Applications

GeoSeal® High-Flow Coalescing Filter

Features and Benefits

- Diesel fuel coalescing filter for dispensing, transfer or polishing filtration applications
- Uses patented GeoSeal® elements
- All-aluminum filter housing is fully compatible with diesel and biodiesel
- Minimal clearance needed for element service, ideal for enclosure installations
- Cartridge style element improves performance and reduces waste compared to spin-on solutions
- A compact design with reduced dimensions compared to similar cartridge filter and spin-on solutions on the market

Model No. of filter in photograph is: GHCFCG5VS24D5RTH

Flow Rating: Up to 25 gpm (95 L/min)
Max. Operating Pressure: 150 psi (10.3 bar)
Min. Yield: 1189 psi (82 bar)
Temp. Range: 32°F to 225°F (0°C to 107°C) Standard; -20°F to 225°F (-29°C to 107°C) Heater Option
Bypass Setting: 40 psi (2.8 bar)
Porting Head: Cast Aluminum, Anodized
Element Case: Aluminum, Anodized
Sump: Cast Aluminum, Anodized
Weight of GHCF: 19.45 lbs. (8.82 kg)
Element Change Clearance: 4.5" (114 mm)

Markets

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

Filter Housing Specifications

- 25 gpm
- 95 L/min
- 150 psi
- 10.3 bar
GeoSeal® High-Flow Coalescing Filter

Filter Element Selection
Coalescing Element Performance Information
Elements Sold Separately

Fluid Compatibility

Diesel Fuel and Biodiesel (B100).
For other Distillate Petroleum, Contact Factory.

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.

### Coalescing Element

<table>
<thead>
<tr>
<th>Element Nominal Dimensions:</th>
<th>5” (127 mm) O.D. x 12” (305 mm) long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material: DEC. Tolerance</td>
<td>140</td>
</tr>
<tr>
<td>Element Collapse Rating:</td>
<td>21.15</td>
</tr>
<tr>
<td>Pressure Side Coalescing</td>
<td>39</td>
</tr>
<tr>
<td>Flow Direction:</td>
<td>Inside Out</td>
</tr>
<tr>
<td>Flow Rating:</td>
<td>Up to 25 GPM (95 L/min)</td>
</tr>
<tr>
<td>Temperature Range:</td>
<td>-20 F to 165 F (-29 C to 74 C)</td>
</tr>
<tr>
<td>Max. Operating Pressure:</td>
<td>150 PSI (10 bar)</td>
</tr>
<tr>
<td>Hoisting Weight:</td>
<td>3.0 lbs (1.4 kg)</td>
</tr>
<tr>
<td>Max. Operating Temperature:</td>
<td>250 °F (121 °C)</td>
</tr>
<tr>
<td>Heater:</td>
<td>Optional W/ Manual Reset</td>
</tr>
<tr>
<td>Quick Disconnect Valve:</td>
<td>Optional</td>
</tr>
<tr>
<td>Ball Valve:</td>
<td>Optional</td>
</tr>
<tr>
<td>Filter Housing Specifications:</td>
<td></td>
</tr>
<tr>
<td>Change Clearance:</td>
<td>0.94</td>
</tr>
<tr>
<td>Scale: SHT. XXXXXXXX</td>
<td>7/12/2017</td>
</tr>
<tr>
<td>Date:</td>
<td>7/12/2017</td>
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</tbody>
</table>

### Pressure Side Coalescing

<table>
<thead>
<tr>
<th>Recommended Flow</th>
<th>Single Pass Water Removal Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 gpm</td>
<td>&gt; 95%</td>
</tr>
</tbody>
</table>

*Schroeder Anti-Static Pleat Media (ASP®) is standard
*NOTE: Efficiency based on ULSD15 with 27 Dynes/cm surface tension and 0.25% (2500 ppm) water injection. Discharge water concentration of <100 ppm free and emulsified water.
**GeoSeal® High-Flow Coalescing Filter**

<table>
<thead>
<tr>
<th>Coalescing Element</th>
<th>Pressure Drop Information Based on Flow Rate and Viscosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>C125GZSV</td>
<td>∆P_{\text{filter}} = ∆P_{\text{housing}} + ∆P_{\text{element}}</td>
</tr>
</tbody>
</table>

**Notes**

- sp gr = specific gravity
- ∆P_{\text{housing}}
- ∆P_{\text{element}} = flow x element ∆P factor x viscosity factor
- Element ∆P factors @ 37 SUS (3 cSt).
- C125GZSV = 0.098

**Exercise:** Determine ∆P at 25 gpm (95 L/min) for GHCF CGSV

**Solution:**
- ∆P_{\text{housing}} = 1.6 psi = [0.11 bar]
- ∆P_{\text{coalescing}} = 25 x 0.098 = 2.5 psi [0.17 bar]
- ∆P_{\text{total}} = 1.6 + 2.5 = 4.1 psi [0.28 bar]

**Filter Element Selection Coalescing Element Performance Information**

**Flow Direction:** Inside Out

**Element Nominal Dimensions:** 5” (127 mm) O.D. x 12” (305 mm) long

**Highlighted product eligible for QuickDelivery**
## How to Build a Valid Model Number for a Schroeder GHCF:

<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>
</tr>
</thead>
<tbody>
<tr>
<td>GHCF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Example:**  
NOTE: One option per box  

<table>
<thead>
<tr>
<th>GHCF</th>
<th>CG5</th>
<th>V</th>
<th>S24</th>
<th>D5</th>
<th>R</th>
<th></th>
<th></th>
</tr>
</thead>
</table>

= GHCFCG5VS24D5R

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### BOX 1
**Filter Series**
- GHCF

### BOX 2
**Coalescing Filtration**
- CG5 = C125GZ5V Coalescing Element

### BOX 3
**Element Seal Material**
- V = Viton®

### BOX 4
**Bypass Setting**
- Omit = 40 psid  
- X = Blocked Bypass

<table>
<thead>
<tr>
<th>Inlet Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>S24 = SAE-24</td>
</tr>
<tr>
<td>P24 = 1.5” NPTF</td>
</tr>
</tbody>
</table>

### BOX 6
**Dirt Alarm® Options**
- Visual  
- D5 = Visual pop-up w/manual reset

### BOX 7
**Indicator Orientation**
- R = Right Side  
- L = Left Side

### BOX 8
**Sump Options**
- Omit = Sump Sight Glass (standard)
- UU = Upstream & Downstream Test Point
- T = WIF Sensor Only
- I = WIF Sensor w/ Indicator Lamp
- H = Sump Heat (74W)
- S5 = 5 gal. Water Collection Tank
- S20 = 20 gal. Water Collection Tank
- AWD5 = Auto Water Drain w/ 5 gal. Collection Tank
- AWD20 = Auto Water Drain w/ 20 gal. Collection Tank

### NOTES:

**Box 4.** A blocked bypass requires the user to ensure a pressure relief is integrated into the system to prevent overpressuring the filter housings.

**Box 7.** As viewed in the direction of the fluid flow from inlet to outlet.

**Box 8.** Test point adapter replaces the blanking plug installed opposite the element indicator.

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**SCHROEDER INDUSTRIES | FUEL FILTRATION**