

More From Racor

FBO Fuel Filter

FBO Fuel Filter/Water Separator

FBO Fuel Filter/Water Absorber



How They Work:

These versatile housings have three element options to meet various requirements, fuel filter, water separator, or a water absorber. For fuel dispensing applications a fuel filter/water separator element is recommended.

Racors FBO-10 and FBO-14 filter assemblies are designed to meet the toughest hydrocarbon refueling conditions and designed for easy cartridge element change-outs.

The FBO assembly can be used on mobile refuelers or installed in refueling cabinets. The FBO unit can also be used for diesel fuel dispensing pumps or as a primary fuel filter/water separator for large diesel engines or as bulk fuel handling, fuel transfer, and other higher flow applications.

Product Features:

- Die-Cast Aluminum Head
- Steel Filter Bowl Assembly
- Powder Coated Components
- Mounting Bracket
- Locking Ring Collar “No V-Clamps”
- 1.5” NPT Inlet And Outlet
- Designed To Withstand Maximum Pressure 150 PSI (10 bar) and Max Temperature 240°F (115°C)
- Manual Drain Valve 1/4” NPT
- Manual Vent Valve
- Sight Glass 1/2” NPT
- Explosion Proof Heater is Available

Application

Racors FBO assemblies are specifically designed to meet filtration requirements of today’s high pressure common rail diesel injection systems. The unit is used for fuel dispensing pumps or as a primary fuel filter/water separator on large diesel engine applications.

Racors FBO-10 and FBO-14 filter assemblies are designed to meet tough conditions and offer ease of filter change-outs. FBO assemblies have a flow rate of 10 GPM (38 LPM) to 75 GPM (284 LPM), depending on model, element, and the type of fuel to be filtered.

FBO assemblies feature a “locking ring collar”, which attaches the filter housing to aluminum die cast filter head with four bolts. A slotted “locking ring collar” allows maintenance personnel to hand loosen four collar bolts, rotate, and lower the bowl assembly for element change-outs.

With a new element installed, simply raise the bowl and rotate into position on the locking ring and hand tighten (evenly torquing the 4 closure bolts to 100 lb-in is highly recommended).

The closure hardware consists of stainless steel nuts, bolts, and washers with metal hand knobs for ease of

maintenance. No wrenches or other special tools are required, allowing one person to easily change the filter element.

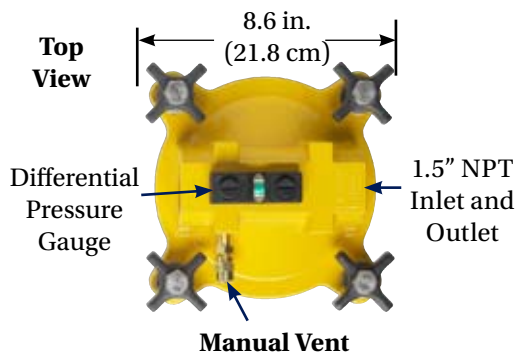
Note: No V-band clamps are used.



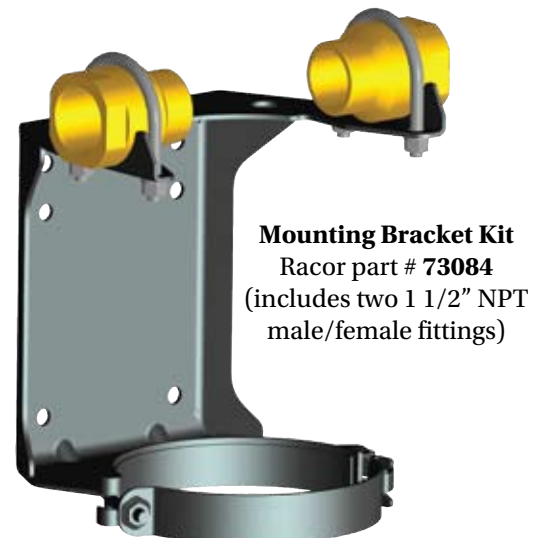
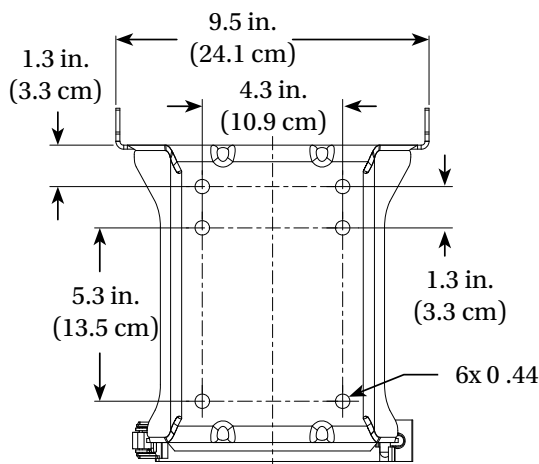
Technical Information

Specifications	Maximum Flow Rates			Clean	Change
FBO-10	Diesel	Gasoline	Kerosene	Delta P	Delta P
Filter	18 GPM (81 LPM)	53 GPM (240 LPM)	35 GPM (159 LPM)	< 2 PSID	15 PSID
Water Separator	10 GPM (45 LPM)	32 GPM (145 LPM)	21 GPM (95 LPM)	< 2 PSID	15 PSID
Water Absorber	18 GPM (81 LPM)	45 GPM (204 LPM)	35 GPM (159 LPM)	< 2 PSID	30 PSID
FBO-14	Diesel	Gasoline	Kerosene	Delta P	Delta P
Filter	25 GPM (113 LPM)	75 GPM (340 LPM)	50 GPM (227 LPM)	< 2 PSID	15 PSID
Water Separator	15 GPM (68 LPM)	45 GPM (204 LPM)	30 GPM (136 LPM)	< 2 PSID	15 PSID
Water Absorber	26 GPM (118 LPM)	70 GPM (318 LPM)	55 GPM (250 LPM)	< 2 PSID	30 PSID

FBO Mounting Information



Mounting Bracket Hole Pattern



In The Field And On The Road



FBO Commercial Application



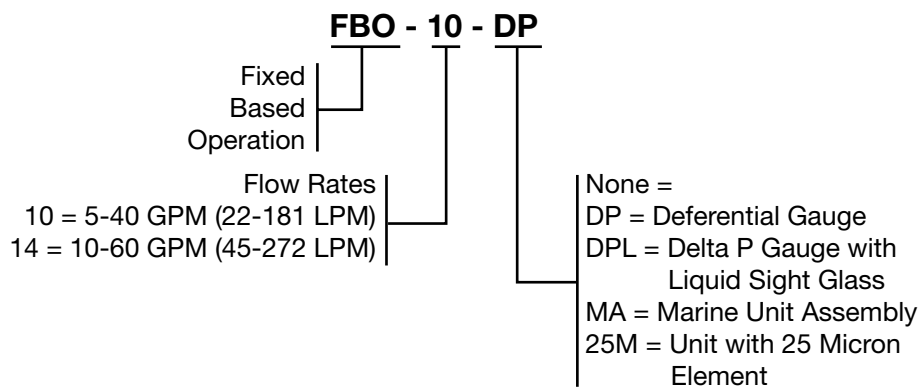
FBO Commercial Application



FBO Duplex Application



FBO Mining Application



How to Order

Below is a guide to help customers order the right FBO assembly with the accessories you need.

Assembly	1 Element	2 Delta P Gauge	3 Sight Glass	4 Drain Valve
FBO-10	Order Separately			X
FBO-10-DP	Order Separately	X		X
FBO-10-DPL	Order Separately	X	X	X
FBO-10-25M	FBO-60332	X	X	X
FBO-14	Order Separately			X
FBO-14-DP	Order Separately	X		X
FBO-14-DPL	Order Separately	X	X	X
FBO-14-25M	FBO-60341	X	X	X

Replacement Elements

Filter elements are recommended to be used on engines to protect the OEM supplied fuel system. Silicon treated fuel filter elements remove particle contaminants down to one micron.

Filter elements can also be used upstream before a water separator to extend the elements life.



Water absorber elements are recommended to absorb water and filter out contaminants from diesel fuel

and other hydrocarbon streams.

The water separator elements are recommended to removed water from the fuel stream and are the most popular elements.



Element Chart

FBO	Micron Rating	Water Separator	Filter	Water Absorber
 FBO-10 (6 X 10 Element)	1	FBO-60327	FBO-60330	FBO-60333
	5	FBO-60328	FBO-60331	FBO-60334
	10	FBO-60353	FBO-60354	FBO-60355
	25	FBO-60329	FBO-60332	FBO-60335
 FBO-14¹ (6 X 14 Element)	1	FBO-60336	FBO-60339	FBO-60342
	5	FBO-60337	FBO-60340	FBO-60343
	10	FBO-60356	FBO-60357	FBO-60358
	25	FBO-60338	FBO-60341	FBO-60344

¹ 7295I Monitor Adapter Plat enables the **FBO-14** to take five, **RMO-210-4** monitor elements.

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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