# **Application**

The FBO assembly is 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.

Racor's new FBO-10 and FBO-14 filter assemblies were designed to meet the toughest conditions and offer ease of filter changeouts. The FBO assembly can flow from 10 GPM (38 LPM) to 75 GPM (284 LPM), depending on which model, the element, and the 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 element changeouts. With a new element 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 element (no Vband clamps are used).



# FBO-10 and FBO-14 Fuel Filter/Water Separator

## **How They Work**

These versatile fuel filter/water separator assemblies have three element options to meet various requirements. For fuel dispensing applications the filter water separator element is recommended.

The filter water separator element removes contaminants and water from biodiesel, biodiesel blends, diesel fuel, gasoline, and other hydrocarbon fuels. The filter separator allows water to be removed from the fuel stream.

Microfilters are recommended to be used on engines to protect the OEM supplied fuel system. Silicon treated cellulose microfilters remove particle contaminants down to one micron. Microfilters can also be used before filter water separators to extend life. Absorptive filters absorb water and filter contaminants from diesel fuel and other hydrocarbon streams. The filter separator element is recommended so water can be removed from the fuel stream.

## **Features**

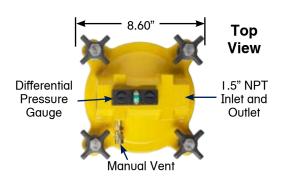
- Die-cast aluminum head
- · Steel filter bowl assembly
- Powder coated components
- "Locking ring collar" no V-clamps
- 1.5" NPT inlet and outlet
- Designed to withstand 150 PSI maximum pressure at 240°F
- Manual drain valve
- Manual vent valve
- Sight Glass

| Specifications   | Maximum Flow Rates |                    |                  | Clean    | Change  |
|------------------|--------------------|--------------------|------------------|----------|---------|
| FBO-10           | Diesel             | Gasoline           | Kerosene         | Delta P  | Delta P |
| Microfilter      | 18 GPM (38 LPM)    | 52.5 GPM (199 LPM) | 35 GPM (132 LPM) | < 2 PSID | 15 PSID |
| Filter Separator | 10 GPM (38 LPM)    | 31.5 GPM (119 LPM) | 21 GPM (79 LPM)  | < 2 PSID | 15 PSID |
| FBO-14           | Diesel             | Gasoline           | Kerosene         | Delta P  | Delta P |
| Microfilter      | 25 GPM (95 LPM)    | 75 GPM (284 LPM)   | 50 GPM (189 LPM) | < 2 PSID | 15 PSID |
| Filter Separator | 15 GPM (57 LPM)    | 45 GPM (170 LPM)   | 30 GPM (114 LPM) | < 2 PSID | 15 PSID |

### How To Order

| Assembly   | Element          | Delta P<br>Gauge | Sight<br>Glass | Drain<br>Valve |
|------------|------------------|------------------|----------------|----------------|
| FBO-10     | Order Separately |                  |                |                |
| FBO-10-DP  | Order Separately | х                |                |                |
| FBO-10-DPL | Order Separately | x                | х              | х              |
| FBO-10-25M | FBO-60332        | x                | х              | х              |
| FBO-14     | Order Separately |                  |                |                |
| FBO-14-DP  | Order Separately | x                |                |                |
| FBO-14-DPL | Order Separately | x                | х              | х              |
| FBO-14-25M | FBO-60341        | x                | х              | х              |

| Element<br>Chart     | Micron<br>Rating | FBO-10<br>(6 X 10 Element) | FBO-14<br>(6 X 14 Element) |
|----------------------|------------------|----------------------------|----------------------------|
| Filter<br>Separator  | I                | FBO-60327                  | FBO-60336                  |
|                      | 5                | FBO-60328                  | FBO-60337                  |
|                      | 10               | FBO-60353                  | FBO-60356                  |
|                      | 25               | FBO-60329                  | FBO-60338                  |
| Microfilter          | I                | FBO-60330                  | FBO-60339                  |
|                      | 5                | FBO-60331                  | FBO-60340                  |
|                      | 10               | FBO-60356                  | FBO-60357                  |
|                      | 25               | FBO-60332                  | FBO-60341                  |
| Absorptive<br>Filter | I                | FBO-60333                  | FBO-60342                  |
|                      | 5                | FBO-60334                  | FBO-60343                  |
|                      | 10               | FBO-60355                  | FBO-60358                  |
|                      | 25               | FBO-60335                  | FBO-60344                  |







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