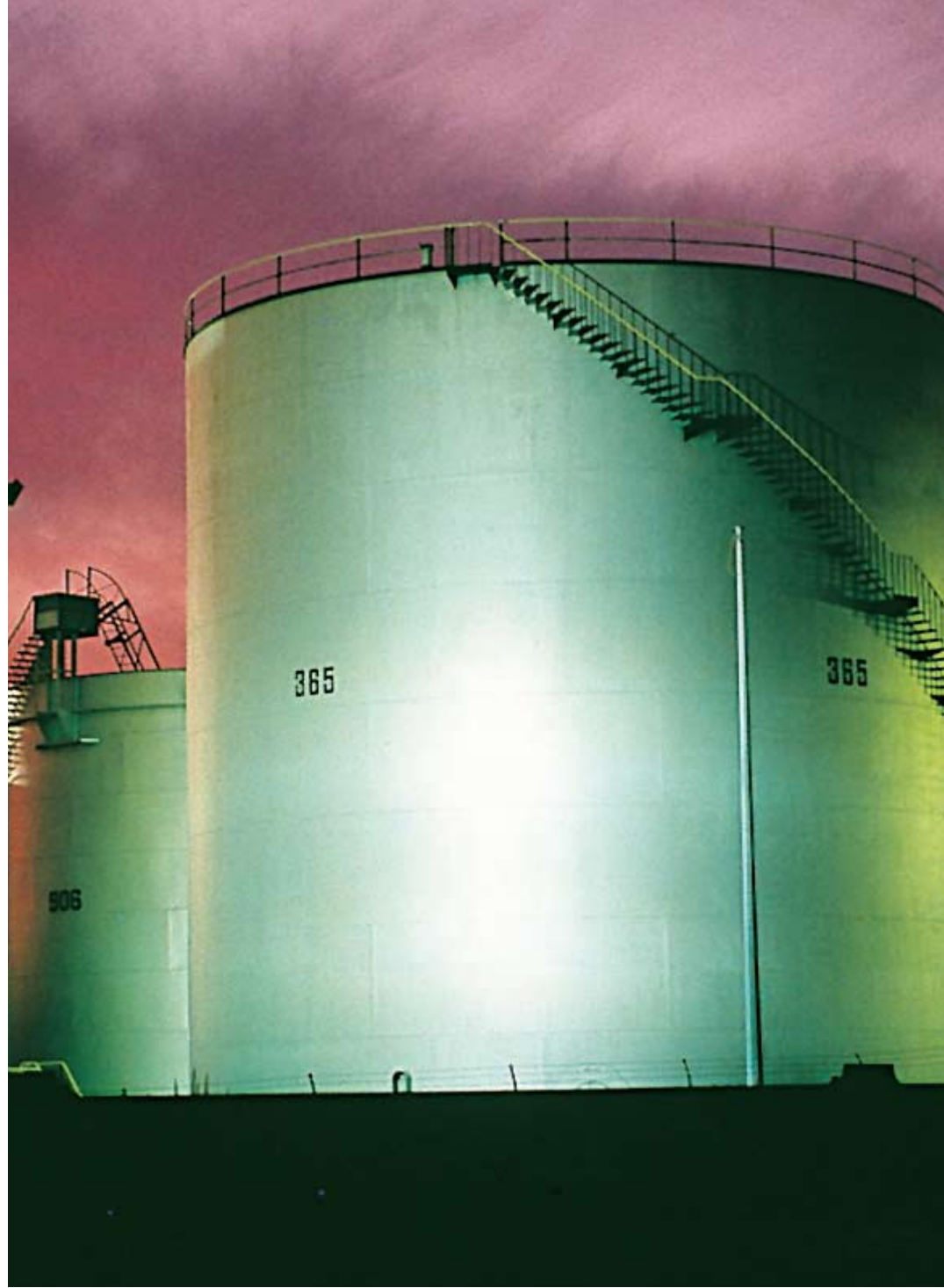




aerospace
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filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



RV Series

RVFS Fuel Filter/Water Separator Vessel
RVMF Fuel Filter Vessel



How They Work

The RV Series vessels are designed to be used in bulk fuel storage, fuel dispensing, or in fuel transfer and large engine applications.

RV Series set up as a filter/water separator (RVFS) will remove emulsified free water and solids from diesel fuel, gasoline, and other hydrocarbon streams. When equipped with filter water separator elements, water can be drained and removed from the RVFS sump.

RV Series set up as a particulate filter (RVMF) is designed to remove solid contaminants such as dirt, rust, scale, and other solid materials from a hydrocarbon fuel stream down to two micron.

Order a complete system “off the shelf” or customize via our three step ordering process on page 5.



Product Features:

- Carbon Steel Construction
- 250 PSI ASME Code, Section VIII Construction Stamped And Certified
- Inlet And Outlet Permanently Marked
- Interior: Epoxy Coated To MIL-C-4556E
- Exterior: Grey Primer Coated
- Hinged Cover
- Leg Mounts or Wall Mounts
- Connections are 2" FNPT
- Pressure relief valve, automatic air eliminator, drain valve, water-in-fuel sight glass, and differential pressure gauge.

Fuel Flow Information

Flow Rate with Diesel Fuel

Type	Fuel Filter Water Separator RVFS	Microfilter RVMF
Size 1	25 GPM (113 LPM)	66 GPM (300 LPM)
Size 2	50 GPM (227 LPM)	133 GPM (604 LPM)
Size 3	75 GPM (340 LPM)	200 GPM (909 LPM)

Flow Rate with Kerosene-Aviation Fuel

Type	Fuel Filter Water Separator RVFS	Microfilter RVMF
Size 1	50 GPM (227 LPM)	66 GPM (300 LPM)
Size 2	100 GPM (454 LPM)	133 GPM (604 LPM)
Size 3	150 GPM (681 LPM)	200 GPM (909 LPM)

Mounting Information

RVFS-1 & RVMF-1

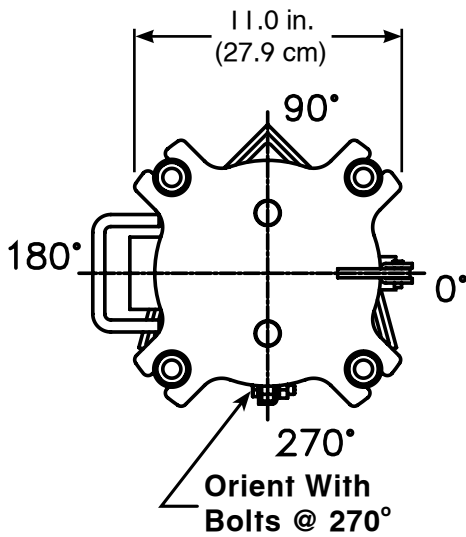
A: 35.3 in. (89.7 cm)
B: 34.0 in. (86.0 cm)
C: 24.8 in. (63.0 cm)

RVFS-2 & RVMF-2

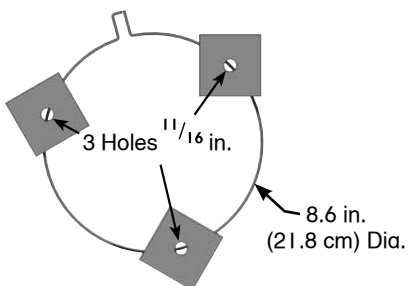
A: 49.8 in. (126.5 cm)
B: 48.5 in. (123.2 cm)
C: 39.3 in. (99.8 cm)

RVFS-3 & RVMF-3

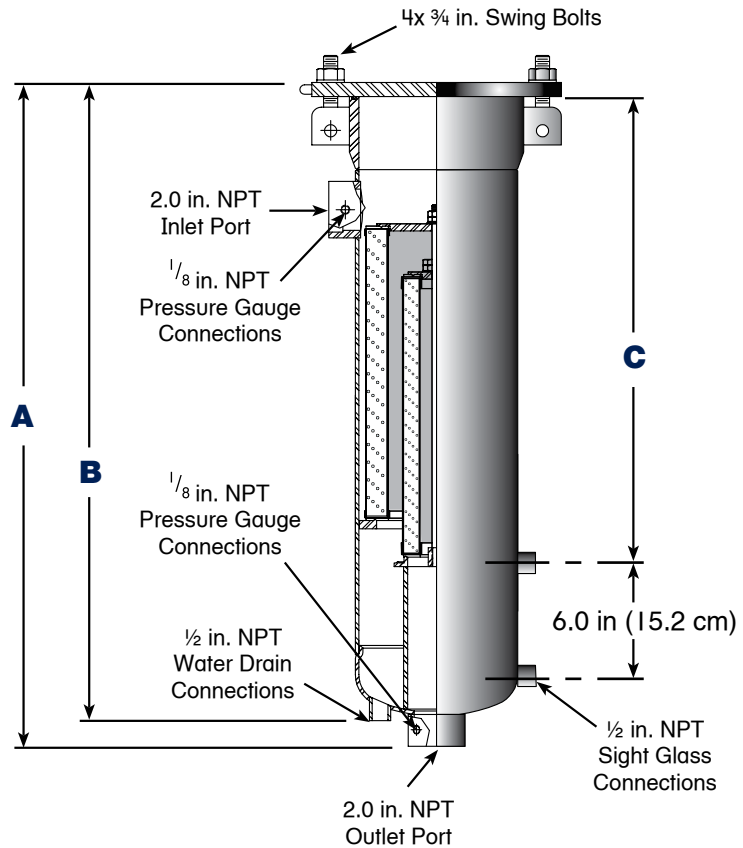
A: 63.8 in. (162.1 cm)
B: 62.4 in. (158.5 cm)
C: 54.0 in. (137.2 cm)



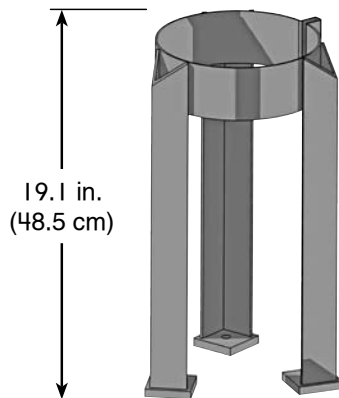
Top View



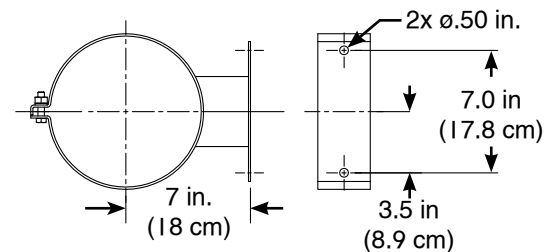
Bottom View



Mounting Hardware



Mounting Legs



Bulkhead Mounting Bracket

RV Series Technical Information

Application:

Racor RV Series filter vessels offer economy, versatility, unparalleled high efficiency, and low maintenance solutions to many fuel delivery and industrial filtration applications. The vessels will accept fuel filter or fuel filter water separator elements.

Filter vessels are used in the diesel and kerosene re-fueling industry on fuel

dispensing locations, providing clean dry fuel. Equally these vessels can be used for AV gas, heating oils, gasoline, and other hydrocarbon fuels.

Racor RV Series vessels provide the required filtration demanded for today's high pressure common rail engines.



Specifications

	RVFS-1 RVMF-1	RVFS-2 RVMF-2	RVFS-3 RVMF-3
<i>Inlet and Outlet Ports</i>	2 in. NPT	2 in. NPT	2 in. NPT
<i>Vent and Relief Ports</i>	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT
<i>Water Level Gauge Ports</i>	1/2 in. NPT	1/2 in. NPT	1/2 in. NPT
<i>Deferential Gauge Ports</i>	1/8 in. NPT	1/8 in. NPT	1/8 in. NPT
<i>Design Pressure and Temperature</i>	250 PSI @ 250°F (17 bar @ 121°C)		
<i>ASME Code Stamped</i>	Yes	Yes	Yes
<i>Pressure Drop - Clean</i>	2 PSID (0.14 bar)	2 PSID (0.14 bar)	2 PSID (0.14 bar)
<i>Pressure Drop/Element Change-out</i>	25 PSID (1.7 bar)	25 PSID (1.7 bar)	25 PSID (1.7 bar)
<i>Height</i>	35.3 in. (89.7 cm)	49.8 in. (126.5 cm)	63.8 in. (162.1 cm)
<i>Width</i>	13.5 in. (34.0 cm)	13.5 in. (34.0 cm)	13.5 in. (34.0 cm)
<i>Depth</i>	13.2 in. (33.5 cm)	13.2 in. (33.5 cm)	13.2 in. (33.5 cm)
<i>Dry Weight</i>	100 lbs. (45 kgs)	115 lbs. (52 kgs)	130 lbs. (59 kgs)
<i>Overhead Service Clearance</i>	16.0 in. (41.0 cm)	32.0 in. (81.0 cm)	47.0 in. (119.0 cm)

Ordering:

I. Fuel filter/water separator vessels
 RVFS-1-10C, RVFS-2-10C, RVFS-3-10C
 with 10 micron elements and these
 accessories: automatic air eliminator,
 pressure relief valve, differential pressure/
 element change-out gauge, water in
 fuel sight glass, manual drain valve, and
 mounting legs.

“IN STOCK AND READY TO SHIP”

OR

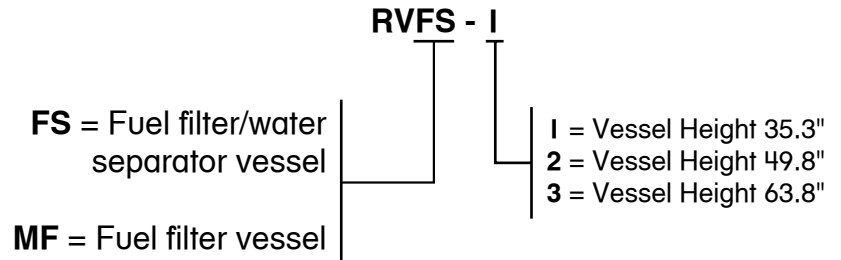
**II. Customized RV series with a easy three
 step configuration:
 (lead time 10 days)**

Step 1: Choose Fuel Filter Vessel

Part Number	Description
RVFS-1	Fuel Filter/Water Separator Vessel Only
RVFS-2	Fuel Filter/Water Separator Vessel Only
RVFS-3	Fuel Filter/Water Separator Vessel Only
RVMF-1	Vessel Only
RVMF-2	Vessel Only
RVMF-3	Vessel Only

Step 2: Choose Accessories

Part Number	Description
71330-150	Pressure Relief Valve
70906	Water Level Site Gauge, (Diesel only 125 PSIG)
72061-RVFS	Water Level Site Gauge (Jet, AV gas, and Gasoline 300 PSIG)
71679	Air Eliminator
72059	Deferential Pressure Gauge Assembly
71943-.75	3/4" NPT Brass Drain Valve
72060-.75	3/4" NPT Stainless Steel Drain Valve
71981	Mounting Legs
71982	Wall Mount Bracket
72482	Inlet Check Valve
72025V ¹	Viton O-ring



Step 3: Choose Elements

RVFS-1	Element Description ²
OCP-15858	5 Micron Coalescer
SP-15404	5 Micron Separator
OCP-15868	10 Micron Coalescer
SP-15405	10 Micron Separator
OCP-15878	25 Micron Coalescer
SP-15407	25 Micron Separator
RVMF-1	Element Description
FP-14602	2 Micron Silicone Treated Fuel Filter
FP-14604	5 Micron Silicone Treated Fuel Filter
FP-14605	10 Micron Silicone Treated Fuel Filter
FP-14607	25 Micron Silicone Treated Fuel Filter
RVFS-2	Element Description ²
OCP-30858	5 Micron Coalescer
SP-30404	5 Micron Separator
OCP-30868	10 Micron Coalescer
SP-30405	10 Micron Separator
OCP-30878	25 Micron Coalescer
SP-30407	25 Micron Separator
RVMF-2	Element Description
FP-29601	2 Micron Silicone Treated Fuel Filter
FP-29604	5 Micron Silicone Treated Fuel Filter
FP-29605	10 Micron Silicone Treated Fuel Filter
FP-29607	25 Micron Silicone Treated Fuel Filter
RVFS-3	Element Description ²
OCP-44858	5 Micron Coalescer
SP-44404	5 Micron Separator
OCP-44868	10 Micron Coalescer
SP-44405	10 Micron Separator
OCP-44878	25 Micron Coalescer
SP-44407	25 Micron Separator
RVMF-3	Element Description
FP-44601	2 Micron Silicone Treated Fuel Filter
FP-44604	5 Micron Silicone Treated Fuel Filter
FP-44605	10 Micron Silicone Treated Fuel Filter
FP-44607	25 Micron Silicone Treated Fuel Filter

¹ All vessels come equipped with Buna-N O-rings. Viton O-rings are available in the accessories section.

² For RVFS-1, 2, and 3, customer must order one **OCP** and one **SP** element. A fuel filter water separator consists of one coalescer and one separator element.

Full Line of Racor Additives



We've Bottled Racor Protection

Racor Additives are performance-enhancing products for all climates and seasons. There are several convenient sizes, including a 16 oz. bottle; 1 and 5 gallon containers; and a 55 gallon drum. The high concentration of active ingredients in Racor additives allows for higher treatment rates. All Racor Fuel Additives are alcohol-free.



Diesel Winter Plus+

Racor Diesel Winter Plus+ is added to middle petroleum distillates such as No. 2 heating oil or diesel fuel to improve their low temperature operability as measured by pour point and cold filter plugging point. Racor Diesel Winter Plus+ prevents the plugging of lines, filter screens, and valves and allows the fuel to flow freely down to 32°F (0°C). Diesel Winter Plus+ contains a deicer, which can help reduce line freezing.

Compatible with Biodiesel blends up to B20.



Powershot+™ Diesel Conditioner

Racor Powershot+™ Diesel Fuel Conditioner is recommended for use in all engine applications using #1 and #2 diesel fuels.

With regular use of Racor Powershot+ Diesel Conditioner, fuel economy is improved, corrosion protection is provided and fuel stability is enhanced during storage.

Compatible with Biodiesel blends up to B20.



Diesel Biocide

Racor Diesel Biocide is a multifunctional petroleum distillate fuel additive. It is used to help maintain color stability and clarity; control bacteria, fungi, organic reaction and sludge formation; inhibit corrosion; and disperse existent sludge.

EPA Est. No. 072342-CA-001, EPA Reg. No. 1448-17-47099.

Compatible with Biodiesel blends up to B20.



Diesel Conditioner Plus+

Racor Diesel Conditioner Plus + is a multi-functional fuel additive for all season use. Its formulation contains a cetane improver. Its lubricity additives reduce friction and pass the scuffing BOCLE test for lubricity. Corrosion and rust formation are also reduced.

Compatible with Biodiesel blends up to B20.



Diesel Performance Plus+

Racor Diesel Performance Plus+ has the same engine protection qualities as the Racor Diesel Conditioner Plus + and it has five times the cetane improver to deliver optimal engine performance. The added performance comes with improved lubricity and is alcohol free for better fuel system component protections.

Compatible with Biodiesel blends up to B20.



Powershot+™ Gasoline Conditioner

Racor Powershot+™ Gasoline Conditioner is a convenient gasoline additive that cleans while it protects. It can be used in all types of internal combustion systems and gasoline blends.

By cleaning the engine's fuel injectors or carburetor, Racor Powershot+™ Gasoline Conditioner provides better combustion, better fuel economy and lower exhaust emissions.



Gasoline Conditioner Plus+

Racor Gasoline Conditioner Plus+ is a diluted multi-functional gasoline additive that cleans as it protects. It is designed for secondary treatment applications and can be used with all types of internal combustion systems and gasoline blends. It provides better combustion, better fuel economy and lower exhaust emissions.



Synthetic Heavy Duty Engine Oil

Racor premium synthetic engine oil is crafted with the highest quality synthetic base stock. Advanced additive systems provide superior film strength, oxidation resistance, and exceptional soot and deposit control.

With high TBN, coupled with superior performance and a high viscosity index formulated to meet CJ-4 API, and is backwards compatible to assure excellent engine protection; no matter what engine you are running.

- Prevents Rust & Corrosion
- Resists Oxidation/Reduces Engine Wear
- Extended Drain Intervals
- Provides Low Temperature Protection
- Improves Fuel Economy

Additive Part Numbers and Treat Ratios

Part Number	Description	Size	Treats
ADT 1111	Powershot+ Diesel Fuel Conditioner	11 ounces	30 gallons
ADT 1116	Diesel Conditioner Plus+	16 ounces	320 gallons
ADT 1201	Diesel Conditioner Plus+	1 gallon	2,560 gallons
ADT 1555	Diesel Conditioner Plus+	55 gallon drum	140,800 gallons
ADT 2116	Diesel Biocide	16 ounces	1,280 gallons
ADT 2201	Diesel Biocide	1 gallon	10,240 gallons
ADT 2405	Diesel Biocide	5 gallons	51,200 gallons
ADT 2555	Diesel Biocide	55 gallon drum	563,200 gallons
ADT 3116	Diesel Performance Plus+	16 ounces	80 gallons
ADT 4116	Diesel Winter Plus+	16 ounces	128 gallons
ADT 4201	Diesel Winter Plus+	1 gallon	1,024 gallons
ADT 4555	Diesel Winter Plus+	55 gallon drum	563,200 gallons
ADT 5111	Powershot+ Gasoline Conditioner	11 ounces	15 gallons
ADT 5116	Gasoline Conditioner Plus+	16 ounces	320 gallons
ADT 9332	Synthetic Heavy Duty Engine Oil	1 Quart	Engine Components

Parker Filtration Group

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and distribution network by calling:

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6035 Parkland Blvd.
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