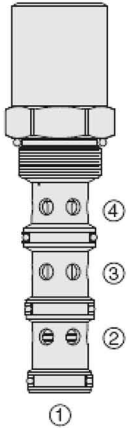


Part number:

EC16-42

PRIORITY ON DEMAND PRESSURE COMPENSATOR WITH STATIC LOAD SENSE

Overview



Description

EC16-42 is a screw-in, cartridge style, priority on demand pressure compensator valve with static load sense. Intended to provide priority flow in required amount, while allowing excessive flow to be used for auxiliary functions.

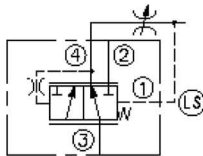
Operation

With inlet flow at port 3, the EC16-42 will deliver required priority flow at port 4 regardless of load pressure. Excessive flow exits at port 2 and port 1 is the load sense port. All ports may be fully pressurized.

Features

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

Symbol



Ratings

Pressure Ratings

| | |
|-----------------|----------------------|
| Pressure rating | 241 bar (3500 psi) |
| Proof pressure | 690 bar (10000 psi) |
| Burst pressure | 1275 bar (18500 psi) |

Flow Ratings

| | | |
|----------------------|---|---|
| Inlet flow rating | 115 lpm (30.0 gpm) | - Note: Maximum, with compensating spring 5.5 bar (80 psi) |
| | 150 lpm (40.0 gpm) | - Note: Maximum, with compensating spring 10.3 bar (150 psi) |
| | 189 lpm (50.0 gpm) | - Note: Maximum, with 15.2 bar (220 psi) |
| Priority flow rating | - Note: 80% of input flow when priority pressure exceeds bypass pressure; 50% of input flow when bypass pressure exceeds priority pressure | |

Temperature Ratings

| | | |
|-----------------------------|-------------------------------|--|
| Operating fluid temperature | -40 to 100 °C (-40 to 212 °F) | - Note: With buna N seals |
| | -26 to 204 °C (-15 to 400 °F) | - Note: With fluorocarbon seals |
| | -54 to 107 °C (-65 to 225 °F) | - Note: With polyurethane seals |
| | -54 to 107 °C (-65 to 225 °F) | - Note: With urethane seals |
| Storage temperature | -40 to 70 °C (-40 to 160 °F) | |
| Ambient temperature | -40 to 70 °C (-40 to 160 °F) | |

Other Ratings

| | |
|----------------------|--|
| Corrosion protection | 960 hr salt spray per ASTM b117 (gec16-42) |
|----------------------|--|

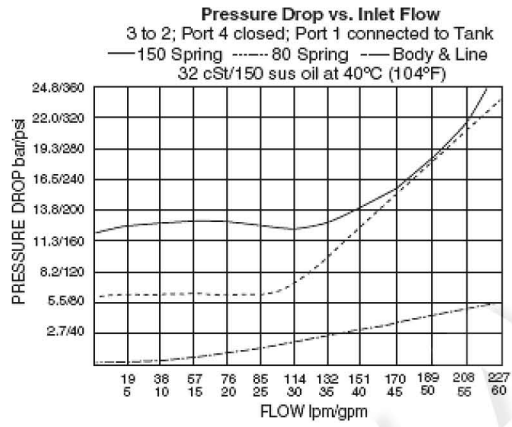
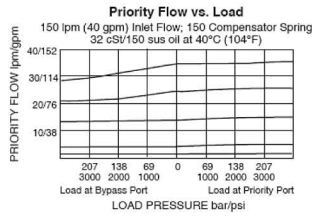
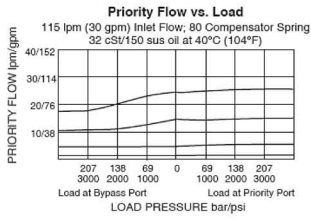
Operating Parameters

| | |
|---------------------------------------|--|
| Fluids | Mineral based or synthetic hydraulic fluid with lubricating properties |
| Fluid viscosity range | 7.4 to 420 cSt |
| Maximum operating contamination level | 18/16/13 per ISO 4406 |

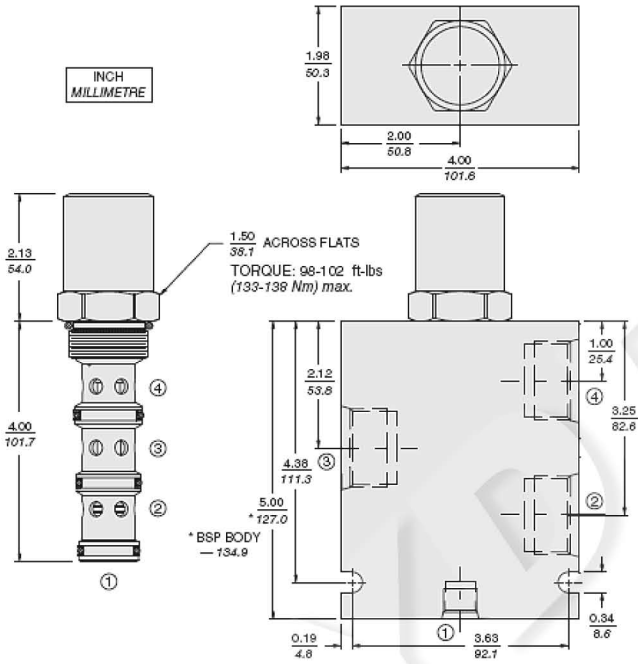
Properties

Unit weight 0.67 kg (1.48 lb)
 Internal wetted surface area 425 cm² (65.9 in²)

Performance



Dimensions



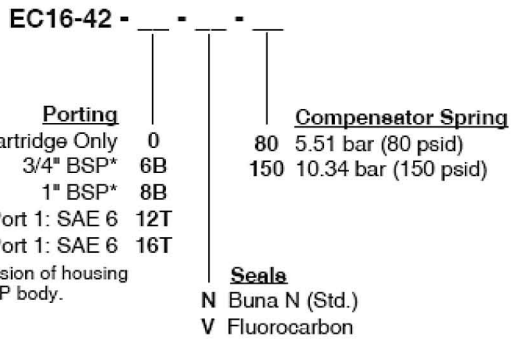
Installation Specifications

Cavity VC16-4
 Cartridge installation torque 133 to 138 N-m (98 to 102 ft-lb)
 Orientation restriction None

Accessories

Seal kit SK16-4X-MMM - Note: X = seal option
 SK10-4U-O - Note: Urethane

Order Code



Model Options

EC16-42-H-J-R

H Line Body

| CODE | DESCRIPTION |
|------|---------------------|
| 0 | No Body |
| 12TD | Ductile Iron SAE 12 |
| 16TD | Ductile Iron SAE 16 |

J Seal

| CODE | DESCRIPTION |
|------|---------------|
| N | Buna-N |
| V | Fluorocarbon |
| P | Polyurethane |
| U | PPDI Urethane |

R Compensator Spring

| CODE | DESCRIPTION |
|------|------------------------|
| 80 | 80 Compensator Spring |
| 150 | 150 Compensator Spring |
| 220 | 220 Compensator Spring |