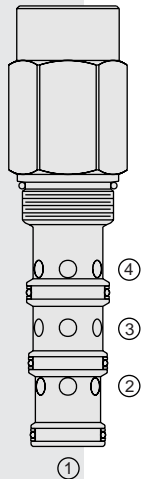


EC42-M43 Pressure Compensator



DESCRIPTION

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

OPERATION

The **EC42-M43** 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 sus); See Temperature and Oil Viscosity, page 9.060.1

Installation: No restrictions; See page 9.020.1

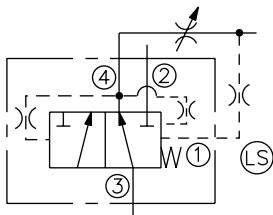
Cavity: VC42-M4; See page 9.142.1

Cavity Tool: CT42-M4XX; See page 8.600.1

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

SYMBOLS

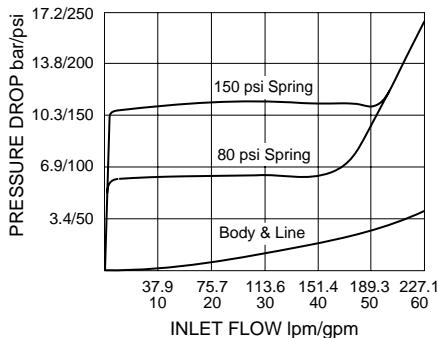
USASI/ISO:



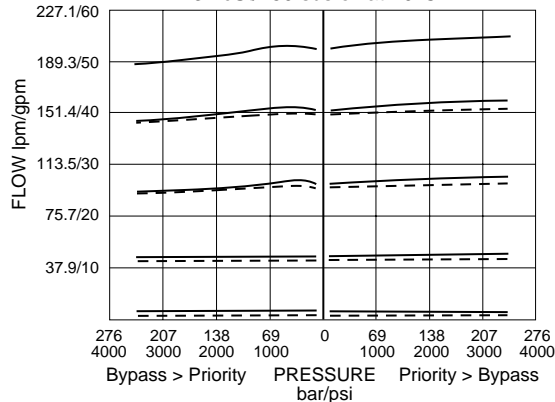
Note: This valve, the EC42-M43, replaces the older EC42-M41 functionally, although the two valves have different port logic. We will continue to provide the EC42-M41 for existing customers, but recommend conversion to the new EC42-M43 for new designs. For more information consult factory.

PERFORMANCE (Cartridge Only)

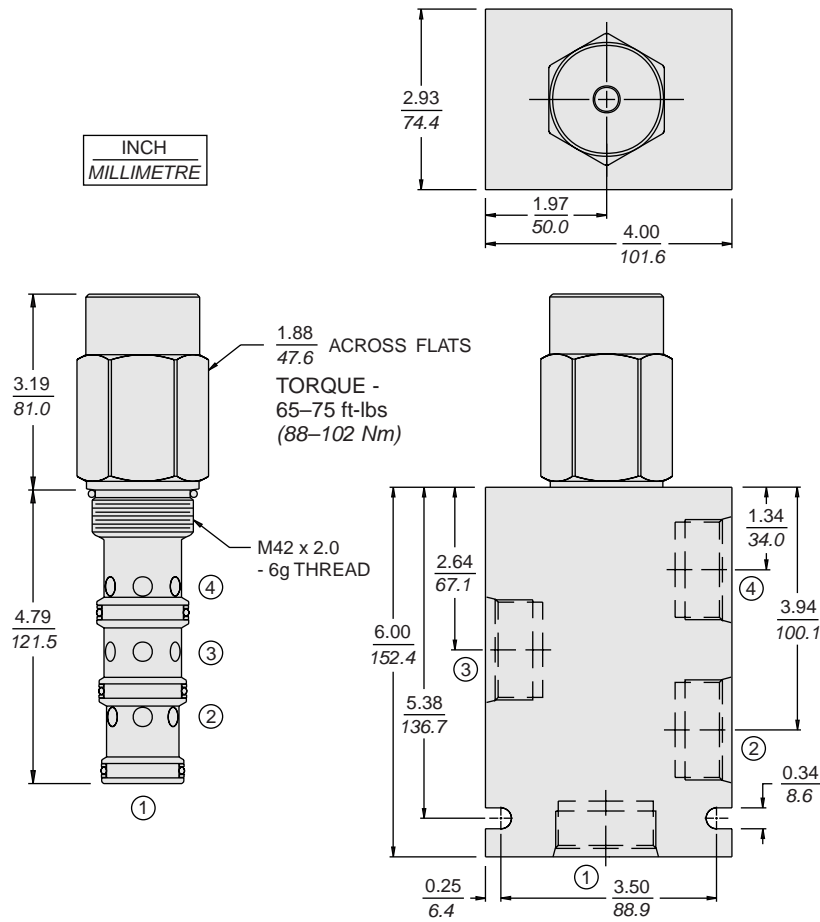
Pressure Drop thru Bypass vs. Inlet Flow with ④ closed; no load at ②
0.031 in. (0.79 mm) Orifice in Load Sense Line
32 cSt/150 sus oil at 40°C



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:
2.8 kg. (6.2 lbs.) Anodized high-
strength 6061 T6 aluminum alloy,
rated to 207 bar (3000 psi). Ductile
iron bodies available; dimensions
may differ. See page 8.042.1

TO ORDER

