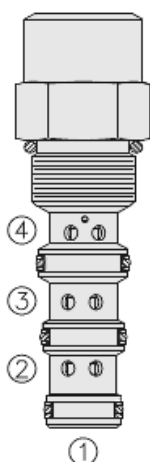




Overview



Description

EC10-42 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.

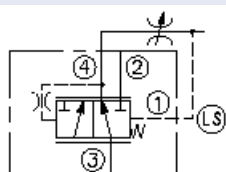
Operation

With inlet flow at port 3, the EC10-42 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 | 345 bar (5000 psi) |
| Burst pressure | 1034 bar (15000 psi) |

Flow Ratings

| | | |
|----------------------|-------------------|--|
| Inlet flow rating | 45 lpm (12.0 gpm) | - Note: Maximum |
| Priority flow rating | 30 lpm (8.0 gpm) | - Note: With 5.5 bar (80 psi) compensating spring |
| | 38 lpm (10.0 gpm) | - Note: With 10.3 bar (150 psi) compensating spring |

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 |
| 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 (model number - gec10-42) |
|----------------------|---|

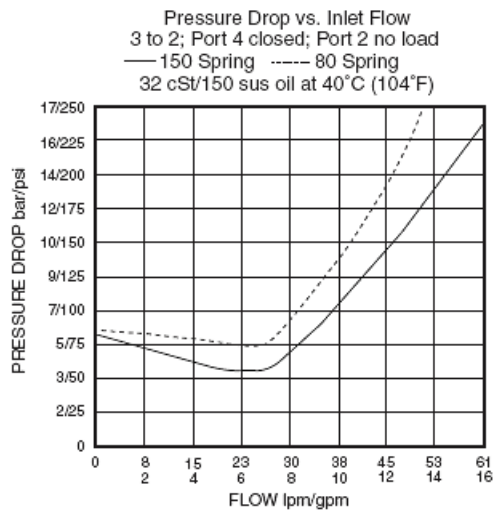
Operating Parameters

| | |
|---------------------------------------|--|
| 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 |

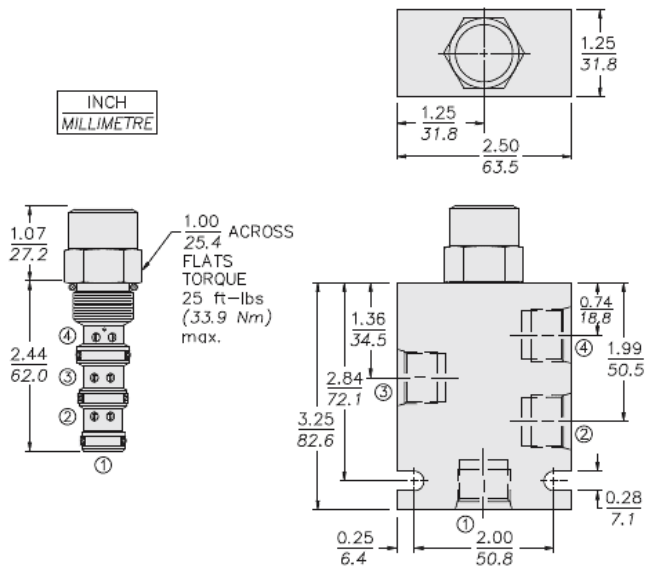
Properties

| | |
|------------------------------|---|
| Unit weight | 0.18 kg (0.40 lb) |
| Internal wetted surface area | 172 cm ² (26.7 in ²) |

Performance



Dimensions



Installation Specifications

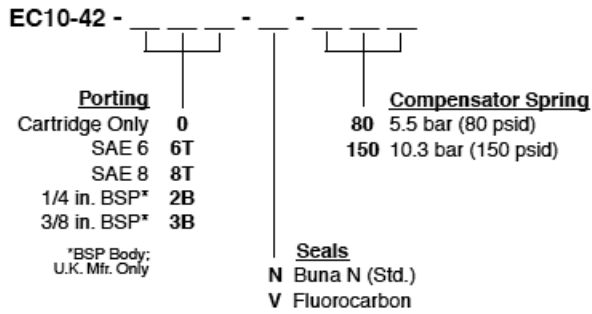
| | |
|-------------------------------|-------------------------------|
| Cavity | VC10-4 |
| Cartridge installation torque | 33 to 35 N-m (24 to 26 ft-lb) |
| Maximum allowable torque | 67.8 N-m (50 ft-lb) |
| Orientation restriction | None |

Accessories

Seal kit SK10-4X-MMM - **Note:** X = seal option



Order Code



Model Options

EC10-42-H-J-R

H Line Body

| CODE | DESCRIPTION |
|------|--------------------|
| 0 | No Body |
| 6T | Aluminum SAE 6 |
| 8T | Aluminum SAE 8 |
| 6TD | Ductile Iron SAE 6 |

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 |