

GeoSeal® High-Flow Particulate Filter

GHPF

Applications



FLEET FILL / BULK FUEL TRANSFER



BULK FUEL UNLOADING



PROTECTION FOR HIGH-FLOW FUEL INJECTION SYSTEMS



BULK TANK KIDNEY LOOP / RECIRCULATION

100 gpm
380 L/min

150 psi
10.3 bar

GHPF

Features and Benefits

- Diesel fuel particulate 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
- Port to port and mounting pattern dimensions match standard spin-on assembly



Model No. of filter in photograph is:
GHPF11GGZ3VS24D5R

Flow Rating: Up to 100 gpm (380 L/min)

Max. Operating Pressure: 150 psi (10.3 bar)

Min. Yield: 2600 psi (179 bar)

Temp. Range: -20°F to 225°F (-29°C to 107°C)

Bypass Setting: Cracking: 40 psi (2.8 bar)

Porting Head: Cast Aluminum, Anodized

Element Case: Aluminum, Anodized

Weight of GHPF: 7.64 lbs. (3.47 kg)

Element Change Clearance: 2" (51 mm)

Filter Housing Specifications

Markets



INDUSTRIAL



MOBILE VEHICLES



MARINE



MINING TECHNOLOGY



AGRICULTURE



POWER GENERATION



COMMON RAIL INJECTOR SYSTEMS



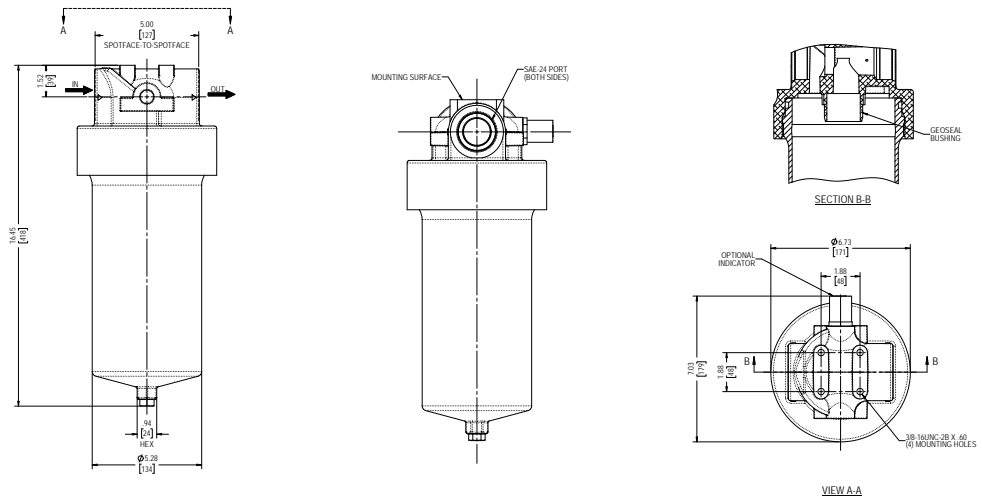
FLEET



RAILROAD



BULK FUEL FILTRATION



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.

Element Performance Information

Media Type	Element	Filtration Ratio per ISO 16889 Using APC calibrated per ISO 11171	
		$\beta_x(c) \geq 200$	$\beta_x(c) \geq 1000$
Traditional	11GGZ1V	<4.0	4.5
	11GGZ3V	4.6	5.8
Excellement®	11GGZ5V	5.9	7.8
	11GGZ10V	11.4	13.2
Z-Media®	11GGZ25V	15.8	17.5

Dirt Holding Capacity

Media Type	Element	DHC (gm)
Traditional	11GGZ1V	172
	11GGZ3V	148
Excellement®	11GGZ5V	174
	11GGZ10V	165
Z-Media®	11GGZ25V	164

Element Collapse Rating: 150 psid (10.3 bar) for standard and non-bypassing elements

Flow Direction: Outside In

Element Nominal

Dimensions: 11GG: 5" (127 mm) O.D. x 11" (305 mm) long

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

Fluid Compatibility

Element Selection

GHPF

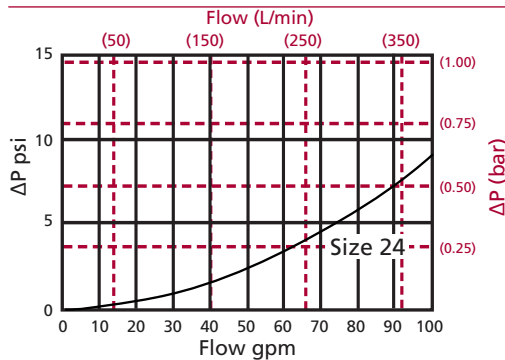
Based on Flow Rate

Pressure	Series	Element Part No.	Element selections are predicated on the use of 37 SUS (3 cSt) Diesel Fuel and Biodiesel (B100), SAE-24 porting, and a 40 psi (2.8 bar) bypass valve.					
	Z-Media®	11GGZ1V		11GGZ1V				
		11GGZ3V		11GGZ3V				
		11GGZ5V		11GGZ5V				
		11GGZ10V		11GGZ10V				
		11GGZ25V		11GGZ25V				
Flow		gpm	0	20	40	60	80	100
		(L/min)	0	50	150	250	380	

Shown above are the elements most commonly used in this housing.

$\Delta P_{\text{housing}}$

GH $\Delta P_{\text{housing}}$ for fluids with sp gr = 0.86:



$\Delta P_{\text{element}}$

$\Delta P_{\text{element}} = \text{flow} \times \text{element } \Delta P \text{ factor} \times \text{viscosity factor}$

El. ΔP factors @ 37 SUS (3 cSt):

11GGZ1V 0.07 11GGZ3V 0.05
11GGZ5V 0.05 11GGZ10V 0.05
11GGZ25V 0.04

If working in units of bars & L/min, divide above factor by 54.9.

Viscosity factor: Divide viscosity by 37 SUS (3 cSt).

CF = Contact factory.

Pressure Drop Information

Based on Flow Rate and Viscosity

sp gr = specific gravity

Sizing of elements should be based on element flow information provided in the Element Selection chart above.

Notes

$$\Delta P_{\text{filter}} = \Delta P_{\text{housing}} + \Delta P_{\text{element}}$$

Exercise:

Determine ΔP at 80 gpm (303 L/min) for GHPF11GGZ3VS24D5R using 37 SUS (3 cSt) fluid.

Solution:

$$\Delta P_{\text{housing}} = 6.0 \text{ psi [0.41 bar]}$$

$$\Delta P_{\text{element}} = 80 \times 0.05 \times (37 \div 37) = 4.0 \text{ psi}$$

or

$$= [303 \times (0.05 \div 54.9) \times (3 \div 3) = 0.28 \text{ bar}]$$

$$\Delta P_{\text{total}} = 6.0 + 4.0 = 10.0 \text{ psi}$$

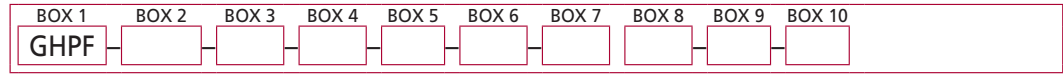
or

$$= [0.41 + 0.28 = 0.69 \text{ bar}]$$

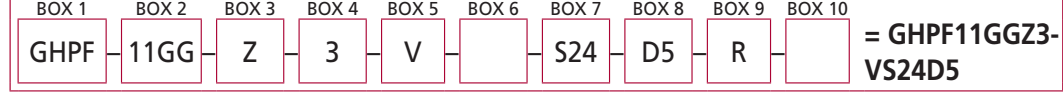
Filter Model Number Selection

Highlighted product eligible for **QuickDelivery**

How to Build a Valid Model Number for a Schroeder GHPF:



Example: NOTE: One option per box



BOX 1	BOX 2	BOX 3	BOX 4	BOX 5
Filter Series	Element Length & Series	Element Media	Micron Rating	Element Seal Material
GHPF	11GG	Z = Excellement® Z-Media® (synthetic)	1 = (1 µm, Z media) 3 = (3 µm, Z media) 5 = (5 µm, Z media) 10 = (10 µm, Z media) 25 = (25 µm, Z media)	V = Viton®

BOX 6	BOX 7	BOX 8
Bypass Setting	Inlet Port	Dirt Alarm® Options
Omit = 40 psid	S24 = SAE-24 P24 = 1.5" NPTF	Visual D5 = Visual pop-up w/manual reset

BOX 9	BOX 10
Indicator Orientation	Options
R = Right Side L = Left Side	Omit = None U = Downstream Test Point

- NOTES:
- Box 2. Replacement element part numbers are a combination of Boxes 2, 3, 4 and 5.
 - Box 9. As viewed in the direction of the fluid flow from inlet to outlet.