

Parker Product Datasheet



The Racor P510MAM Series Pump and Filter Fuel Polishing System helps extend the life of on-board filters by removing contaminants from stored fuel. It can be used for continuous operation on fuel tanks, or as part of a day-tank transfer system.

PART NUMBER: P510MAM
SERIES TYPE: Cartridge FF/WS Pump

PRODUCT OVERVIEW

During refining, distribution, and storage, fuels are subject to contamination from dirt, rust, water intrusion and condensation, microbial growth, and oxidation. If allowed to enter the fuel tank during transfer, these contaminants can lead to prematurely plugged filters, damaged components, decreased combustion efficiency, and even system failure.

The Racor P510MAM Series Pump and Filter Fuel Polishing System helps protect on-board engine filters by removing water and contaminants from contaminated fuel before it is transferred to a fuel tank or fuel system. Fuel polishing extends onboard filtration life and enhances filtration efficiency. Fuel polishing is especially important in standby power applications, as old degraded fuel can clog filters within minutes, leading to engine shutdown.

The P510MAM Series utilizes Racor's proprietary Aquabloc® engineered media. Aquabloc® incorporates pleat-spacing corrugations and a graduated pore structure to increase dirt-holding capacity and extend filter life. The media is waterproof and rustproof, capturing contaminants while the specially treated surface separates and coalesces water from the fuel. The polisher also comes equipped with a brushless 12/24V DC motor, electrical harness and control module, metal bowl, and a stainless water-in-fuel sensor.

The P510MAM Series can be used for continuous operation on fuel tanks, or as part of a fuel

transfer system.

How it works:

The Racor P510MAM Fuel Polishing System is normally plumbed in a closed loop system with a diesel fuel tank. Fuel exits the tank and enters the module. The first stage is a primary pleated fuel filter cartridge that blocks particle contamination and free water, which in turn is held by the media and collected in the collection bowl. Clean, dry fuel then enters the integral fuel pump, which flows back to the tank or system depending on application. The P510MAM contains high performance Aquabloc® media in a cartridge design, which provides superior filtration while remaining environmentally friendly. All Racor filter materials and seals are compatible with ultra-low sulfur diesel and biofuels up to B20 blend. The pump in the Fuel Polishing Module is a 12/24V DC brushless electronic pump with a maximum flow rate of 66 gph (250 lph), and internal 26 psi (179 kPa) pressure regulation.

Markets:

- Agriculture
- Construction
- Power Generation
- Oil and Gas
- Marine

Applications:

- Diesel and Biodiesel fuel tank polishing system
- Diesel fuel transfer

Benefits:

- Removes free water that often collects at the bottom of fuel cans, tanks, or drums. Free water formation occurs when humid air inside a container or tank cools to the point that water condenses out of the air.
- Removes hard particles (e.g., sand and silica) present in air that are introduced during transfer and distribution.
- Prevents costly injector damage and extends life of downstream filters.
- Saves time and money by eliminating unplanned maintenance and unscheduled downtime from system component failure.
- Can be used for continuous filtration on fuel tanks, or for fuel transfer systems.
- Environmentally-friendly filter cartridges and biodiesel compatible

Features:

- Innovative, modular fuel filter/water separator, bottom-load design

- One size housing, with M16-1.5 ORB ports (adapters available)
- 12/24V DC brushless electronic fuel pump, 66 gph (250 lph) flow
- Internal 26 psi (179 kPa) pressure regulation
- Features high-performance Aquabloc® media in cartridge-style pleated element
- Water-in-fuel sensor
- Control module for pump and water sensor operation
- A removable and reusable contaminant collection bowl is standard on all models
- UL 1105 fire tested
- Operating Temperature: -40°F to +255°F (-40°C to +121°C)

TECH SPECIFICATIONS

DIVISION	Engine Mobile Original Equipment Division
FLOW RATE	273 L/hour
FLOW RATE	73 gal/hour
FOR FLUID TYPE	Diesel / B20
APPLICATION	Fuel Polishing System
BRAND	Racor
PRODUCT SERIES	P-Series
WEIGHT	4.2 lb
WEIGHT	1.9 kg
WIDTH	11.4 cm
WIDTH	4.5 inch
HEIGHT	11.5 inch
HEIGHT	33.3 cm
PUMP TYPE	12/24V DC Brushless, Continuous duty
PUMP TYPE	72 gph / 273 lph maximum output
PORT SIZE	M16x1.5 ORB Adapters available
MOUNTING TYPE	Bracket Included
DEPTH	13.2 cm

DEPTH	5.2 inch
COMPATIBLE ELEMENT	R58039-2 = 2 micron R58039-10 = 10 micron R58039-30 = 30 micron
BOWL TYPE	Powder Coated Aluminum
OPTIONAL ACCESSORIES	Fitting adapters available. See Product Overview & Support Tabs
WATER SENSOR OPTION	Included Stainless Steel Probe
HEAT TYPE	None
CLEAN PRESSURE DROP	0.8 psi
CLEAN PRESSURE DROP	0.8 kPa