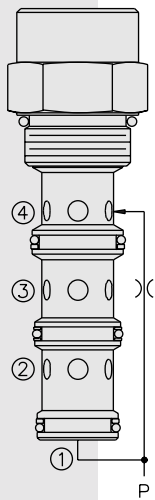


EC16-40 Pressure Compensator



DESCRIPTION

A screw-in, cartridge-style pressure-compensating element, intended for use with a remote fixed or variable orifice to yield a three-port (bypass-type), pressure-compensated, flow regulating hydraulic valve.

OPERATION

The **EC16-40** maintains a constant flow rate from ③ regardless of load pressure changes in the circuit downstream of ③.

The cartridge maintains a constant differential pressure from circuit point P to port ③ (see USASI Symbol), thereby regulating the hydraulic flow rate between the two points in the circuit. The EC16-40 is a priority type regulator, delivering pump flow first to ③, then bypassing excess to ②. All ports may be fully pressurized.

FEATURES

- Hardened parts for long life.
- Quiet, modulated response.
- Industry common cavity.

RATINGS

Operating Pressure: 240 bar (3500 psi)

Flow Rate: 100 lpm (26.5 gpm) max. regulated; 180 lpm (47.5 gpm) max. input.

Pressure at ① begins to rise higher than compensating pressure differential when bypass flow exceeds 80 lpm (21 gpm).

Standard Compensator Bias Spring: 5.5 bar (80 psid)

Flow Maintenance: 7.57 to 98.4 lpm (2 to 26 gpm) settings $\pm 10\%$

Temperature: -40 to 120°C

Filtration: See page 8.010.1

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 8.020.1

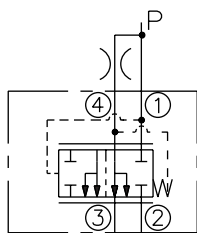
Cavity: VC16-4; See page 8.116.2

Cavity Tool: CT16-4XX; See page 8.600.1

Seal Kit: SK16-4X-TMB; See page 8.650.1

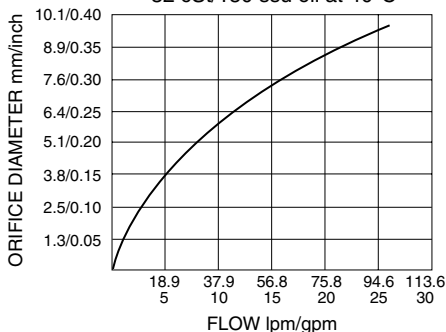
SYMBOLS

USASI/ISO:



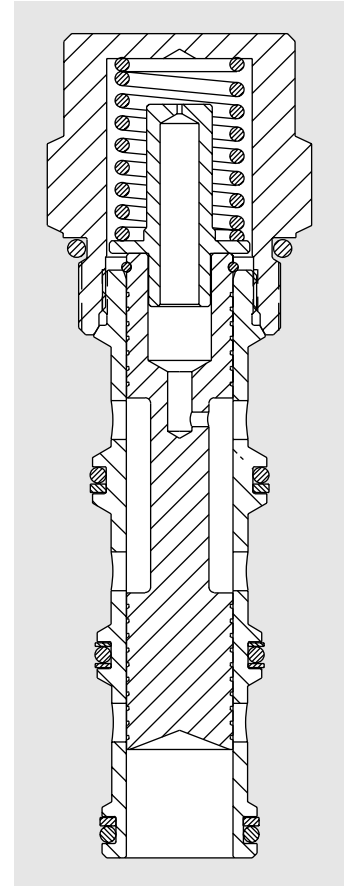
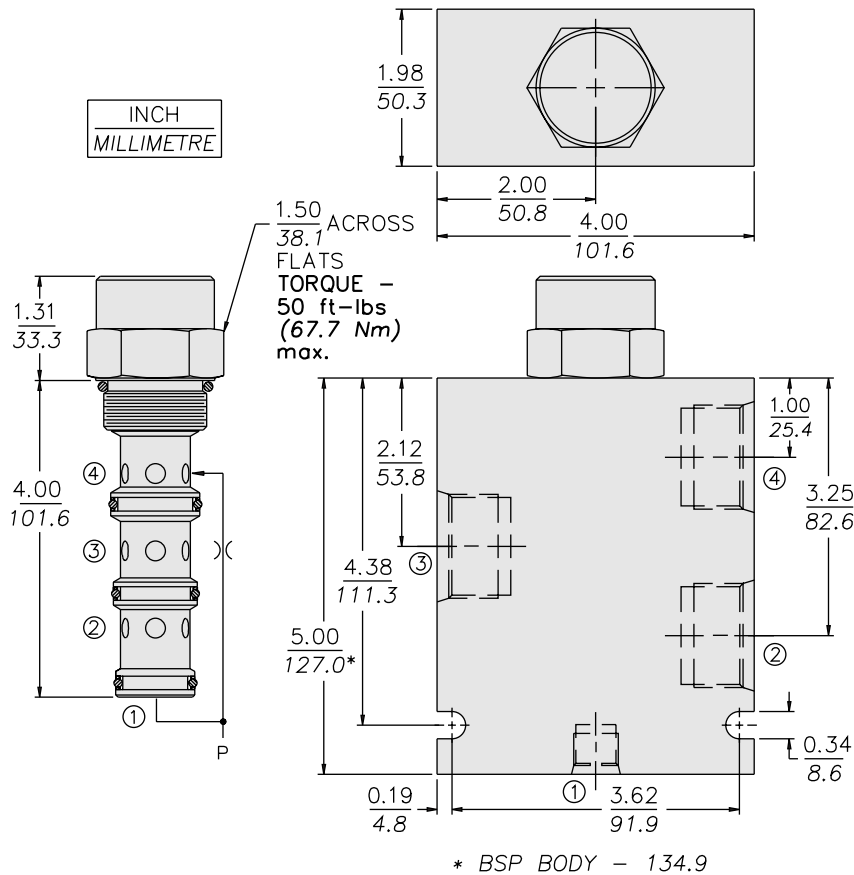
PERFORMANCE (Cartridge Only)

Output Flow vs. Orifice Dia.
with 80 psid Spring
32 cSt/150 ssu oil at 40°C



EC16-40

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.36 kg. (0.80 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight: 1.50 kg. (3.30 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

EC16-40 -

Porting
Cartridge Only 0
SAE 12, SAE 6 Pilot 12T
SAE 16, SAE 6 Pilot 16T

Compensator Spring

40 2.8 bar (40 psid)
80 5.5 bar (80 psid) standard
160 11.0 bar (160 psid)

Seals

N Buna N (Std.)
V Fluorocarbon