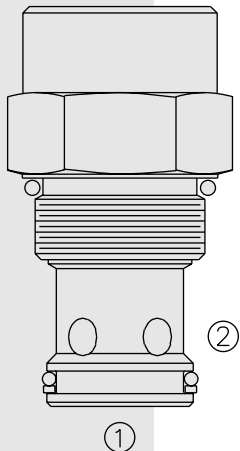


FR16-20F Regulator, Pressure-Compensated



DESCRIPTION

A screw-in, cartridge-style, fixed orifice, pressure-compensated, hydraulic flow regulating valve (restrictive type).

OPERATION

The **FR16-20F** maintains a constant flow rate out of ② regardless of load pressure changes in the circuit downstream of ②.

The fixed control orifice is factory preset to customer flow specification. The valve begins to respond to load changes when the flow through the valve creates a pressure differential across the control orifice greater than 5.5 bar (80 psid), with accurate flow maintenance from 7.6 to 240 bar (300 to 3500 psid). Reverse flow (② to ①) returns through the control orifice and is non-compensated.

FEATURES

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

RATINGS

Operating Pressure: 240 bar (3500 psi)

Flow Settings: 4 lpm (1 gpm) min; 113 lpm (30 gpm) max.

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 ssu)

Installation: No restrictions; See page 9.020.1

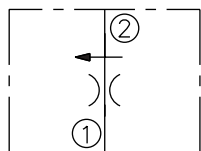
Cavity: VC16-2; See page 9.116.1

Cavity Tool: CT16-2XX; See page 8.600.1

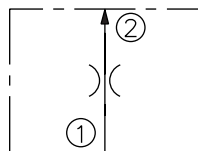
Seal Kit: SK16-2X; See page 8.650.1

SYMBOLS

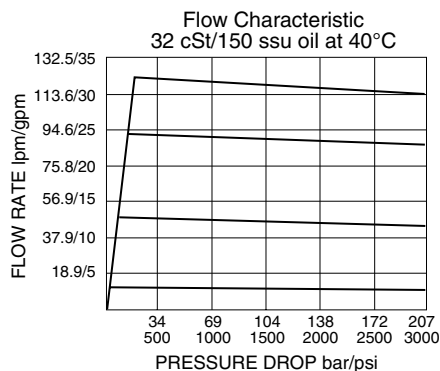
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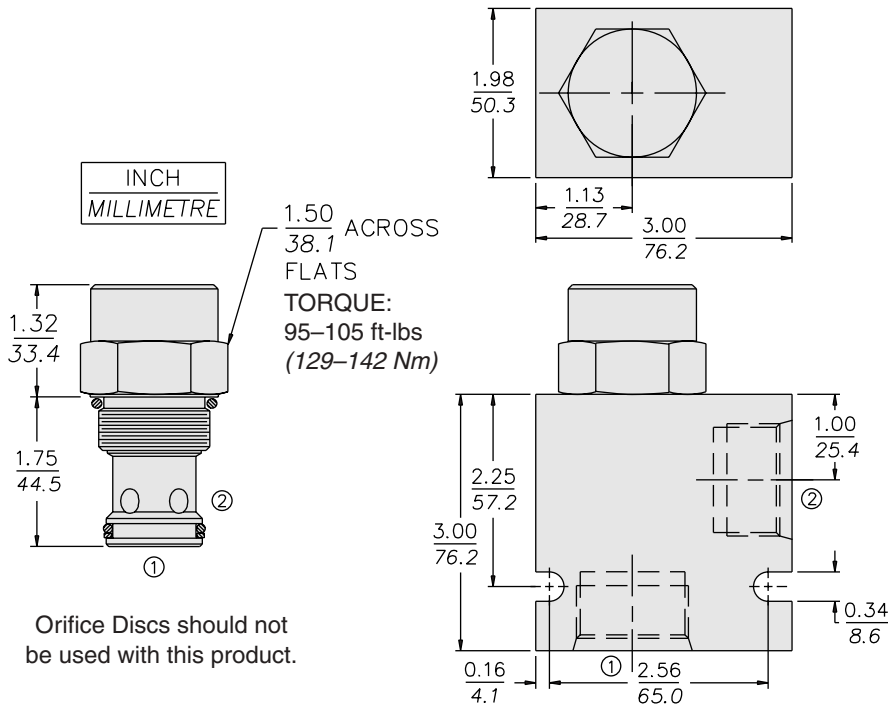
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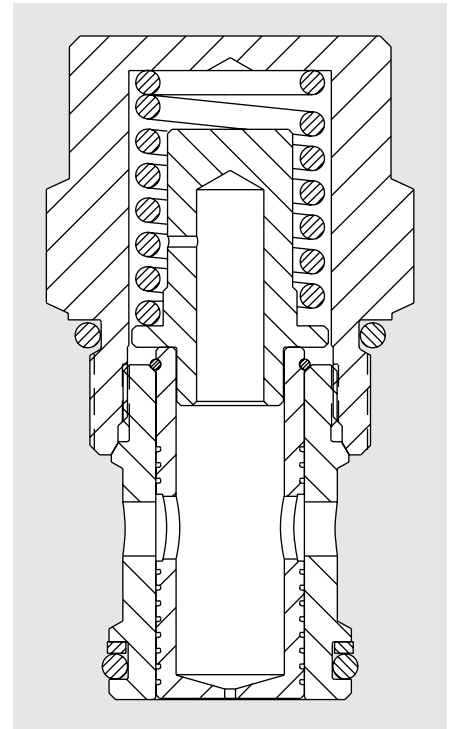
PERFORMANCE



DIMENSIONS



Orifice Discs should not be used with this product.



MATERIALS

Cartridge: Weight: 0.32 kg. (0.70 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight: 0.57 kg. (1.25 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); see page 8.016.1. Ductile iron and steel bodies available; dimensions may differ; consult factory.

TO ORDER

FR16-20F - - - /

Porting

Cartridge Only **0**
SAE 10 **10T**
SAE 12 **12T**
SAE 16 **16T**
3/4 in. BSP* **6B**
1 in. BSP* **8B**

*BSP Body;
U.K. Mfr. Only

Seals

Buna N (Std.) **N**
Fluorocarbon **V**

Setting in lpm

Specify, for example:
M4.0 4.0 lpm
M12.0 12.0 lpm
etc.

Setting in gpm

Specify, for example:
5.0 5.0 gpm
13.0 13.0 gpm
etc.

Drill Size Method

In thousandths of an inch.
Specify, for example:

D030 0.030 in. control orifice hole
etc.

Note: Minimum drill diameter is 0.020 in.
For smaller orifice sizes consult factory.