

# CLEANDiesel FBO Series

## Fuel Filter/Water Separator For Power-Gen Customers



The CLEANDiesel FBO fuel filter water separators versatile housings have three filter options to meet various requirements: a fuel filter/water separator, a silicone treated filter, and a water absorber. For fuel dispensing applications the fuel filter/water separator filter is recommended.

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

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, as a primary fuel filter/water separator for large diesel engines, or as bulk fuel handling, fuel transfer, and other higher flow applications.



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## 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
- Viton® seals for compatability to various fuels

Note: Viton® is a registered trademark of DuPont™

- Designed to withstand a max pressure of 150 PSI (10 bar) and a max temperature of 240°F (115°C)
- Manual drain valve (1/4” NPT)
- Manual vent valve
- Sight glass (1/2” NPT)
- 120 volt AC explosion proof heater option available
- Wide variety of accessories, filters and applications available



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# Application

FBO assemblies are specifically designed to meet the 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.

FBO-10 and FBO-14 filter assemblies were designed to meet the toughest conditions and offer ease of filter change outs. The FBO assembly can flow from 10 GPM (38 LPM) to 75 GPM (284 LPM), depending on which model, filter, and type of fuel to be filtered.

The assembly features a "locking ring collar", which attaches the filter housing to the aluminum die cast filter head with four

bolts. The slotted "locking ring collar" allows maintenance personnel to hand loosen the four collar bolts, rotate, and lower the bowl assembly for filter changeouts.

With a new filter cartridge installed, simply raise the bowl and rotate into position on the locking ring and hand tighten evenly (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 cartridge (no V-band clamps are used).

## Biodiesel Filtration

FBO assemblies are great for biofuel applications because of ease of service, rugged construction, and the optional electric heater.

Biodiesel is known to attack certain synthetic rubber compounds so Viton o-rings are used to prevent o-rings from swelling, softening, shrinking, or hardening.

Racor recommends using a thermostatically controlled electric heater in the head and/or filter bowl to help avoid biofuel waxing and gelling. Pour point suppressants and biocides are necessary for reliable operation.



# Replacement Elements

## Water Separator

Water separator filters remove water and contaminants from hydrocarbon fuel streams and are the most popular filters.

## Silicone Treated



Silicone treated fuel filters remove particle contaminants down to one micron.

Silicone filters can also be used upstream, before a fuel filter/water separator, to extend filter life.

## Water Absorber

Water absorber filters absorb water and filter out contaminants from diesel fuel and other hydrocarbon streams.



FBO	Micron Rating	Water Separator	Silicone Treated Filter	Water Absorber
 <b>FBO-10</b> (6 X 10 Element)	1	FBO 60327 FBO 60360 <sup>2</sup>	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
 <b>FBO-14<sup>1</sup></b> (6 X 14 Element)	1	FBO 60336 FBO 60361 <sup>2</sup>	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

<sup>1</sup> 72951 Monitor Adapter Plate enables the FBO-14 to take five, RMO-210-4 monitor elements.

<sup>2</sup> API/EI 1581 5th Edition filters are certified for jet fuel applications.