

# Parker CFQ Series Priority Type Flow Control Service Manual

## General Description

Series CFQ flow controls are priority type flow controls. A constant rate of flow (through a spool type compensator) is maintained at the constant flow port (marked CF on the casting) regardless of changes in load pressure located downstream. Once maximum controlled flow is achieved, the compensator spool shifts to delivery any excess flow to an excess flow port (marked EX on the casting). Excess flow can either be used to supply flow to another function or be directed to tank. Should the excess flow port be plugged or blocked, the CFQ will function as a two-port pressure compensated flow control.

## Features

- Electro-nickeless plated spool
- High-tensile cast iron body

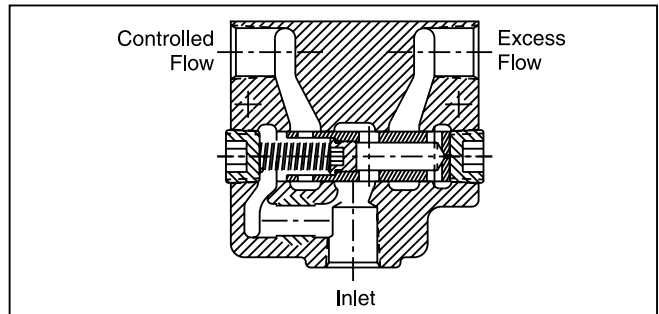
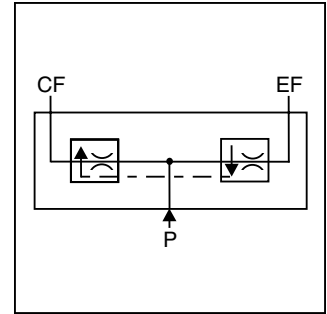
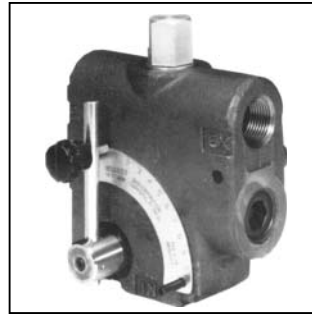
## Operation

Flow enters the inlet port and travels to the spool. The spool is spring compensated and is normally open to the controlled flow port. A rotary lever adjusts the amount of controlled flow. Any amount of flow in excess of the controlled flow is diverted by the spool to the excess flow port.

Controlled flow is maintained by a 3.4 Bar (50 PSI) pressure differential in the compensator spool and spring.

The rotary lever rotates an orifice which increases or decreases the controlled flow. The lever is marked in gradients of 0 through 12. At 0, all flow is directed to the excess flow port. The controlled flow port is blocked. At 1, the orifice begins opening the controlled flow port until it is fully open at 12. The numbers (1-12) represent position only and do not correspond to a rate of flow.

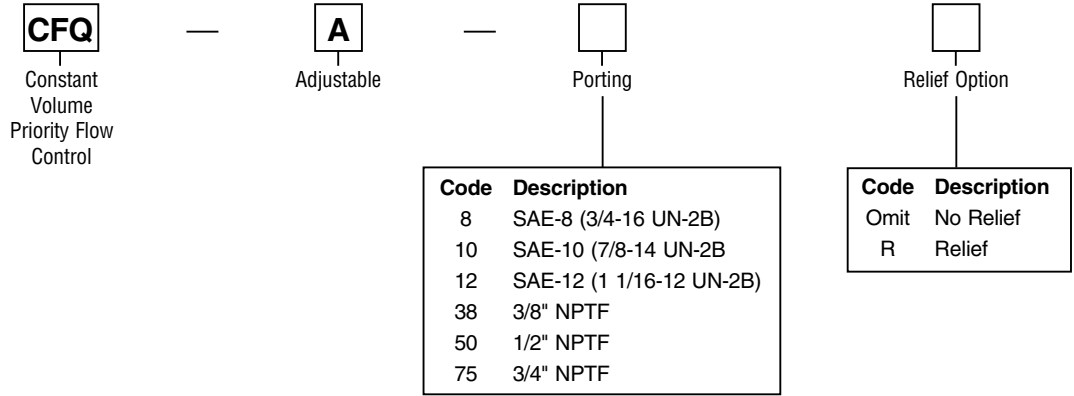
When the excess flow port is plugged, the valve functions as a pressure compensated flow control. The excess flow port should not be plugged when a relief valve is used. The excess flow port should then be plumbed to tank to vent the relief.



## Specifications

<b>Input Flow</b>	131.25 LPM (35 GPM)
<b>Controlled Flow</b>	30 LPM (8 GPM) (Port sizes 8 & 38) 60 LPM (16 GPM) (Port sizes 10 & 50) 112.5 LPM (30 GPM) (Port sizes 12 & 75)
<b>Operating Pressure</b> <b>SAE Ports</b> <b>NPTF Ports</b>	207 Bar (3000 PSI) 138 Bar (2000 PSI)
<b>Compensation Pressure</b>	3.4 Bar (50 PSI)
<b>Operating Ambient Temperature Range</b>	Nitrile Seals: -40°C to +93°C (-40°F to 200°F)
<b>Material</b>	Body: High strength cast iron Spool: Hardened and ground steel
<b>Filtration</b>	ISO Code 16/13, SAE Class 4 or better
<b>Mounting Position</b>	In-line; no restrictions

**Ordering Information**



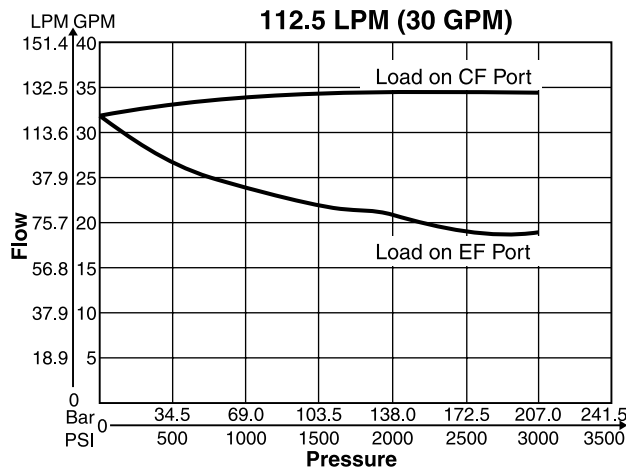
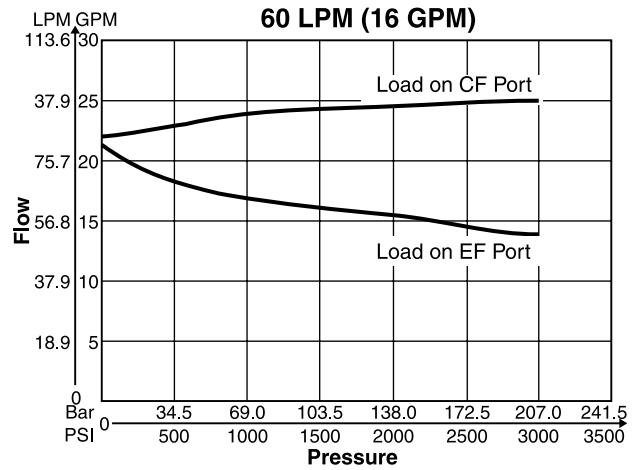
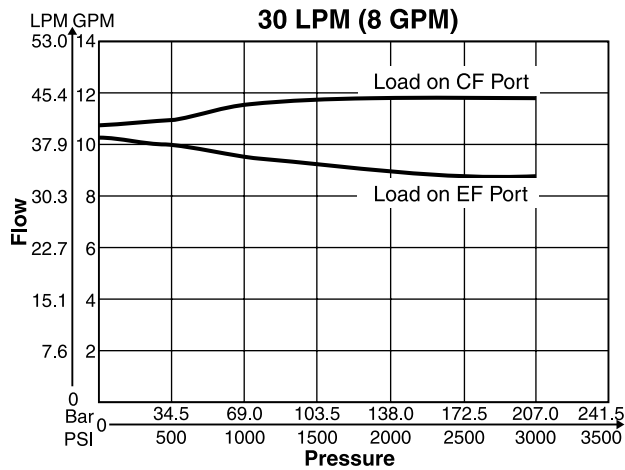
Weight: 3.5 kg (7.8 lbs)

**Service Parts**

Rebuild Kit *	00712424
30 LPM (8 GPM) Kit	00712521
60 LPM (16 GPM) Kit	00712520
112.5 LPM (30 GPM) Kit	00712519

\* Includes seals, retaining ring, washers, lever and knob  
 Note 1: The body and the spool are not service items  
 Note 2: The relief valve is a non-cartridge type valve

**Performance Curves**



**Dimensions**

**Series CFQ**

Inch equivalents for millimeter dimensions are shown in (\*\*)

