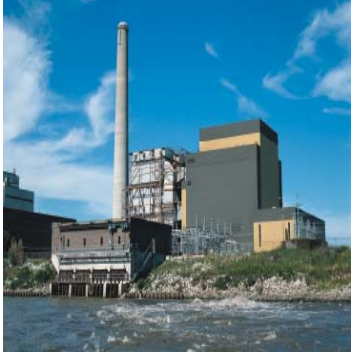
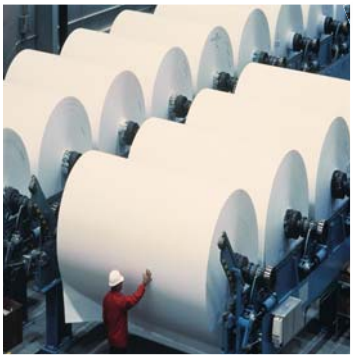




aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding

RF7 Series

Low Pressure Filters

ENGINEERING YOUR SUCCESS.

RF7 Series

Applications

- Mobile equipment
- Power unit fabricators
- Off-line filter loops

The Parker RF7 filter is designed for those applications where dependable, yet economical, return line system protection is required. The in-tank mounting design makes the RF7 ideally suited for use by power unit fabricators and mobile equipment manufacturers...or anyone who views equipment space at a premium, but not at the expense of performance.

Element Condition Indicator
- True pressure differential
- Know, at a glance, when to change the filter element
- Gauge also available

Two-Piece Construction (Head/Tube)
- Easy in-tank mounting

Diffuser Tube
- Disperses return flow below reservoir fluid level
- Prevents fluid aeration
- Closed bottom provides for even fluid dispersal
- Prevents objects from falling into the reservoir during element servicing

Vent
- For variable displacement pump applications

Bypass Valves
- Virtually zero leakage
- Multiple valves for high flow

Cartridge/Element Handle
- Easy to remove entire assembly for servicing

Bypass Filter Screen
- Prevents gross contamination from passing through the filter — even during bypass

Cover Lock-Band with "T" Handle
- Easy access for servicing
- No loose parts to remove and handle
- No special tools required for removal

RF7 Series

Element Features

Inside each Parker Filter... a quality Parker Element

The important item in a filter assembly is the element. It has to capture and hold contaminants that can damage or stop a machine...while at the same time allowing the required flow of clean fluid so the machine can function properly.

There are many ways to design and build an element, and it's easy to produce a low cost element. However, cost is not a good selection criteria... especially when the risk is loss of critical performance.

For instance, consider wire mesh reinforcement. Not all filter elements have it. It's used in Parker elements to keep the pleats from collapsing or bunching.

If pleats bunch, the effective surface area of the element is reduced, excessive pressure drop develops, and the filter assembly may go into the bypass mode. This condition wastes energy and allows unfiltered fluid flow back into the system, effectively shortening filter life.

Gasket Ring Seal
- Positive sealing for optimum element efficiency

Protective Perforated Cylinder
- Necessary for inside-to-outside flow
- Prevents media "blow out"

Wire Reinforced Media (Not Visible)
- Prevents pleat bunching
- Helps prevent media migration
- Maintains media efficiency

Engineered Element Design
- The right combination of pleat depth and number of pleats means lower pressure losses (longer life)
- Dirt holding capability is maximized for less frequent element change-out

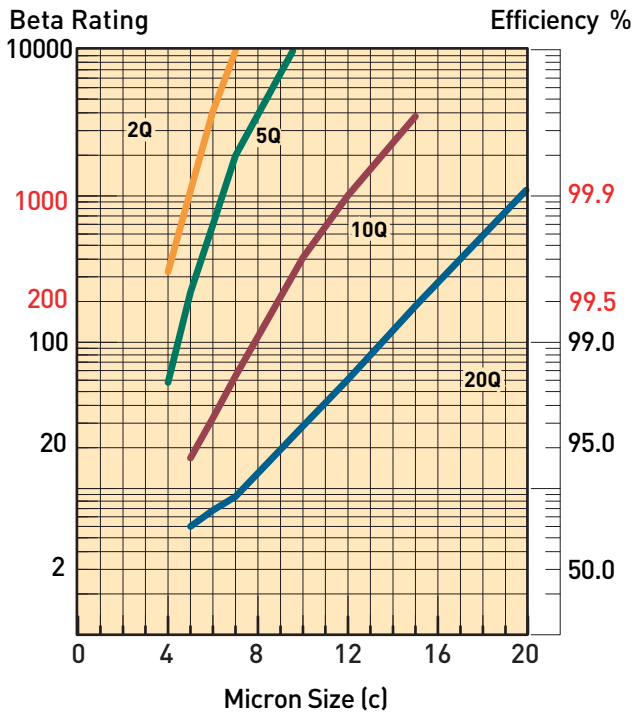
Elements for Every Application
- Standard Microglass III media for long life and excellent system protection
- Economical cellulose elements also available

Features	Advantage	Benefits
• Tank mounted design.	• Saves space and reduces hardware requirements.	• Easy to integrate into system design.
• Cover fill port.	• Allows 100% filtration of all new system oil.	• Eliminates contamination before it can cause problems.
• High flow capacity.	• One filter may handle all return line flows.	• Cost savings in filters and hardware.
• Broad range of filter media available – including water removal.	• Choose the proper medium for system parameters.	• Cost savings by avoiding both "over" and "under" filtration.
• Inside-to-outside flow through element with a closed bottom end cap.	• All contamination is trapped inside of element assembly.	• Contamination is not reintroduced into the system during replacement.
• Wire reinforced Microglass III elements.	• Rugged construction stands up to abuse of cyclic flows without performance loss. • Wire support reduces pleat bunching, keeps pressure drop consistent.	• The reliable filtration provided assures equipment protection, reduces downtime, maximizes element life, and allows the hydraulic system to operate properly.
• Multipass tested elements (per ANSI/NFPA T3.10.8.8 R1-1990 modified for fine filtration).	• Filter performance backed by recognized and accepted laboratory test standards.	• Filters you select have consistent performance levels.
• Complete element performance data disclosure.	• All pertinent information is provided in an easy-to-compare format.	• Provides an easy guide to proper filter selection.

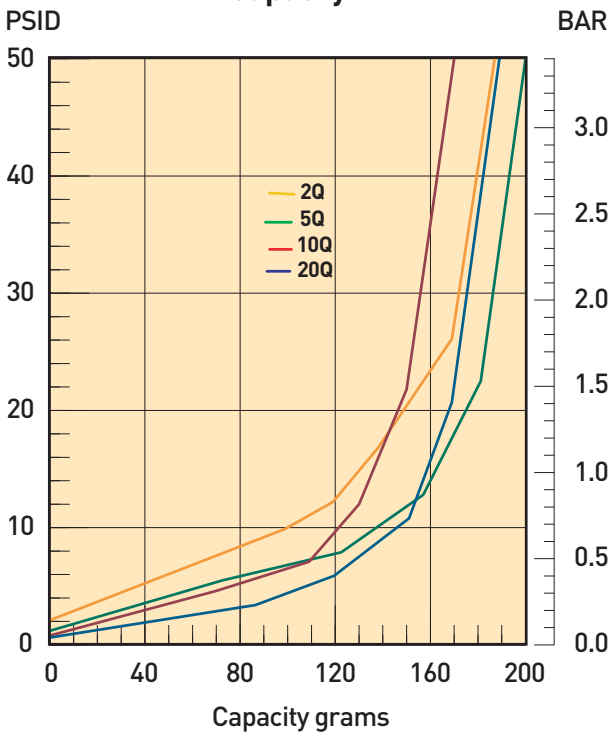
RF7 Series

RF7-1 Element Performance

Efficiency

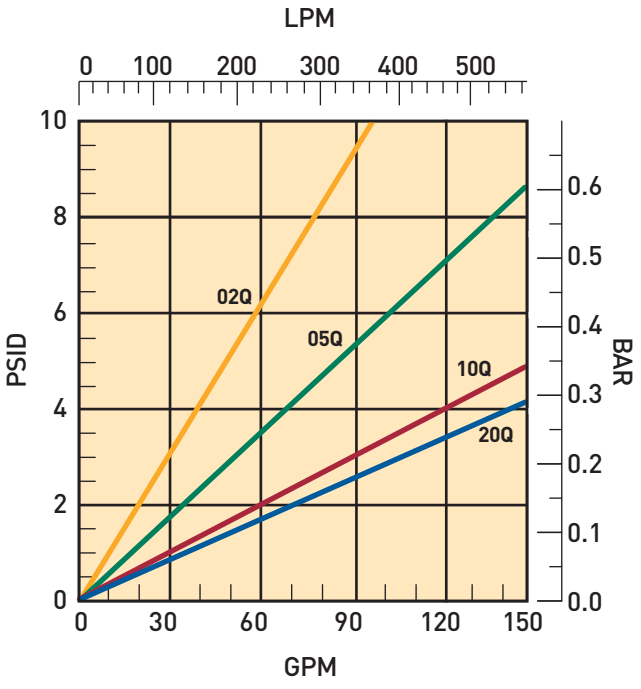


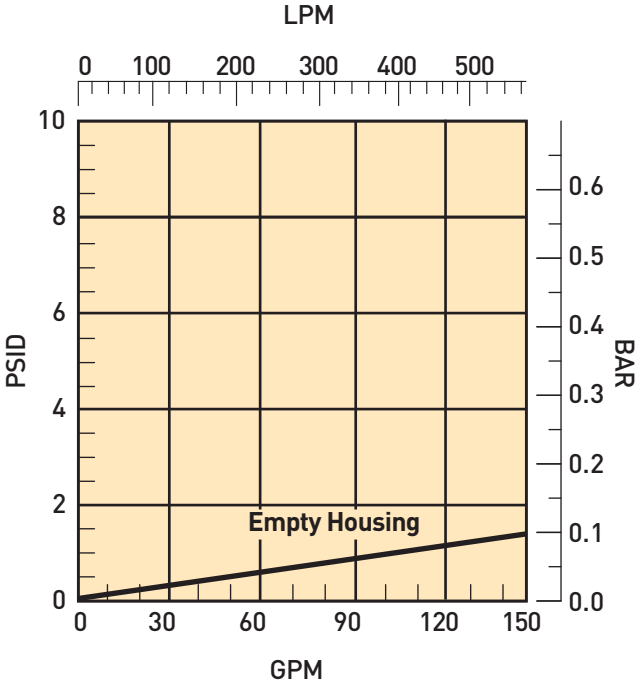
Capacity



Results typical from Multi-pass tests run per test standard ISO 16889 @ 50 gpm to 50 psid terminal - 10 mg/L BUGL
Refer to Appendix on pages 264-265 for relationship to test standard ISO 4572.

Flow vs. Pressure Loss

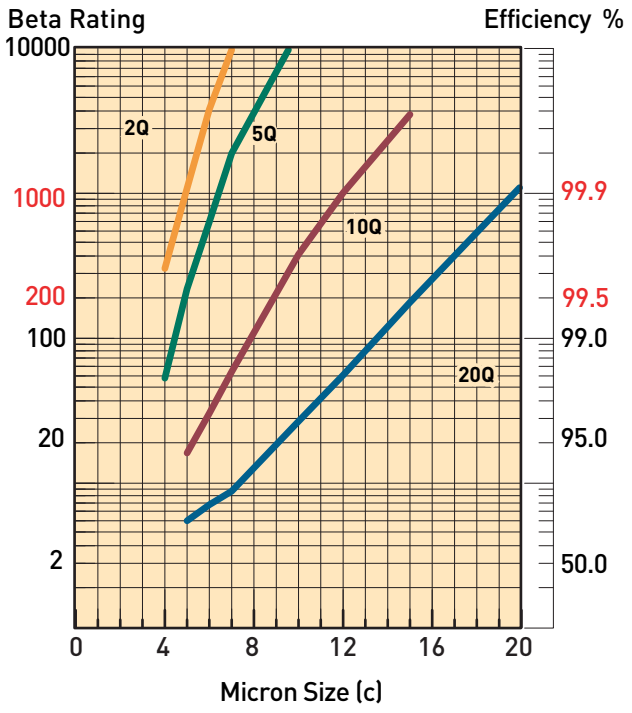




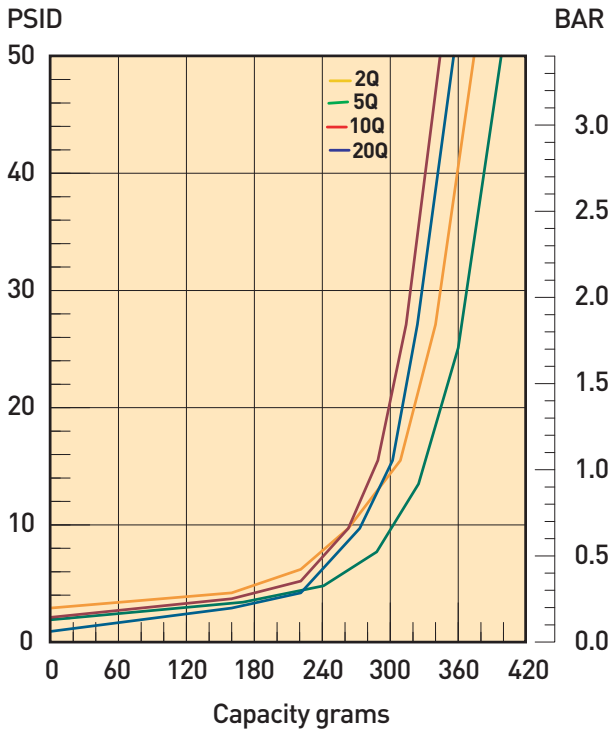
RF7 Series

RF7-2 Element Performance

Efficiency

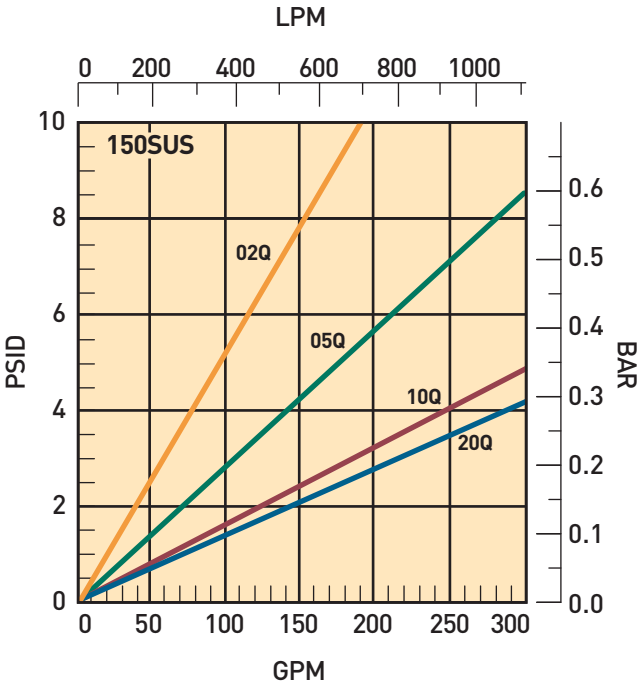


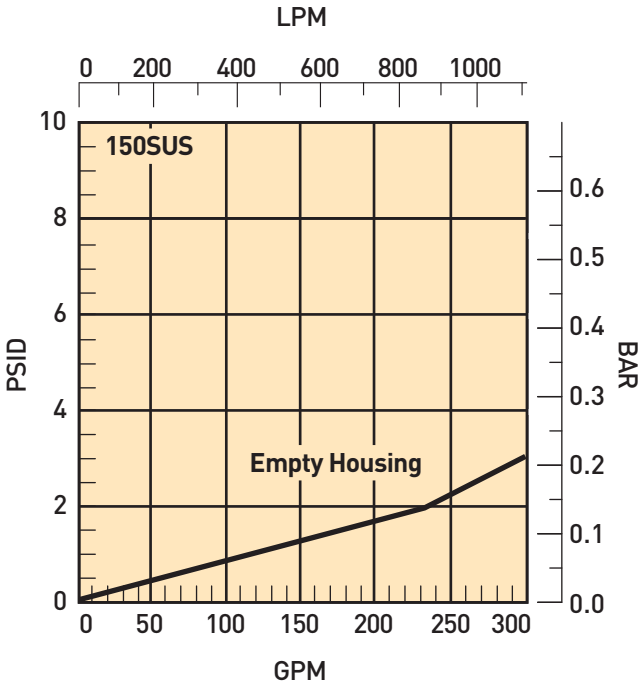
Capacity



Results typical from Multi-pass tests run per test standard ISO 16889 @ 80 gpm to 50 psid terminal - 10 mg/L BUGL
Refer to Appendix on pages 264-265 for relationship to test standard ISO 4572.

Flow vs. Pressure Loss





RF7 Series

Specifications

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

Design Safety Factor: 3:1

Element Burst Rating:
50 psid (3.4 bar) minimum.

Materials:
Cast Aluminum Head & Cover
Steel Diffuser Tube
Steel Clamp

Operating Temperatures:
Nitrile; -40°F to 225°F
(-40°C to 107°C)

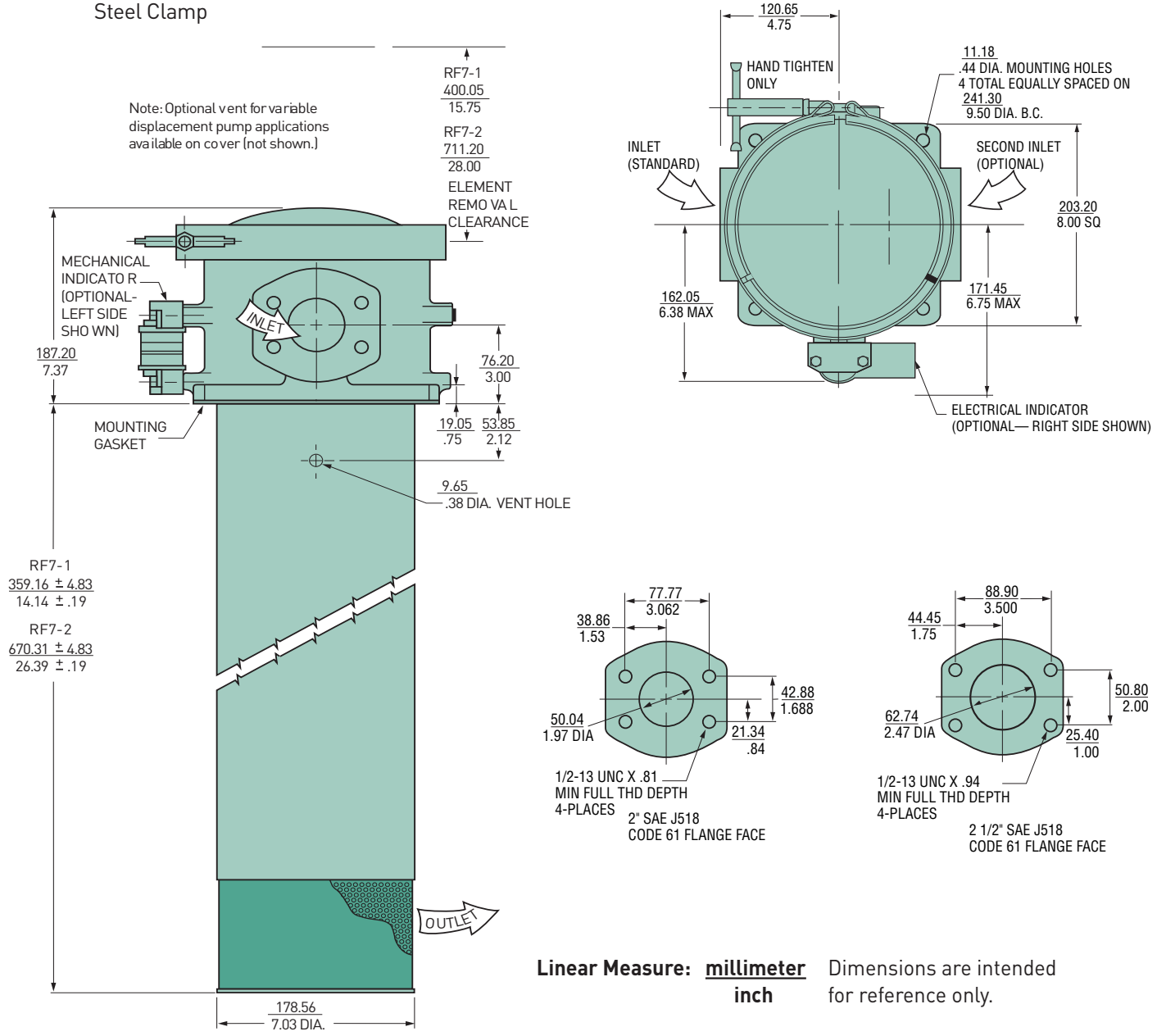
Fluorocarbon; -15°F to 275°F
(-26°C to 135°C)

Weight (approximate):
RF7-1 34 lbs. (15.4 kg)
RF7-2 42 lbs. (19 kg)

Indicators:
Visual system pressure type (gauge or pressure switch).

Visual pressure differential type.

Electrical pressure differential type.
15A @ 250 VAC
.5A @ 125 VDC



Clearance hole in tank reservoir to be 7 1/8 IN. ± 1/16 IN. DIA.

Linear Measure: **millimeter** / **inch** Dimensions are intended for reference only.

Drawings are for reference only.
Contact factory for current version.

RF7 Series

Specifications

Filter Service

When servicing an RF7 filter, use the following procedure:

A. Stop all flow to the filter.

B. Loosen the clamp handle counterclockwise and remove the clamp assembly.

C. Remove the filter cover by lifting upward.

D. Pull the entire cartridge assembly out by grabbing onto the "T" handle.

E. Unscrew the "T" handle from the bypass assembly (with mesh screen) and remove the bypass assembly.

F. Lift the element over the exposed rod assembly and discard.

G. Place a new element over the rod and seat on the bottom.

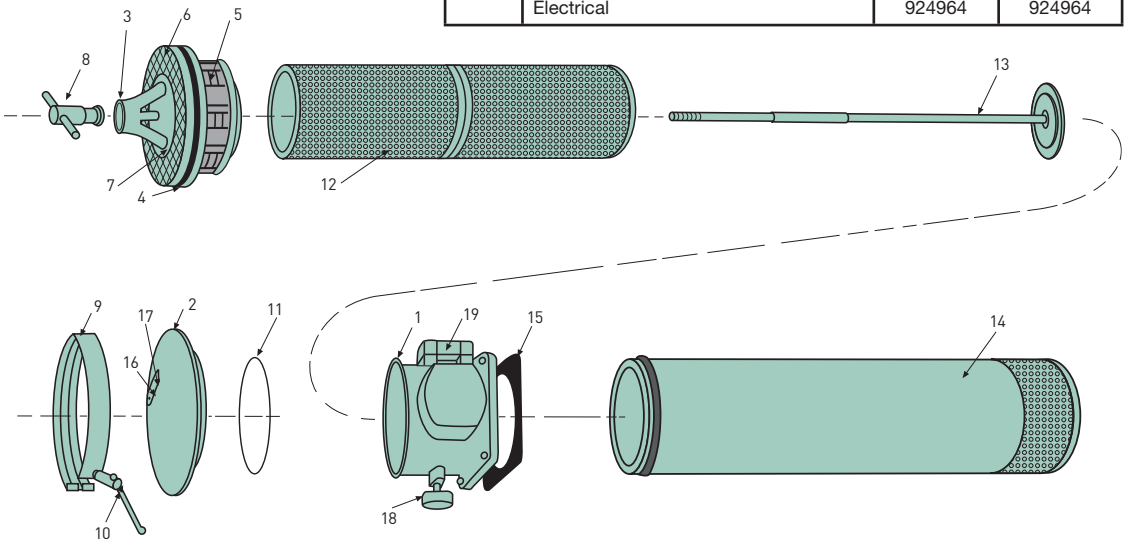
H. Re-attach the bypass assembly to the top of the element.

I. Replace the "T" handle and hand-tighten.

J. Firmly place the entire cartridge assembly back into the filter housing.

K. Set the cover back on the housing, reattach the clamp assembly and hand tighten the handle.

Parts List			
Index	**Description**	**Part Number**	
		RF7-1	**RF7-2**
1	**Head - Single Inlet**		
	2" SAE Flange Face w/gage ports	932549	932549
	2 1/2" SAE Flange Face w/gage ports	932483	932483
	2" SAE Flange Face w/indicator	932484	932484
	2 1/2" SAE Flange Face w/indicator	932485	932485
	Head - Double Inlets		
	2" SAE Flange Face w/gage ports	932550	932550
	2 1/2" SAE Flange Face w/gage ports	932551	932551
	2" SAE Flange Face w/indicator	932552	932552
	2 1/2" SAE Flange Face w/indicator	932553	932553
2	**Cover**	932288	932288
3	**Bypass Mount**	932521	932521
4	**Lipseal**		
	Nitrile	932415	932415
	Fluorocarbon	932488	932488
5	**Bypass Valve (6)**	930507	930507
6	**Screen**	932416	932416
7	**Screen Retaining Ring**	932417	932417
8	**"T" Handle Assembly**	903889	903889
9	**Clamp**	909876	909876
10	**Clamp Handle**	926768	926768
11	**Cover O-Ring**		
	Nitrile	N72263	N72263
	Flourocarbon	V72263	V72263
12	**Element (See model code page)**		
13	**Cartridge Rod Assembly**	933067	932418
14	**Diffuser Tube Assembly**	933064	932419
15	**Gasket**		
	Nitrile	932420	932420
	Fluorocarbon	932489	932489
16	**Nameplate**	920928	920928
17	**Drivescrew (2)**	900028	900028
18	**Pressure Gauge**	936912	936912
19	**Indicators**		
	Visual	924776	924776
	Electrical	924964	924964



RF7 Series

How to Order

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8
	RF7	2	10Q	MP	25	Y999	1

BOX 1: Seals Symbol	Description
None	**Nitrile**
F3	Fluorocarbon

BOX 2: Basic Assembly Symbol	Description
RF7	In-tank return filter

BOX 3: Length Symbol	Description
1	**Single length**
2	**Double length**

BOX 4: Media Code Symbol	Description
20Q	Microglass III
10Q	Microglass III
05Q	Microglass III
02Q	Microglass III
10C	Cellulose
WR	Water Removal

BOX 5: Indicator(s) (See Note A) Symbol (2 Required)	Description
P	**Gauge, port plugged**
G	Gauge, color coded
S	Pressure switch
M	Visual indicator
E	Electrical indicator

Note A: (First letter of indicator code = left side of filter head when looking into inlet with bowl down; second letter = right side of filter head when looking into inlet with bowl down.)

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

BOX 7: Ports Symbol	Description
Inlet	Side
Y9	**2" SAE flange face (Standard)**
Z9	**2½" SAE flange face (Standard)**
2Y9	Two Inlets, 180° apart (Optional)
2Z9	Two Inlets, 180° apart (Optional)
Outlet	
99	**No fitting**

BOX 8: Modifications Symbol	Description
1	**None**

Replacement Elements

Media	Single Length Nitrile	Single Length Fluorocarbon	Double Length Nitrile	Double Length Fluorocarbon
20Q	933800Q	933808Q	933812Q	933156Q
10Q	933802Q	933809Q	933814Q	933155Q
05Q	933804Q	933810Q	933816Q	933153Q
02Q	933806Q	933811Q	933818Q	933152Q
10C	908648	923551	932498	932503
WR	928563	933853	932501	932506

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