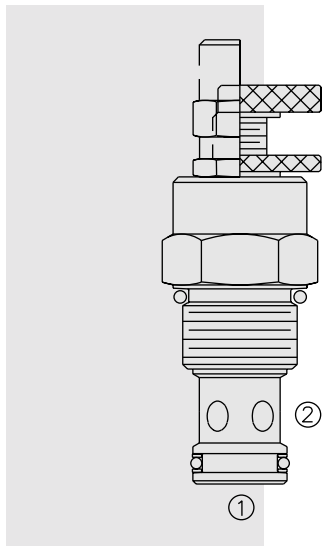


FLOW CONTROLS

FC12-20 Flow Control



DESCRIPTION

A screw-in, cartridge-style, variable orifice, hydraulic flow control valve with reverse flow check.

OPERATION

The FC12-20 adjusts flow passage from ② to ① to full open with counterclockwise rotation.

The cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at ① to open to ②.

FEATURES

- Adjustments cannot be backed out of the valve.
- Desired settings may be locked down.
- Hardened parts for long life.
- Aluminum knob option.
- Positive shut-off.
- Linear adjustment.

RATINGS

Operating Pressure: 240 bar (3500 psi)

Flow: See Performance Chart

Internal Leakage: 0.15 cc/minute (3 drops/minute) max. at 240 bar (3500 psi)

Adjustment Torque:

@ 6.9 bar (100 psi): 0.17 Nm (1.5 lb.-in.)

@ 207 bar (3000 psi): 16.9 Nm (150 lb.-in.)

Standard Bias Spring at Crack: 1.4 bar (20 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 ssu)

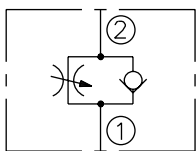
Cavity: VC12-2; See page 9.112.1

Cavity Tool: CT12-2XX; See page 8.600.1

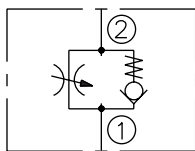
Seal Kit: SK12-2X-M; See page 8.650.1

SYMBOLS

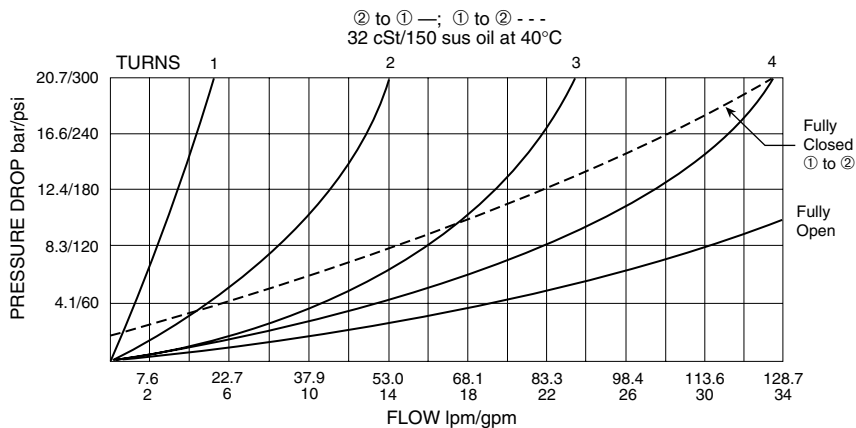
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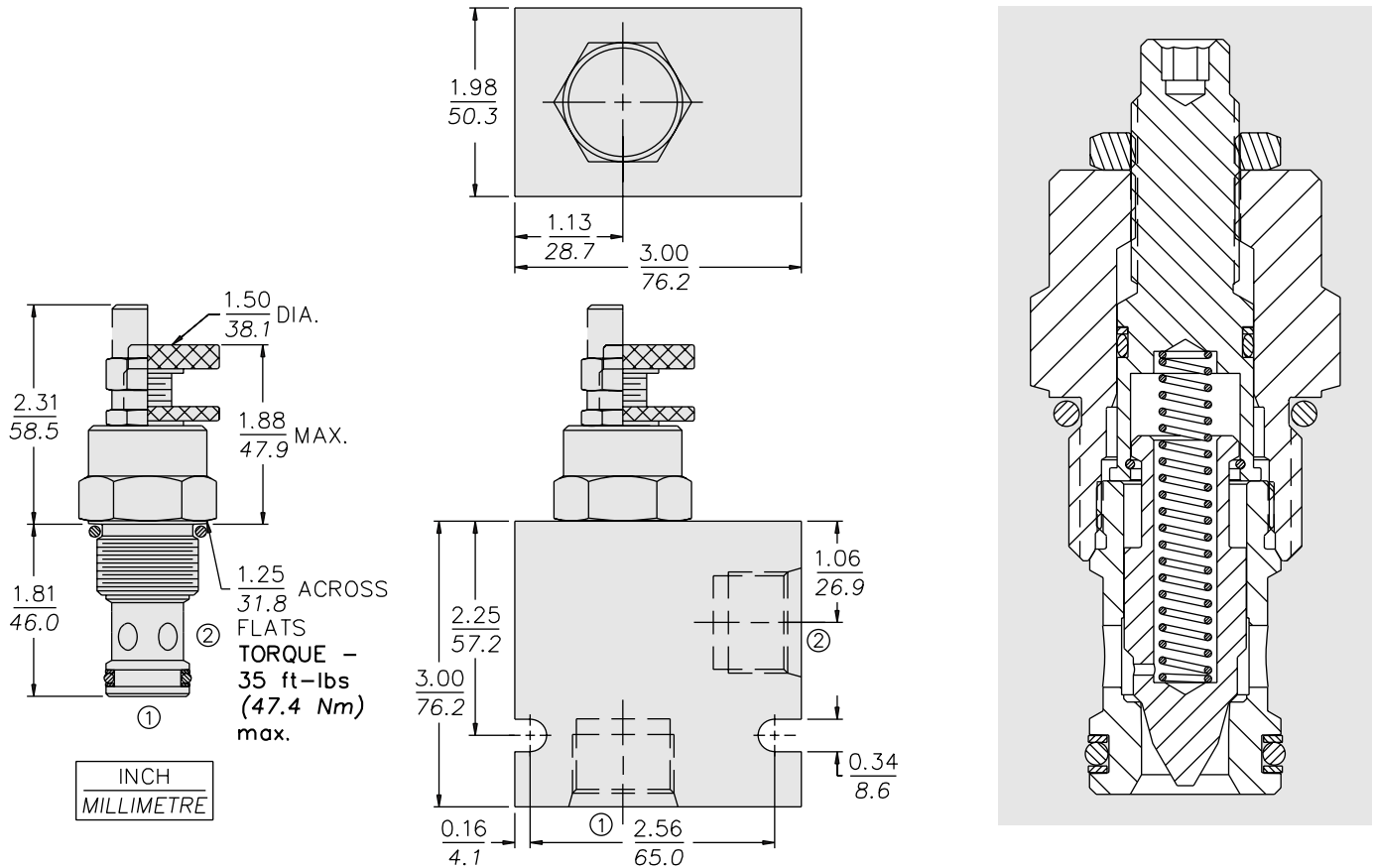


PERFORMANCE (Cartridge Only)



FC12-20

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.20 kg. (0.45 lbs.); Steel with hardened work surfaces; Zinc-plated exposed surfaces; Buna N O-rings and polyester elastomer back-up 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 8.012.1. Ductile iron and steel bodies available; dimensions may differ; consult factory.

TO ORDER

FC12-20 - - -

- Adjustment Option**
- 1/4 in. Hex Allen Head **A**
 - 1-1/2 in. Dia. Alum. Knob **B**
 - Option A with Cover Cap **C**
 - Top Knob with Lock Nut **D**
 - Top Knob Only **E**

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

- Porting**
- 0** Cartridge Only
 - 10T** SAE 10
 - 12T** SAE 12
 - 16T** SAE 16
 - 4B** 1/2 in. BSP*
 - 6B** 3/4 in. BSP*
 - 8B** 1 in. BSP*

*BSP Body; U.K. Mfr. Only