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

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)

Markets


INDUSTRIAL


MOBILE VEHICLES


MARINE


MINING TECHNOLOGY


AGRICULTURE


POWER GENERATION


COMMON RAIL INJECTOR SYSTEMS


FLEET


RAILROAD

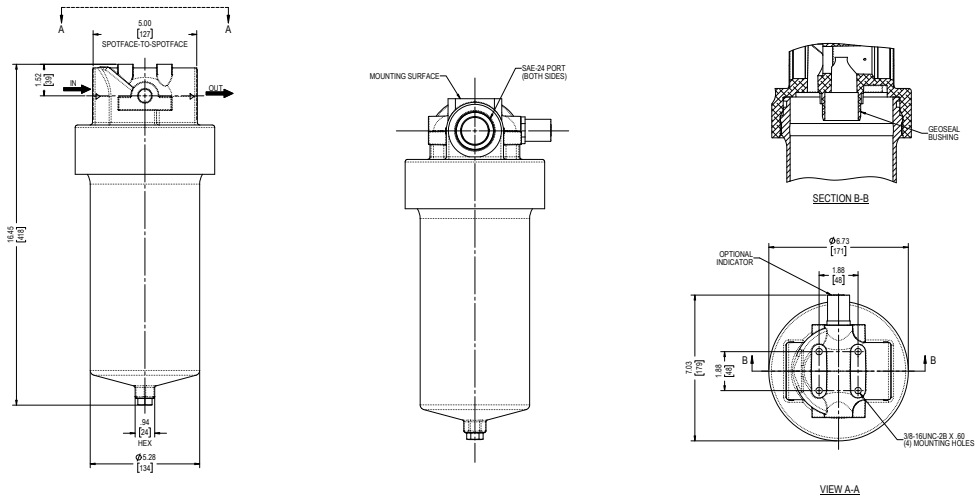

BULK FUEL FILTRATION

100 gpm
380 L/min

150 psi
10.3 bar

Filter Housing Specifications

GHPF GeoSeal® High-Flow Particulate Filter



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 Excellement® Z-Media®	11GGZ1V	<4.0	4.5
	11GGZ3V	4.6	5.8
	11GGZ5V	5.9	7.8
	11GGZ10V	11.4	13.2
	11GGZ25V	15.8	17.5

Dirt Holding Capacity

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

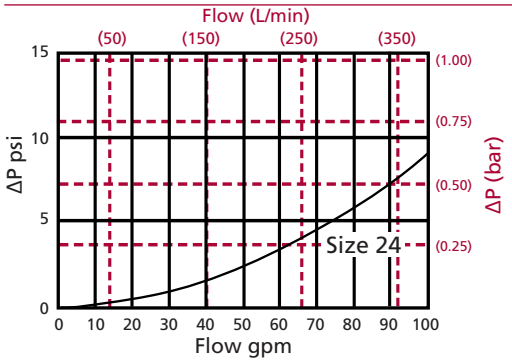
For other Distillate Petroleum, Contact Factory.

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.

$\Delta P_{housing}$

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



$\Delta P_{element}$

$\Delta P_{element}$ = flow x element ΔP factor x 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).

C/F = Contact factory.

sp gr = specific gravity

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

Notes

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

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

Solution:

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

$\Delta P_{element}$ = 80 x 0.05 x (37÷37) = 4.0 psi
or
= [303 x (0.05÷54.9) x (3÷3) = 0.28 bar]

ΔP_{total} = 6.0 + 4.0 = 10.0 psi
or
= [0.41 + 0.28 = 0.69 bar]

GHPF GeoSeal® High-Flow Particulate Filter

Filter Model Number Selection

Highlighted product eligible for QuickDelivery

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

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8	BOX 9	BOX 10
GHPF									

Example: *NOTE: One option per box*

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8	BOX 9	BOX 10	
GHPF	11GG	Z	3	V		S24	D5	R		**= GHPF11GGZ3-VS24D5**

BOX 1 – Filter Series

GHPF

BOX 2 – Element Length & Series

11GG

BOX 3 – Element Media

Z = Excellement® Z-Media® (synthetic)

BOX 4 – Micron Rating

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)

BOX 5 – Element Seal Material

V = Viton®

BOX 6 – Bypass Setting

Omit = 40 psid

BOX 7 – Inlet Port

S24 = SAE-24
P24 = 1.5" NPTF

BOX 8 – Dirt Alarm® Options

Visual	D5 = Visual pop-up w/manual reset

BOX 9 – Indicator Orientation

R = Right Side
L = Left Side

BOX 10 – Options

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.