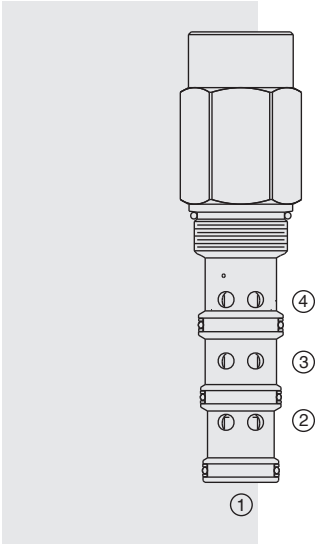


EC42-M42 Pressure Compensator with Static



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

- Priority-on-demand.
- Static load sense.
- Hardened parts for long life.
- Quiet, modulated response.
- Industry common cavity.

RATINGS

Operating Pressure: 241 bar (3500 psi)

Proof Pressure: 345 bar (5000 psi)

Burst Pressure: 896 bar (15000 psi)

Maximum Input Flow: 303 lpm (80.0 gpm)

Maximum Priority Flow: 208 lpm (55 gpm) with 10.3 bar (150 psi) spring;
171 lpm (45 gpm) with 7.6 bar (110 psi) spring; 40 gpm (151 lpm) with 5.5 bar (80 psi) spring

Temperature: -40 to 120°C (-40 to 250°F) with Buna N seals;
-26 to 204°C (-15 to 400°F) with fluorocarbon seals;
-54 to 107°C (-65 to 225°F) with polyurethane 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

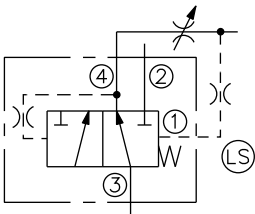
Installation: No restrictions; See page 9.020.1

Cavity: VC42-M4; See page 9.142.1

Cavity Tool: CT42-M4XX; See page 8.600.1

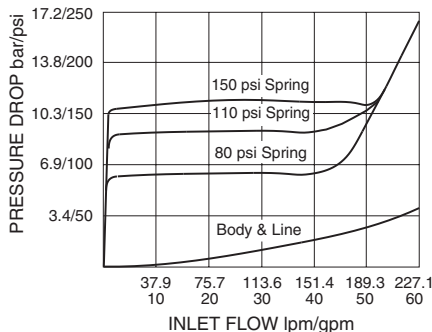
Seal Kit: SK42-4X-MMM; See page 8.650.1

ISO SYMBOL

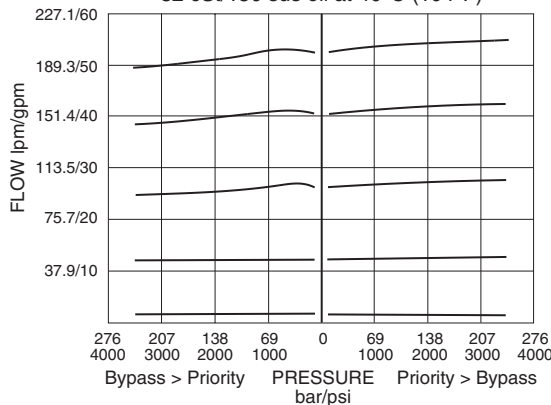


PERFORMANCE (Cartridge Only)

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



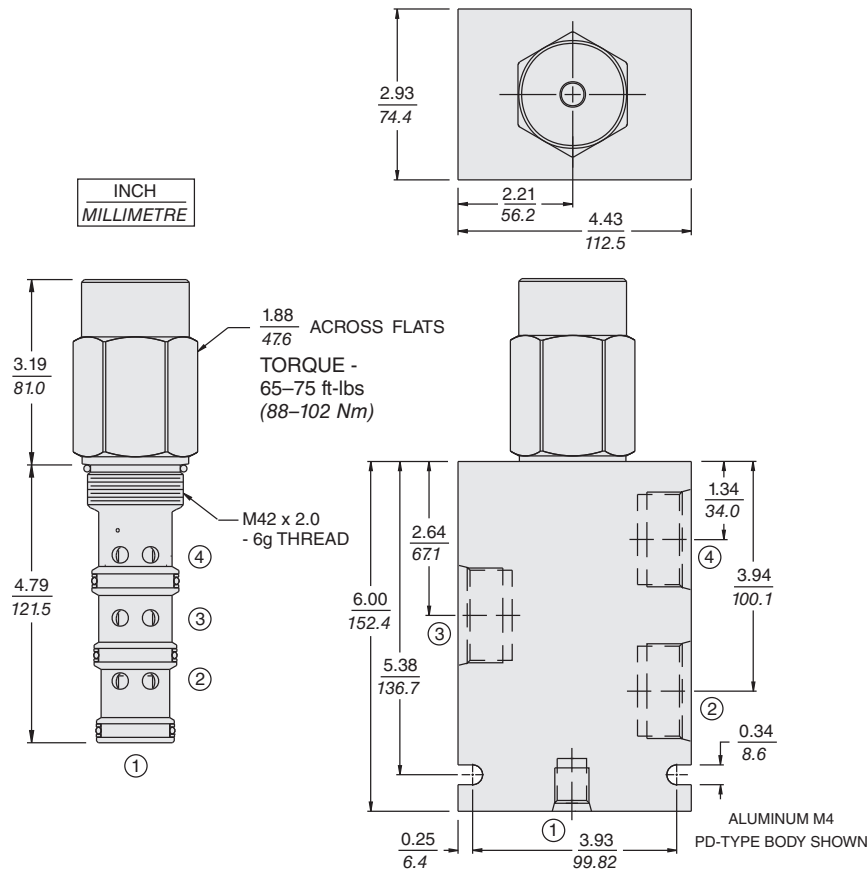
Priority Flow vs. Pressure
at 3500 psi (241 bar), 60 gpm (227 lpm) Inlet
0.031 in. (0.79 mm) Orifice in Load Sense Line
32 cSt/150 sus oil at 40°C (104°F)



Load Sense, Priority-On-Demand

EC42-M42

DIMENSIONS



MATERIALS

Cartridge: Weight: 1.56 kg (3.44 lb)
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 lb) Anodized high-strength aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.042.1.

TO ORDER

EC42-M42 -

Porting
Cartridge Only 0
SAE 16 16HT
SAE 20 20HT
SAE 20 20TD

Bias Spring
80 5.5 bar (80 psid)
110 7.6 bar (110 psid)
150 10.3 bar (150 psid)

Seals
N Buna N (Std.)
V Fluorocarbon
P Polyurethane