Bulk Diesel Filtration Panel

Features and Benefits

- Turn-key coalescing and filtration system, for use as a fuel transfer, polishing, and dispensing solution
- Incorporates high-efficiency particulate and water removal filtration into a stationary mounted system with pump
- Available with either electrical or air operated pump options for more system flexibility
- GHPF and GHCF filter housings use patented GeoSeal® elements
- All-aluminum filter housings are fully compatible with diesel and biodiesel
- Minimal clearance needed for element service, ideal for enclosure installations
- Routine element change only needed on GHPF particulate filter, reducing operating cost
- Patent-pending, three-phase particulate, coalescing and fuel/water separation media technology
- A revolutionary element designed for the highest single-pass water and particulate removal efficiencies in today’s ultra-low sulfur diesel (ULSD) fluids
- Protects expensive Tier III and Tier IV engine components against failures caused by particulate and water transferred from the fuel storage tanks to the equipment
- Allows users to achieve or exceed the particulate and water removal specifications of the injection system OEMs

Markets

- INDUSTRIAL
- MOBILE VEHICLES
- MARINE
- MINING TECHNOLOGY
- AGRICULTURE
- POWER GENERATION
- COMMON RAIL INJECTOR SYSTEMS
- FLEET
- RAILROAD
- BULK FUEL FILTRATION

Application Introduction:
A simple turn-key stationary fuel filtration system

The BDFP provides a simple turn-key stationary fuel filtration system for exceptional fuel transfer, polishing, and dispensing applications. Both filters combine Schroeder’s fully synthetic Z-Media® in a particulate pre-filter, the GHPF, with our patent-pending coalescing water removal filter, the GHCF, to fully protect vital diesel engine components from dirt and water. The BDFP provides premium filtration in a simple system which can easily be integrated into new and existing fuel storage systems.

Model no. of filter in photograph is: BDFP11GGZ3CHSVDS14

Applications

<table>
<thead>
<tr>
<th>Application</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Dispensing</td>
<td><img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td>Bulk Fuel Transfer</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>Protection for High Flow Fuel Injection Systems</td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>Bulk Tank - Loop / Recirculation</td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
</tbody>
</table>
**Bulk Diesel Filtration Panel**

**Flow Rating:**
- Electric Motor Option: 14 gpm or 25 gpm (53 or 95 L/min)
- Air Operated Option: 16 or 25 gpm (53 or 95 L/min)

**Ambient Temperature Range:**
- 32°F to 104°F (0°C to 40°C) Standard; -20°F to 104°F (-29°C to 40°C) Heater Option

**Bypass Indication:**
- **Particulate Filter**
  - Electric Motor: 35 psi (2.4 bar)
  - Air Operated: 25 psi (1.7 bar)
- **Coalescing Filter**
  - Electric Motor: 35 psi (2.4 bar)
  - Air Operated: 15 psi (1.0 bar)

**Bypass Valve Cracking:**
- **Particulate Filter**
  - Electric Motor: 40 psi (2.8 bar)
  - Air Operated: 30 psi (2.1 bar)
- **Coalescing Filter**
  - Electric Motor: 40 psi (2.8 bar)
  - Air Operated: 20 psi (1.4 bar)

**Materials of Construction:**
- **Particulate Filter**
  - Porting Head: Cast Aluminum, Anodized
  - Element Bowl: Aluminum, Anodized
- **Coalescing Filter**
  - Porting Head: Cast Aluminum, Anodized
  - Element Bowl: Aluminum, Anodized
  - Sump: Cast Aluminum, Anodized

**Weight:**
- 130 - 150 lbs. (59 - 68 kg)

**Element Change Clearance:**
- GHFP: 2” (51 mm)
- GHCF: 4” (102 mm)

**Operating Frequency:**
- 60 Hz

**Operating Phase:**
- Single

**Full Load Amperage:**
- 13.4 A @ 115 VAC
- 7.2-6.7 A @ 208-230 VAC

**Service Factor Amperage:**
- 15.2 A @ 115 VAC
- 8.1-7.6 A @ 208-230 VAC

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*Elements sold with the filter system

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Metric dimensions in ( ).
Dimensions shown are inches [millimeters] for general information and overall envelope size only.
For complete dimensions please contact Schroeder Industries to request a certified print.
**Filtration Ratio per ISO 16889**

Using APC calibrated per ISO 11171

<table>
<thead>
<tr>
<th>Particulate Elements</th>
<th>DHC(g)</th>
<th>$\beta_1 (\xi) \geq 200$</th>
<th>$\beta_1 (\xi) \geq 1000$</th>
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<tbody>
<tr>
<td>11GGZ1V</td>
<td>172</td>
<td>&lt;4.0</td>
<td>4.2</td>
</tr>
<tr>
<td>11GGZ3V</td>
<td>148</td>
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**Coalescing Element**

<table>
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<tr>
<th>Coalescing Element</th>
<th>Max Flow</th>
<th>Single Pass Water Removal Efficiency</th>
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<tr>
<td>C125GZ5V</td>
<td>25 gpm</td>
<td>$\geq 95%$</td>
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**Note:**

Based on ULSD15 with 27 Dynes/cm surface tension and 0.25% (2500 ppm) water injection

**Particulate Element**

- Flow Direction: Outside In
- Element Nominal Dimensions: 5.0" (27 mm) O.D. x 11" (279 mm) long

**Coalescing Element**

- Flow Direction: Inside Out
- Element Nominal Dimensions: 5.0" (27 mm) O.D. x 12" (305 mm) long

Metric dimensions in ( ).

Dimensions shown are inches [millimeters] for general information and overall envelope size only.

For complete dimensions please contact Schroeder Industries to request a certified print.
### How to Build a Valid Model Number for a Schroeder BDFP Supplied with Elements:

<table>
<thead>
<tr>
<th>BOX 1</th>
<th>BOX 2</th>
<th>BOX 3</th>
<th>BOX 4</th>
<th>BOX 5</th>
<th>BOX 6</th>
<th>BOX 7</th>
<th>BOX 8</th>
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<tbody>
<tr>
<td>BDF</td>
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**Example:** NOTE: One option per box

```
BDF - P - 11GGZ3 - CG5 - V - D5 - 14 = BDFP11GGZ3CG5VD514
```

### Fluid Compatibility
- **Fuel Oils**
  - ULSD15, low sulfur diesel and high sulfur diesel
  - Biodiesel blends
  - Synthetic diesel and blends
  - No. 2 fuel oil and heating oil

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**Filtration Ratio per ISO 16889**
Using APC calibrated per ISO 11171

**Notes:**
- For configurations not listed, please contact factory.

**Options:**
- Omit = Sight Glass (standard)
- U = Downstream Test Point
- T = Water-In-Fuel (WIF) sensor only
- I = WIF sensor w/ remote mount light indicator
- H = Coalescing sump heater
- SS = 5 gal. sump tank
- S20 = 20 gal. sump tank
- AWDS = Auto. water drain w/ 5 gal. remote tank
- AWD20 = Auto. water drain w/ 20 gal. remote tank

*only to be used in applications above 32°F (0°C)*

### Notes:
- Only Box 7 will allow a combination of options.
- Viton® is a registered trademark of DuPont Dow Elastomers.