Parker Product Datasheet



Racor Marine Spin-on Series Fuel Filter Water Separators provide maximum protection of modern engines by effectively removing water, sand, dirt, and rust contamination from fuel. UL-approved versions available.

PART NUMBER: 120R-RAC-01
MICRON RATING: 98% @ 10 Micron
INTEGRAL PRIMER PUMP: No
FILTERED MEDIUM: Gasoline
FLOW RATE: 30 gph / 114 lph
PORT SIZE: 1/4”-18 NPTF
UL CERTIFICATION: No
BOWL MATERIAL: Clear Engineering Plastic

PRODUCT OVERVIEW

No matter how carefully gasoline or diesel is handled, contamination in the form of dirt, sludge or water will always find its way into your marine vessel’s fuel tank. With modern engines now injecting fuel at over 36,000 psi (2,500 bar) and injector tolerances measured in microns, even a small amount of dirt or water corrosion can cause damaged components, reduced engine efficiency, and in severe cases, complete injector break-down.

Racor Marine Spin-on Series Fuel Filter Water Separators provide maximum protection of modern marine diesel and gasoline engines by effectively removing contaminants from fuel, such as water, silica, sand, dirt, and rust. The mounting head and filter body are protected with a durable electrostatically-applied powder coating for superior corrosion resistance. The unique spin-on filter design is easy to service and features a reusable clear engineered plastic or metal

contaminant collection bowl with a self-venting drain or metal plug.

Filters can be mounted on-engine or remotely, and come with hand-operated fuel priming pumps, which allow for easy filter replacement and air purge. When it's time for service, only the filter element is replaced—the bowl and drain plug are reused. Water-in-fuel (WIF) sensor upgrades are available for diesel applications to alert operators to drain accumulated water from the bowl.

All Marine Spin-on Series Fuel Filter Water Separators utilize Racor's high-efficiency Aquabloc® engineered media, which repels water and removes solid contaminants from fuel at 98% efficiency of their micron rating. Depending on the product selected, three different micron ratings are available for purchase, including:

30 micron (98%@30 micron) – Ideally suited as a pre-filter to protect downstream filters from excessive contamination. Extends the life of on-engine filters.

10 micron (98%@10 micron) - Captures more contaminants than 30 micron elements, and is more effective at stopping water. Extends the life of the entire fuel system.

"2" micron (98%@4 microns) – Provides maximum water removal and filtration and is capable of protecting all modern injection systems, while greatly extending the life of difficult-to-service on-engine filters.

How it works:

Racor Marine Spin-on Series Fuel Filter Water Separators use Aquabloc® media to reliably remove dirt and water from diesel and gasoline. Aquabloc® media is pleated, corrugated, and arranged for high water rejection and long service life. Fuel entering the filter head is diverted downward past the vertical media pleats, allowing larger water droplets and contamination particles to fall directly to the collection bowl. Smaller water droplets converge and coalesce on the specially treated media surface until they are large enough to also drop to the collection bowl. Small contamination particles are stopped at the surface of the Aquabloc® media, while even smaller particles are held deeper in its layers. This results in dry, clean motor fuel being delivered to your engine.

Notes on use:

• Gasoline filters used in an enclosed location should use a metal bowl.
• Clear bowls in gasoline systems are a routine inspection item: Inspect for damage, deformation, and discoloration often, and replace as necessary.
• Heaters and water probes must NOT be used in gasoline

• Gasoline filters available first fit with 10 micron media element only.

Notes on selection:

To ensure selection of the proper Spin-on Series marine filter, follow the steps below:

1.Choose your engine fuel to be filtered; gasoline or diesel fuel.
2.Select total flow rate through the fuel system (gpm or lpm).
3.Choose bowl material. Engineered plastic bowls are only available for gasoline outboard applications.
4.If available, choose or reject hand primer feature.
5.If available, select media micron rating.
6.Choose port size.
7.Select UL Certified or not.

Markets:

• Marine Power Generation
• Marine Propulsion

Applications:

• Diesel and Biodiesel Engines
• Gasoline Engines

Benefits:

• Offers exceptional removal of water that enters the system through condensation in the fuel tank. Any water present in the fuel stream will support bacterial growth, which can cause clogged filters and result in the formation of corrosive acids. Susceptible components then rust and corrode, leading to erosion and wear of critical fuel system components.
• Removes hard particles present in air that are introduced during fueling, such as sand and silica.
• Prevents costly injector damage and increases operational life of downstream filters.
• Saves time and money by eliminating unplanned maintenance and unscheduled downtime from system component failure.
• High-efficiency Aquabloc® media helps OEMs’ diesel engines adhere to rigid government emission standards.
• UL-listed filters meet ABYC, ASTM, ISO, and many other global standards for filters used in marine engine rooms.

• Corrosion-resistant construction means bowls will not deteriorate from water collection, alcohol blended fuels, exposure to harsh additives, salt spray or UV light.

Features:

• Water-in-fuel (WIF) sensor upgrades are available for diesel applications to alert operators of accumulated water in the bowl.
• Reusable, clear plastic or metal collection bowl with self-venting drain
• Metal bowl units for inboard-powered boats meet 33 CFR and USCG regulations
• Replacement cartridge elements exhibit high dirt-holding capacity and long service life.
• Corrosion-resistant coatings and construction
• Gasket and o-ring materials designed for diesel and gasoline use.
• Ports available: ¼”-18 NPTF, 3/8”-18 NPTF, ½”-14 NPTF
• Hand primer available on selected models.

TECH SPECIFICATIONS

WIDTH	3.2 inch
WEIGHT	1.1 lb / 0.5 Kg
FILTER ELEMENT TYPE	10 Micron Aquabloc Spin-on
MAXIMUM OPERATING PRESSURE	7 psi
NUMBER OF PORTS	2 Inlet / 2 Outlet
HEAD MATERIAL	Power Coated Aluminium Alloy
MAXIMUM FLUID TEMPERATURE	190.0 °F
DIVISION	Engine Mobile Original Equipment Division
HEIGHT	6.5 inch
PRODUCT SERIES	Marine Spin-on FF/WS
BRAND	Racor
CLEAN PRESSURE DROP	1.38 kPa
HEIGHT	16.5 cm
MAXIMUM FLUID TEMPERATURE	88.0 °C
MOUNTING TYPE	Bracket Included

CLEAN PRESSURE DROP	0.2 psi
OPERATING TEMPERATURE	-40 to 250 °F
OPERATING TEMPERATURE	-40 to 121 °C
MAXIMUM OPERATING PRESSURE	48.3 kPa
DEPTH	3.2 inch
PRODUCT SERIES	Gasoline Spin-on
COMPATIBLE ELEMENT	S3240 = 10 micron S3240TUL = 10 micron
WIDTH	8.1 cm
DEPTH	8.1 cm