

# LPFR-10

Adjustable Pressure-compensated  
Flow Control Valve

## DESCRIPTION

A cartridge-style adjustable pressure-compensated flow control valve

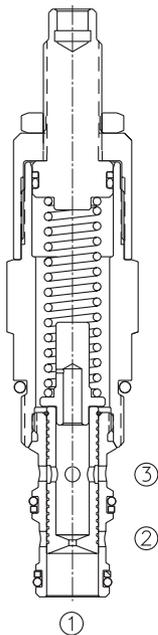
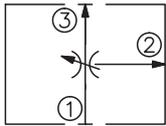
## OPERATION

The valve maintains a constant flow rate from ③ regardless of load pressure changes in the system downstream of ③, or in the bypass leg at ②. The valve will pressure-compensate once a minimum pressure drop (determined by spring adjustment setting) is achieved from ① to ③. This value will range from approximately 4.8 to 13.8 bar (70 to 200 psi). Bypass port ② may be fully pressurized.

The cartridge may be adjusted to  $\pm 25\%$  of nominal setting. At nominal setting, pressure drop is approximately 9 bar (130 psi).

Flow out of priority port ③ may vary based on input flow amount, particularly with lower temperatures and increased fluid viscosities.

## SYMBOL

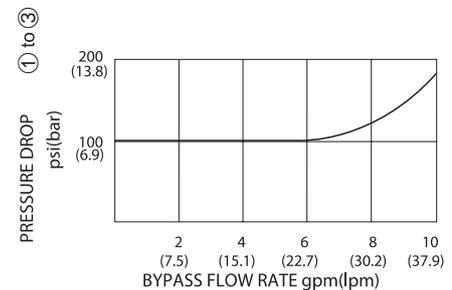
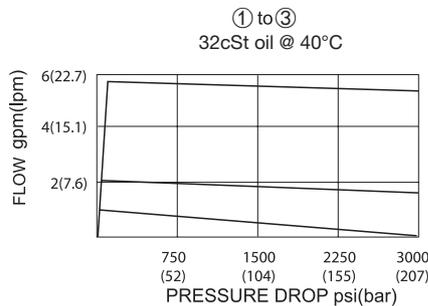


If flow to port ③ is shut off,  
flow to port ② will be shut off

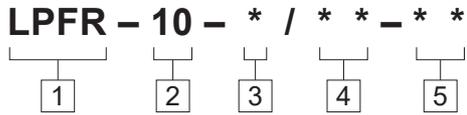
## SPECIFICATIONS

Operating Pressure	207bar
Flow Setting	low range: 1.9 to 9.5 lpm (0.5 to 2.5 gpm) Specify in 1.9 lpm (0.5 gpm) increments high range: 11.4 to 22.7 lpm (3.0 to 6.0 gpm) Specify in 3.8 lpm(1gpm) increments
Temperature	-40°F to +250°F(-40°C to +120°C)
Filtration	See page N-1
Fluids	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity	10-3, See page M-2
Housing Material	6061-T6 aluminum alloy rated to 207bar, Steel & Ductile iron rated to 350bar

## PRESSURE DROP VS.FLOW



**TO ORDER**



**1 Function**  
LPFR=Adjustable Pressure-compensated Flow Control Valve

**2 Size**  
10=10 Size

**3 Adjustment**  
K= 1-1/2" Dia Knob  
Omit= 1/4" Hex Allen Head

**4 Optional Flow Setting**  
0.5=1.42 to 2.37lpm  
1.0=2.84 to 4.73lpm  
2.0=5.68 to 9.46lpm  
2.5=7.08 to 11.81lpm  
3.0=8.52 to 14.19lpm  
4.0=11.35 to 18.93lpm  
5.0=14.19 to 23.66lpm  
6.0=17.03 to 28.93lpm

**5 Port Size**  
Omit=None  
6T=SAE6  
8T=SAE8  
2G=G 1/4  
3G=G 3/8

※ See page K-5 for detail of housing  
※ Other port sizes are available

F

**INSTALLATION DIMENSIONS**

Unit=Millimeters

