



RF4 Series

Return Line Filters



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RF4 Series

Applications for RF4 Filters

- Mobile Equipment
- Mining Equipment
- Industrial Power Units
- Automotive Specified Equipment

The RF4 is a rugged, industry proven filter assembly. The all steel housing will provide trouble free operation in demanding return line applications. The in-tank flange option with quick release cover makes this filter series an excellent choice for a wide range of applications.

To insure the best filtration possible, all elements are multipass tested in accordance with ANSI/NFPA T3.10/8.8 RI-1990. In addition, the elements meet the SAE HF4 automotive specification.

Reliable, field proven components. Accurate and complete testing. Full performance data disclosure. We give you our best, so you can do your best.



Cover

- Tee handle for easy service
- Slotted for quick release

Gauge (optional)

- Color coded for easy reading
- 15 or 25 psi calibration

Ports

- NPT or SAE

Mounting Flange (optional)

- Simple in-tank installation

Housing

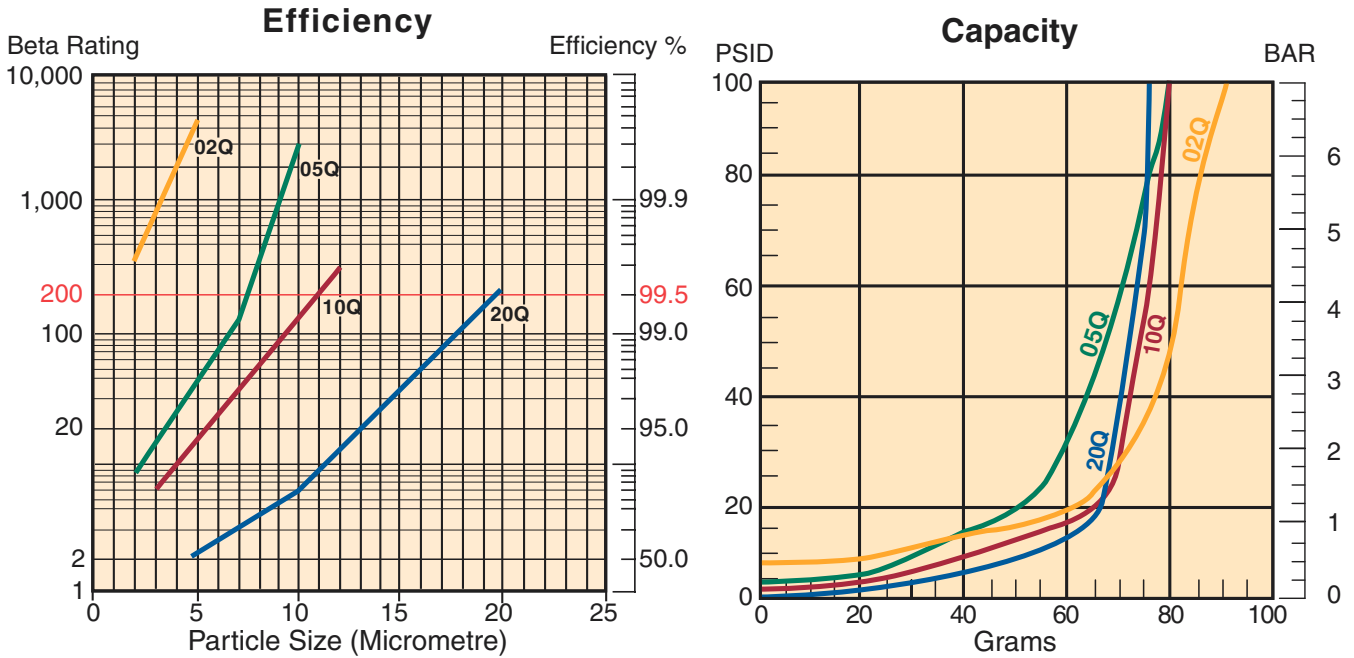
- Durable all steel construction

Elements (not visible)

- Cellulose, wire or high performance Microglass III media
- Meet SAE (automotive) HF4 standard
- Single or double length

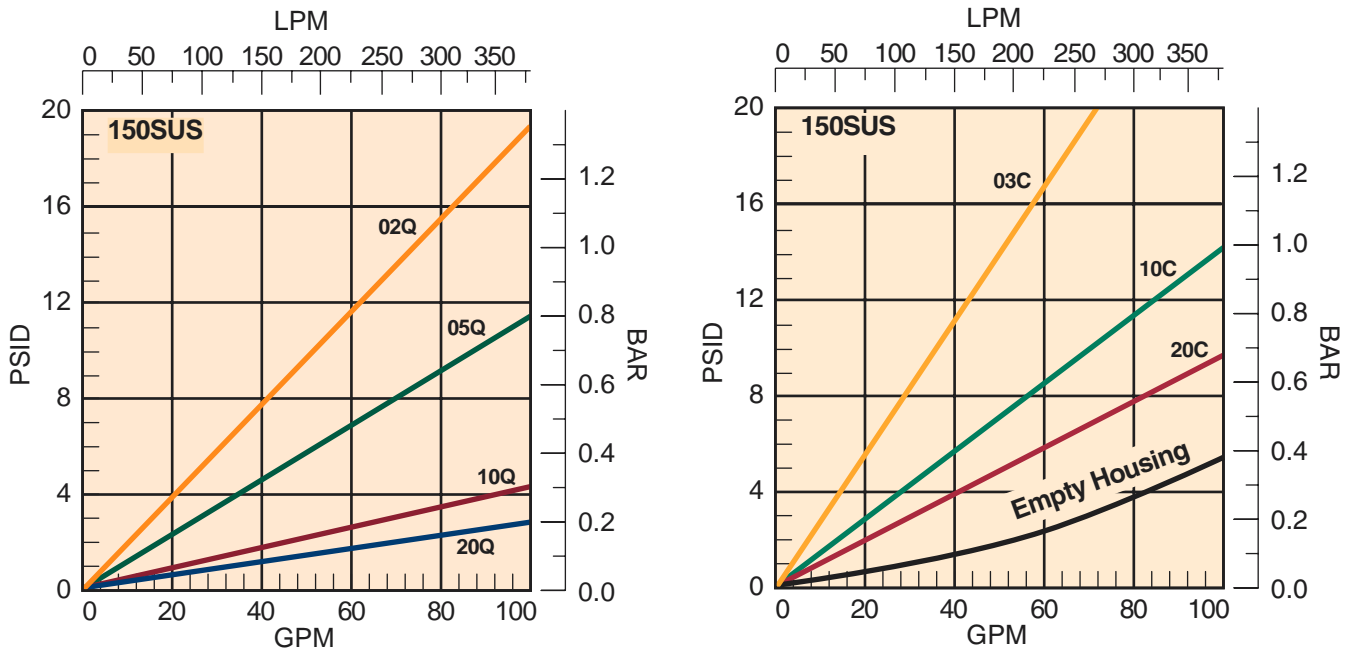
Feature	Advantage	Benefit
<ul style="list-style-type: none"> • Top access element service 	<ul style="list-style-type: none"> • Oil remains in housing • Quicker element change 	<ul style="list-style-type: none"> • No Spills • Reduced maintenance costs
<ul style="list-style-type: none"> • Slotted cover 	<ul style="list-style-type: none"> • Quick release cover • Cap screws remain in housing 	<ul style="list-style-type: none"> • Reduced maintenance costs • No loose parts
<ul style="list-style-type: none"> • All steel construction 	<ul style="list-style-type: none"> • Durable, built to last • Good for mining applications 	<ul style="list-style-type: none"> • No downtime • Versatility
<ul style="list-style-type: none"> • Visual or electrical indicators 	<ul style="list-style-type: none"> • Know exactly when to service elements 	<ul style="list-style-type: none"> • Helps prevent bypass condition • No premature disposal
<ul style="list-style-type: none"> • Cover / bypass is one complete assembly 	<ul style="list-style-type: none"> • No loose parts during service • Visually examine bypass valve 	<ul style="list-style-type: none"> • No misplaced parts • Verify cleanliness and integrity

RF4-1 Element Performance



Multipass tests run @ 50 gpm to 100 psid terminal - 5mg/L BUGL

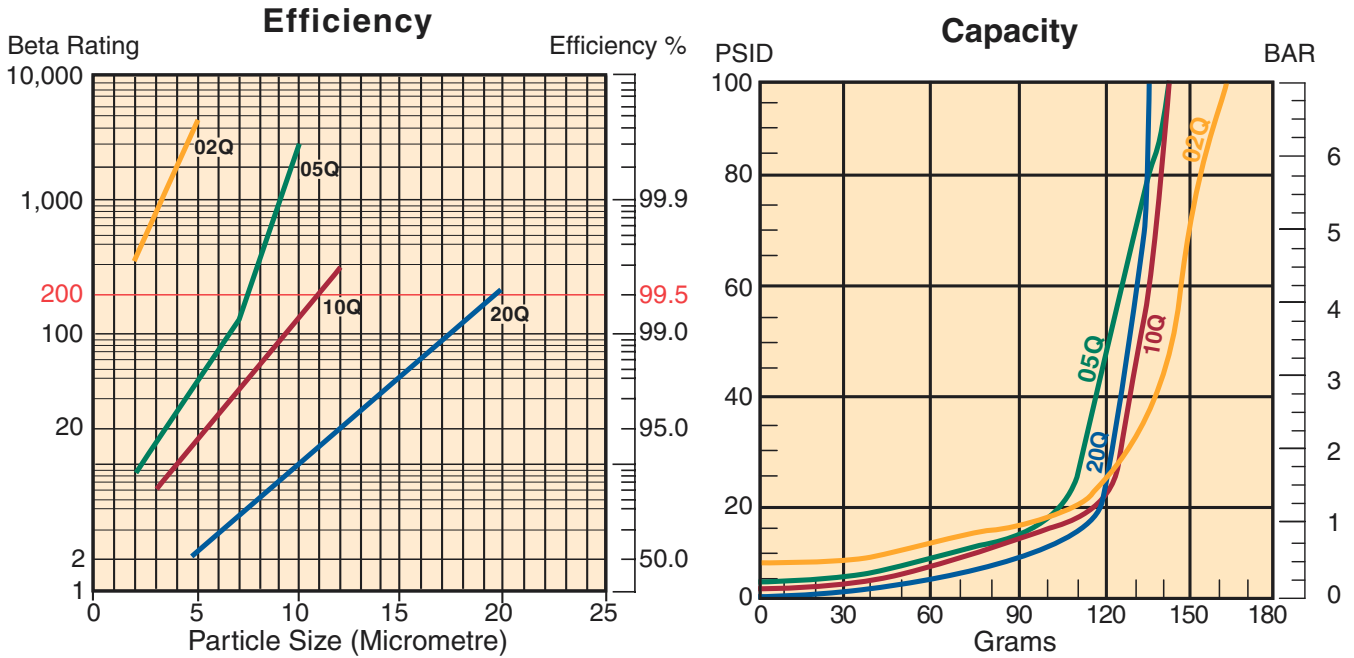
Flow vs. Pressure Loss



Return Line Filters

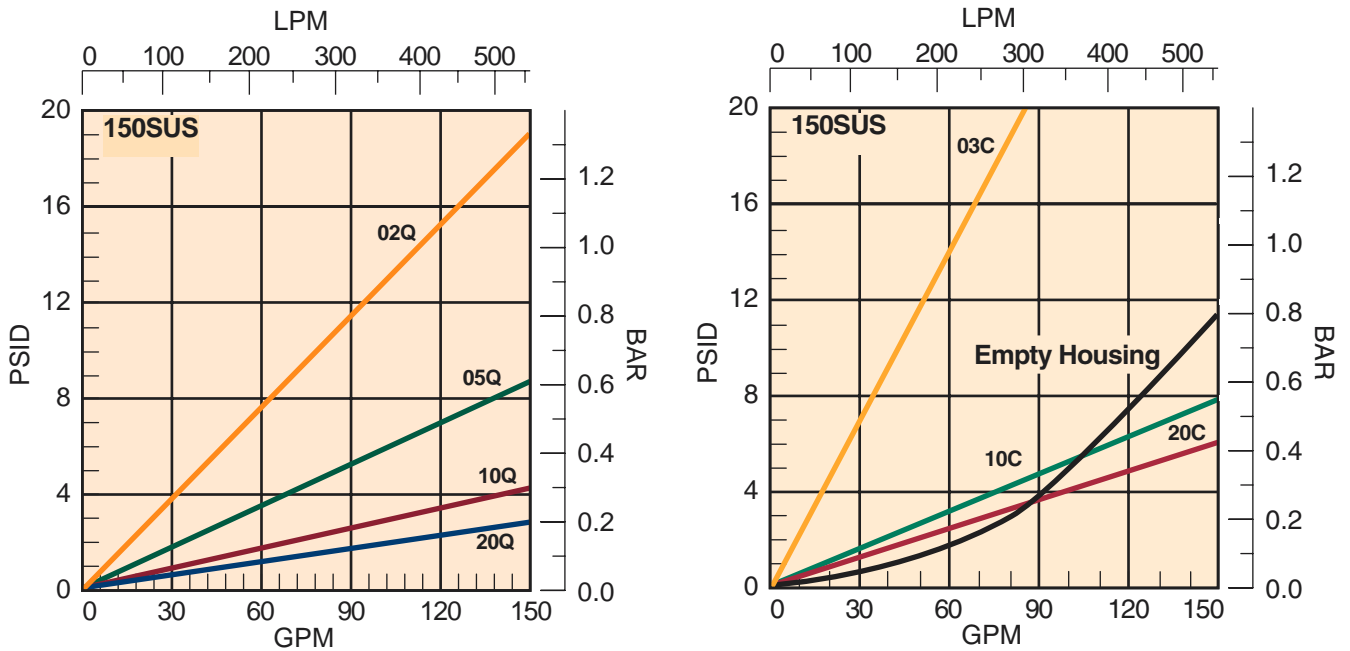
RF4 Series

RF4-2 Element Performance



Multipass tests run @ 100 gpm to 100 psid terminal - 5mg/L BUGL

Flow vs. Pressure Loss



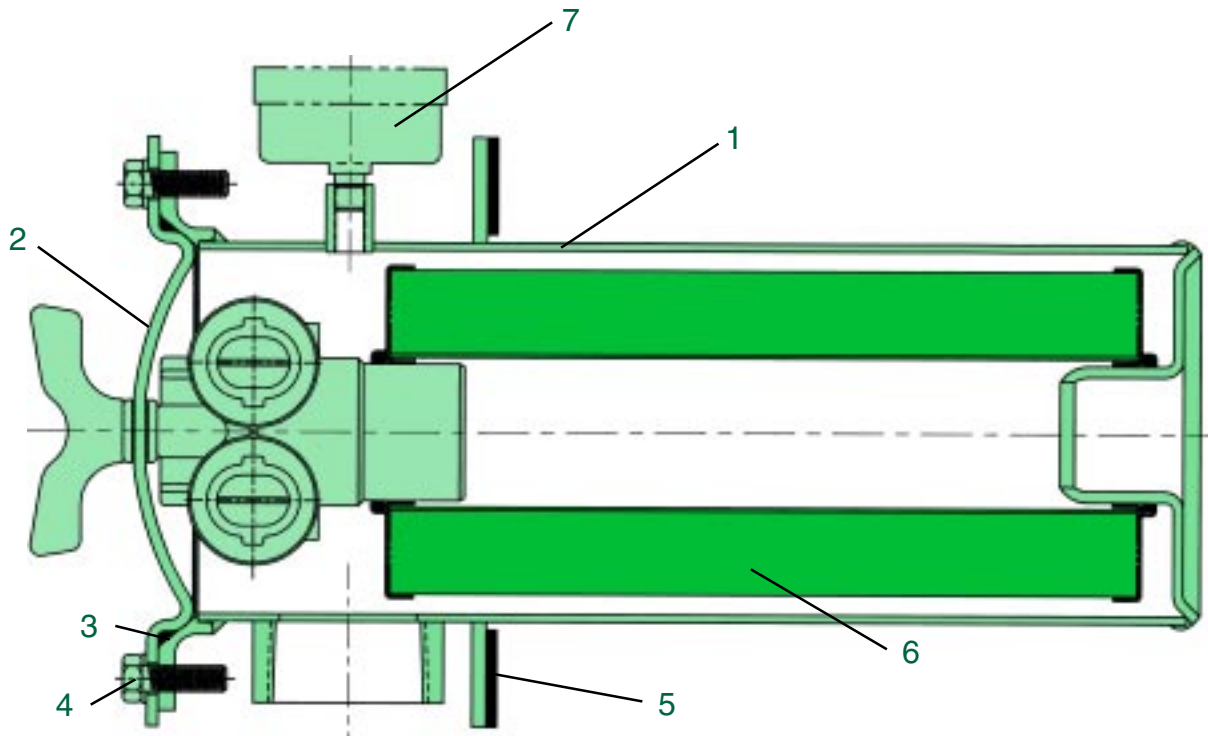
RF4 Maintenance Instructions

Element Service

1. Shut down the system power supply and relieve pressure in the filter line.
2. Loosen the hex head cap screws on the cover. Turn cover (tee handle) until cover slots clear the cap screws.
3. Remove cover and element from filter assembly.
4. Discard all disposable (cellulose, Microglass III and Par-Gel) elements. Woven wire elements are cleanable and may be reused. Ultrasonic cleaning is the best method for dislodging contaminant to achieve a like new condition.
5. Place new or clean element in housing, center it on locator in the bottom of bowl.
6. Inspect cover o-ring and replace if necessary.
7. Replace cover, centering the bypass assembly in the element. Tighten the hex head cap screw to specified torque (140-160 in/lbs.).

Parts List

Index	Description	Part Number	Quantity
1	Bowl assembly	Consult Factory	1
2	Cover assembly 15 psid bypass 25 psid bypass	932908 932909	1
3	Cover o-ring Buna Fluorocarbon	N72247 V72247	1
4	Hex head cap screws	926633	6
5	Gasket (mounting flange)	928852	1
6	Elements	See order page	1
	Check valve (not shown)	925119	1 (optional)
7	Pressure gauge 15 psi 25 psi	934238 934237	1 (optional)
Not Shown	Pressure Switch 15 psi 25 psi	926359 926923	1 (optional)



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Specifications: RF4

Pressure Ratings:

Maximum Allowable Operating Pressure (MAOP): 150 psi (10.3 bar)

Rated Fatigue Pressure:

100 psi (6.9 bar)
Design safety factor: 2:1

Operating Temperatures:

Buna: -40°F (-40°C) to 225°F (107°C)
Viton: -15°F (-26°C) to 275°F (135°C)

Element Collapse Rating: 150 psid (10.3 bar)

Element Condition Indicators:

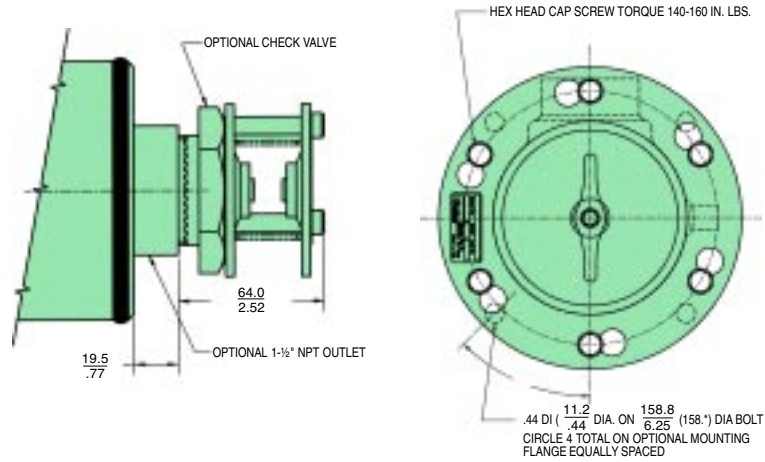
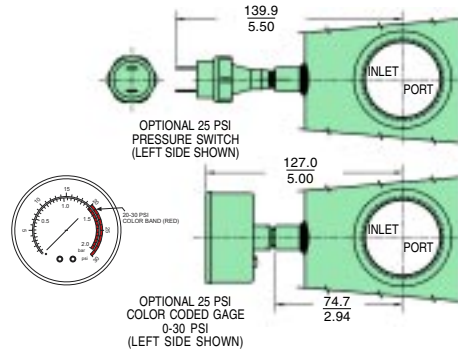
Gauge: 0-30 psi color coded
Switch: SPST 5A @ 24 VDC

Materials:

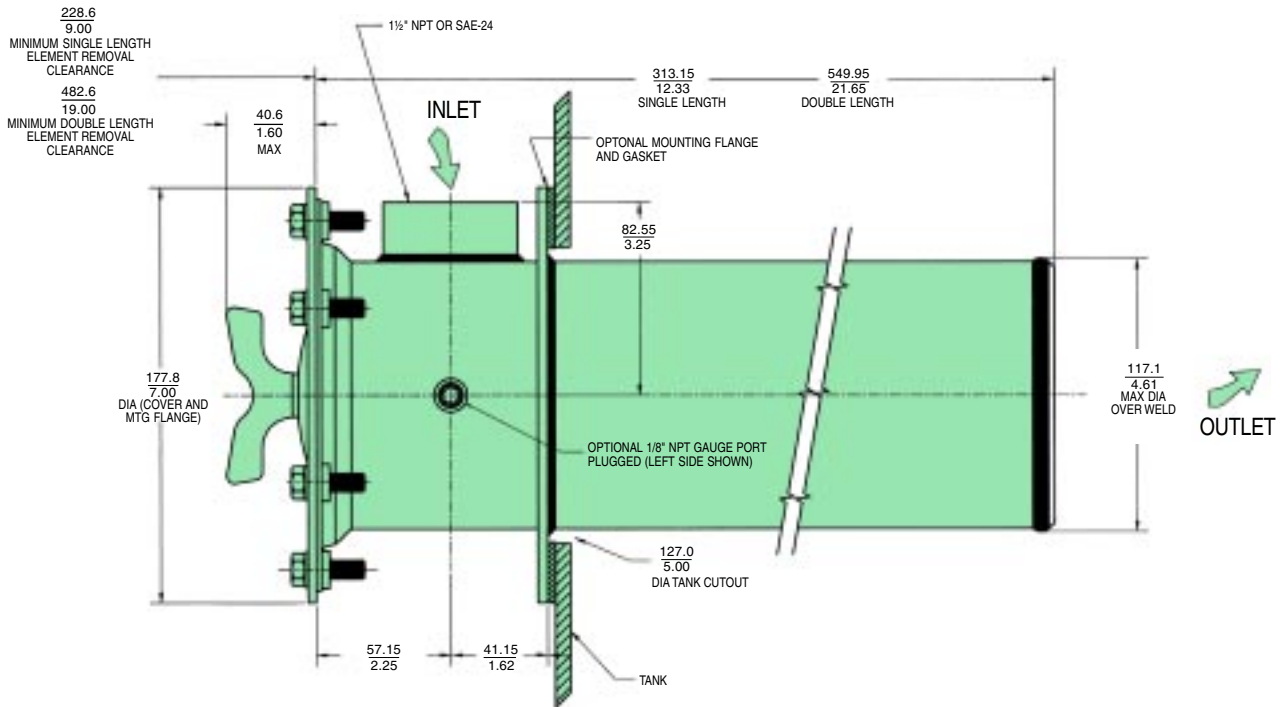
Bowl: carbon steel
Cover: carbon steel
Handle: nylon

Shipping Weights (approximate):

Single: 13 lbs. (5.9 kg)
Double: 16 lbs. (7.3 kg)



Linear Measure: millimeter
inch



HOW TO ORDER:

Select the desired symbol (in the correct position) to construct a model code.

Example:

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8	BOX 9
	RF4	1	10Q	GL	25	P999	1	Design number assigned by Parker

BOX 1: Seals	
Symbol	Description
None	Buna N (nitrile)
F3	Fluorocarbon

BOX 2 : Housing	
Symbol	Description
RF4	Return filter

BOX 3 : Housing Length	
Symbol	Description
1	Single length
2	Double length
1F	Single length with mounting flange
2F	Double length with mounting flange

BOX 4 : Filter Media	
Symbol	Description
20C	20 micron cellulose
10C	10 micron cellulose
03C	3 micron cellulose
WR	Water removal
20Q	Microglass III
10Q	Microglass III
05Q	Microglass III
02Q	Microglass III

BOX 5 : Indicator	
Symbol	Description
N	No indicator, no pressure port
GL	Gauge, left side
PL	No indicator, plugged pressure port (left side)
SL	Pressure switch, left side

Note: Left side is on the viewer's left when looking into inlet with bowl down.

BOX 6 : Bypass Setting	
Symbol	Description
25	25 psid
35	35 psid

BOX 7 : PORTS	
Symbol	Description
Inlet	(Side)
E9	1½" NPT
P9	SAE-24
Outlet	(Bottom)
99	No fitting
E9	1½" NPT
F8	Check valve

Note: Two symbols required. The first symbol describes inlet port.

BOX 8 : Modifications	
Symbol	Description
1	None

BOX 9: Design Number
Applied to the filter by Parker Hydraulic Filter Division. Use the full model code, including the design number when ordering replacement parts.

Please note the bolded options reflect standard options with a reduced lead-time. Consult factory on all other lead-time options.

REPLACEMENT ELEMENTS

Element Code	ELEMENT: SINGLE (RF4-1)	ELEMENT: DOUBLE (RF4-2)
	Fluorocarbon P/N	Fluorocarbon P/N
03C	925772	925798
10C	925520	925792
20C	925773	925793
WR	930156	928557
20Q	931018Q	931020Q
10Q	932670Q	932679Q
05Q	932669Q	932678Q
02Q	932668Q	932677Q