm
Specify; For example:
M10 10 lpm etc.

Seals
N Buna N (Std.)
V Fluorocarbon
P Polyurethane (required for operation over 241 bar/3500 psi)