



FRF Series Duplex Filter Assemblies

Low Pressure Hydraulic Filter Assemblies

Features

- 350 psi (24 bar) operating pressure
- 60 & 100 gpm (227 & 379 lpm) nominal flow rates
- Elements available with $\beta_{x(c)} \geq 1000$ Glas-Tech® media
- SAE Code 61 4-bolt flange ports
- Visual indicator
- Transfer valve and convenient bleed valve provides for smooth changeover

Technical Data

Pressure & Temperature Rating

Operating Pressure:	350 psi (24 bar)
Proof Pressure:	525 psi (36 bar)
Burst Pressure:	1,000 psi (69 bar)
Operating Temperature:	-40°F to +250°F (-40°C to +121°C)

Materials of Construction

Head:	Cast Aluminum Alloy
Bowl :	Cast Aluminum Alloy

Bypass Options

Bypass Valve Setting:	50 psid (3.4 bar) ±10% Non-Bypass
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Differential Pressure Indicators

Visual Indicator :	32 psid (2.2 bar) ±10% activation, self resetting
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Filter Assembly (Housing Only) Weight

Size	060	100
Weight	21.2 lbs (9.6 kg)	23.3 lbs (10.6 kg)

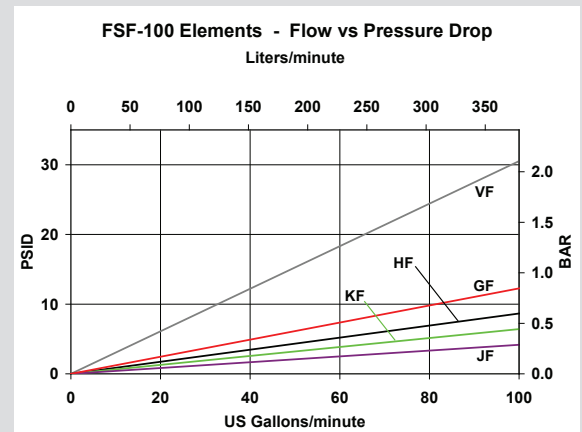
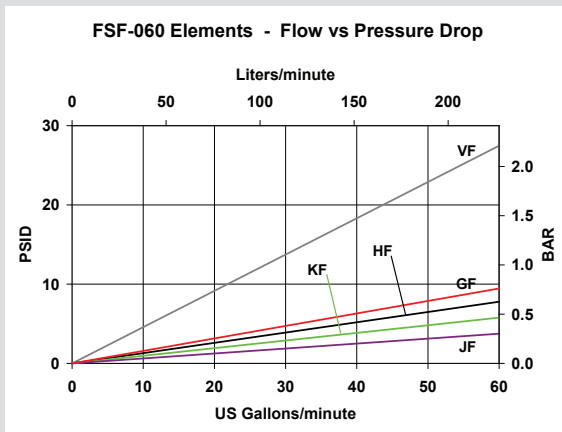
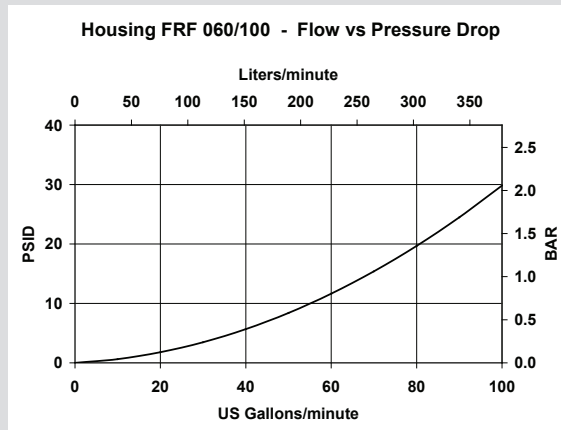
*A more robust
and reliable
filter assembly*

Elements

PTI filter elements are manufactured with the highest quality materials. PTI filter elements feature multi-layer construction for increased dirt-holding capacity and low pressure drop. PTI elements provide cost-effective contamination control for the most demanding applications. All elements are tested to the latest industry standards including ISO 16889 procedure for multipass efficiency testing.

Filtration Rating			
Multipass Test results per old ISO 4572 and new ISO 16889 test procedures			
Particle size (x) in microns at which the Beta Ratio (β) is greater than or equal to the indicated value (200 or 1000).			
	Per ISO 4572	Per ISO 16889	
Code	$\beta_x \geq 200$	$\beta_{x(c)} \geq 200$	$\beta_{x(c)} \geq 1000$
V	1 μ m	4.2 μ m	4.2 μ m
G	3 μ m	5 μ m	7 μ m
H	6 μ m	7 μ m	9 μ m
K	12 μ m	12 μ m	15 μ m
J	23 μ m	21 μ m	24 μ m

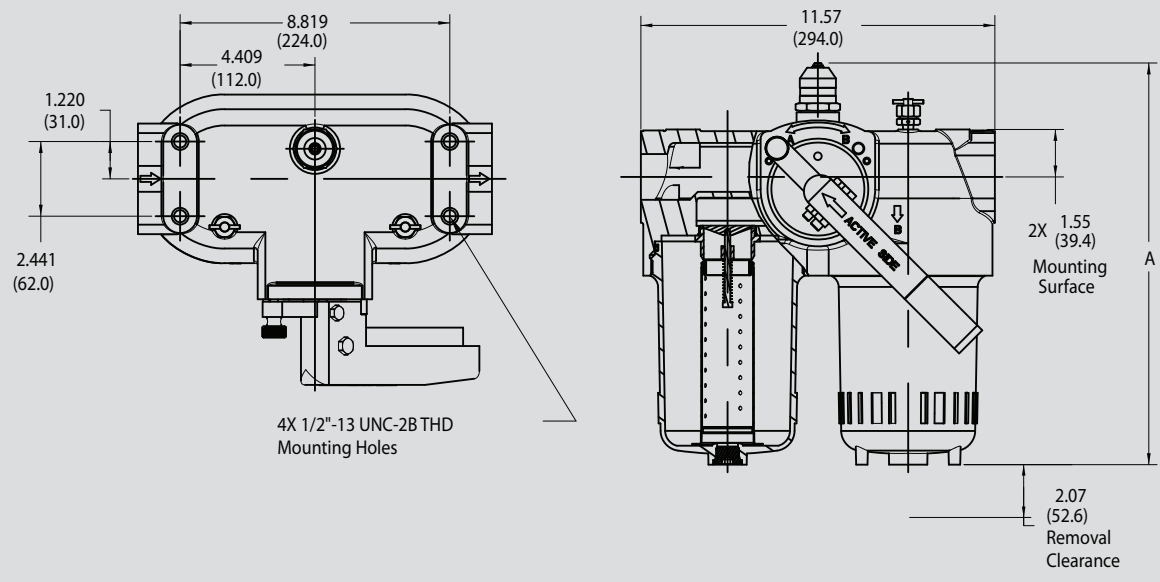
Flow Rate/Pressure Drop Curves



Pressure drop curves are based on 150 SUS (32 cSt) petroleum base hydraulic fluid of 0.9 S.G.
 Filter Assembly ΔP = Housing ΔP + Element ΔP

Assembly Dimensions*

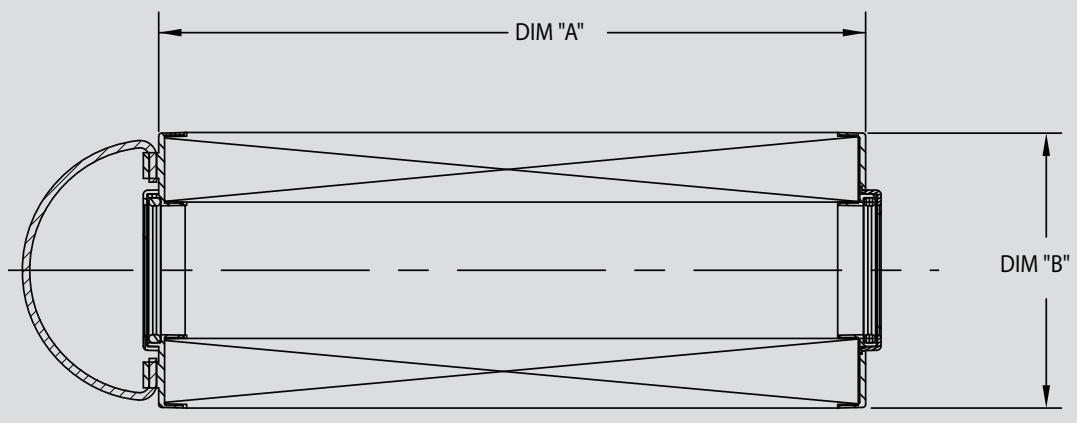
* Dimensions in inches (mm)



Model	-060	-100
Dimension A	13.38 (340)	17.63 (448)

Element Dimensions*

* Dimensions in inches (mm)



Model	-050	-070
Dimension A	6.2 (156.5)	9.6 (244.3)
Dimension B	3.8 (95.2)	3.8 (95.2)

Note: FRF 060 assembly utilizes FSF-050 elements
FRF 100 assembly utilizes FSF-070 elements.

Ordering Information

Assembly:

FRF	XXX	X	X	-	X	X	O	X	X	X
TBL 1	TBL 2	TBL 3	TBL 4	TBL 5	TBL 6	TBL 7	TBL 8			

Table 1 Size

Code	Nominal Flow
060	60 gpm (227 lpm)
100	100 gpm (379 lpm)

Table 2 Filtration Rating

Code	Micron Rating	Media
N	No Filter Element	

Table 3 Collapse

Code	Collapse Rating
N	No Filter Element

Table 4 Seals

Code	Material
B	Buna

Table 5 Port

Code	Option
4	1-1/2" SAE Flange Code 61 (SAE J518)

Table 6 Indicator

Code	Option
B	Visual 32 psid (2.2 bar) ±10% Pop-Up Indicator

Table 7 Bypass

Code	Option
N	No Bypass
H	50 psid (3.4 bar) ±10%

Table 8 Drain Port

Code	Option
X	Drain & Vent Ports

Note: Assemblies do not include filter elements. Elements are ordered separately.

Element:

FSF-	XXX	-	X	X	-	X	-	X
TBL 1	TBL 2	TBL 3	TBL 4	TBL 5				

Table 1 Size

Code	Used On
050	FRF060
070	FRF100

Table 2 Filtration Rating

Code	Micron Rating	Media
V	$\beta_{4.2(c)} \geq 1000$	Glas-Tech
G	$\beta_{7(c)} \geq 1000$	Glas-Tech
H	$\beta_{9(c)} \geq 1000$	Glas-Tech
K	$\beta_{15(c)} \geq 1000$	Glas-Tech
J	$\beta_{24(c)} \geq 1000$	Glas-Tech

Table 3 Collapse

Code	Collapse Rating
F	150 psid (10 bar)

Table 4 Seals

Code	Material
B	Buna

Table 5 Dry Pak™ Media

Code	Material
W	DryPak™ Media
Blank	No DryPak™ Media