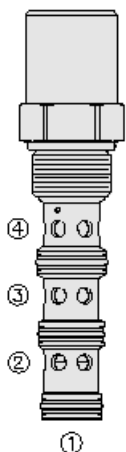




Overview



Description

EC12-42 is a screw-in, cartridge style, priority on demand pressure compensator valve with static load sense. It is intended to provide priority flow in required amount, while allowing excessive flow to be used for auxiliary functions.

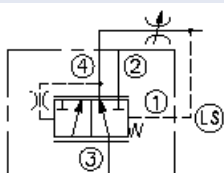
Operation

With inlet flow at port 3, the EC12-42 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 345 bar (5000 psi)

Flow Ratings

Inlet flow rating	68 lpm (18.0 gpm)	- Note: Maximum, with compensating spring 5.5 bar (80 psi)
	83 lpm (22.0 gpm)	- Note: Maximum, with compensating spring 7.6 bar (110 psi)
	95 lpm (25.0 gpm)	- Note: Maximum, with compensating spring 11.0 bar (160 psi)
	132 lpm (35.0 gpm)	- Note: Maximum, with compensating spring 15.2 bar (220 psi)
Priority flow rating	Up to 80% of input flow	

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)	

Operating Parameters

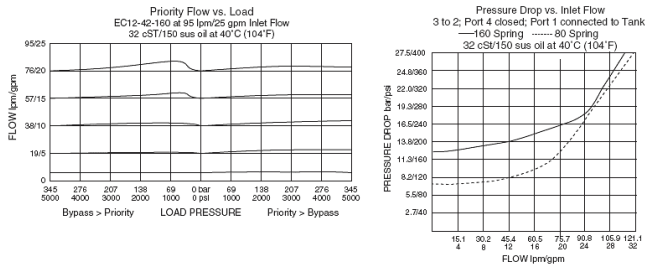
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406

Properties

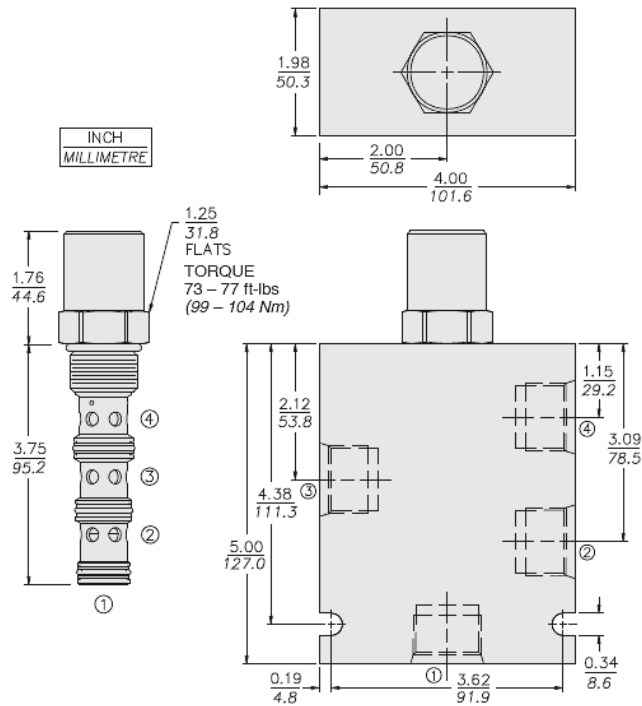
Unit weight	0.44 kg (0.97 lb)
Internal wetted surface area	304 cm ² (47.1 in ²)



Performance



Dimensions



Installation Specifications

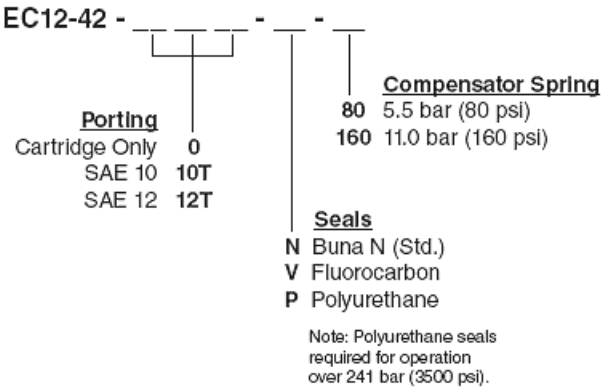
Cavity	VC12-4
Cartridge installation torque	99 to 104 N-m (73 to 77 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK12-4X-MMM	- Note: X = seal option
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Order Code



Model Options

EC12-42-H-J-R

H Line Body

CODE	DESCRIPTION
0	No Body
10T	Aluminum SAE 10
12T	Aluminum SAE 12
12TD	Ductile Iron SAE 12
6B	Aluminum BSPP 3/4" (6)

J Seal

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

R Compensator Spring

CODE	DESCRIPTION
80	80 Compensator Spring
110	110 Compensator Spring
160	160 Compensator Spring
220	220 Compensator Spring