Racor
The World’s Best Filtration starts with the

Over 30 years of innovation, over 30 years of quality...

1969  Diesel Fuel
1969   It all began with a patented, and exceptionally efficient new way to remove water, dirt, rust and algae from diesel fuel.

1975  Cold
1975   Racor pioneers integrated fuel heaters, now standard throughout the industry.

1983  Technology
1983   Aquabloc® filters debut, and Racor Filter/Separators make another significant leap in filtration efficiency.

1984  Protection
1984   The Racor Sentinel System shuts down an engine before a major component failure can cause permanent damage. Sentinel remains the preferred all mechanical engine control system.

1985  Growth
1985   Racor becomes a division of Parker Hannifin Corporation, further strengthening one of the world’s most respected brands.

1987  Standard Equipment
1987   The first Navistar powered Ford E Series and F Series vehicles roll off the production line with the revolutionary, compact and flexible Racor Spin On Series.

1989  Quality
1989   Racor earns Ford Q1 certification, the first in a series of quality awards from one of the world’s leading engine and equipment manufacturers.

1991  The Environment
1991   Along with protecting engines, Racor makes products that protect the environment. Lifeguard is a marine fuel/air separator that prevents fuel from escaping overboard from vent lines during refuelling.

1992  Oil
1992   Every bit as vital and every bit as dirty as fuel. The Racor solution is an ingenious one, a cleanable oil filter that puts an end to frequent filter changes and disposal.
1994

Air

1994 Engines gasping for a breath of fresh air breathe easy with the introduction of synthetic, multi stage Racor “twice the life” air filters.

1995

CCV Products

1995 Racor starts cleaning up engine rooms with a crankcase ventilation system that keeps oily blow-by from damaging turbo chargers and other precision components.

1996

Plant expansion

1996 In addition to the world class manufacturing facility in Modesto, Racor opens locations in Oklahoma, South Carolina, Brazil, Korea and South Africa. In Europe Morley, West Yorkshire in the UK becomes the centre of excellence in Europe.

1997

Racor Hydrocarbon

1997 Racor Hydrocarbon Filters and Vessels debut – offering customers flow rates to 1000 gpm and higher.

2000

UK Facility

2000 Having moved out of Morley into a purpose built factory at nearby Dewsbury in 1998, Racor sees significant growth in Europe. 2000 saw the expansion of manufacturing capability to include all spin on series filters, and the establishment of a state-of -the-art design and test, research and development facility.

2001

Global OEM

2001 Racor continues to forge long term relationships with Global OEM companies to produce sound, cost effective engineered solutions to meet specific application requirements.

2002

High performance air filters

2002 Racor purchases Farr opening up opportunities in medium and heavy duty Engine Air applications.

2007

Ultra high efficiency CCV integration

2007 European design and engineering consolidation to provide CCV integrated OEM solutions.

2008

Lab and engine test facilities

2008 A major investment in Dewsbury facilities ensure technical resources are in place to support customer needs. Parker Racor purchases Village Marine-Water filtration desalination products.

The most trusted name in engine protection

Racor technology takes the guesswork out of engine protection and Racor manufacturing quality and attention to detail ensures every customer gets the filtration and separation solution they are looking for.

To make product selection easier, Racor’s extensive range has been catalogued into four market/ application groups detailed below.

Hydrocarbon Filter Vessels and Elements

From the refinery to the injector, at the terminal and on the forecourt, Racor has a hydrocarbon filter vessel and element solution to meet your fuel delivery needs.

Commercial Fuel Filtration

Everytime you add fuel, you add millions of tiny contaminants. small enough to be invisible, but big enough to destroy injectors, pumps and profitability. Racor’s industrial and automotive product range of customer proven spin-on filter/ separators, turbine fuel filters and crank case ventilators are the solution.

Engine Air Filtration Systems

Fresh air. That’s what Racor filtration is all about. Because when engines breathe easier they perform better with more power, more torque and with improved fuel economy. Whatever your application, there’s a Racor Air Filtration system that will help you and your engine breathe easy.

Leisure Marine and Commercial Marine Filtration

Ask a sailor about engine protection. About filtration, about reliability and performance. Whether they are the master of a super yacht, sailboat, fishing boat or tug, the chances are the one word answer will be the same as it has been for more than three decades…Racor Marine filtration products trusted across the seven seas.

For further information email: filtrationinfo@parker.com

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The World’s Best Filtration Starts with the Racor Out in Front

Whether you operate a truck, bus, generator or pump set, you need to know that every time you switch on the ignition you will hear the engine fire into life, each time and every time. There is no better way to ensure engine reliability than with good quality filtration. Whatever and wherever your application, we have a system which will meet your requirements.

Fuel Filtration Water Separators (FFWS)
Fuel Contamination, either in the form of dirt or water will find its way into your fuel system however careful you are. With modern engines now injecting fuel at anything up to 2000 bar, and injector tolerances being measured in microns, it is hardly surprising that even a small amount of dirt or water corrosion can start a problem. Water or particulate can cause microscopic surface damage which is then focused on by the high pressure flow, to cause significant wear which will eventually lead to reduced efficiency and complete break-down. Several $100 of filtration over an engines life can save $1000’s in engine re-fits let-alone down-time. Parker Racor offer what is widely accepted as the industry bench mark premium product, why risk anything less.

Working to Efficiency standards:
ISO TR 13353, ISO TS 13353, ISO 19438, SAE J 1985,
SAE J 905,

Water Separation Standards:
ISO 4020 6.5, SAE J1839,
SAE J1488)

FFWS
1. 400 Series FFWS
2. 600 Series FFWS
3. 200 Series FFWS
4. Turbine FFWS
5. Top Loader
6. P-Series Pump FFWS
7. RAC gasoline Series

Fuel Dispensing Filters
Water and dirt are often introduced into fuels during fuel transfer and storage, therefore to clean fuel before it enters the fuel tank, will reduce contamination, protect your injection system and save money in the long-run.

Fuel Delivery
8. FBO FFWS
9. RVFS FFWS

Racor Closed Crankcase Ventilation
To meet emissions legislation and also to keep engine bays and air filters clear of oil, engine blow by gases emanating from the crankcase are fed back into the air intake before the turbo charger.
World’s Best Engineering

Air Filters
High efficiency air filters will allow your engine to breathe clean dry air, which will stop damaging particulate from entering the engine and oil systems. In very dirty atmospheres special static and active pre-cleaners are available to stop media elements from being prematurely clogged.

**Air Filters**
12. AF Air Filter
13. Pamic Air Filter
14. ECO Air Filter
15. Dynacell Air Filter
16. Cabin Air Filters

Oil Filters
Parker Racor is able to develop with boat and marine engine manufacturers oil filtration system solutions based either on cartridge elements or spin-on canister filter assemblies.

**Oil Filters**

International Oil, Fuel and Cooler Module
17. A total system approach that utilises 17 functions in one filtration module developed for OEM’s. The module has a patented fuel and oil top loading filter cartridge ensuring quality and preventing design features being copied. The oil, fuel and cooler module is used in conjunction with the HFCM OE version of the P Series.

Racor Additives
For long term fuel stability, elimination of Bacterial growth or engine performance improvement, Racor have an additive to suit your needs.

**Racor Additives**
18. Fuel/Oil/Coolant Additives

Additional Products
19. Hydraulic spin on
20. Parker Par-Fit
21. Replacement Elements
22. LPG/CNG Filters
23. ABL
24. EAB
25. Particle Counter
26. Multiclamp
27. Nitrogen Tyre Saver
28. Green Dust Cap Nitrogen Filled
29. Transmission Filter

However these gases are full of soot laidened oil mist, which will coat the turbo turbine blades and more importantly coat the intercooler, reducing efficiency and causing overheating. Racor’s CCVs solve this problem.

They are some of the most efficient available and have patented upstream crankcase pressure regulation as opposed to a turbo vacuum limiters, which other manufacturers are forced to employ.

**CCV**
10. CCV 3500
11. CCV 6000

At the heart of the filter is the filter paper or media, which is constructed from a special blend of mixed fibre sizes, to achieve the highest possible efficiency whilst maximising capacity and life. The media is impregnated with special resins to ensure durability and separation performance. Product is built in an ISO TS 16949 quality system environment to ISO 14001 Environmental requirements. Leading global engine manufacturers recommend Racor to protect their engines, why risk anything less.
Water sensor and vacuum gauges to signal service are valuable options available for most models.

Aquabloc II media is corrugated, allowing greater surface area exposure for fuel filtration and an increased dirt-holding capacity.

Polymer bowls are virtually indestructible. They won’t discolor from exposure to alcohol, additives or UV light — a see-thru that stays see-through. A die cast aluminum bowl is available for most models.

Positive seal self-venting drain eliminates leaks and speeds service.

Die cast aluminium heads with multiple ports make installation as easy as adding options.

The best gaskets and o-rings available promise consistent, sure seals.

Powerful primer pumps are integrated into mounting heads.

Water sensor and vacuum gauges to signal service are valuable options available for most models.

100 Series
110A - 120A - 140
Maximum protection in minimum space.

The 110A is designed for fuel injected petrol engines with high working pressures and also can be used on diesel engines. A metal housing is standard.

Other models in the 100 Series, the 120A and 140, offer reliable protection for smaller diesel and petrol engines used in generator sets, pressure washers and other equipment. Their compact size fits tight mounting locations and multiple ports offer installation flexibility.

200 Series
215 - 230 - 245
Improved for greater versatility.

The 215, 230 and 245 filter/separators come standard with an integral priming pump and a new see-through contaminant bowl which can operate in applications up to 30 psi. Another design upgrade is the optional 200-watt in-bowl heater for colder operating conditions. Applications include light duty and medium duty trucks and vehicles, construction, agricultural and other diesel powered equipment.

Maximum protection in minimum space.

The 110A is designed for fuel injected petrol engines with high working pressures and also can be used on diesel engines. A metal housing is standard.

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400 Series
445 - 460 - 490 - 4120 - 4160
A powerful, integral primer pump makes service quick and easy.
The standard equipment primer pump tops the list of extensive options that allows bus fleets, truck fleets, RV owners and others to tailor a filter/separater system specifically to their operating requirements. These options include a choice of three micron rating for the Aquabloc filter element, 300 watt in head PTC (positive temperature coefficient heater) water sensor and flow rates up to 600 l/hr (160 US gph).

Diesel Spin-On Series
4120 - 6120 - 3150 - 3250
High Capacity Fuel Filtration
High flow applications need not suffer with high maintenance... and Racor offers a range of ultra-high capacity, highly efficient fuel filter/water separators that also deliver spin-on convenience. As you'd expect, Aquabloc II media is standard, and all units provide flexibility in options to customize and meet specific operating conditions.

600 Series
645 - 660 - 690 - 6120
Maximise engine protection with a low profile, easy to fit filtration system.
With all the features of the 400 Series, the 600 Series offers engine owners an economical system for applications where an integral primer pump is not needed. Flow rates up to 600 l/hr (160 US gph), in bowl heater and water sensor are all available options.

Bowl removal wrench available 22628
Diesel and Petrol Spin-On Series

100 Series

Filter Series
1-100

Type
10 - For 110A
(exclude micron rating, only available with 10 micron, 2 micron available in aftermarket only)
20 - For 120A
40 - For 140A

Micron Rating
S-2 Micron
T-10 Micron
P-30 Micron

Can Length Option
A - Length A for 15GPH
B - Length B for 20GPH
(110A only available in Length A)

Model | 110A | 120A | 140A
--- | --- | --- | ---
Maximum Flow Rate *1 | 57 L/hr (15 G/hr) Diesel | 57 L/hr (15 G/hr) Diesel | 57 L/hr (15 G/hr) Diesel
| 132 L/hr (35 G/hr) Petrol | 132 L/hr (35 G/hr) Petrol | 132 L/hr (35 G/hr) Petrol
Petrol/Diesel *2 | Both | Both | Both
Maximum Pressure Bar *3 | 6.9 | 0.5 | 0.5
No. of Ports | 4 | 4 | 2
Port Size | 1/4” – 18 NPTF | 1/4” – 18 NPTF | 1/4” – 18 NPTF
Integral Primer Pump *4 | No | No | No
Water Sensor Option *5 | Yes | Yes | Yes
Electric Heater Option *5 | No | No | No
Height mm | 152 | 166 | 152
Width mm | 81 | 81 | 81
Depth mm | 81 | 81 | 81
Weight Kg | 0.59 | 0.5 | 0.5

*1 Flow rate given in US gph 1 US Gallon = 0.833 Gallon
*2 Metal Bowls must be used for petrol installations
*3 Pressure installations are applicable up to the maximum Pressure shown
## 200 Series

<table>
<thead>
<tr>
<th>Box 1</th>
<th>Box 2</th>
<th>Box 3</th>
<th>Box 4</th>
<th>Box 5</th>
<th>Box 6</th>
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<tr>
<td>2</td>
<td>15</td>
<td>R</td>
<td>24</td>
<td>30</td>
<td>MTC</td>
</tr>
</tbody>
</table>

1. **Filter Series (Head)**
   - 2-200

2. **Flow Rate**
   - 15 US Gallons
   - 30 US Gallons
   - 45 US Gallons
   - 60 US Gallons
   - Blank (No pump)

3. **Bowl Material**
   - RM - Metal Bowl
   - R - Clear Bowl

4. **Bowl Heater**
   - 12-12V / 200W
   - 24-24V / 200W

5. **Micron Rating**
   - 2-2 Micron
   - 10-10 Micron
   - 30-30 Micron

6. **Threads**
   - MTC - Metric 14mm (16mm on 260R)
   - (Blank) 1/4” NPTF

### Ordering and Specification

<table>
<thead>
<tr>
<th>Model</th>
<th>215</th>
<th>230</th>
<th>245</th>
<th>260</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Flow Rate *1</td>
<td>57 L/hr (15 G/hr) Diesel</td>
<td>114 L/hr (30 G/hr) Diesel</td>
<td>170 L/hr (45 G/hr) Diesel</td>
<td>227 L/hr (60 G/hr) Diesel</td>
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<tr>
<td>Petrol/Diesel *2</td>
<td>Diesel</td>
<td>Diesel</td>
<td>Diesel</td>
<td>Diesel</td>
</tr>
<tr>
<td>Max Pressure Bar *3</td>
<td>2.06</td>
<td>2.06</td>
<td>2.06</td>
<td>2.06</td>
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<tr>
<td>No. of Ports</td>
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<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Port Size</td>
<td>M14 x 1.5 - 1/4NPTF</td>
<td>M14 x 1.5 - 1/4NPTF</td>
<td>M14 x 1.5 - 1/4NPTF</td>
<td>M16 x 1.5 - 1/4NPTF</td>
</tr>
<tr>
<td>Integral Primer Pump *4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Water Sensor Option *5</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Electric Heater Option *5</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Height mm</td>
<td>211</td>
<td>229</td>
<td>267</td>
<td>267</td>
</tr>
<tr>
<td>Width mm</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>102</td>
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<tr>
<td>Weight Kg</td>
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<td>0.8</td>
<td>1</td>
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</table>

*4 Models with integral priming pumps are not recommended for petrol applications
*5 Not for use with petrol applications
# Diesel and Petrol Spin-On Series

## 400 Series

<table>
<thead>
<tr>
<th>Box 1</th>
<th>Box 2</th>
<th>Box 3</th>
<th>Box 4</th>
<th>Box 5</th>
<th>Box 6</th>
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<tr>
<td>4</td>
<td>120</td>
<td>R</td>
<td>24</td>
<td>30</td>
<td>MTC</td>
</tr>
</tbody>
</table>

**Filter Series (Head)**
- 4-400

**Flow Rate**
- 45 US Gallons
- 60 US Gallons
- 90 US Gallons
- 120 US Gallons
- 160 US Gallons

**Bowl Material**
- RM - Metal Bowl
- R - Clear Bowl

**Threads**
- MTC - Metric 16mm
- Blank indicates 3/8" NPTF, 3/4" UNF on 4120

**Micron Rating**
- 2-2 Micron
- 10-10 Micron
- 30-30 Micron

**Bowl Heater**
- 12-12V / 200W
- 24-24V / 200W

### Model

<table>
<thead>
<tr>
<th>Model</th>
<th>445</th>
<th>460</th>
<th>490</th>
<th>4120</th>
<th>4160</th>
</tr>
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<tbody>
<tr>
<td><strong>Maximum Flow Rate</strong> *1</td>
<td>170 L/hr (45 G/hr)</td>
<td>227 L/hr (60 G/hr)</td>
<td>341 L/hr (90 G/hr)</td>
<td>454 L/hr (120 G/hr)</td>
<td>600 L/hr (160 G/hr)</td>
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<tr>
<td>Petrol/Diesel *2</td>
<td>Diesel</td>
<td>Diesel</td>
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<tr>
<td>Maximum Pressure Bar *3</td>
<td>2.06</td>
<td>2.06</td>
<td>2.06</td>
<td>2.06</td>
<td>2.06</td>
</tr>
<tr>
<td>No. of Ports</td>
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<td>4</td>
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<tr>
<td>Port Size</td>
<td>M16 x 1.5 – 3/8NPTF</td>
<td>M16 x 1.5 – 3/8NPTF</td>
<td>M16 x 1.5 – 3/8NPTF</td>
<td>M16 x 1.5 – 3/4SAE</td>
<td>M16 x 1.5 – 3/4SAE</td>
</tr>
<tr>
<td>Integral Primer Pump *4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Water Sensor Option *5</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Electric Heater Option *5</td>
<td>Yes</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
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<td>1.4</td>
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</tr>
</tbody>
</table>

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*1 Flow rate given in US gph 1 US Gallon = 0.833 Gallon
*2 Metal Bowls must be used for petrol installations
*3 Pressure installations are applicable up to the maximum Pressure shown
Ordering and Specification

600 Series

1. **Filter Series (Head)**
   - 6-600

2. **Flow Rate**
   - 45 US Gallons
   - 60 US Gallons
   - 90 US Gallons
   - 120 US Gallons
   - 160 US Gallons

3. **Bowl Material**
   - RM - Metal Bowl
   - R - Clear Bowl

4. **Bowl Heater**
   - 12-12V / 200W
   - 24-24V / 200W

5. **Micron Rating**
   - 2-2 Micron
   - 10-10 Micron
   - 30-30 Micron

6. **Threads**
   - MTC - Metric 16mm
   - Blank indicates 3/8” NPTF

---

**Model**

<table>
<thead>
<tr>
<th>Model</th>
<th>645</th>
<th>660</th>
<th>690</th>
<th>6120</th>
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</thead>
<tbody>
<tr>
<td>Max Flow Rate *1</td>
<td>170 L/hr (45 G/hr)</td>
<td>227 L/hr (60 G/hr)</td>
<td>341 L/hr (90 G/hr)</td>
<td>454 L/hr (120 G/hr)</td>
</tr>
<tr>
<td>Petrol/Diesel *2</td>
<td>Both</td>
<td>Both</td>
<td>Both</td>
<td>Both</td>
</tr>
<tr>
<td>Max Pressure Bar *3</td>
<td>2.06</td>
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<td>2.06</td>
</tr>
<tr>
<td>No. of Ports</td>
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<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Port Size</td>
<td>M16 x 1.5 – 3/8NPTF</td>
<td>M16 x 1.5 – 3/8NPTF</td>
<td>M16 x 1.5 – 3/4SAE</td>
<td>M16 x 1.5 – 3/4SAE</td>
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<tr>
<td>Integral Primer Pump *4</td>
<td>No</td>
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<td>No</td>
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<td>Water Sensor Option *5</td>
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<td>Yes</td>
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<tr>
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<td>Depth mm</td>
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<td>1.8</td>
</tr>
</tbody>
</table>

*4 Models with integral priming pumps are not recommended for petrol applications
*5 Not for use with petrol applications
Spin-on Replacement Filter Cans

**Box 1**

- R - Racor

**Box 2**

- 120

**Box 3**

- T

**Micron Rating**

- S-2 Micron
- T-10 Micron
- P-30 Micron

**Can Size**

- 11 - To fit 110A
- 12 - To fit 120A and 140R
- 13 - To fit 120B
- 15 - To fit 215R
- 20 - To fit 230R
- 24 - To fit old 220R
- 25 - To fit 245R
- 26 - To fit old 225R
- 260 - To fit 260R
- 45 - To fit 400-600 series
- 645R/445R
- 60 - To fit 400-600 series
- 660R/460R
- 90 - To fit 400-600 series
- 690R/490R
- 120 - To fit 400-600 series
- 6120R/4120R
- 160 - To fit 400-600 series
- 6160R/4160R

---

**700 Series**

### Fuel Filter / Water Separators with Integrated Priming Pump

The Racor 700 Series is equipped with state-of-the-art fuel pumps with DC motors. The 12V roller-cell fuel pump offers the benefit of an electric on-demand priming pump. In the 24V brushless version, the motor shaft directly drives the gerotor, creating a unique, positive displacement pump. The gerotor has fewer parts than gear or vane pumps, and the sensorless control technology of the DC motor make this product the most reliable filter and pump assembly on the market. The 24V pump assembly is ideal for tough on-engine applications. For off-engine mounting, the 12V pumps are a more economical alternative.
**Product Features**

- Aluminium filter head with integral mounting bracket and four ports (2 inlets and 2 outlets) with 7/8”-14 SAE O-ring threads.
- 100 micron prefilter screen.
- 12 volt or 24 volt electronic priming pump.
- Vent valve to purge air during fuel priming.
- Replaceable Aquabloc®II spin-on element.
- Reusable, see-thru collection bowl.
- Self-venting water/contaminant drain.
- Water-in-fuel (WIF) sensor/detection probe.

**Problem**

- Filters are often installed in hard to reach places for re-priming.
- Air can get in fuel lines during element change-out or storage.
- Pre-filling filter can be messy.
- Distance between tank and filter can be inconvenient for hand priming.

**Solution**

Racor 700 Series Integrated Fuel Filter/Water Separator with a two stage filtration and re-priming system.

- Simplifies service
- No messy pre-filling
- Protects engine
- No lag in starting engine
- Fast and safe re-priming

**How it works**

The 700 Series pump/fuel filter water separator assemblies are two stage filtration and re-priming systems. These complete fuel management systems isolate contaminants present in diesel fuels and traps them prior to reaching the fuel injection system, protecting the engine’s fuel system from costly and premature failure.

**Ordering and Specification**

<table>
<thead>
<tr>
<th>Model</th>
<th>745R30</th>
<th>760R30</th>
<th>790R30</th>
<th>7125R10</th>
<th>7125R30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Flow Rate</td>
<td>170 L/hr [45 G/hr]</td>
<td>227 L/hr [60 G/hr]</td>
<td>341 L/hr [90 G/hr]</td>
<td>454 L/hr [120 G/hr]</td>
<td>454 L/hr [120 G/hr]</td>
</tr>
<tr>
<td>Replacement Element</td>
<td>R45P</td>
<td>R60P</td>
<td>R90P</td>
<td>R125T</td>
<td>R125P</td>
</tr>
<tr>
<td>Height</td>
<td>10.8in / 27.5cm</td>
<td>11.8in / 29.5cm</td>
<td>12.8in / 32.2cm</td>
<td>15.8in / 40.1cm</td>
<td>15.8in / 40.1cm</td>
</tr>
<tr>
<td>Width</td>
<td>4.3in / 10.9cm</td>
<td>4.3in / 10.9cm</td>
<td>4.3in / 11.0cm</td>
<td>4.3in / 11.0cm</td>
<td>4.3in / 11.0cm</td>
</tr>
<tr>
<td>Depth</td>
<td>6.5in / 16.5cm</td>
<td>6.5in / 16.5cm</td>
<td>6.5in / 16.5cm</td>
<td>6.5in / 16.5cm</td>
<td>6.5in / 16.5cm</td>
</tr>
<tr>
<td>Weight</td>
<td>4.5 lbs / 2.0kg</td>
<td>5.5 lbs / 2.5kg</td>
<td>6.5 lbs / 3.0kg</td>
<td>7.7 lbs / 3.5kg</td>
<td>7.7 lbs / 3.5kg</td>
</tr>
<tr>
<td>Clean Pressure Drop</td>
<td>0.25 psi / 1.7 kPa</td>
<td>0.25 psi / 1.7 kPa</td>
<td>0.25 psi / 1.7 kPa</td>
<td>0.25 psi / 1.7 kPa</td>
<td>0.25 psi / 1.7 kPa</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40º to +225ºF [-40º to +107ºC]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The 700 Series comes standard with a 12 volt brushed pump assembly. To order the 24 volt brushless pump assembly insert 24 at the end of the 790 or 7125 part numbers. (example: 790R3024)
The patented RFCM contains Racor’s high performance Aquabloc II filter media. Contaminant collection bowl is removable. Robust roller-cell electric fuel pump ensures consistent fuel delivery at a variety of engine speeds. Environmentally friendly cartridge-style element is incinerable and is available at the required efficiency levels for high pressure diesel fuel injection systems. An anti-drainback valve makes element service convenient and clean. Water sensing system alerts the operator when service is required and a self-vent ing drain valve makes draining quick and easy.

Thermal recirculation valve regulates return fuel recirculation for optimum performance during cold weather operation (10°C / 50°F – 32°C / 90°F).

The patented RFCM contains Racor’s high performance Aquabloc II filter media.

Figure: Durable, 12V DC roller-cell electric fuel pump offers the benefit of an electric, on-demand, priming pump.

Figure: High performance Aquabloc II cartridge-style filter media is environmentally friendly and incinerable.

Figure: Contaminant collection bowl with self-venting drain is both removable and reusable.

Figure: Water sensing system alerts the operator when service is required and a self-venting drain valve makes draining quick and easy.

Figure: Also available in see-through collection bowl.

Figure: Thermostatically controlled PTC style electric (150-watt) heater facilitates cold weather starting.

Figure: Thermostatically controlled (10°C / 50°F – 26°C / 80°F) controlled PTC style electric fuel heater (200 watts at 12V DC) facilitates cold weather starting.

Figure: Durable, 12V DC roller-cell electric fuel pump offers the benefit of an electric, on-demand, priming pump.

Figure: High performance Aquabloc II cartridge-style filter media is environmentally friendly and incinerable.

Figure: Contaminant collection bowl with self-venting drain is both removable and reusable.

Figure: Water sensing system alerts the operator when service is required. Under-dash control module for pump and water sensor operation is included with pump option.

Figure: The patented RFCM allows features to be added or removed independent of one another – providing a new level of design flexibility.

The modular design of the RFCM allows features to be added or removed independent of one another – providing a new level of design flexibility.
The Racor fuel conditioning module is designed and manufactured to provide the highest possible value to the diesel engine, vehicle and equipment. The innovation and modular design of the RFCM incorporates all of the low pressure fuel components required by the latest generation of electronically-controlled fuel injection systems. The consistent pressure and volume delivery of pure fuel under various engine speeds, loads and environmental conditions is absolutely essential to achieve the efficiency levels required in today’s engines. The modular design of the RFCM allows features to be added or removed independent of one another – providing a new level of design flexibility.

<table>
<thead>
<tr>
<th>Model</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Flow Rate</td>
<td>30 gph / 170 lph</td>
<td>40 gph / 170 lph</td>
<td>50 gph / 227 lph</td>
</tr>
<tr>
<td>Clean Pressure Drop</td>
<td>0.4 psi / 2.8 kPa</td>
<td>0.5 psi / 3.4 kPa</td>
<td>0.8 psi / 5.5 kPa</td>
</tr>
<tr>
<td>Maximum Pump Output (at 14.4 volts)</td>
<td>40 gph / 151 lph</td>
<td>40 gph / 151 lph</td>
<td>40 gph / 151 lph</td>
</tr>
<tr>
<td>Total Number of Ports Available</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Fuel Inlets</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Fuel Outlets</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Replacement Elements:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 micron</td>
<td>R58060-02</td>
<td>R58095-02</td>
<td>R58039-02</td>
</tr>
<tr>
<td>10 micron</td>
<td>R58060-10</td>
<td>R58095-10</td>
<td>R58039-10</td>
</tr>
<tr>
<td>30 micron</td>
<td>R58060-30</td>
<td>R58095-30</td>
<td>R58039-30</td>
</tr>
<tr>
<td>Minimum Service Clearance</td>
<td>2.5” [28 mm]</td>
<td>2.5” [28 mm]</td>
<td>2.5” [28 mm]</td>
</tr>
<tr>
<td>Height</td>
<td>7.7” [196 mm]</td>
<td>9.0” [229 mm]</td>
<td>11.5” [292 mm]</td>
</tr>
<tr>
<td>Depth</td>
<td>5.2” [132 mm]</td>
<td>5.2” [132 mm]</td>
<td>5.2” [132 mm]</td>
</tr>
<tr>
<td>Width</td>
<td>4.8” [122 mm]</td>
<td>4.8” [122 mm]</td>
<td>4.8” [122 mm]</td>
</tr>
<tr>
<td>Weight (dry)</td>
<td>3.4 lb [1.5 kg]</td>
<td>3.8 lb [1.7 kg]</td>
<td>4.2 lb [1.9 kg]</td>
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<td>Maximum Pump Output Pressure</td>
<td>10 psi [69 kPa]</td>
<td>10 psi [69 kPa]</td>
<td>10 psi [69 kPa]</td>
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<tr>
<td>Features:</td>
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<tr>
<td>Water Sensor</td>
<td>Standard</td>
<td>Standard</td>
<td>Standard</td>
</tr>
<tr>
<td>Heater</td>
<td>Standard</td>
<td>Standard</td>
<td>Standard</td>
</tr>
<tr>
<td>Pressure Regulator (10 psi)</td>
<td>Standard</td>
<td>Standard</td>
<td>Standard</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>−40°F to +255°F / −40°C to +121°C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For continuous run pump operation, custom fittings, or pressure requirements consult Parker Filtration +44 (0) 1924 487000.

Ordering and Specification

1. Specify ‘P3’ for 30gph
2. ‘2’ must be in the part number.
3. Specify micron rating of element: ‘10’ only
4. ‘N’ must be in the part number. (It specifies standard 3/8” npt ports)
5. ‘H’ must be in the part number. (It specifies a 12vdc, 150 watt heater)

Vacuum installations are recommended. ‘Not for use with gasoline applications.'
The First in Fuel Filtration

Every engine runs better with a system that cleans fuel, removes water, heats fuel and senses when it’s time for service. The system is the Racor Turbine Series and it’s the most complete, most efficient, most reliable high-capacity engine protection you can install. A system that protects your investment in engines and fuel.
## Ordering and Specification

### Turbine Series

**Single / Duplex**
- (Blank) Single Housing
- 73/75 – Double Housing
- 77/79 – Triple Housing

**Model Number**
- 500 - 227Lt/Hr (902 = Metric)
- 900 - 341Lt/Hr (902 = Metric)
- 1000 - 681Lt/Hr (1002 = Metric)

**Application**
- FH – Industrial

**Heater**
- 500 Series
  - 12-12V/150W
  - 24-24V/150W
- 900/1000 Series
  - 312-12V/300W
  - 324-12V/300W

**Micron Rating**
- 2-2 Micron
- 10-10 Micron
- 30-30 Micron

### Table

<table>
<thead>
<tr>
<th>Model</th>
<th>500FG</th>
<th>900FH</th>
<th>1000FH</th>
<th>75500FGX</th>
<th>75900FHX</th>
<th>731000FH</th>
<th>751000FH</th>
<th>771000FH</th>
<th>791000FH</th>
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<tbody>
<tr>
<td>Maximum</td>
<td>60 gph</td>
<td>90 gph</td>
<td>180 gph</td>
<td>60/120 gph</td>
<td>90/180 gph</td>
<td>360 gph</td>
<td>180/360 gph</td>
<td>560 gph</td>
<td>360/540 gph</td>
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<tr>
<td>Flow Rate</td>
<td>227 lph</td>
<td>341 lph</td>
<td>681 lph</td>
<td>227/454 lph</td>
<td>341/681 lph</td>
<td>1363 lph</td>
<td>681/1363 lph</td>
<td>2044 lph</td>
<td>1363/2044 lph</td>
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<tr>
<td>Height</td>
<td>11.5” / 292mm</td>
<td>17” / 432mm</td>
<td>22” / 559mm</td>
<td>11.5” / 292mm</td>
<td>17” / 432mm</td>
<td>22” / 559mm</td>
<td>22” / 559mm</td>
<td>22” / 559mm</td>
<td>22” / 559mm</td>
</tr>
<tr>
<td>Width</td>
<td>5.8” / 147mm</td>
<td>6” / 152mm</td>
<td>6” / 152mm</td>
<td>14.5” / 368mm</td>
<td>18.75” / 479mm</td>
<td>16.5” / 419mm</td>
<td>18.75” / 479mm</td>
<td>21.5” / 546mm</td>
<td>21.5” / 546mm</td>
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<tr>
<td>Depth</td>
<td>4.8” / 122mm</td>
<td>7” / 178mm</td>
<td>7” / 178mm</td>
<td>9.5” / 241mm</td>
<td>11” / 279mm</td>
<td>12” / 305mm</td>
<td>11” / 279mm</td>
<td>12” / 305mm</td>
<td>12” / 305mm</td>
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<tr>
<td>Weight</td>
<td>4 lbs / 1.7 kgs</td>
<td>6 lbs / 2.7 kgs</td>
<td>10 lbs / 4.5 kgs</td>
<td>17 lbs / 7.7 kgs</td>
<td>23 lbs / 10.4 kgs</td>
<td>26 lbs / 11.8 kgs</td>
<td>30 lbs / 13.6 kgs</td>
<td>39 lbs / 17.7 kgs</td>
<td>52 lbs / 23.6 kgs</td>
</tr>
<tr>
<td>Port Size Std.</td>
<td>3/4“-16 UNF</td>
<td>7/8“-14 UNF</td>
<td>3/4“-16 UNF</td>
<td>7/8“-14 UNF</td>
<td>7/8“-14 UNF</td>
<td>1/2“-1/2 UNF</td>
<td>7/8“-14 UNF</td>
<td>1“-1/2 UNF</td>
<td>3/4“-1/2 UNF</td>
</tr>
<tr>
<td>Clean Pressure</td>
<td>0.25 psi</td>
<td>0.24 psi</td>
<td>0.24 psi</td>
<td>0.24 psi</td>
<td>0.24 psi</td>
<td>0.24 psi</td>
<td>0.24 psi</td>
<td>0.24 psi</td>
<td>0.24 psi</td>
</tr>
<tr>
<td>Drop</td>
<td>1.72 kPa</td>
<td>2.4 kPa</td>
<td>3.4 kPa</td>
<td>4.83 kPa</td>
<td>11.7 kPa</td>
<td>11.7 kPa</td>
<td>25.5 kPa</td>
<td>11.7 kPa</td>
<td>17.2 kPa</td>
</tr>
<tr>
<td>Maximum</td>
<td>15 psi</td>
<td>15 psi</td>
<td>15 psi</td>
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<td>15 psi</td>
<td>15 psi</td>
<td>15 psi</td>
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</tr>
<tr>
<td>Operating Pres.</td>
<td>103 kPa</td>
<td>103 kPa</td>
<td>103 kPa</td>
<td>103 kPa</td>
<td>103 kPa</td>
<td>103 kPa</td>
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<td>103 kPa</td>
<td>103 kPa</td>
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<tr>
<td>Replacement Element #</td>
<td>2010PM-OR</td>
<td>2020PM-OR</td>
<td>2010PM-OR</td>
<td>2010PM-OR</td>
<td>2010PM-OR</td>
<td>2010PM-OR</td>
<td>2010PM-OR</td>
<td>2010PM-OR</td>
<td>2010PM-OR</td>
</tr>
</tbody>
</table>

**Removal Clearance**
- 4” / 102mm
- 5” / 127mm
- 6” / 152mm
- 8” / 203mm
- 10” / 254mm

**Notes:**
1. Male “JIC” 37” fittings.
2. Flow rates shown for one/both filters on-line.
3. Flow rates shown for two/all filters on-line.
4. For accurate fuel flow rates consult your engine manual, engine manufacturer’s agent or Racor distributor.

**Manifold Units:**
- 75500, 75900 and 751000 double manifolds with shutoff valve.
- 751000 double manifold without shutoff valves.
- 791000 triple manifold with shutoff valves.
- 771000 triple manifold without shutoff valves.
Fuel Filter Primer Pump

Applications
The Turbine Series Fuel Primer Pump Kit is designed for marine, gen set, and mobile applications.

Product
The RKP1912 (12 volt) and RKP1924 (24 volt) Fuel Primer Pump Kits can be retrofitted to the Racor 1000 or 900 series fuel filters already in service.

The Primer Pump Kit is designed to offer improved ease of maintenance for the user.

The Primer Pump Kit is a pre-assembled system which includes all the components ready for easy installation. It is manufactured with premium materials installed into a die cast and powder coated housing.

How it works
The Fuel Primer Pump Kit is an innovative and proprietary system consisting of a pre-screen filter, a flow bypass circuit and a roller cell pump powered by a 12VDC brushed motor or a 24VDC brushless motor.

When the switch is activated the fuel is drawn into the pre-screen and then pumped through the housing refilling the unit with fuel. When not in use the primer pump system is bypassed and the Racor fuel filter/water separator functions normally.

The Primer Pump Kit works on Racor duplex and triplex systems also. This will allow one Racor primer pump to prime the other filter or filters in a manifold system such as a 751000MAX for example.

Benefits
- Easy installation.
- Pump adds only 3.3” to the overall assembly.
- 60 gallons per hour flow rate while in priming mode.
- 12 VDC brushed electric motor.
- 24 VDC brushless electric motor.
- 100 micron pre-screen.
- One size fits several models.
- Kit includes wiring harness and controller switch.
- Allows for electric re-priming of filter and fuel system.
- Not for use as continuous duty.
Whilst Racor’s extensive standard CCV range is extremely versatile and robust, offering a solution for almost every diesel application, Racor also endeavour to offer unique innovation OEM solutions. The OEM offering includes rocker cover integration and supply, flange mount integration, fit for life impactor solutions and open breather options. These solutions can offer anything up to 98% efficiency ‘depending on customer requirements.’
The precision components necessary for the efficient operation of an alternative fuel system demand superior filtration.

The solution – the industry’s first and most complete line of alternative fuel filter/coalescers and prefilter/strainers. From pipeline to engine – Racor fuel filter/coalescer products provide the ultra-fine filtration required by alternative fuels.

Protecting the fuel injectors and components of an alternative fuel system is vital to efficient vehicle operation. Racor offers the most complete line of fuel filter/coalescers and prefilter/strainers for on-vehicle applications. These filters ensure removal of damaging aerosol contamination as small as 0.3 to 0.6 micron and exceed 95% efficiency, depending on the grade of element specified. Units are available in a range of pressure ratings and are constructed of aluminium, stainless steel or painted steel.

The fuel filter/coalescer elements are produced by a patented process of arranging microglass fibres into a tubular form. During operation, fuel is forced through the coalescing media from the inside of the cartridge through the tubular wall to the outside, where the large droplets fall to the bottom of the housing.

Oily water emulsion accumulates until drained while the dirt particles remain trapped on the surface of the fibres.

Prefilter/Strainers
Engineered and precisely manufactured to provide superior performance at operating pressures up to 500 psi, the compact, in-line prefilter/strainers are an essential first step in a complete filtration system.

Low Pressure Fuel Filter/Coalescers
Low pressure coalescers are ideal for operating environments up to 54 bar. All aerosol contaminants in the 0.3 to 0.6 micron range are filtered to an efficiency level that exceeds 95%.

High Pressure Fuel Filter/Coalescers
These patented coalescing filters are constructed to withstand operating pressures to 245 bar. These coalescing filters remove over 95% of aerosols in the 0.3 to 0.6 micron range.

Engineered Modules/System
The combination of high pressure filters, regulators, fittings and brackets into one module allows manufacturers to specify one part number.

Today’s alternative fuels – compressed natural gas, liquid natural gas and liquid propane gas – have the same problems that plague diesel and gasoline... contamination that collects during handling, water that condenses in tanks and compressors that leak oil into the fuel stream.
## Ordering and Specification

Contact your Parker Specialist for details

<table>
<thead>
<tr>
<th>Model</th>
<th>LOW</th>
<th>MEDIUM</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Prefilter/Strainer</td>
<td>Coalescer</td>
<td>Coalescer</td>
</tr>
<tr>
<td>Port</td>
<td>5/8” Outlet 1/4” Inlet</td>
<td>1/4” NPT</td>
<td>1/2” NPT</td>
</tr>
<tr>
<td>Bar (Max.)</td>
<td>34 bar</td>
<td>54 bar</td>
<td>54 bar</td>
</tr>
<tr>
<td>Rated Flow</td>
<td>25 SCFM</td>
<td>25 SCFM</td>
<td>50 SCFM</td>
</tr>
<tr>
<td>Length (in / mm)</td>
<td>4.87” / 123.69 mm</td>
<td>7.16” / 181.86 mm</td>
<td>10.4” / 264.16 mm</td>
</tr>
<tr>
<td>Diameter (in / mm)</td>
<td>2.63” / 66.80 mm</td>
<td>3.13” / 79.50 mm</td>
<td>3.13” / 79.50 mm</td>
</tr>
<tr>
<td>CNG</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>LPG</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Weight lbs / kg</td>
<td>5 lbs / 2.3 kg</td>
<td>1.5 lbs / .68 kg</td>
<td>1.8 lbs / .82 kg</td>
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<td>Element Number</td>
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<td>Sump</td>
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<tr>
<td>Capacity Oz.</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Material</td>
<td>Painted</td>
<td>Painted</td>
<td>Painted</td>
</tr>
<tr>
<td></td>
<td>Steel</td>
<td>Aluminium</td>
<td>Aluminium</td>
</tr>
</tbody>
</table>

Notes:
1. Use in conjunction with coalescer.
2. SCFM at 100 PSIG.
3. ECER 110 versions of FFC-112 and FFC-110 available on request.
FB0 Filter Assembly

Racors’ new FB0-10 and FB0-14 filter assemblies are designed to meet the toughest hydrocarbon refuelling conditions and provide for ease of filter change outs. The FB0 Assembly can flow at 25gpm (95 lpm) or up to 75gpm (230 lpm) depending on the model, the elements installed and fuel being filtered.

The FB0 assembly can be used on mobile refuellers or installed in refuelling cabinets. The unit can also be used for diesel fuel dispensing pumps or as a primary fuel filter/water separator for large diesel engines.

The assembly features a locking ring collar, which attaches the filter housing to the aluminium die-cast filter head with four bolts. The slotted locking ring collar allows maintenance personnel to hand-loosen the four collar bolts, rotate and lower the bowl assembly for element change outs. With new element installed, simply raise the bowl and rotate into position on the locking ring and hand-tighten evenly.

The closure hardware consists of stainless steel nuts, bolts and washers with metal hand knobs for ease of maintenance – one person can easily change the filter element. No special tools are required.

The versatile FB0-10 and the FB0-14 filter assemblies have three element options to meet most field applications.

For refuelling applications the filter separator element is used. The filter separator element removes contaminants and water from jet fuel, aviation gas, diesel fuel, gasoline and hydrocarbon fuels.

Standard Design Features
- Die-cast aluminium head
- Steel filter bowl assembly
- Powder coated components
- Locking ring collar, no clamps
- 1 1/2” NPT Inlet and Outlet
- 10 bar @ 240° F max. design pressure
- Manual drain valve
- Manual vent valve

Options
- Mounting bracket
- Sight level gauge
- Pressure diff. indicator

Installations
- Aviation fuel trucks
- Aviation fuelling cabinets
- Diesel fuel dispensing system
- Marine fuel docks
- Fuel systems on large diesel engines

Applications
Ordering and Specification

Maximum Flow Rates

<table>
<thead>
<tr>
<th>Application</th>
<th>Micron Rating</th>
<th>FBO-10 Element</th>
<th>FBO-14 Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter Separator</td>
<td>1 FBO 60327</td>
<td>FBO 60336</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 FBO 60328</td>
<td>FBO 60337</td>
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<tr>
<td></td>
<td>10 FBO 60333</td>
<td>FBO 60336</td>
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</tr>
<tr>
<td></td>
<td>25 FBO 60339</td>
<td>FBO 60338</td>
<td></td>
</tr>
<tr>
<td>Micro Filter</td>
<td>1 FBO 60330</td>
<td>FBO 60339</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 FBO 60331</td>
<td>FBO 60340</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 FBO 60332</td>
<td>FBO 60341</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 FBO 60333</td>
<td>FBO 60342</td>
<td></td>
</tr>
<tr>
<td>Absorptive Filter</td>
<td>1 FBO 60334</td>
<td>FBO 60343</td>
<td></td>
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<tr>
<td></td>
<td>5 FBO 60335</td>
<td>FBO 60344</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 FBO 60336</td>
<td>FBO 60345</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 FBO 60337</td>
<td>FBO 60346</td>
<td></td>
</tr>
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</table>

Performance Specifications

<table>
<thead>
<tr>
<th>Application</th>
<th>Micron Rating</th>
<th>FBO-10 Element</th>
<th>FBO-14 Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microfilter</td>
<td>18 GPM (68 LPM)</td>
<td>52.5 GPM (199 LPM)</td>
<td>35 GPM (132 LPM)</td>
</tr>
<tr>
<td></td>
<td>&lt; 2 PSID</td>
<td>15 PSID</td>
<td></td>
</tr>
<tr>
<td>Filter Separator/</td>
<td>18 GPM (68 LPM)</td>
<td>52.5 GPM (199 LPM)</td>
<td>35 GPM (132 LPM)</td>
</tr>
<tr>
<td>Absorptive</td>
<td>&lt; 2 PSID</td>
<td>15 PSID</td>
<td></td>
</tr>
<tr>
<td>Microfilter</td>
<td>25 GPM (95 LPM)</td>
<td>75 GPM (284 LPM)</td>
<td>50 GPM (189 LPM)</td>
</tr>
<tr>
<td></td>
<td>&lt; 2 PSID</td>
<td>15 PSID</td>
<td></td>
</tr>
<tr>
<td>Filter Separator/</td>
<td>25 GPM (95 LPM)</td>
<td>75 GPM (284 LPM)</td>
<td>50 GPM (189 LPM)</td>
</tr>
<tr>
<td>Absorptive</td>
<td>&lt; 2 PSID</td>
<td>15 PSID</td>
<td></td>
</tr>
</tbody>
</table>
The Racor RVFS Series filter vessels offer an unparalleled high efficiency, versatile, economical and low maintenance solution to many fuel delivery and industrial filtration applications. The vessels will accept Micro-filter pre-filters, Coalescer/ Water Separator combinations, Monitor/Absorbers and clay treatment bags.

Used mainly in the diesel and kerosene re-fuelling industry, these robust vessels can be seen on countless forecourts providing clean dry safe fuel to modern TDI, PD, HDI, CDI and heavy duty vehicles. Equally these vessels can be used for kerosene, aviation fuels, heating oils, gasoline and numerous other industrial fluids and fuels.

**RVFS Element Options**

**Coalescer / Separator**
Coalescer and separator mounted in the RVFS housing. Fluid/fuel is passed from the outside of the coalescer to the inside. The coalescer element provides primary filtration of the fuel as well as coalescing free water from it. The clean fuel passes through the separator barrier and into the outlet of the housing. The coalesced water droplets are repelled by the hydrophobic barrier and are collected in the sump of the housing. The sump should be drained routinely.

**FP Element Installation**
Mounting shown – Parker’s cellulose FP microfilter series. These elements offer 95% filtration efficiency of fluids and are available in micron ratings of 1, 2, 5, 10, 25 & 40.

When ordering a RVFS for FP installation the kit number 72137 is required.

The RVFS-1, 2 & 3 housing series is compatible with all 6-7” OD, 3.5” ID in multiple lengths of 14 inches.

**FW Element Installation**
Mounting shown – Parker’s combination water absorbing/ filtration FW filter series. These elements will absorb free water from fuels to less than 15 ppm and offer 95% filtration efficiency and are available in micron ratings of 1, 5, 10 & 25. This product can also be used to absorb free water and filter industrial oils.

When ordering a RVFS for FW installation the kit number 72137 is required. The RVFS-1, 2 & 3 housing series is compatible with all 6-7” OD, 3.5” ID elements in multiple lengths of 14 inches.

**Optional Accessories**
- Automatic air eliminator
- Pressure relief valve
- Differential pressure gauge
- Liquid level gauge
- Manual water drain valve
- Support stand
- Wall mount brackets

**Applications**
- Jet A, Jet A1
- Diesel Fuel
- Kerosene
- Gasoline

**Features**
- Carbon steel construction, other materials available
- 17 23 ASME code Section VIII construction, stamped and certified. CE certified vessels available.
- Zinc plated swing bolt closure.
- Buna-N o-ring cover seal
- Interior epoxy coated MIL C4556E, exterior primer coated (carbon steel versions only)

**Connections**
- Inlet and Outlet: 2 inch NPT
- Main Drain and Liquid Level Ports: 1/2 inch NPT
- Vent and Pressure Relief Connection: 3/4 inch NPT
- Differential Pressure Gauge/ Sample Ports: 1/8 inch NPT
RVFS Maximum Flow Rates

Flow rate with 8 cSt Diesel GPM

<table>
<thead>
<tr>
<th>Vessel</th>
<th>Coalescer</th>
<th>Prefilter</th>
<th>Monitor</th>
<th>Flow rate with 7 cSt Aviation Fuel GPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>RVFS-1</td>
<td>25</td>
<td>66</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>RVFS-2</td>
<td>50</td>
<td>133</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>RVFS-3</td>
<td>75</td>
<td>200</td>
<td>87</td>
<td></td>
</tr>
</tbody>
</table>

Note: ASME or CE rated vessels available. EU legislation requires CE marked vessels on all European installations.

Element Options

Coalescer Element Prefix OCP

<table>
<thead>
<tr>
<th>Vessel</th>
<th>1 micron</th>
<th>2 micron</th>
<th>5 micron</th>
<th>10 micron</th>
<th>25 micron</th>
</tr>
</thead>
<tbody>
<tr>
<td>RVFS-1</td>
<td>OCP-15854</td>
<td>OCP-15855</td>
<td>OCP-15858</td>
<td>OCP-15868</td>
<td>OCP-15878</td>
</tr>
<tr>
<td>RVFS-2</td>
<td>OCP-30854</td>
<td>OCP-30855</td>
<td>OCP-30858</td>
<td>OCP-30868</td>
<td>OCP-30878</td>
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<tr>
<td>RVFS-3</td>
<td>OCP-44854</td>
<td>OCP-44855</td>
<td>OCP-44858</td>
<td>OCP-44868</td>
<td>OCP-44878</td>
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Separator Element Options

<table>
<thead>
<tr>
<th>Vessel</th>
<th>5 micron</th>
<th>10 micron</th>
<th>25 micron</th>
<th>Teflon</th>
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<tbody>
<tr>
<td>RVFS-1</td>
<td>SP-15404</td>
<td>SP-15405</td>
<td>SP-15407</td>
<td>ST-15401</td>
</tr>
<tr>
<td>RVFS-2</td>
<td>SP-30404</td>
<td>SP-30405</td>
<td>SP-30407</td>
<td>ST-30401</td>
</tr>
<tr>
<td>RVFS-3</td>
<td>SP-44404</td>
<td>SP-44405</td>
<td>SP-44407</td>
<td>ST-44401</td>
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</table>

Water Absorbing FW Elements

<table>
<thead>
<tr>
<th>Vessel</th>
<th>0.5 micron</th>
<th>1 micron</th>
<th>2 micron</th>
<th>5 micron</th>
<th>10 micron</th>
<th>25 micron</th>
</tr>
</thead>
<tbody>
<tr>
<td>RVFS-1</td>
<td>FP-14601</td>
<td>FP-14601</td>
<td>FP-14602</td>
<td>FP-14604</td>
<td>FP-14605</td>
<td>FP-14607</td>
</tr>
<tr>
<td>RVFS-2</td>
<td>FP-30601</td>
<td>FP-30601</td>
<td>FP-30602</td>
<td>FP-30604</td>
<td>FP-30605</td>
<td>FP-30607</td>
</tr>
<tr>
<td>RVFS-3</td>
<td>FP-44601</td>
<td>FP-44601</td>
<td>FP-44602</td>
<td>FP-44604</td>
<td>FP-44605</td>
<td>FP-44607</td>
</tr>
</tbody>
</table>

Clay Canister

<table>
<thead>
<tr>
<th>Vessel</th>
<th>Clay Canister</th>
</tr>
</thead>
<tbody>
<tr>
<td>RVFS-1</td>
<td>FCC-18701</td>
</tr>
<tr>
<td>RVFS-2</td>
<td>FCC-18701</td>
</tr>
<tr>
<td>RVFS-3</td>
<td>FCC-18701</td>
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</tbody>
</table>

FP Silicon Treated Pre-filters

<table>
<thead>
<tr>
<th>Vessel</th>
<th>0.5 micron</th>
<th>1 micron</th>
<th>2 micron</th>
<th>5 micron</th>
<th>10 micron</th>
<th>25 micron</th>
</tr>
</thead>
<tbody>
<tr>
<td>RVFS-1</td>
<td>FP-14601-1/2</td>
<td>FP-14601</td>
<td>FP-14602</td>
<td>FP-14604</td>
<td>FP-14605</td>
<td>FP-14607</td>
</tr>
<tr>
<td>RVFS-2</td>
<td>FP-30601-1/2</td>
<td>FP-30601</td>
<td>FP-30602</td>
<td>FP-30604</td>
<td>FP-30605</td>
<td>FP-30607</td>
</tr>
<tr>
<td>RVFS-3</td>
<td>FP-44601-1/2</td>
<td>FP-44601</td>
<td>FP-44602</td>
<td>FP-44604</td>
<td>FP-44605</td>
<td>FP-44607</td>
</tr>
</tbody>
</table>

Recommended options for diesel fuel applications. Consult Racor for other fluids.

Vessel Dimensions [mm]

<table>
<thead>
<tr>
<th></th>
<th>height</th>
<th>width</th>
<th>depth</th>
<th>dry weight</th>
<th>overhead space requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>RVFS-1</td>
<td>991</td>
<td>349</td>
<td>343</td>
<td>46 kg</td>
<td>406</td>
</tr>
<tr>
<td>RVFS-2</td>
<td>1295</td>
<td>349</td>
<td>343</td>
<td>52 kg</td>
<td>813</td>
</tr>
<tr>
<td>RVFS-3</td>
<td>1651</td>
<td>349</td>
<td>343</td>
<td>59 kg</td>
<td>1194</td>
</tr>
</tbody>
</table>

For additional information please consult Parker Racor for installation details.
Closed Crank Case Ventilation Systems

The problem – open and unfiltered engine crankcase breathers, allow oil and soot laden aerosol mist to enter the atmosphere from the crankcase.

Environmental concerns and EPA and European legislation bans the emission of open and untreated crankcase gases into the atmosphere. To reduce total engine emissions, it is becoming necessary to close the crankcase breather system, by routing these gases back into the air intake system.

Crankcase blowby is produced when combustion gases under high pressure are blown past the piston rings into the crankcase. As these blow by gases pass though the crankcase, they become contaminated with oil mist.

Racor’s crankcase ventilation system removes these contaminations. The exhaust can then be allowed to be vented in the atmosphere.

For applications requiring more stringent emissions requirements, a closed crankcase filter is recommended.

In this application, the exhaust from the crankcase filter is routed to the inlet side of the turbo. A regulator in the crankcase filter controls the vacuum in the crankcase to ensure proper operation.

Pictures below: (left) Cummins QSM11 marine engine with CCV cutaway. (right) Caterpillar 3716 marine engine with Racor CCV/AF System.

A modern diesel engine schematic

A schematic indicating air intake filtration, crankcase ventilation and water separation and fuel filtration in a modern diesel engine.
• In closed environments like generator set and marine engine rooms, damage to surrounding equipment such as radiators and electronic control panels can cause hazardous conditions, down time and expensive maintenance.

• Oil mist will coat and contaminate the aftercooler and other engine components. This coating reduces engine cooling capacity, causes a degradation of engine performance and reliability over time, and shortens the useful service life of the engine components.

• The engine intake inhales contaminated gasses, clogging air filter systems and damaging turbo-charger components. It is imperative that oil mist be removed from the crankcase emissions prior to introduction into the engine air intake in closed breather systems.

Separator Performance Data

Measurement of blow-by aerosol size distribution shows that over 90% of oil particles can be ≤1 micron in diameter. Typically a significant peak occurs in particle sizes between 0.4 and 0.5 microns. (as shown below). While some other CCV systems can offer reasonable efficiency above 1 micron, depth filtering media gives excellent sub micron performance, while still maintaining a very low pressure differential across the entire engine speed and load range.
CCV Systems

Advanced Crankcase Pressure Regulation

Racor CCV’s employ a unique patented upstream pressure regulation system, which is the only way to maintain consistent crankcase pressures across the full engine speed/load range and throughout the filter element service life.

Racor Patented CCV Crankcase Regulation

Competitive products are forced to use vacuum limiter forms of regulation which allow varying crankcase pressures at different engine speeds and are unable to regulate for increasing filter element differential during the service period.

Racor CCV Sizing

CCV systems should be specified using engine blow-by flow, based on engine manufacturer’s data. The chart will help you to easily select a CCV, which will allow for a typical filter element service period of 750 hours, for larger applications it is possible to use multiple CCVs, for convenience the CCVs can be specified with Right or Left hand inlet (Suffix R or L).

Ordering and Specification

<table>
<thead>
<tr>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
</tr>
<tr>
<td>Maximum Opening Width (incl. clamps &amp; bracket)</td>
</tr>
<tr>
<td>Depth</td>
</tr>
<tr>
<td>Weight</td>
</tr>
<tr>
<td>Filter Removal Clearance</td>
</tr>
<tr>
<td>Replacement Element High Efficiency Media</td>
</tr>
<tr>
<td>Replacement Element Ultra Efficiency Media</td>
</tr>
<tr>
<td>Housing Material</td>
</tr>
<tr>
<td>Inlet &amp; Outlet Thread Size</td>
</tr>
<tr>
<td>Flow Max. Cubic Feet per Minute</td>
</tr>
<tr>
<td>Crankcase Pressure Regulator</td>
</tr>
<tr>
<td>Bypass/Change Indicator</td>
</tr>
<tr>
<td>Engine Block Check Valve Return Fitting</td>
</tr>
<tr>
<td>Swivel Fitting (Qty.)</td>
</tr>
<tr>
<td>Oil drain hose I.D.</td>
</tr>
</tbody>
</table>
Crankcase Replacement Elements

Open System Crankcase Filtration

Crankvent CV4500, CV6000 and CV8000 Systems trap crankcase blow-by and recycle engine oil through a high performance filter. They help to decrease costs for maintaining air filters and keeping engine rooms clean. These units are typically used as an “open” system for non-turbocharged engines.

<table>
<thead>
<tr>
<th>CCV4500</th>
<th>CCV6000</th>
<th>CCV8000</th>
<th>CCV12000</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.25” / 235.0 mm</td>
<td>12.00” / 304.8 mm</td>
<td>13.88” / 352.6 mm</td>
<td>18” / 457 mm</td>
</tr>
<tr>
<td>7.50” / 190.5 mm</td>
<td>11.25” / 286.8 mm</td>
<td>13.25” / 336.6 mm</td>
<td>17.88” / 454.2 mm</td>
</tr>
<tr>
<td>5.60” / 142.2 mm</td>
<td>7.30” / 185.4 mm</td>
<td>9.30” / 236.2 mm</td>
<td>9.30” / 236.2 mm</td>
</tr>
<tr>
<td>3.26” lbs / 1.48 kg</td>
<td>5.0”1 lbs / 2.28 kg</td>
<td>8.72 lbs / 3.96 kg</td>
<td>9.5 lbs / 4.30 kg</td>
</tr>
<tr>
<td>2.25” / 57.2 mm</td>
<td>4.00” / 101.6 mm</td>
<td>5.00” / 127.0 mm</td>
<td>9.00” / 229 mm</td>
</tr>
<tr>
<td>CCV 55248-08</td>
<td>CLV 55274-08</td>
<td>CCV 55222-08</td>
<td>CLV 55222-12-08</td>
</tr>
<tr>
<td>CCV 55248-10</td>
<td>CLV 55274-10</td>
<td>CCV 55222-10</td>
<td>CLV 55222-12-10</td>
</tr>
<tr>
<td>1 3/16” - 12 STOR</td>
<td>1 5/8” - 12 STOR</td>
<td>1 7/8” - 12 STOR</td>
<td>1 7/8” - 12 STOR</td>
</tr>
<tr>
<td>10 cfm / 283 lpm</td>
<td>20 cfm / 566 lpm</td>
<td>40 cfm / 1132 lpm</td>
<td>50 cfm / 1415 lpm</td>
</tr>
<tr>
<td>Integral or Remote</td>
<td>Integral or Remote</td>
<td>Integral or Remote</td>
<td>Integral or Remote</td>
</tr>
<tr>
<td>1/4 NPT*</td>
<td>3/8 NPT*</td>
<td>3/8 NPT*</td>
<td>3/8 NPT*</td>
</tr>
<tr>
<td># 6 JIC (2pcs.)</td>
<td># 6 JIC (2pcs.)</td>
<td># 8 JIC (2pcs.)</td>
<td># 8 JIC (2pcs.)</td>
</tr>
<tr>
<td>.375”</td>
<td>.5”</td>
<td>5”</td>
<td>5”</td>
</tr>
</tbody>
</table>

* Units can be manifolded to handle higher flow rates.
**ECO III and ECO II**

**Air Filtrations Solutions in every day situations**

The ECO III is Racor’s newest filter model, designed specifically to be the most versatile filter on the market, allowing for multiple inlet/outlet angle positions, left or right hand element removal and outlet configurations, with CCV and gauge connections built in. Designed for 250-500HP engines the ECO III’s versatility makes it ideally suited for truck, bus and coach applications.

**ECO III in a typical Closed Air Filtration System Configuration**

- Outside Air
- Clean Air to Turbocharger or Cylinders
- Crankcase Breather Exhaust
- Crankcase Ventilation System

**ECO III Pressure Drop**

<table>
<thead>
<tr>
<th>Air Flow (CFM)</th>
<th>Restriction (in H2O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>100</td>
<td>0.5</td>
</tr>
<tr>
<td>200</td>
<td>1.0</td>
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<tr>
<td>300</td>
<td>1.5</td>
</tr>
<tr>
<td>400</td>
<td>2.0</td>
</tr>
<tr>
<td>500</td>
<td>2.5</td>
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<tr>
<td>600</td>
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<td>700</td>
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<tr>
<td>900</td>
<td>4.5</td>
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**Part No.**

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing, Base with Secondary</td>
<td>500250012</td>
</tr>
<tr>
<td>Housing, Base without Secondary</td>
<td>500251012</td>
</tr>
<tr>
<td>Primary Element</td>
<td>500247012</td>
</tr>
<tr>
<td>Safety Element</td>
<td>500233000</td>
</tr>
<tr>
<td>Outlet Pan</td>
<td>5002192012</td>
</tr>
<tr>
<td>Clip (8 per package)</td>
<td>500229000</td>
</tr>
</tbody>
</table>

For additional information regarding custom manufacturing and ECO III configurations for larger horsepower ratings, please contact Racor Division.
The ECO II is a lightweight, compact easy fit, economical air cleaner offering maximum efficiency for light to medium duty applications. The ECO II can also be rotated to position the air intake at any angle. It also has a water resistant paper, which gives engine protection in moisture laden environments.

The Racor Pamic Range is uniquely adaptable, providing both lower maintenance costs and increased filtration efficiency to extend engine life cycles even in the harshest, most aggressive operational environments.

The AF Series Filters and Pre-Cleaners are designed to be connected to the air intake of gasoline or diesel engines. A full range of complete air cleaners, pre-cleaners and combination air/pre-cleaner units are available for engines from 30 to 600HP.
Water Probe Kits

Racor offers a wide selection of water probes, each designed for use with particular models and installation requirements. These probes are available in various configurations to fit every Racor filter/separator. The water probe is only a component in the water detection system and will not work without a Racor electronic detection module (see next two pages). The RK30880 has the electronic detection module built-in to its design and has the simplest installation procedure. Multiplex units must use one probe for each collection bowl but only one water detection module is needed.

T-handle Vacuum Gauge

T-handle vacuum gauges are available to monitor element condition and as the filter element slowly becomes clogged with contaminants the restriction (resistance to flow) increases. The fuel pump still tries to draw fuel (suction) but because of this restriction less fuel is delivered to the engine and instead more air is pulled from it (fuel de-gassing). These results can cause the engine to lose power and eventually stall. By installing a vacuum gauge in your fuel system (at the outlet side of the Racor filter) visual monitoring of element condition is possible at a glance. At the first indication of decreased performance, note the dial reading or apply the ‘red line’ decal provided with most kits. This will assist in knowing when to change the filter at the next interval. T-handle Vacuum Gauge.

Caution: Never wire a water probe directly to voltage or another brand of detection module.

<table>
<thead>
<tr>
<th>Specifications</th>
<th>RK 21069</th>
<th>RK 30964</th>
<th>RK 22371</th>
<th>RK 30880</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threads</td>
<td>1/2&quot;-20 Threads</td>
<td>1/2&quot;-20 Threads</td>
<td>9/16&quot;-18 Threads</td>
<td>1/2&quot;-20 Threads</td>
</tr>
<tr>
<td>Description</td>
<td>One piece design with two wires. Requires a detection module.</td>
<td>Includes detachable 2-wire connector. Requires a detection module.</td>
<td>Includes detachable 2-wire connector. Requires a detection module.</td>
<td>Active probe, 3-wire connector, no detection module.</td>
</tr>
<tr>
<td>Voltage</td>
<td>12 or 24 vdc</td>
<td>12 or 24 vdc</td>
<td>12 or 24 vdc</td>
<td>12 or 24 vdc</td>
</tr>
<tr>
<td>Power Draw:</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>5 Milliamps 10 Milliamps</td>
</tr>
<tr>
<td>(12 volt)</td>
<td>(24 volt)</td>
<td>(24 volt)</td>
<td>(24 volt)</td>
<td>(24 volt)</td>
</tr>
<tr>
<td>Maximum Load</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>1 Amp</td>
</tr>
<tr>
<td>Weight</td>
<td>0.03 lb [0.01 kg]</td>
<td>0.02 lb [0.01 kg]</td>
<td>0.1 lb [0.05 kg]</td>
<td>0.4 lb [0.2 kg]</td>
</tr>
</tbody>
</table>

Special Notes: For severe vibration applications, mount the gauge on a stable, remote location and connect to the source using flexible tubing. After September 1999, Racor converted many liquid-filled gauges to new silicone dampened movement. This new [dry] technology provides a vibration resistant design that never leaks fluid or requires adjustments due to temperature or altitude variations.
Water Detection Modules

Racor Water Detection Kits are available in a wide selection for various installation requirements. Under dash, in-dash and remote mount, these solid-state units may be used with any Racor fuel filter/water separator and water probe. They are manufactured using the highest quality materials and are all 100% electrically tested. An electric detection module analyzes electrical resistance at the water probe and determines if water is present. If so, the detection module operates to indicate water, based on its features listed below. All units reset automatically after water is removed (unless specified).

<table>
<thead>
<tr>
<th>Specifications</th>
<th>RK 20726</th>
<th>RK 11-11570</th>
<th>RK 20725</th>
<th>RK 20725-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>12 or 24 vdc</td>
<td>12 or 24 vdc</td>
<td>12 vdc</td>
<td>24 vdc</td>
</tr>
<tr>
<td>Features</td>
<td>Light &amp; Buzzer</td>
<td>Light &amp; Buzzer</td>
<td>Light Only</td>
<td>Light Only</td>
</tr>
<tr>
<td>Description</td>
<td>Red DRAIN lamp illuminates continuously and buzzer sounds momentarily when water is detected. Power-up self diagnosis feature and circuit protection included.</td>
<td>Includes pre-set vacuum switch (7in.Hg.), connector and outlet adapter fitting. The red DRAIN or CHANGE FILTER lamps illuminate continuously and buzzer sounds momentarily when water is detected.</td>
<td>Green ON lamp illuminates with power and red DRAIN lamp illuminates when water is detected. Includes initial power-up self diagnosis feature &amp; circuit protection.</td>
<td>Same as RK20725</td>
</tr>
<tr>
<td>Dimensions¹</td>
<td>2.2” Diameter x 3.2” Depth</td>
<td>2.2” Diameter x 2.0” Depth</td>
<td>1.0” H x 1.5”D x 2.0” W</td>
<td>1.0” H x 1.5”D x 2.0” W</td>
</tr>
<tr>
<td>Power Draw:</td>
<td>(12 volt) 3 Milliamps 13 Milliamps</td>
<td>(24 volt) 3 Milliamps 14 Milliamps</td>
<td>10 Milliamps</td>
<td>10 Milliamps</td>
</tr>
<tr>
<td>Max. Internal Load</td>
<td>30 Milliamps</td>
<td>30 Milliamps</td>
<td>30 Milliamps</td>
<td>30 Milliamps</td>
</tr>
<tr>
<td>Weight</td>
<td>0.4 lb [0.2 kg]</td>
<td>0.9 lb [0.4 kg]</td>
<td>0.4 lb [0.2 kg]</td>
<td>0.4 lb [0.2 kg]</td>
</tr>
</tbody>
</table>

¹Cut 2.0” diameter hole to mount gauges in instrument panel.

RK22628 Bowl Wrench

Racor offers a hand wrench to remove all metal and see-through spin-on bowls that feature external ribs. By simply fitting the wrench over the bowl ribs, the bowl can be removed from the replaceable spin-on element, or filter housing with little effort. The wrench is made of a corrosion proof, high-impact, high-strength engineered polymer. One bowl wrench per kit.
Primary (Pre-) Fuel/Water Separator
For Vacuum Applications And Final Fuel
For Pressure Applications

Fuel is drawn out of the fuel reservoir by the lift pump into and out of the pre-fuel filter/water separator. The fuel is pre-filtered through a 10 to 30 micron rated filter which also removes harmful water, thereby protecting the lift pump and injection system. The lift pump pressurizes the pre-filtered fuel into the final filter. Fuel is then filtered by a 1 to 7 micron rated filter, ensuring purified fuel is delivered. The combination filtration system design provides superior protection for heavy-duty applications where high levels of contamination and high volumes of fuel require a high filter capacity. Fuel conditioning options (drain, water sensor, hand primer pump, heater, etc.) are usually installed in the primary assembly.

Secondary (Final) Fuel Filter/Water Separators
For Vacuum Applications

This design integrates the primary fuel filter/water separator and final fuel filter into one system that is installed prior to the lift pump. The single assembly provides total filtration (1 to 7 microns) and water separation for the entire fuel system. This filtration system design provides excellent protection for applications where cost and service constraints are a challenge. Sufficient space for an adequate size combination unit must be available.

Secondary (Final) Fuel Filter/Water Separators
For Pressure Applications

This design integrates the primary fuel filter/water separator and final fuel filter into one compact system that is installed after the lift pump. Generally, an in-fuel reservoir filter screen (100 to 200 micron) is utilized to complete the filtration system. The final fuel filter/water separator is installed after the lift pump and provides protection (1 to 7 microns) to the high pressure injection system. This filtration system design provides economical fuel injection system protection for small diesel engines, automotive and light-truck applications that already have generally good fuel quality and a relatively low volume of fuel usage.
Hydrocarbon Filters

Hydrocarbon filter vessels and elements represent an important and fast developing part of the Parker Racor range. Installation applications include aviation fuel trucks, diesel fuel dispensing systems, marine fuel docks, bulk fuel storage and garage pump dispensing systems.

Hydraulic Filtration

Parker Filtration’s global reputation as a reliable supplier of superior hydraulic and lubrication filtration products, quality environmental filter media and fluid power products, is the result of a focused and integrated development and advanced manufacturing systems.

Condition Monitoring

To clearly identify the condition of a fluid system, Parker Filtration has a range of fluid contamination monitoring products. Portable or installed monitors and detectors allow for the observation of fluid within the working system in most circumstances, environments and including hazardous or explosive areas requiring ATEX approved equipment.