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

Fuel Filtration Systems

Parker Racor

ENGINEERING YOUR SUCCESS.

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Cost-Effective Visual Inspection

See-thru collection bowls allow a water-in-fuel condition to be immediately visible. Closed spin-on cans waste expensive fuel and labor because it's impossible to check for water without actually opening the drain or removing the can from the mounting head.

Environmentally Friendly

Engineered polymer bowls are reusable, impact-resistant and virtually indestructible. When it's time for service, only the filter element is replaced – the see-thru bowl and drain valve assembly are reused. The long life cycle of the bowl saves money and reduces the environmental impact through disposal of less material. Use metal bowl versions for inspected or commercial vessels.

Easy Upgrades

See-thru bowls provide connection ports for upgrades that enhance engine performance and reliability. Powerful in-bowl heaters can be added to improve operation in colder climates and electronic sensors alert the operator to drain water in the bowl.

Corrosion-Free Construction

Advanced polymer technology means bowls will not deteriorate from water collection, alcohol-blended fuels, exposure to harsh additives or UV light. Unseen water lying in sealed cans causes them to rust and corrode or worse yet, increase in level and pass through.

High quality gaskets and 0-rings for consistent, sure seals.

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

Durable hand primer pumps are integrated into mounting heads.

The heart of every Racor filter is the engineered filter media. Aquabloc II® is known around the world for its combination of high efficiency, long life and unsurpassed water-removal performance.

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

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

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

Model 460R

445 - 460 - 490

A powerful, integral primer pump makes service quick and easy

The standard equipment primer pump tops the list of extensive options that allow bus fleets, truck fleets, RV owners and others to tailor a filter/separator system specifically to their operating requirements. These options include a choice of a three-micron rating for the Aquabloc® filter element, 200-watt in-bowl resistance heater, water sensor and flow rates up to 120 gph.

Model 660R

645 - 660 - 690

Maximize 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 120 gph, in-bowl heater and water sensor are all available options.

MEDIUM FLOW						
MODEL	**445**	**460**	**490**	**645**	**660**	**690**
Maximum Flow Rate	45 gph / 170 lph	60 gph / 227 lph	90 gph / 341 lph	45 gph / 170 lph	60 gph / 227 lph	90 gph / 341 lph
Gasoline or Diesel	Diesel	Diesel	Diesel	Both	Both	Both
Vacuum Installation	Yes	Yes	Yes	Yes	Yes	Yes
Pressure Installation	Yes	Yes	Yes	Yes	Yes	Yes
Maximum PSI [1] / kPa	30 psi / 207 kPa	30 psi / 207 kPa	30 psi / 207 kPa	30 psi / 207 kPa	30 psi / 207 kPa	30 psi / 207 kPa
Clean Pressure	0.17 psi	0.39 psi	0.95 psi	0.01 psi	0.05 psi	0.29 psi
Drop PSI / kPa	1.2 kPa	2.7 kPa	6.5 kPa	0.07 kPa	0.34 kPa	2.0 kPa
No. of Ports	4	4	4	7	7	7
Port Size	3/8" NPT / 16 mm	3/8" NPT / 16 mm	3/8" NPT / 16 mm	3/8" NPT / 16 mm	3/8" NPT / 16 mm	3/8" NPT / 16 mm
Integral Primer Pump [2]	Yes	Yes	Yes	No	No	No
Replacement Element No. [3]	R45	R60	R90	R45	R60	R90
Bowl / See-Thru	Yes	Yes	Yes	Yes	Yes	Yes
Bowl / Metal	No	No	No	No	No	No
Drain Type	Self-Vent	Self-Vent	Self-Vent	Self-Vent	Self-Vent	Self-Vent
Water Sensor Option [4]	Yes	Yes	Yes	Yes	Yes	Yes
Electric Heater Option [4] (12V/24V)	Yes	Yes	Yes	Yes	Yes	Yes
Height	9.3 / 236 mm	11 / 279 mm	11.8 / 300 mm	8.46 / 215 mm	10.2 / 259 mm	11.2 / 284 mm
Width	4.5 / 114 mm	4.5 / 114 mm	4.5 / 114 mm	4.5 / 114 mm	4.5 / 114 mm	4.5 / 114 mm
Depth	4.8 / 121 mm	4.8 / 121 mm	4.8 / 121 mm	4.5 / 114 mm	4.5 / 114 mm	4.5 / 114 mm
Weight	2.5 lbs / 1.1 Kg	2.7 lbs / 1.3 Kg	2.9 lbs / 1.4 Kg	2.35 lbs / 1.07 Kg	2.58 lbs / 1.17 Kg	2.65 lbs / 1.2 Kg

Notes:
(1) Pressure installations are applicable up to the maximum PSI/ kPa shown.
(2) Models with integral primer pumps are not recommended for gasoline applications.
(3) Replacement element micron rating can be specified as "S" for 2 micron, "T" for 10 micron, or "P" for 30 micron.
(4) Not for use with gasoline applications.

110A - 120A - 140

Model 120AT

Maximum protection in minimum space

The 110A is designed for fuel-injected gasoline 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 gasoline engines used in generator sets, pressure washers and other equipment. Their compact size fits tight mounting locations and multiple ports offer installation flexibility.

Model 230R2

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-thru 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.

For marine rated filters, see brochure #7501.

LOW FLOW						
MODEL	**110A**	**120A**	**140**	**215**	**230**	**245**
Maximum Flow Rate	15 gph / 57 lph Diesel 35 gph / 132 lph Gas	15 gph / 57 lph	15 gph / 57 lph	15 gph / 57 lph	30 gph / 114 lph	45 gph / 170 lph
Gasoline or Diesel [1]	Both	Both	Both	Diesel	Diesel	Diesel
Vacuum Installation	Yes	Yes	Yes	Yes	Yes	Yes
Pressure Installation	Yes	Yes	Yes	Yes	Yes	Yes
Maximum PSI [2]/ kPa	100 psi / 690 kPa	7 psi / 48 kPa	7 psi / 48 kPa	30 psi / 207 kPa	30 psi / 207 kPa	30 psi / 207 kPa
Clean Pressure Drop PSI/kPa	0.15 psi 1.03 kPa	0.15 psi 1.03 kPa	0.01 psi 0.07 kPa	0.12 psi 0.83 kPa	0.31 psi 2.14 kPa	0.61 psi 4.21 kPa
No. of Ports	4	4	2	3	3	3
Port Size	1/4" NPT/ M14 x 1.5	1/4" NPT/ M14 x 1.5	1/4" NPT/ M14 x 1.5	1/4" NPT/ M14 x 1.5	1/4" NPT/ M14 x 1.5	1/4" NPT/ M14 x 1.5
Integral Primer Pump [3]	No	No	No	Yes	Yes	Yes
Replacement Element No. [4]	R11	R12	R12	R15	R20	R25
Bowl/See-Thru	No	Yes	Yes	Yes	Yes	Yes
Bowl/Metal [1]	STD	Yes	Yes	Yes	Yes	Yes
Drain Type	Positive Seal	Positive Seal	Positive Seal	Positive Seal	Positive Seal	Positive Seal
Water Sensor Option [5]	Yes	Yes	Yes	Yes	Yes	Yes
Electric Heater Option [5] (12V/24V)	No	No	No	Yes	Yes	Yes
Height	6" / 152 mm	6.5" / 166 mm	6" / 152 mm	8.3" / 211 mm	9" / 229 mm	10.5" / 267 mm
Width	3.2" / 81 mm	3.2" / 81 mm	3.2" / 81 mm	4" / 102 mm	4" / 102 mm	4" / 102 mm
Depth	3.2" / 81 mm	3.2" / 81 mm	3.2" / 81 mm	4" / 102 mm	4" / 102 mm	4" / 102 mm
Weight	1.3 lbs / 0.59 Kg	1.1 lbs / 0.50 Kg	1.1 lbs / 0.50 Kg	1.8 lbs / 0.80 Kg	2 lbs / 0.90 Kg	2.2 lbs / 1.0 Kg

Notes: (1) Metal bowls should be used for gasoline installations.
(2) Pressure installations are applicable up to the maximum PSI/kPa shown.
(3) Models with integral primer pumps are not recommended for gasoline applications.
(4) Replacement element micron rating can be specified as "S" for 2 micron, "T" for 10 micron, or "P" for 30 micron, except for R11.
(5) Not for use with gasoline applications.

Racor Quality in One Easy Spin

- High-capacity, on-engine primary or secondary filtration
- Fits most existing mounting heads
- See-thru bowl with water sensor option
- Mounting heads available, contact Racor or your distributor

320 Engine Spin-On Series

Fuel Filter/ Water Separator w/ Reusable See-Thru Bowl	Spin-On Replace-ment Element (only)	Micron Rating		
B32001	S3201	10	10.5"	267 mm
Application: Cummins – 90 gph / Secondary (Final)				
B32002	S3202	30	10.5"	267 mm
Application: DDC – 90 gph / Primary				
B32003	S3203	2	8.63"	219 mm
Applications: Caterpillar – 60 gph / Secondary (Final) IH (Navistar) – 90 gph / Secondary (Final)				
B32004	S3204	30	7.13"	181 mm
Application: IH (Navistar) – 40 gph / Secondary				
B32006	S3206	2	12"	305 mm
Application: Caterpillar – 90 gph / Secondary (Final)				
B32007	S3207	10	13.5"	343 mm
Application: Cummins – 180 gph / Secondary (Final)				
B32008	S3208	*	7.25"	184 mm
Application: Deutz, Volvo – 30 gph				
B32009	S3209	*	8.63"	219 mm
Application: Mann, DAF – 60 gph				
B32011	S3211	10	8.63"	219 mm
Application: Cummins Short – 90 gph/Secondary (Final)				
B32012	S3212	30	7.13"	181 mm
Application: DDC – 90 gph / 8.2L Primary				
B32016	S3216	*	5.85"	149 mm
Application: Deutz, Volvo Short – 20 gph				

* Available in 2, 10 or 30 micron.

4125 - 6125
3150 - 3250

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.

Model 3250R

HIGH FLOW				
MODEL	**4125**	**6125**	**3150**	**3250**
Maximum Flow Rate	120 gph / 454 lph	120 gph / 454 lph	150 gph/ 570 lph	250 gph/ 946 lph
Gasoline or Diesel [1]	Diesel	Both	Diesel	Diesel
Vacuum Installation	Yes	Yes	Yes	Yes
Pressure Installation	Yes	Yes	Yes	Yes
Maximum PSI [2]/kPa	15 psi / 103 kPa	15 psi / 103 kPa	7psi / 50 kPa	7 psi / 50 kPa
Clean Pressure Drop PSI	0.85 psi	0.35 psi	0.68 psi	1 psi
No. of Ports Port Size	4 3/4" SAE / 18 mm	7 3/8 NPT	2 0.875" X 14 SAE	2 0.875" X 14 SAE
Integral Primer Pump [3]	Yes	No	No	No
Replacement Element No. [4]	R125	R125	S3238P	S3207P
Bowl / See-Thru	Yes	Yes	Yes	Yes
Bowl / Metal [1]	No	No	Yes	Yes
Drain Type	Self-Vent	Self-Vent	Self-Vent	Self-Vent
Water Sensor Option [5]	Yes	Yes	Yes	Yes
Electric Heater Option [5] (12V/24V)	Yes	Yes	Yes	Yes
Height	15 / 381 mm	14.12 / 359 mm	13.6 / 345 mm	17.25 / 438 mm
Width	4.5 / 114 mm	4.5 / 114 mm	5 / 127 mm	5 / 127 mm
Depth	4.8 / 121 mm	4.5 / 114 mm	5.5 / 140 mm	5.5 / 140 mm
Weight	3.9 lbs / 1.8 Kg	3.9 lbs / 1.8 Kg	3.6 lbs / 1.6 Kg	4.6 lbs / 2.08 Kg

Notes: (1) Metal bowls should be used for gasoline installations.
(2) Pressure installations are applicable up to the maximum PSI/ kPa shown.
(3) Models with integral primer pumps are not recommended for gasoline applications.
(4) Replacement element micron rating can be specified as "S" for 2 micron, "T" for 10 micron, or "P" for 30 micron.
(5) Not for use with gasoline applications.

All Racor filter materials and seals are compatible with ultra-low sulphur diesel (ULSD) fuel and B2 to B20 Biodiesel.

See Racor bulletin #7679.

700 Series Integrated Filter/Separators

The Racor 700 Series is equipped with state-of-the-art fuel pumps with either brush or brushless DC motors. In brushless versions, 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 brushless DC motor makes this product the most reliable filter and pump assembly on the market. The brushless pump assembly is ideal for tough on-engine applications. For off-engine mounting, brushed pumps are a more economical alternative.

The 700 Series Integrated Fuel Filter/ Water Separators have a two-stage filtration and repriming system. This complete fuel management system isolates contaminants present in diesel fuels and traps them prior to reaching the fuel injection system, protecting against costly and premature failure.

The heart of every Racor filter is the engineered filter media. Aquabloc II® is known around the world for its combination of high efficiency, long life and unsurpassed water removal performance.

Bowls are virtually indestructible. They won't discolor from exposure to alcohol, additives or UV light.

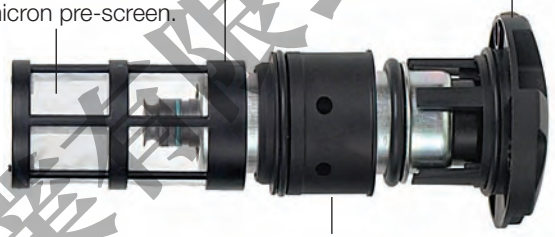
Water sensor and vacuum gauges to signal service are valuable options available for most models.

Positive seal self-venting drain.

A rugged roller-cell pump. 60 gallons per hour flow rate while in priming mode.

Unitized assembly only 3.3" tall.

100 micron pre-screen.



12V DC or 24V DC motor.

MODEL	745R30	760R30	790R30[1]	7125R10[1] (10 Micron) 7125R30[1] (30 Micron)
Maximum Flow Rate	45 gph / 170 gph	60 gph / 227 lph	90 gph / 341 lph	120 gph / 454 lph
Gasoline or Diesel	Diesel	Diesel	Diesel	Diesel
Replacement Element	R45P	R60P	R90P	R125T (10 Micron) R125P (30 Micron)
Clean Pressure Drop	0.25 psi / 1.7 kPa	0.25 psi / 1.7 kPa	0.25 psi / 1.7 kPa	0.25 psi / 1.7 kPa
Port Size	3/8" NPT	3/8" NPT	3/8" NPT	3/8" NPT
Water Sensor Option	Yes	Yes	Yes	Yes
Height	10.8 / 25.7 cm	11.8 / 28.4 cm	12.8 / 31.2 cm	15.8 / 40.1 cm
Width	4.3 / 11.0 cm	4.3 / 11.0 cm	4.3 / 11.0 cm	4.3 / 11.0 cm
Depth	6.5 / 16.5 cm	6.5 / 16.5 cm	6.5 / 16.5 cm	6.5 / 16.5 cm
Weight (dry)	4.5 lbs. / 2.0 kg	5.5 lbs. / 2.5 kg	6.5 lbs. / 3.0 kg	7.7 lbs. / 3.5 kg
Operating Temperature	-40° to +225°F (-40° to +107°C)			

[1]The 700 Series comes in 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)

Fuel pump for priming applications only. Not for continuous operation unless protected by a pre-filter.

For additional information about Racor Filter/Separator Pump Systems, request brochure #7683.