GHCF Series

GeoSeal® High-Flow Coalescing Filter

150 psi • up to 25 gpm

Model No. of filter in photograph is:
GHCFCG5VS24VMRTH

Description

The GHCF is a high flow, compact coalescing filter for use where superior performance is needed in fuel transfer, kidney-loop, or dispensing applications. The filter assembly uses a patent-pending coalescing filter media along with the GeoSeal® element interface to ensure quality filtration with every replacement. The GHCF can be used alone to provide superior particulate and water removal, or in conjunction with a high efficiency particulate filter to provide additional performance with reduced maintenance costs.

Features

- 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

Applications

- Point of use fuel dispensing
- Fleet fill/bulk fuel transfer
- Bulk fuel unloading
- Protection for high-flow fuel injection systems
- Bulk tank kidney loop/recirculation

Technical Specifications

Flow Rating	Up to 25 gpm (95 l/min)
Max. Operating Pressure	150 psi (10.3 bar)
Min. Yield Pressure	2600 psi (179 bar)
Temperature 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 Element Case Sump	Cast Aluminum, Anodized Aluminum, Anodized Cast Aluminum, Anodized
Weight GHPF	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

Model Code

GHCF – CG5 – V __ S24 VM – R __

Filter Series
GHCF = GeoSeal® High-Flow Coalescing Filter

Coalescing Filtration
CG5 = C125GZ5V Coalescing Element

Sealing Material
V = Fluorocarbon Elastomer (FKM)

Bypass Setting
Omit = 40psid

Inlet Port
S24 = SAE-24
P24 = 1.5" NPTF

Indicator Options
VM = Visual pop-up with manual reset

Indicator Orientation
R = Right side
L = Left side

Sump Options
Omit = Sight Glass (standard)
U = Downstream test point
T = WIF Sensor Only
I = WIF Sensor with Indicator Lamp
H = Sump Heat (74W)
AWD5 = Auto Water Drain with 5 gallon Collection Tank
AWD20 = Auto Water Drain with 20 gallon Collection Tank

Element Performance Information

Coalescing Element	Pressure Side Coalescing	
	Recommended Flow	Single Pass Water Removal Efficiency
C125GZ5	25 gpm	≥ 95%

Flow Direction: Inside Out
Element Nominal Dimensions: 5.0" (127 mm) O.D. x 12" (305 mm) long

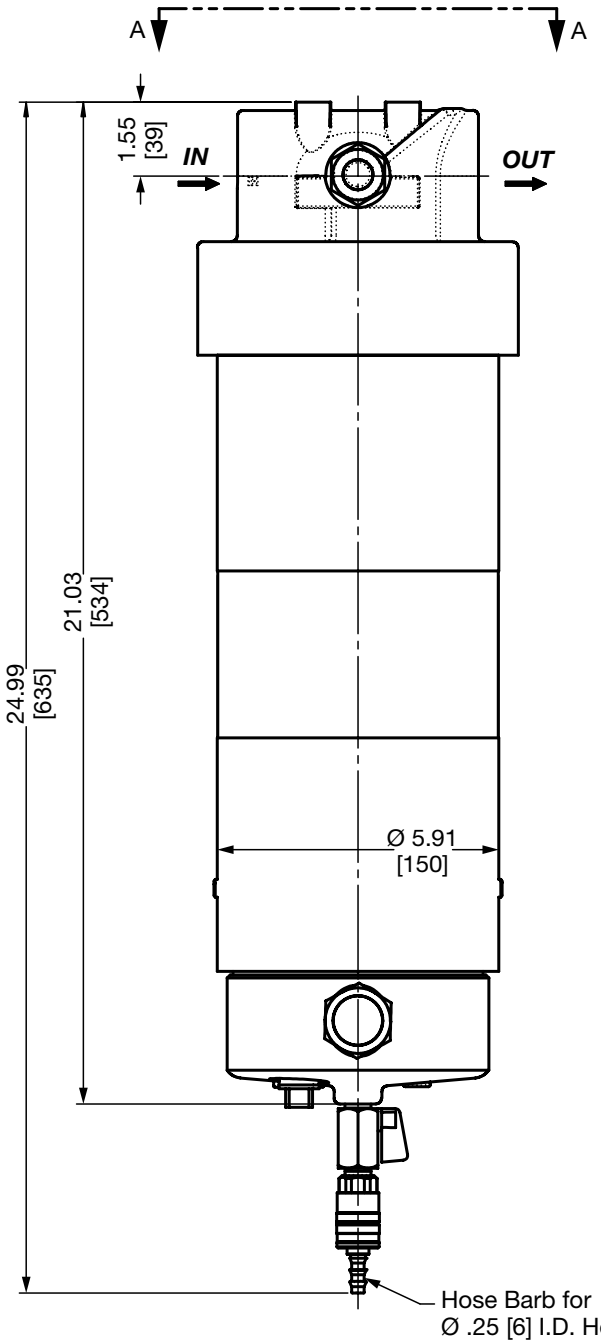
*Element Collapse Rating 150 psid (10.3 bar) for standard and non-bypassing element

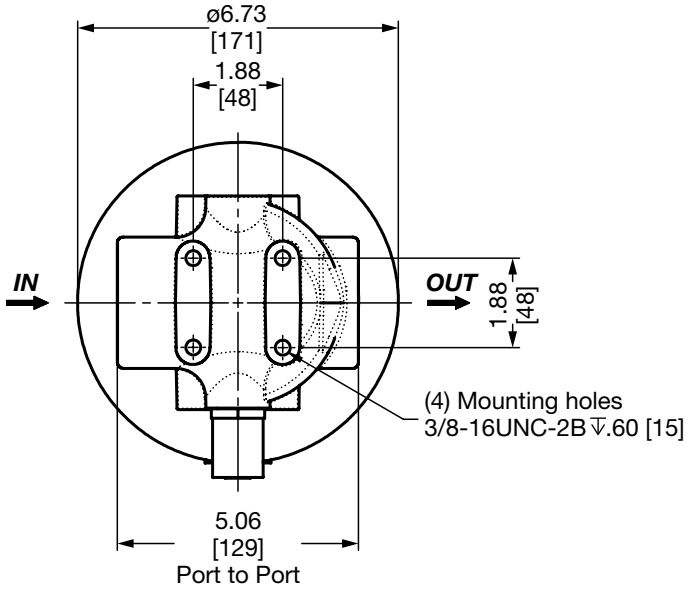
Note: Efficiency based on ULSD15 with 27 Dynes/CM surface tension and 0.25% (2500 PPM) water injection. Discharge water concentration of <100 PPM free and emulsified water.

Fuel Compatibility

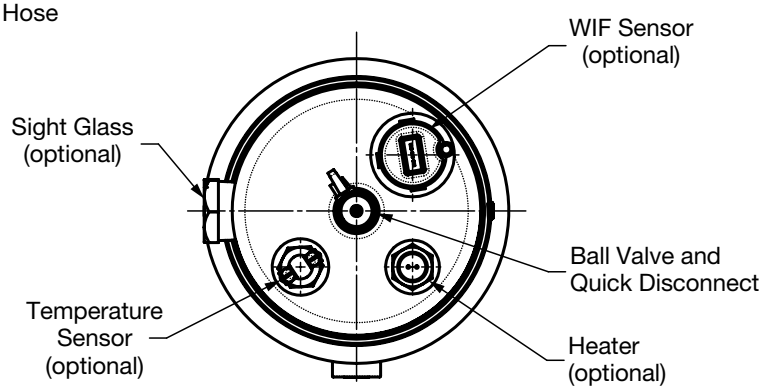
- Diesel Fuel and Biodiesel (B100).
- For other Distillate Petroleum, Contact Factory.

Dimensions
GHCF





VIEW A-A



Dimensions shown are inches [millimeters] and for general information only. For complete dimensions please contact HYDAC to request a certified print.

Sizing Information

Total pressure loss through the filter is as follows:

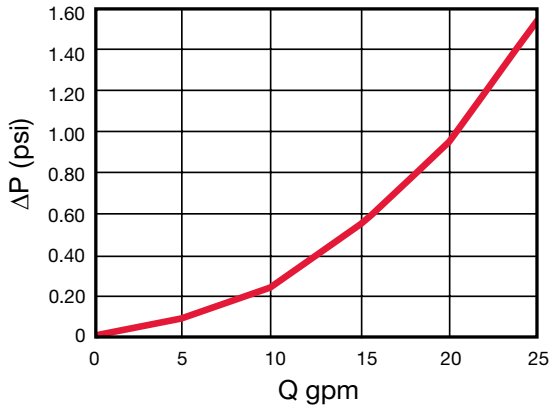
Assembly ΔP = Housing ΔP + Element ΔP

Housing Curve

Pressure loss through housing is as follows:

$$\text{Housing } \Delta P = \text{Housing Curve } \Delta P \times \frac{\text{Actual Specific Gravity}}{0.86}$$

Housing Pressure Drop GHCF



Element K Factors

$$\Delta P \text{ Elements} = \text{Elements (K) Flow Factor x Flow Rate (gpm)} \times \frac{\text{Actual Viscosity (SUS)}}{37 \text{ SUS}} \times \frac{\text{Actual Specific Gravity}}{0.86}$$

C125GZ5V = 0.09