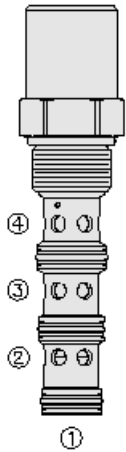




## Overview



### Description

EC12-43 is a screw-in, cartridge style, priority on demand pressure compensator valve with dynamic load sense. It is intended to provide priority flow in required amount, while allowing excessive flow to be used for auxiliary functions

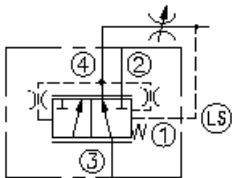
### Operation

With inlet flow at port 3, the EC12-43 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.
- Dynamic 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)	- <b>Note:</b> Maximum, with compensating spring 5.5 bar (80 psi)
	83 lpm (22.0 gpm)	- <b>Note:</b> Maximum, with compensating spring 7.6 bar (110 psi)
	95 lpm (25.0 gpm)	- <b>Note:</b> Maximum, with compensating spring 11.0 bar (160 psi)
	132 lpm (35.0 gpm)	- <b>Note:</b> 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)	- <b>Note:</b> With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- <b>Note:</b> With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- <b>Note:</b> 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 - gec12-43)

## Operating Parameters

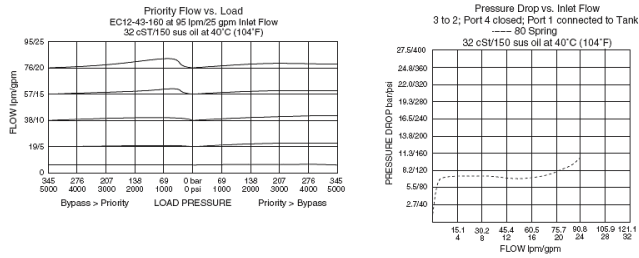
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406

## Properties

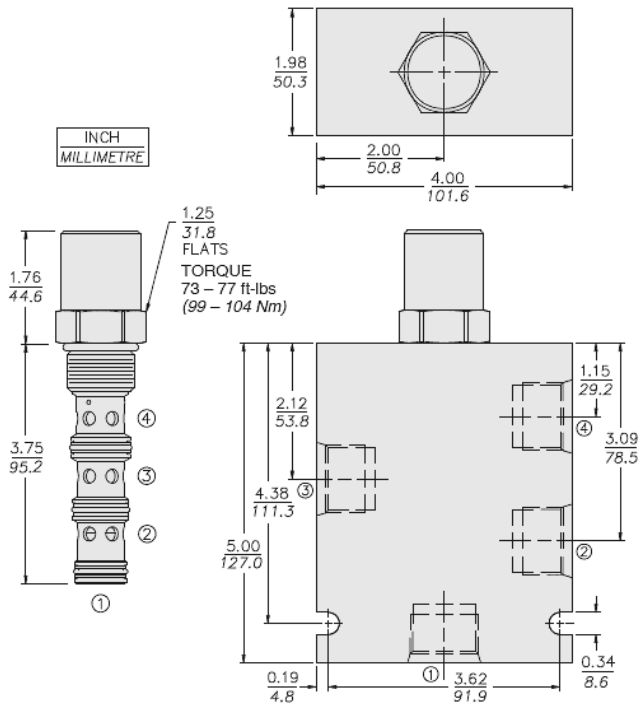
Unit weight	0.44 kg (0.96 lb)
Internal wetted surface area	325 cm <sup>2</sup> (50.3 in <sup>2</sup> )



## Performance



## Dimensions



## Materials

### Materials

**Cartridge:** Weight: 0.46 kg (1.02 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and polyester elastomer back-ups standard. For operating pressures above 241 bar (3500 psi), use polyurethane seals.

**Standard Ported Body:** Weight: 1.5 kg (3.3 lb); Anodized high-strength aluminum alloy, rated to 207 bar (3000 psi); For operating pressures above 241 bar (3500 psi), use ductile iron body; dimensions may differ.

## 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
Housings		



Order Code

POSITION	CODE	DESCRIPTION
		EC12-43-H-J-R
H		Line Body
H	0	No Body
H	10T	Aluminum SAE 10
H	12T	Aluminum SAE 12
H	12TD	Ductile Iron SAE 12
H	6B	Aluminum BSPP 3/4" (6)
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	110	110 Compensator Spring
R	160	160 Compensator Spring
R	220	220 Compensator Spring

