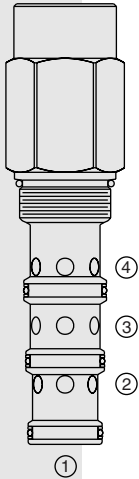


EC42-M42 Pressure Compensator



DESCRIPTION

A screw-in, cartridge-style priority-on-demand pressure-compensator with static load sense.

OPERATION

The EC42-M42 provides priority flow in the required amount, while allowing excess flow to be used for auxiliary functions. With port ③ providing inlet flow, port ④ will deliver the required priority flow regardless of load pressure. Excess flow exits at ②. Port ① is the load sense port. All ports may be fully pressurized.

NOTE: 0.031 in. (0.79 mm) orifice is recommended to be installed in the load sense line at port ① for better stability.

FEATURES

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

RATINGS

Operating Pressure: 241 bar (3500 psi)

Maximum Input Flow: 303 lpm (80.0 gpm)

Maximum Priority Flow: 208 lpm (55.0 gpm) with 10.3 bar (150 psi) spring; 151 lpm (40.0 gpm) with 5.5 bar (80 psi) spring

Maximum Bypass Flow: 208 lpm (55.0 gpm) with 10.3 bar (150 psi) spring; 151 lpm (40.0 gpm) with 5.5 bar (80 psi) spring

Flow Maintenance: see performance chart

Temperature: -40 to 120°C with Buna N 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 ssu)

Installation: No restrictions; See page 9.020.1

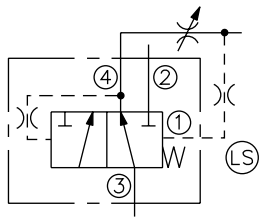
Cavity: VC42-M4; See page 9.142.1

Cavity Tool: CT42-M4XX; See page 8.600.1

Seal Kit: SK42-4X-MMM; See page 8.650.1

SYMBOLS

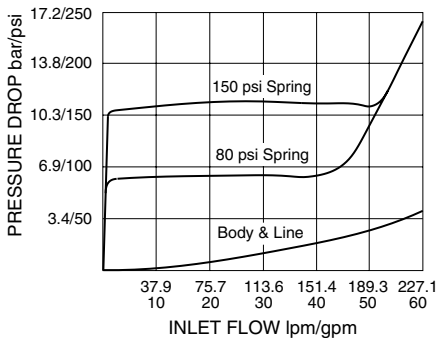
USASI/ISO:



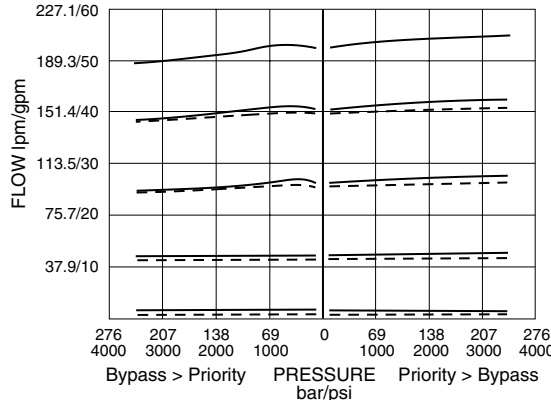
Note: This valve, the EC42-M42, replaces the older EC42-M41 functionally, although the two valves have different port logic. We will continue to provide the EC42-M41 for existing customers, but recommend conversion to the new EC42-M42 for new designs. For more information consult factory.

PERFORMANCE (Cartridge Only)

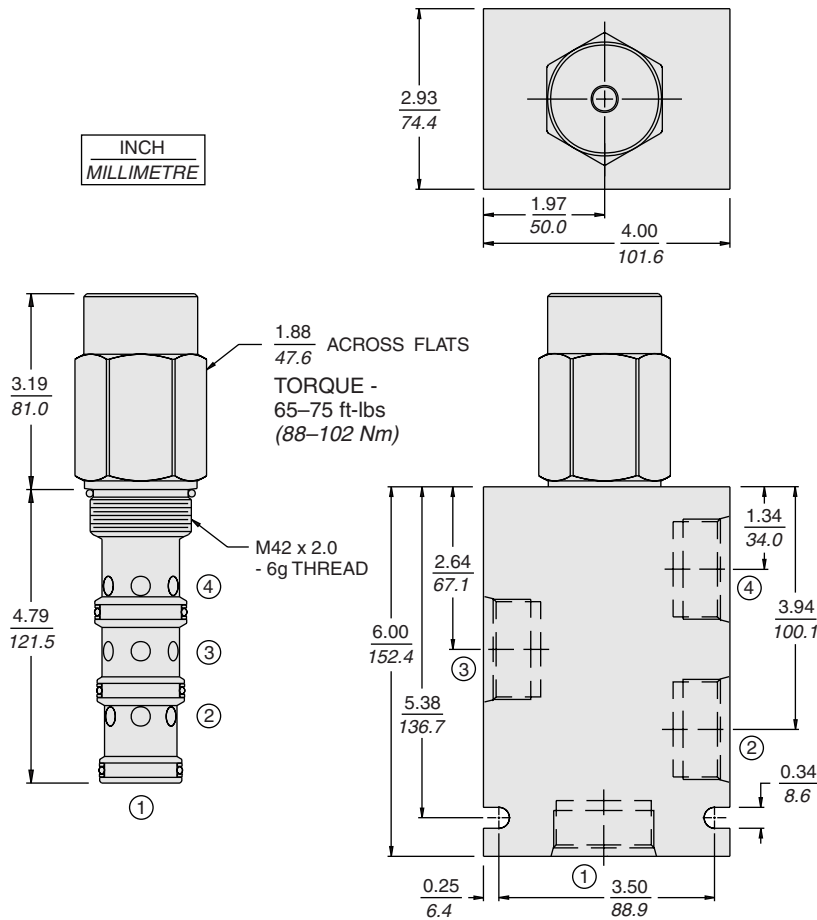
Pressure Drop thru Bypass vs. Inlet Flow with ④ closed; no load at ②
0.031 in. (0.79 mm) Orifice in Load Sense Line
32 cSt/150 sus oil at 40°C



Priority Flow vs. Pressure at 3500 psi (241 bar), 60 gpm (227 lpm) Inlet
0.031 in. (0.79 mm) Orifice in Load Sense Line
150 psi Spring: —; 80 psi Spring: - - - -
32 cSt/150 sus oil at 40°C



DIMENSIONS



MATERIALS

Cartridge: Weight: 1.56 kg. (3.44 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight: 0.34 kg. (0.75 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); see page 8.042.1. Ductile iron and steel bodies available; dimensions may differ; consult factory.

TO ORDER

EC42-M42 -

Porting
Cartridge Only **0**
SAE 12 **12T**
SAE 16 **16T**
SAE 20 **20T**

Bias Spring
80 5.5 bar (80 psid)
150 10.3 bar (150 psid)

Seals
N Buna N (Std.)
V Fluorocarbon