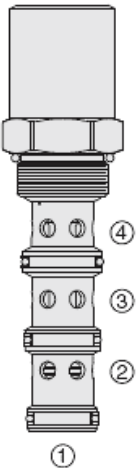




Overview



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.

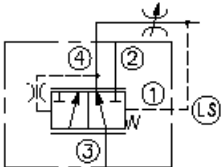
Operation

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)
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Operating Parameters

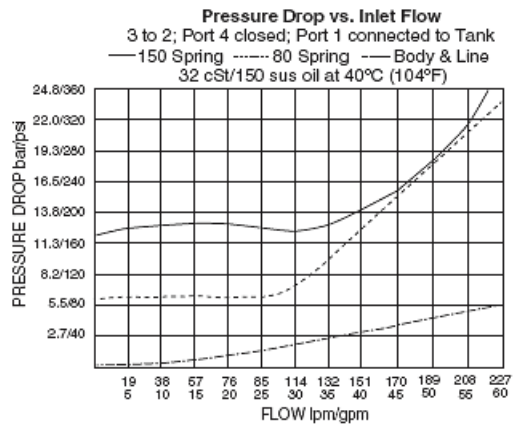
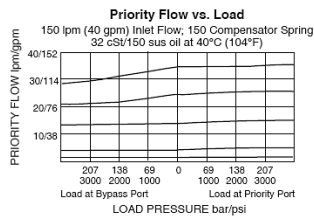
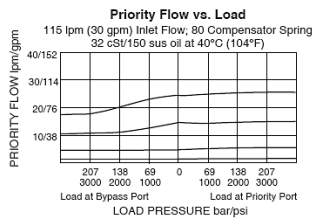
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406



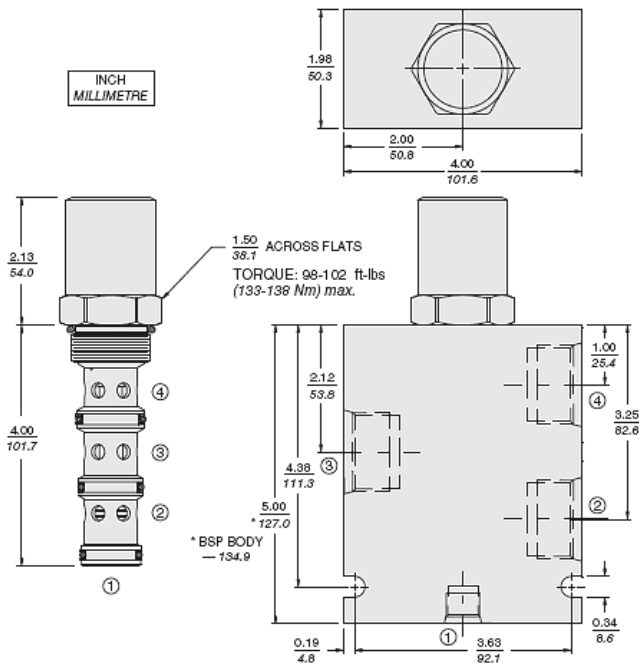
Properties

Unit weight	0.67 kg (1.48 lb)
Internal wetted surface area	425 cm ² (65.9 in ²)

Performance



Dimensions



Installation Specifications

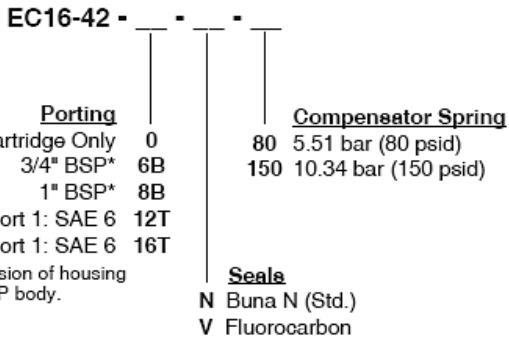
Cavity	VC16-4
Cartridge installation torque	133 to 138 N-m (98 to 102 ft-lb)
Orientation restriction	None

Accessories

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



Order Code



POSITION	CODE	DESCRIPTION
		EC16-42-H-J-R
H		Line Body
H	0	No Body
H	12TD	Ductile Iron SAE 12
H	16TD	Ductile Iron SAE 16
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	P	Polyurethane
J	U	PPDI Urethane
R		Compensator Spring
R	80	80 Compensator Spring
R	150	150 Compensator Spring
R	220	220 Compensator Spring