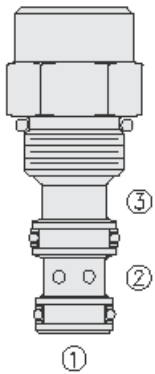




Overview



Description

EPFR58-35 is a screw-in, cartridge style, bypass type pressure compensating element intended for use with remote fixed or variable orifice to provide a constant flow regardless of load pressure changes.

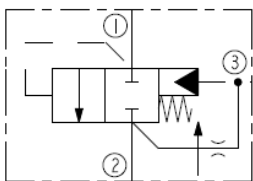
Operation

It is spring biased spool type valve provided with a small internal orifice between ports 2 and 3 so that the valve would bypass all flow to tank at bias spring pressure value plus pressure rise at no load flow demand. The orifice is pressure compensated to restrict flow loss through it at load flow demand.

Features

- Multiple function in a single cavity.
- Low bleed flow throughout the operating pressure range.
- High system efficiency.
- Industry-common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating 345 bar (5000 psi)

Flow Ratings

Flow rating See performance graph

Maximum flow loss 0.76 lpm (0.20 gpm) - **Note:** Between ports 3 and 2 at 345 bar (5000 psi)

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 90 °C (-40 to 194 °F)	

Operating Parameters

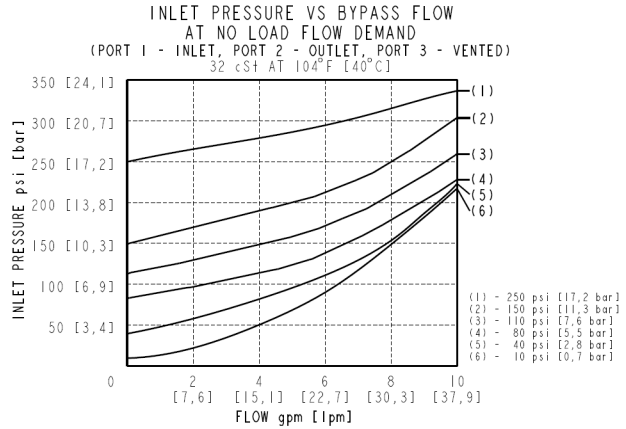
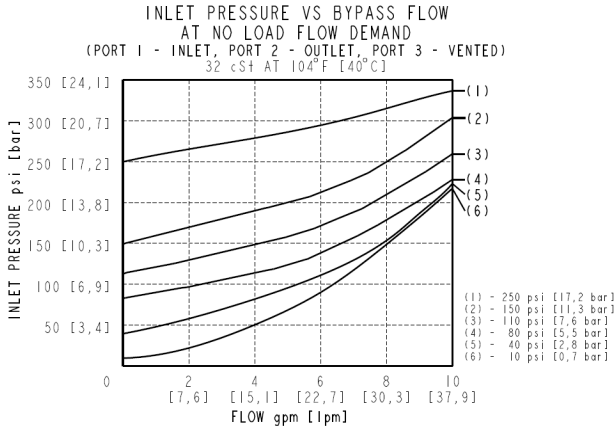
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406

Properties

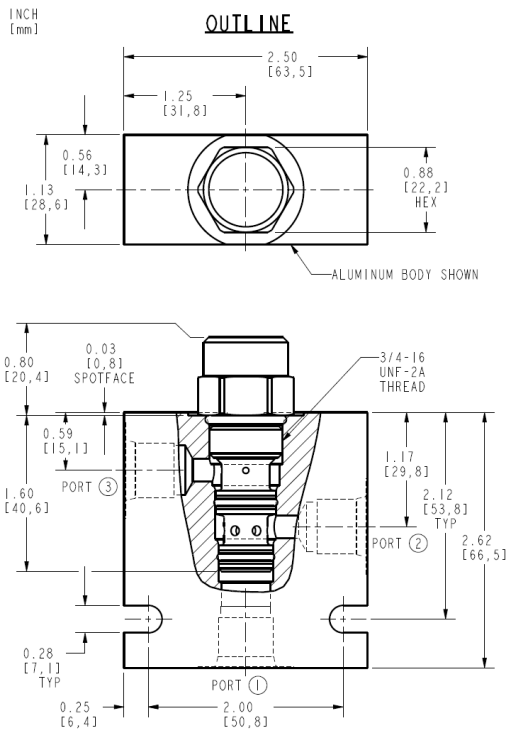
Unit weight	0.1 kg (0.22 lb)
Internal wetted surface area	104 cm ² (16.1 in ²)



Performance



Dimensions



ALL DIMENSIONS ARE FOR REFERENCE ONLY.

Installation Specifications

Cavity	VC08-3
Cartridge installation torque	25.8 to 28.5 N-m (19 to 21 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK08-3N-MM	- Note: BUNA N
	SK08-3V-MM	- Note: Fluorocarbon
	SK08-3P-MM	- Note: Polyurethane

Order Code



ORDERING INFORMATION:

EPFR58-35-X-X-XXX

BASE MODEL

NUMBER

PORTING:

CARTRIDGE ONLY - 0

SEAL OPTION:

BUNA N - N

FLUOROCARBON - V

POLYURETHANE - P

BIAS SPRING VALUE:

- 10 psi [0,7 bar] - 10
- 40 psi [2,8 bar] - 40
- 80 psi [5,5 bar] - 80
- 110 psi [7,6 bar] - 110
- 150 psi [10,3 bar] - 150
- 250 psi [17,2 bar] - 250

Model Options

EPFR58-35-H-J-R

H Line Body

CODE	DESCRIPTION
0	No Body
4T	Aluminum SAE 4
6T	Aluminum SAE 6
6TD	Ductile Iron SAE 6
8TD	Ductile Iron SAE 8
3B	Aluminum BSPP 3/8" (3)
3BD	Ductile Iron BSPP 3/8" (3)

J Seal

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

R Spring

CODE	DESCRIPTION
10	10 psi Bias Spring
40	40 psi Bias Spring
80	80 psi Bias Spring
110	110 psi Bias Spring
150	150 psi Bias Spring



CODE	DESCRIPTION
250	250 psi Bias Spring