



*A more robust
and reliable
filter assembly*

F1F Series T-Type Hydraulic Filters

Low Pressure Hydraulic Filter Assemblies

Features

- 350 psi (24 bar) Operating Pressure
- Flows to 50 gpm (190 lpm)
- SAE -20 Straight Thread Ports
- Available with $\beta_{X(c)} \geq 1000$ Glas-Tech[®] Media
- Optional Visual & Electrical Indicators

Product Description

The F1F Series filter assemblies are rated for 350 psi (24 bar) service and flows to 50 gpm (190 lpm) and are available in three nominal flow sizes: 18, 35 and 50 gpm (68, 132 and 190 lpm). The filters come standard with SAE -20 straight thread o-ring ports for leak-free operation. A variety of micron ratings and indicator options as well as optional water removal media allow you to select the right filter for your application. F1F Series filters use PTI's Glas-Tech Media with Beta 1,000 filtration ratings providing high performance cost effective contamination control for the most demanding applications.



F1F Series T-Type Hydraulic Filters



Technical Data

Pressure & Temperature Rating:

Operating Pressure:	350 psi (24 bar)
Proof Pressure:	700 psi (48 bar)
Burst Pressure:	1,050 psi (72 bar)
Operating Temperature:	-40 °F to +250 °F (-40 °C to +121 °C)

Materials of Construction:

Head:	Aluminum
Bowl:	Size 018/035 - Aluminum, Size 050 - Steel

Bypass Options:

Bypass Valve Setting:	50 psid (3.5 bar) ±10%
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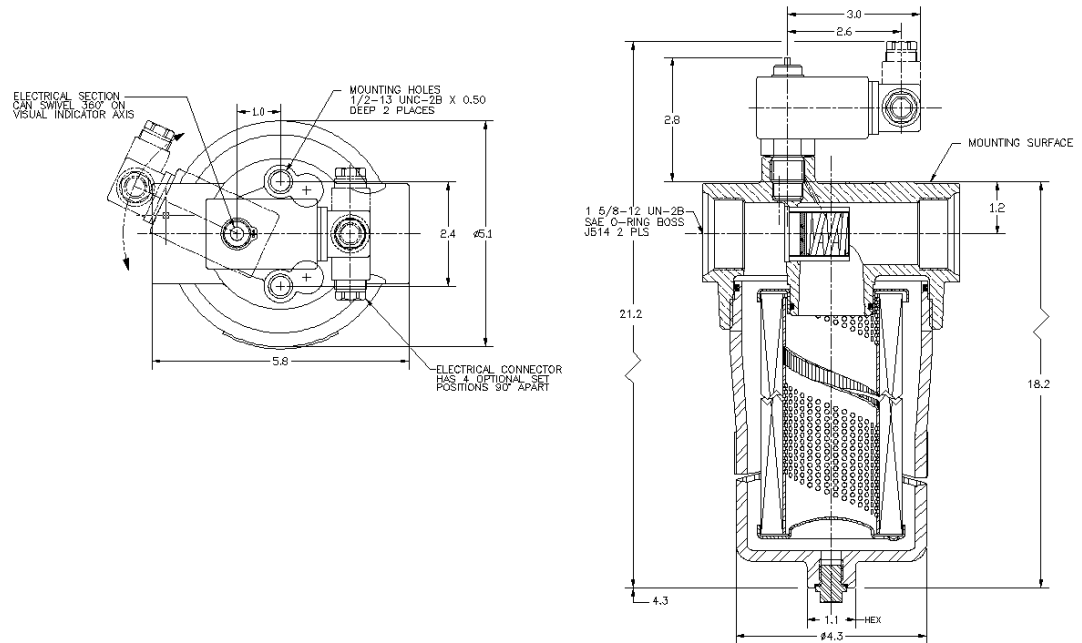
Differential Pressure Indicators:

Visual Indicator :	32 psid (2.2 bar) ±10% activation, manual reset 32 psid (2.2 bar) ±10% activation, self resetting
Visual & Electrical Indicator:	32 psid (2.2 bar) ±10% activation 12 to 220 Volt AC/DC, 2.5 AMP, 60VA, 40W Contacts - SPDT NO or NC, DIN Connector
Thermal Lockout Options:	Lockout below 70 °F (21 °C) Release above 95 °F (35 °C)

Filter Assembly (Housing & Element) Weight:

Size	018	035	050
Weight	5.3 lbs (2.4 kg)	6.6 lbs (3.0 kg)	11.7 lbs (5.3 kg)

Dimensions



Elements

Glas-Tech - High Performance Micro-Fiberglass Media
 F1F filter assemblies incorporate PG series filter elements and are available in V, G, H, K and J medias. PG series elements use PTI's proven Glas-Tech micro-fiberglass media with a multi-layer construction for increased dirt-holding

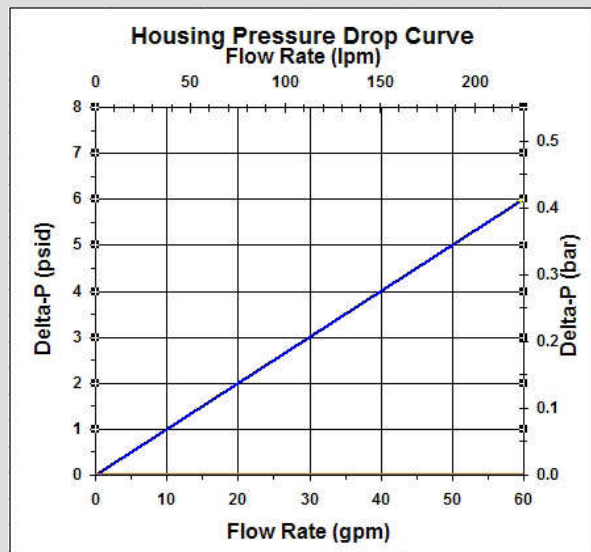
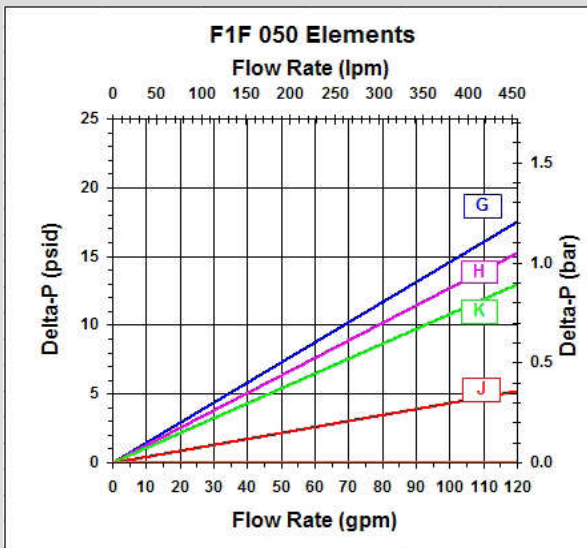
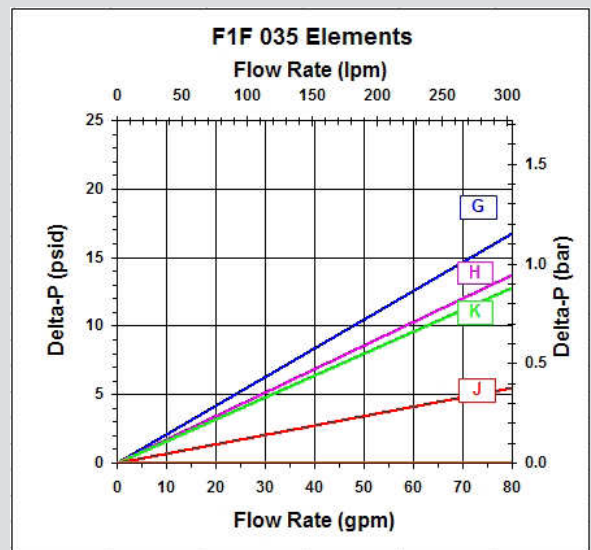
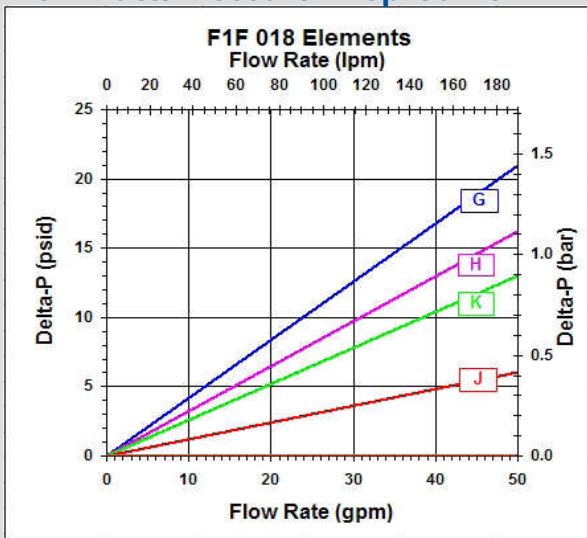
capacity and low pressure drop providing cost-effective contamination control for the most demanding applications. PTI filters are tested to the latest industry standards including ISO 16889 procedure for multipass efficiency testing.

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).

Media	Per ISO 45729	Per ISO 16889	
	$\beta_x \geq 200$	$\beta_{x(c)} \geq 200$	$\beta_{x(c)} \geq 1000$
V	1	4.2	4.2
G	3	5	7
H	6	7	9
K	12	12	15
J	23	21	24

Flow Rate/Pressure Drop Curve



Ordering Information

Assembly

F1F	XXX	X	H	-	X	N	X	X	X	X
TBL 1	TBL 2	TBL 3	TBL 4	TBL 5	TBL 6	TBL 7	TBL 8	TBL 9		

F1F Series Filters

Table 1 Size

Code	Nom Flow, gpm
018	18
035	35
050	50

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
T	149 μ m	Wire Mesh

Table 3 Collapse

Code	Pressure Rating
H	300 psid(20 bar)

Table 5 Port

Code	Option
N	1 1/4" SAE (-20)

Table 4 Seals

Code	Material
B	Buna
V	Viton

Table 6 Thermal Lckout

Code	Option
O	None
T*	Thermal Lockout - NO
U*	Normally Closed - NC

* Options only available for K series DPI

Table 7 Indicator

Code	Option
B	Visual 32 psid (2.2 bar) $\pm 10\%$ Manual Reset
K	Visual/Electrical 32 psid $\pm 10\%$
P	None
Q	Visual 32 psid $\pm 10\%$ Self Resetting

Table 8 Bypass

Code	Option
H	50 psid (3.5 bar) $\pm 10\%$
N	Non-Bypass

Table 9 Drain Port

Code	Option
N	None 018 and 035
D	3/8 BSP (050 only)

Element

PG	-	XXX	-	X	X
TBL 1		TBL 2		TBL 3	

Table 1 Size

Code	Used On
050	F1F018
080	F1F035
120	F1F050

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
T	149 μ m	Wire Mesh
E	10 μ	Water Removal

Table 3 Collapse

Code	Pressure, psid
H	300



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