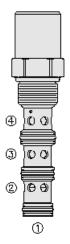


Overview



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.

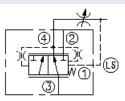
Operation

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.

<u>Features</u>

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

Symbol



Ratings

<u>Pressure Ratings</u>		
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) (160 psi)	 Note: Maximum, with compensating spring 11.0 bar
	132 lpm (35.0 gpm) (220 psi)	- Note: Maximum, with compensating spring 15.2 bar
Priority flow rating	Up to 80% of input flo	wc
<u>Temperature Ratings</u>		
Operating fluid temperature	-40 to 100 °C (-40 to -26 to 204 °C (-15 to -54 to 107 °C (-65 to	400 °F) - Note: With fluorocarbon seals
Storage temperature	-40 to 70 °C (-40 to 1	
Ambient temperature	-40 to 70 °C (-40 to 1	160 °F)
<u>Other Ratings</u>		
Corrosion protection	960 hr salt spray per	ASTM b117 (model number - gec12-43)
Derating Parameters		

Operating Parameters

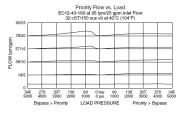
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination	18/16/13 per ISO 4406
level	



Properties

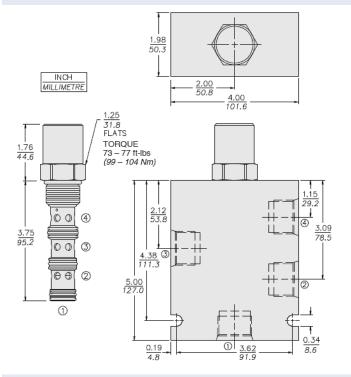
Unit weight Internal wetted surface area 0.44 kg (0.96 lb) 325 cm² (50.3 in²)

Performance



		3 to 2	; Por		sed; F - 80 \$	ort 1 Spring	conn	ected	to Tar	ık
	27.5/400		02.0	1	0 848		100	(104)	ř-	
	24.8/360			<u> </u>					\square	
2	22.0/320	-								
(par)	19.3/280									
^d	16.5/240									
Ë	13.8/200			<u> </u>						
PRESSURE DROP bar/psi	11.3/160									
ES:	8.2/120						d'			
ä	5.5/80	1								
	2.7/40	į						_		
		15	1 3 1	0.2 45 8 1	i.4 60 2 1	0.5 7 6 1	5.7 90 20 2	1.8 10	5.9 121. 8 32	1
				F	LOW	om/gpr	n			

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 -

IMM • Note: X = seal option



Order Code

EC12-43	
<u>Porting</u> Cartridge Only SAE 10 SAE 12	

 Compensator Spring

 80
 5.5 bar (80 psi)

 160
 11.0 bar (160 psi)

- Seals
- N Buna N (Std.)
- V Fluorocarbon
- P Polyurethane Note: Polyurethane seals required for operation over 241 bar (3500 psi).

Model Options

EC12-43-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
Ν	Buna-N
V	Fluorocarbon
Р	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