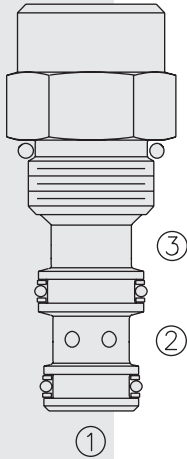


# DIRECTIONAL VALVES

## EPFR58-35 Pressure Compensator with Internal



### DESCRIPTION

A screw-in, cartridge-style, bypass-type, pressure-compensating element, with integral flow regulator for load sense signal drain. The internal pressure-compensated flow regulator restricts the load signal bleed flow in order to minimize system losses even at high operating pressures. The main compensator element holds the valves primary flow constant regardless of load pressure changes.

### OPERATION

The EPFR58-35 is a spring-biased spool-type valve with an internal pressure-compensated flow regulator between ② and ③. When used as a pump unloading compensator, this valve will bypass flow to tank at port ② when system pressure reaches the load pressure plus the bias spring value. When the system load is neutralized, the load signal is bled through the flow regulator bringing the valve to stand-by condition.

### FEATURES

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

### RATINGS

**Operating Pressure:** Cartridge only: 345 bar (5000 psi);  
Aluminum housing: 207 bar (3000 psi); Ductile iron housing: 345 bar (5000 psi).

**Flow Rate:** See Performance Chart

**Maximum Flow Loss between ③ and ②:** 0.95 lpm (0.25 gpm) at 345 bar (5000 psi)

**Bias Springs:**

- Code 80** 5.5 bar (80 psi)
- Code 110** 7.6 bar (110 psi)
- Code 150** 10.3 bar (150 psi)

**Temperature:** -40 to 120°C with standard Buna N seals

**Filtration:** See page 9.010.1

**Fluids:** Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

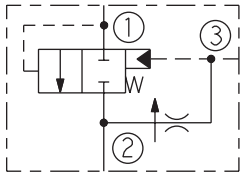
**Installation:** No restrictions; See page 9.020.1

**Cavity:** VC08-3; See page 9.108.1

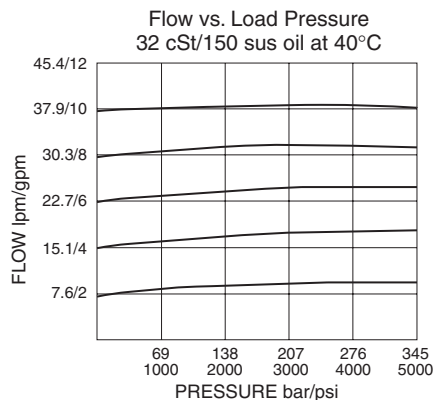
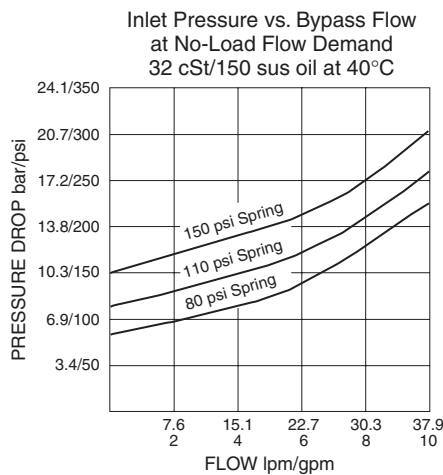
**Cavity Tool:** CT08-3XX; See page 8.600.1

**Seal Kit:** SK08-3X-MM; See page 8.650.1

### SYMBOL



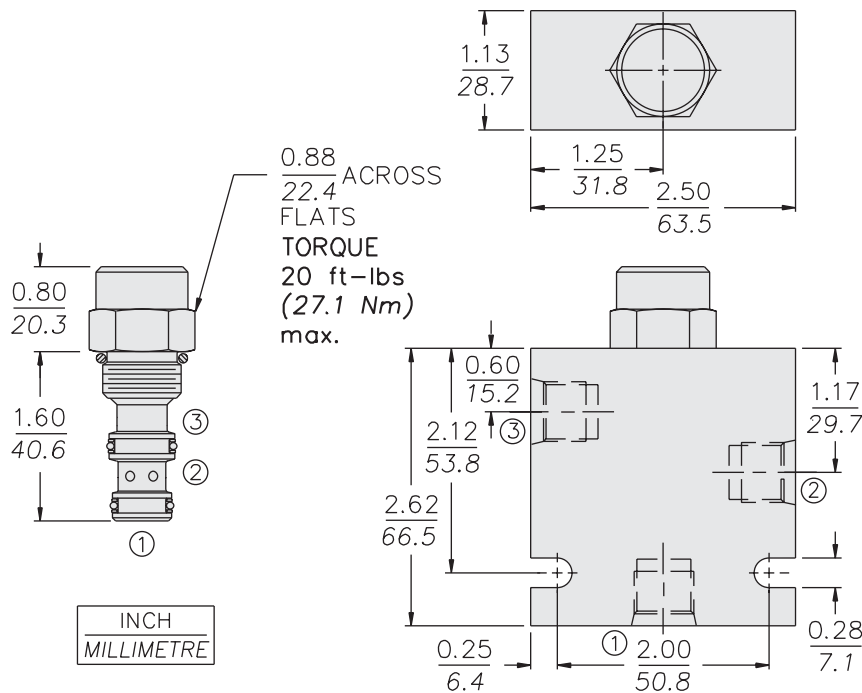
### PERFORMANCE (Cartridge Only)



# Load-Sense Drain Flow Control

# EPFR58-35

## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 0.11 kg. (0.25 lbs.)  
Steel with hardened work surfaces.  
Zinc-plated exposed surfaces.  
Buna N O-rings and back-ups standard.

**Ported Body:** Weight: 0.64 kg.  
(1.4 lbs.) Ductile Iron (code "D")  
standard, dimensions may differ  
from illustration; rated to 345 bar  
(5000 psi). See page 8.008.1

**Ported Body:** Weight: 0.36 kg.  
(0.80 lbs.) Anodized high-strength  
6061 T6 aluminum alloy, rated to  
207 bar (3000 psi).  
See page 8.008.1

## TO ORDER

EPFR58-35 - - -

### Porting

Cartridge Only **0**  
SAE 6 (Ductile) **6TD**  
SAE 6 (Alum.) **6T**

### Bias Spring

**80** 5.5 bar (80 psi)  
**110** 7.6 bar (110 psi)  
**150** 10.3 bar (150 psi)

Note: Aluminum body  
rated for 207 bar  
(3000 psi) max.

### Seals

Buna N (Std.) **N**  
Fluorocarbon **V**  
Polyurethane **P**