Applications

■ Fuel dispensing and transfer filtration solution with choice of integral or blocked bypass to suit application
■ Allows users to achieve or exceed the manufacturer requirements for particulate and water content in diesel fuel
■ Designed with integrated particulate removal pre-filtration for downstream coalescing filter protection and extended element life
■ Routine element change only needed on particulate pre-filter, which saves time and money
■ Updated BDF design incorporates GHPF and GHCF filter housings for a reduced cost, improved function, and increased capacity
■ Patented GeoSeal® element sealing interface ensures quality element replacement
■ Particulate filtration available at 1 or 3 microns utilizing synthetic Z-Media® element for better contamination control
■ Patented, three-phase, particulate and fuel/water separation media technology
■ Housing design allows for field upgrade of any available option
■ Complete automation is achievable with a water and fuel sensor and fail-safe auto-drain feature using a remote 5 gallons (18L) or 20 gallons (75L) sump with alarm and auto shutdown in application >32°F (0°C)
■ Easy mounting and element service

Features and Benefits

Markets

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

Model no. of filter in photograph is: BDF111GGZ3CG5VDS

Model no. of filter in photograph is: BDF211GGZ3CG5VDS

SCHROEDER INDUSTRIES | FUEL FILTRATION 27
**Bulk Diesel Filter**

**Flow Rating:**
- BDF1: up to 25 gpm (95 L/min)
- BDF2: up to 50 gpm (189 L/min)

**Inlet/Outlet Connection:**
-24 (ORB) SAE J1926

**Max. Operating Pressure:**
150 psi (10 bar)

**Temp. Range:**
-20°F to 225°F (-29°C to 107°C) w/ optional water sump heater, 32°F to 225°F (0°C to 107°C) without heater, with standard features and AWD options

**Bypass Indication:**
- Particulate Filter: 35 psi (2.4 bar)
- Coalescing Filter: 35 psi (2.4 bar)

**Bypass Valve Cracking:**
- Particulate Filter: 40 psi (2.8 bar)
- Coalescing Filter: 40 psi (2.8 bar)

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

- Coalescing Filter Only:
  - Sump: Cast Aluminum, Anodized

**Weight:**
- BDF1: 46.5 lbs
- BDF2: 89 lbs

**Element Change Clearance:**
- Particulate Filter: 2" (51 mm)
- Coalescing Filter: 4.5" (114 mm)

**Opt. Water Sump Heater:**
120VAC, 1 x 74W (BDF1) / 2 x 74W (BDF2)

**Opt. Visual Electrical Indicator:**
120VAC

---

**Dimensions:**
- 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.
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Filtration Ratio per ISO 16889
Using APC calibrated per ISO 11171

<table>
<thead>
<tr>
<th>Particulate Elements</th>
<th>DH₂C(g)</th>
<th>β₁(c) ≥ 200</th>
<th>β₂(c) ≥ 1000</th>
</tr>
</thead>
<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>
<td>&lt;4.0</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Coalescing Element

<table>
<thead>
<tr>
<th>Pressure Side Coalescing</th>
<th>Max Flow</th>
<th>Single Pass Water Removal Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>C125GZ5V</td>
<td>25 gpm</td>
<td>≥ 95%</td>
</tr>
</tbody>
</table>

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
# Bulk Diesel Filter

## How to Build a Valid Model Number for a Schroeder BDF housing without element:

<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>
<th>BOX 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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**Example:**

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<tbody>
<tr>
<td>BDF</td>
<td>1</td>
<td>11GGZ3</td>
<td></td>
<td>CG5</td>
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<td>D5</td>
<td></td>
<td></td>
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</tbody>
</table>

= **BDF111GZ3CG5VD5**

### Filter Model Number Selection

#### Filter Series
- **BDF**

#### Flow Rate
- 1 = 25 gpm
- 2 = 50 gpm

#### Particulate Filtration
- **11GGZ1V** = 1 µm
- **11GGZ3V** = 3 µm

#### Particulate Bypass
- Omit = 40 psi
- X = Blocked Bypass

#### Coalescing Filtration
- **CG5** = C125GZ5V Coalescing Element

### Box 6

#### Coalescing Bypass
- Omit = 40 psi
- X = Blocked Bypass

### Box 7

#### Seal Material
- V = Viton®

### Box 8

#### Indicators
- D5 = Visual Pop-up, Manual Reset

### Box 9

#### Options
- Omit = Included Sight Glass and Manual Water Drain Valves
- U = Downstream Test Point
- T = Water-In-Fuel (WIF) Sensor Only
- I = WIF Sensor w/ Remote Mount
- L = Light Indicator
- H = Coalescing Sump Heater
- S5 = 5 gal. Remote Tank
- S20 = 20 gal. Remote Tank
- AWD5 = Auto. Water Drain w/ 5 gal. Remote Tank
- AWD20 = Auto. Water Drain w/ 20 gal. Remote Tank

### 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

---

**Note:**

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

### Filtration Ratio per ISO 16889

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### Pressure Side Coalescing

- **Max Flow:** 25 gpm
- **Single Pass Water Removal Efficiency:** ≥ 95%