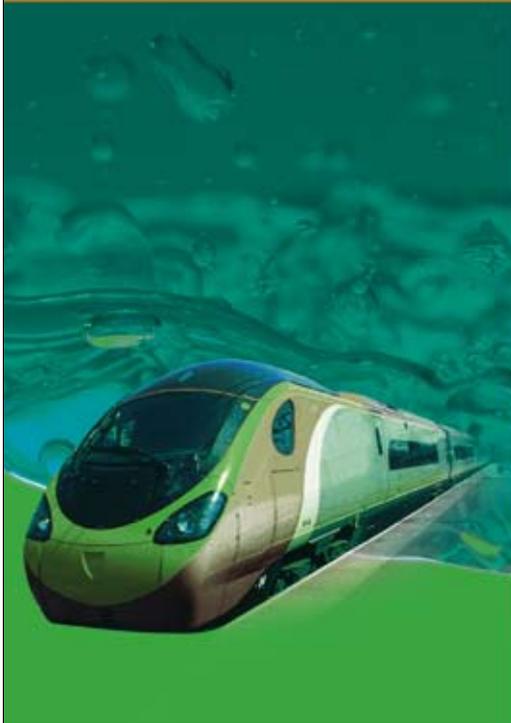
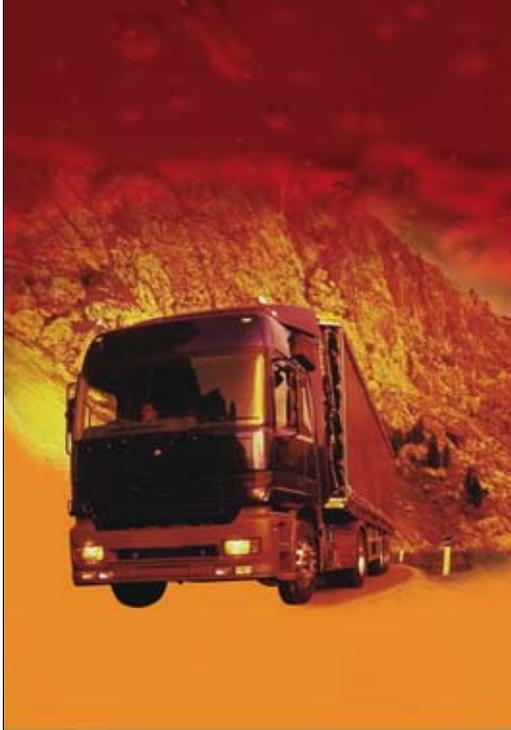




aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



Racor Filter Division Europe – Distribution

Fuel, Air and Hydrocarbon Filtration Solutions



An Introduction to Distributor Products

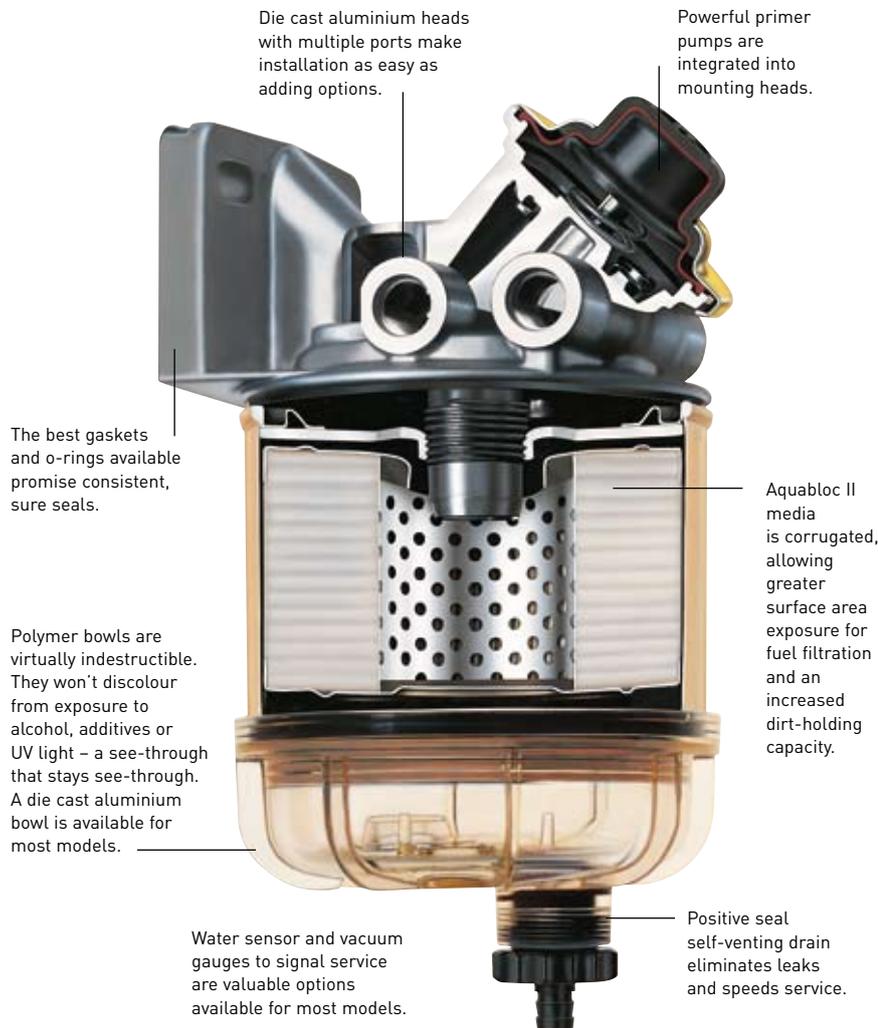
The quality solution

For more than 30 years Parker has been an innovator in diesel fuel filtration and water separation. Providing OEMs and end users with quality filtration solutions. The information contained here is designed to support our distributors in identifying key products: – filter assemblies, replacement elements and more, aimed specifically at the MRO Market.

Product technology and design innovations

As one of the world's leading manufacturers of fuel filtration products, we pride ourselves on our commitment to innovative products and our distributors play a vital role in achieving this consistently, providing local service, support and stock.

Spin-On Series



All-season dependability

Racor see-through bowls are constructed of high grade polymers engineered to withstand the rigours of nature and demanding applications. They won't discolour from exposure to ultra violet light. They are impervious to the chemicals and additives often found in diesel fuel. They withstand severe freezing temperature as well as impact from flying stones and road hazards.

Turbine Series

High grade aluminium components and powder coat paints mean that corrosion is never a worry.

Durable single bolt mounting bracket doubles resistance to vibration fatigue.

300-watt heaters improve cold starting – thermostats are standard to meet the requirements of today's electronic engines.

Polymer bowl withstands impact and temperature extremes.

Self-venting drain. A single twist makes draining clean, fast and easy.

Aquabloc media expels water and keeps engines waterproof, rustproof and dirtproof.

With an Aquabloc II replacement element, you get a complete kit with all the seals you need.

Aquabloc II media is a blend of high grade cellulose compounded with resins and a special chemical treatment.



Crankcase Ventilation Solutions

The first name in fuel filtration is also the most improved

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.



End caps are colour-coded for easy identification and application – red for 30 micron primary filtration, blue for 10 micron primary or secondary, and brown for 2 micron secondary/final filtration.

Use original Racor filter elements to ensure premium performance.

An integral handle makes changeouts easy.

Aquabloc II elements filter harmful tiny particles of dirt and algae from fuel. Aquabloc II elements are rustproof – with polymer end caps that won't ever corrode.

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

Open and unfiltered engine crankcase breathers allow oil and soot laden mist to vent to atmosphere.

Unique crankcase pressure regulator with integral bypass valve that minimizes variation in crankcase pressure. Excessive variation in crankcase pressure can damage seals, cause loss of oil and other problems

Durable glass-filled nylon components

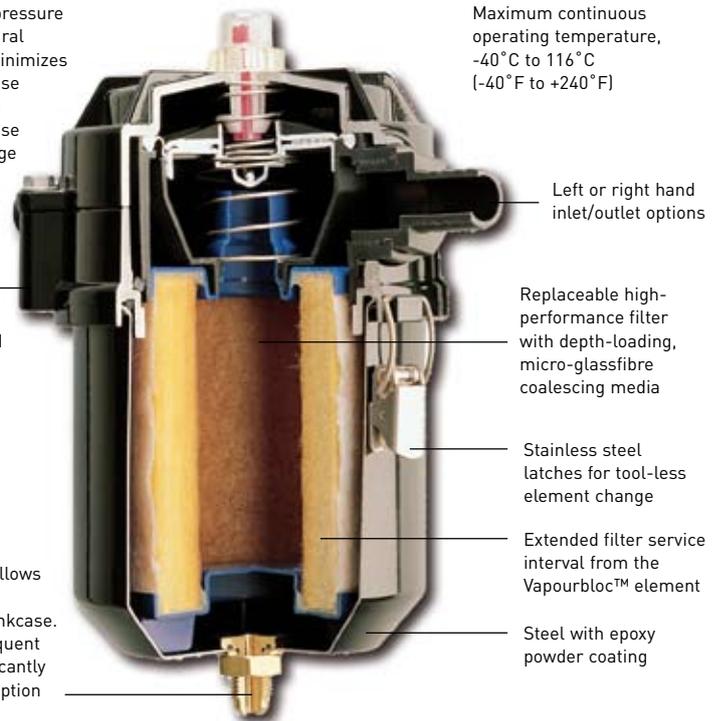
High efficiency oil separation to 0.3µ (microns)

Drain check valve allows collected oil to be returned to the crankcase. This eliminates frequent draining and significantly reduces oil consumption

Environmental concerns, EPA and European legislation prohibit the emission of untreated crankcase gases into the atmosphere.

The Racor Crankcase ventilation system removes soot from blow-by gases whilst returning coalesced oil mist back to the crankcase. The filtered gases can then either be safely vented to atmosphere or returned to the air intake of the turbocharger.

Maximum continuous operating temperature, -40°C to 116°C (-40°F to +240°F)



Closed Crankcase Ventilation

- 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.



Engine Air Filtration

Air filtration solutions in everyday situations

Fresh air. That's what Racor air filtration is all about. Because when engines breathe easier they perform better – with more power, more torque and with improved fuel economy. The Racor lineup includes heavy duty air cleaners and pre-cleaners, crankcase



ventilation, marine filter/silencers, cabin air filters and replacement elements.



The ECO III is Racor's newest engine air filter, 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.



The DynaCell single stage air cleaner for medium to heavy duty applications is easy to install and available in three sizes, for either horizontal or vertical mounting. Maintenance is simple and servicing is quick and clean. The long, effective life of the DynaCell reduces maintenance - a special advantage in remote installations.

Pamic Series Air Cleaners provide unmatched engine protection for a wide range of equipment from on-highway trucks to compressors, stationary engines to marine engines. The Pamic filter element has an average efficiency rating of 99.9% (SAE J726).



Hydrocarbon Filtration

Quality filtration that meets the standards

Parker Racor Hydrocarbon filter vessels and elements available for industries and applications such as: refineries, pipelines, bulk storage terminals and airport refueling equipment.

Finer filtration, cleaner, drier hydrocarbon products and extended element change intervals offering increased uptime and lower maintenance costs.



Parker Racor Fact File:

- Every engine runs better with a system that cleans fuel, removes water, heats fuel and senses when it's time for service
- The solution is a Turbine, Spin-On or Hydrocarbon filter system
- Aquabloc II media is fitted as standard. Proven media that expels water and keeps engines waterproof, rustproof and dirtproof
- An Aquabloc II replacement element or filter comes as a kit complete with all the required seals
- Parker Racor is also the first name in marine filtration with a comprehensive range of marine spin-on and turbine options proven in both the leisure craft and commercial boat sectors



FBO Filter Assembly

Racors' FBO-10 and FBO-14 filter assemblies are designed to meet the toughest hydrocarbon refuelling conditions and provide for ease of filter change outs. The FBO Assembly can flow at up to 75 US GPM (284 lpm) depending on the model, the elements installed and fuel being filtered.

The FBO assembly can be used on mobile refuellers or installed in refuelling cabinets.

The FBO can also be used for diesel fuel dispensing pumps or as a primary fuel filter/water separator for large diesel engines.

The versatile FBO-10 and the FBO-14 filter assemblies have three element options to meet most applications; particulate removal, water coalescing and water absorption.



FBO Standard Design Features

- Die-cast aluminium head
- Steel filter bowl
- Locking ring collar, no clamps
- 1 1/2" NPT Inlet and Outlet
- 10 bar @ 116°C max. design pressure

Options

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

Installations

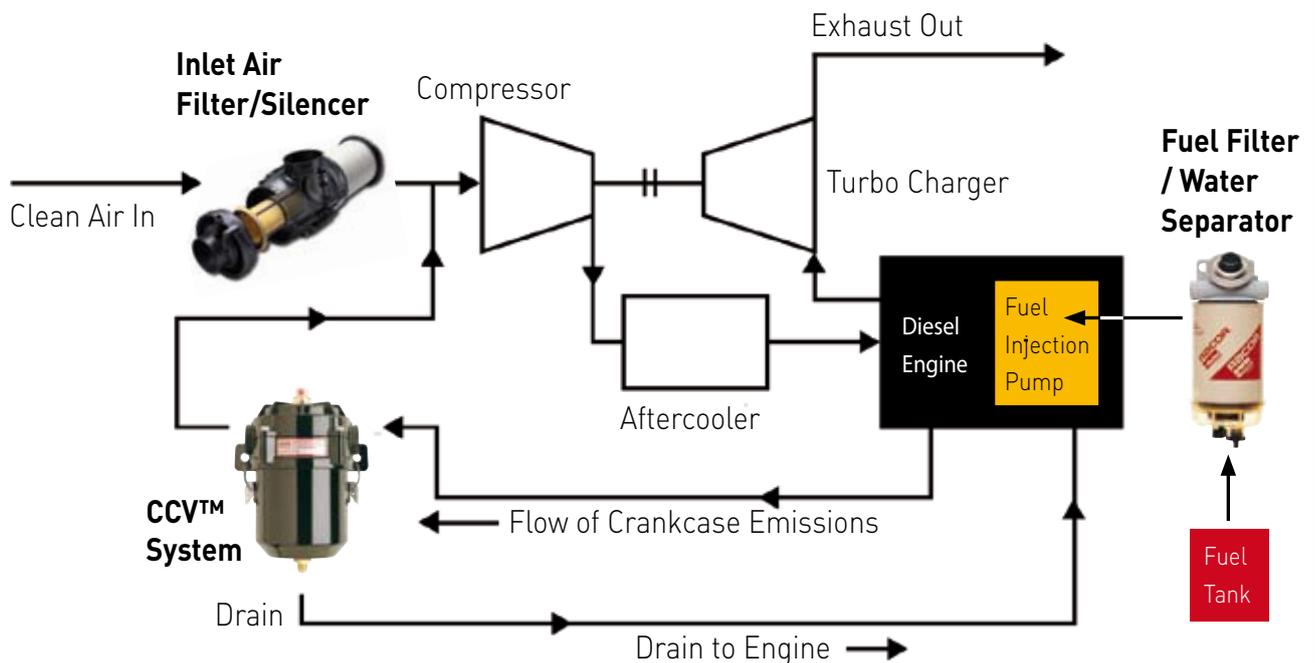
- Aviation fuel trucks
- Aviation fuelling cabinets
- Diesel fuel dispensing systems
- Marine fuel docks
- Fuel systems on large diesel engines

Applications

- Jet fuel, aviation gas, diesel fuel, gasoline, kerosene, JP4, JP5 and JP8.

A modern diesel engine schematic

A schematic indicating air intake filtration, crankcase ventilation, fuel filtration and water separation in a modern diesel engine.



Racor Fuel, Air and Hydrocarbon Products

| Type | Item Number | Flow | Description | Replacement Elements |
|---------------------------------------------------------------------------------------------------|---------------------|-------------------|---------------------------------------------------------------------------|----------------------|
| Spin-On Filters | | | The Racor Spin-On Filter Series contain patented Aquabloc II media | |
| 200 Series  | 230R30 | 30 GPH (113 LPH) | FFWS With primer 30 micron 1/4" NPT | R20P |
| | 260R30MTC | 60 GPH (227 LPH) | FFWS No primer pump 30 micron M16 1.5 | R260P |
| 400 Series  | 490R10MTC | 90 GPH (340 LPH) | FFWS With primer pump 10 micron M16 1.5 | R90T |
| | 490R2430MTC | 90 GPH (340 LPH) | FFWS With primer pump, 24 V bowl heater 30 micron M16 1.5 | R90P |
| | 490R30MTC | 90 GPH (340 LPH) | FFWS With primer pump 30 micron M16 1.5 | R90P |
| | 4120R10MTC | 120 GPH (545 LPH) | FFWS With primer pump 10 micron M16 1.5 | R120T |
| | 4120R30 | 120 GPH (545 LPH) | FFWS With primer pump 30 micron 3/4" - 16 SAE | R120P |
| | 4120R30MTC | 120 GPH (545 LPH) | FFWS With primer pump 30 micron M16 1.5 | R120P |
| | 4160RHH10MTC | 160 GPH (600 LPH) | FFWS With primer pump, 12-42 V PTC head heater 10 micron M16 1.5 | R160T |
| 600 Series  | 690R10MTC | 90 GPH (340 LPH) | FFWS No primer pump 10 micron M16 1.5 | R90T |
| | 690R2430MTC | 90 GPH (340 LPH) | FFWS No primer pump, 24 V bowl heater, 30 micron M16 1.5 | R90P |
| | 690R30 | 90 GPH (340 LPH) | FFWS No primer pump 30 micron 3/8" NPT | R90P |
| | 690R30MTC | 90 GPH (340 LPH) | FFWS No primer pump 30 micron M16 1.5 | R90P |
| | 6120R2430MTC | 120 GPH (545 LPH) | FFWS No primer pump, 24 V bowl heater, 30 micron M16 1.5 | R120P |
| | 6120R30 | 120 GPH (545 LPH) | FFWS No primer pump 30 micron 3/8" -18 NPTF | R120P |
| | 6120R30MTC | 120 GPH (545 LPH) | FFWS No primer pump 30 micron M16 1.5 | R120P |

 = Products available ex-stock

FFWS = Fuel Filter / Water Separator

| Type | Item Number | Flow | Description | Replacement Elements |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------|---------------------------------------------------------------|----------------------|
| Marine Spin-On | | | | |
| Marine 100 Series  | 120R-RAC-02 | 15 GPH (57 LPH) | FFWS No primer pump 10 micron, metal bowl, 1/4"-18 NPTF | S3240 |
| Marine 200 Series  | 320R-RAC-01 | 60 GPH (227 LPH) | FFWS No primer pump 10 micron 1/4"-18 NPTF | S3227 |
| | 320R-RAC-02 | 60 GPH (227 LPH) | FFWS No primer pump 10 micron, metal bowl, 1/4"-18 NPTF | S3227 |
| Marine 600 Series  | 660R-RAC-01 | 90 GPH (340 LPH) | FFWS No primer pump 10 micron 3/8"-18 NPTF | S3232 |
| Turbine Filters | | | | |
| <p>The Turbine Series is the most complete, most efficient, most reliable high capacity engine protection you can install.</p>  | 500FG30 | 60GPH (227 LPH) | Turbine 30 micron 3/4"-16 UNF | 2010 PM – OR |
| | 500FG30MTC | 60GPH (227 LPH) | Turbine 30 micron M16 1.5 | 2010 PM – OR |
| | 900FH30 | 90GPH (340 LPH) | Turbine 30 micron 7/8"-14 UNF | 2040 PM – OR |
| | 902FH30 | 90GPH (340 LPH) | Turbine 30 micron M22 1.5 | 2040 PM – OR |
| | 1000FH30 | 180GPH (681 LPH) | Turbine 30 micron 7/8"-14 UNF | 2020 PM – OR |
| | 1002FH30 | 180GPH (681 LPH) | Turbine 30 micron M22 1.5 | 2020 PM – OR |
| | 75500FGX30 | 60GPH (227 LPH) x2 | Duplex Turbine 30 micron with 6 way valve 3/4"-16 UNF | 2010 PM – OR |
| | 75900FHX30 | 90GPH (340 LPH) x2 | Duplex Turbine 30 micron with 6 way valve 7/8"-14 UNF | 2040 PM – OR |
| | 751000FHX30 | 180GPH (681 LPH) x2 | Duplex Turbine 30 micron with 6 way valve 7/8"-14 UNF | 2020 PM – OR |

Element Colour Coding System

In order to simplify the usual identification of Parker Racor filters, a simple colour code system is adopted using brown, blue and red paint finish on the cans or elements.



Brown = 2 micron

Blue = 10 micron

Red = 30 micron

| Type | Item Number | Flow | Description | Replacement Elements |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|----------------------------------------------------------------------|----------------------|
| UL Marine Turbine Filters Marine variants of the trusted Turbine Series.  | 500MAM30 | 60 GPH (227 LPH) | UL Marine Turbine, Metal bowl, 30 micron 3/4"-16 UNF | 2010 PM – OR |
| | 900MAM30 | 90 GPH (340 LPH) | UL Marine Turbine, Metal bowl 7/8"-14 UNF, 30 micron | 2040 PM – OR |
| | 902MAM30 | 90 GPH (340 LPH) | UL Marine Turbine, Metal bowl, 30 micron M22 1.5 | 2040 PM – OR |
| | 1000MAM30 | 180 GPH (681 LPH) | UL Marine Turbine, Metal bowl 7/8"-14 UNF, 30 micron | 2020 PM – OR |
| | 1002MAM30 | 180 GPH (681 LPH) | UL Marine Turbine, Metal bowl, 30 micron M22 1.5 | 2020 PM – OR |
| | 75500MAXM30 | 60GPH (227 LPH) x2 | UL Marine Duplex FFWS Turbine 30 micron with 6 way valve 3/4"-16 UNF | 2010 PM – OR |
| | 75900MAXM30 | 90GPH (340 LPH) x2 | UL Marine Duplex FFWS Turbine 30 micron with 6 way valve 7/8"-14 UNF | 2040 PM – OR |
| | 751000MAXM30 | 180GPH (681 LPH) x2 | UL Marine Duplex FFWS Turbine 30 micron with 6 way valve 7/8"-14 UNF | 2020 PM – OR |
| Interceptor Series  | PFFDW51125 | | Interceptor replacement filter element 25 Micron Water Absorbing | |
| Spin-On Replacement Elements  | R120P | | Replacement element 4120/6120 30 micron | |
| | R120T | | Replacement element 4120/6120 10 micron | |
| | R12P | | Replacement element 120A 30 micron | |
| | R12T | | Replacement element 120A 10 micron | |
| | R15P | | Replacement element 215 30 micron | |
| | R160T | | Replacement element 4160 10 micron | |
| | R260P | | Replacement element 260 30 micron | |
| | R20P | | Replacement element 230 30 micron | |
| | R25P | | Replacement element 245 30 micron | |
| | R25T | | Replacement element 245 10 micron | |
| | R45P | | Replacement element 445/645 30 micron | |
| | R52P | | Replacement element 152R 30 micron | |
| | R60P | | Replacement element 460/660 30 micron | |
| | R60T | | Replacement element 460/660 10 micron | |

| Type | Item Number | Description |
|---------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Spin-On Replacement Elements Continued  | R90P | Replacement element 490/690 30 micron |
| | R90T | Replacement element 490/690 10 micron |
| | R90T-D-Max | Replacement element 490 RMSC/HH 10 micron |
| | S3227 | Replacement element 320RAC 10 micron |
| | S3232 | Replacement element 660RAC 10 micron |
| | S3240 | Replacement element 120RAC 10 micron |
| | PFF 5510 | Replacement element, gasoline 10 micron |
| | PFF 5605 | Replacement element, gasoline 10 micron |
| | PFF 5607 | Replacement element (RFCM), 30 micron |
| | 31871 | Twin pack replacement element for Outboard Mercury Engines |
| Turbine Replacement  | 2010PM-OR | Replacement element 500 Turbine 30 micron |
| | 2010SM-OR | Replacement element 500 Turbine 2 micron |
| | 2010TM-OR | Replacement element 500 Turbine 10 micron |
| | 2020PM-OR | Replacement element 1000 Turbine 30 micron |
| | 2020SM-OR | Replacement element 1000 Turbine 2 micron |
| | 2020TM-OR | Replacement element 1000 Turbine 10 micron |
| | 2040PM-OR | Replacement element 900 Turbine 30 micron |
| | 2040SM-OR | Replacement element 900 Turbine 2 micron |
| | 2040TM-OR | Replacement element 900 Turbine 10 micron |
| Fuel Products Accessories  | RFF1C | Fuel filter funnel 10 LPM (2.7 GPM) 100 micron |
| | RFF3C | Fuel filter funnel 14 LPM (3.9 GPM) 100 micron |
| | RFF8C | Fuel filter funnel 19 LPM (5.0 GPM) 100 micron |
| | RFF15C | Fuel filter funnel 57 LPM (15.0 GPM) 100 micron |
| | LG 100 | Lifeguard Fuel/Air Separator, diesel and gasoline |
| | RK 30880 | Active water sensor kit complete with built in detection electronics and under dash warning light. For use with all spin on and turbine filters. |
| | RK 22628 | Bowl Wrench |
| | Engine Air Products | |
| CCV  | CCV4500-08L | Max flow rate: 10CFM Port size: 1 3/16" |
| | CCV4500-08R | Max flow rate: 10CFM Port size: 1 3/16" |
| | CCV6000-08L | Max flow rate: 20CFM Port size: 1 5/8" |
| | CCV6000-08R | Max flow rate: 20CFM Port size: 1 5/8" |
| | CCV8000-08L | Max flow rate: 40CFM Port size: 1 7/8" |
| | CCV8000-08R | Max flow rate: 40CFM Port size: 1 7/8" |
| CCV Elements | CCV55248-08 | Replacement filter assembly-CCV4500 |
| | CCV55274-08 | Replacement filter assembly-CCV6000 |
| | CCV55222-08 | Replacement filter assembly-CCV8000 |

| Type | Item Number | Description |
|--------------------------------------------------------------------------------------------------------|----------------------|-----------------------------------------|
| Dynacell Elements  | 049261000 | T-512 Dynacell Element |
| | 045800000 | T-519 Dynacell Element |
| | 048976000 | T-519D Dynacell Element |
| | 052711000 | T-520DR Dynacell Element |
| | 049812000 | T-528D Dynacell Element |
| | 051800000 | T-528 Dynacell Element |
| | 060799000 | T-529DR Dynacell Element |
| ECO Products  | 500187012 | ECO-III Mounting Base |
| | 500192012 | ECO-III Outlet Pan |
| | 500229000 | ECO-III Clip (8 Per Package) |
| | 500233000 | ECO-III Safety Element |
| | 500247012 | ECO-III Primary Element |
| | 500250012 | ECO-III Housing, base with secondary |
| | 500251012 | ECO-III Housing, base with no secondary |
| Pamic Elements  | 012233003 | Pamic Element - P9 |
| | 012233004 | Pamic Element - P12 |
| | 012233005 | Pamic Element - P16 |
| | 012233006 | Pamic Element - P20 |
| | 012233007 | Pamic Element - P24 |
| | 012233008 | Pamic Element - P32 |
| | 012233009 | Pamic Element - P40 |
| | 012233010 | Pamic Element - P48 |
| | 012233011 | Pamic Element - P64 |
| | 012233014 | Pamic Element - P12 (2x6) |
| | 012233010LONG | Pamic Element - P48 |

| Type | Item Number | Description |
|----------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------------|
| Air Products - Spares  | 014439000 | Filterminder Adapter Kit for all Engine Air Products |
| | 014440001 | Filter Service Indicator c/w 90° Elbow 4-25" H ₂ O Vac 1/8" Fitting |
| | 400033015 | Filter Service Indicator 3-15" H ₂ O Vac 1/8" Fitting |
| | 400033025 | Filter Service Indicator 4-25" H ₂ O Vac 1/8" Fitting |
| | 035588000 | Flexible Bleed Valve for T512 Dynacell |
| | 049780000 | Flexible Bleed Valve for T519 and T528 Dynacell |
| | 039135001 | Filter Service Indicator/Adapter Kit 4-25" H ₂ O Vac |
| | 038105007 | Locknut for C61, C63, C64 & C69 Fasteners – Pamic clamp assemblies |
| | 054803000 | Flexible Bleed Valve - for Pamic pre-cleaner |
| Hydrocarbon Products FBO Housings  | FBO-10 | Housing Assembly (Element not included) |
| | FBO-14 | Housing Assembly (Element not included) |
| | 72710 | Water Level Sight Glass |
| | 72694 | 15psi Differential Pressure Indicator |
| FBO Elements  | FB060331 | Pre-Filter Element - 5 Micron (FBO 10) |
| | FB060340 | Pre-Filter Element - 5 Micron (FBO 14) |
| | FB060353 | FFWS Element - 10 Micron (FBO 10) |
| | FB060356 | FFWS Element - 10 Micron (FBO 14) |
| | FB060334 | Absorptive Filter 5 Micron (FBO 10) |
| | FB060343 | Absorptive Filter 5 Micron (FBO 14) |

 **WARNING**

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorised distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyse all aspects of your application, including consequences of any failure, and review the information concerning the product or system in the current product catalogue. Due to the variety of operating conditions and applications for these products or systems, the user, through their own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

Offer of Sale Please contact your Parker representation for a detailed "Offer of Sale".

Parker's technical resources provide the correct filtration technologies that conform to your requirements. That's why thousands of manufacturers and equipment users around the world rely on Parker Filtration products and people.



Hydraulic, Lubrication & Coolant Filtration

High-performance filtration systems for protection of machinery in industrial, mobile and military/marine applications.



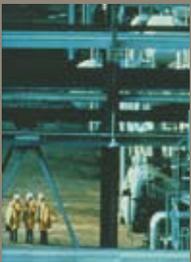
Filtration and Separation

Complete line of compressed air/gas filtration and separation products; coalescing, particulate and adsorption filters in many applications in many industries.



Racor Fuel Conditioning & Filtration

Parker air, fuel and oil filtration systems provide quality protection for engines operating in any environment, anywhere in the world.



Process & Chemical Fluid Filtration

Liquid filtration systems for beverage, chemical and food processing; cosmetic, paint, water treatment; photo-processing; and micro-chip fabrication.



System Contamination Monitoring

On-line dynamic particle analysis, off-line bottle sampling and fluid analysis and measurement of water content polluting the oil in a system.

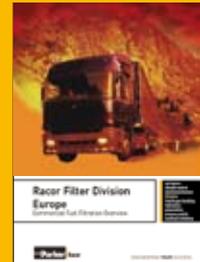
The most trusted name in engine protection

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.

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.



Ref: FDRB129GB1

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.



Ref: FDRB172UK

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 superyacht, 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.



Ref: Commercial Marine FDRB175UK
Ref: Leisure Marine FDRB136GB1

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 for your fuel delivery needs.



Ref: FDRB130GB1