

*A more robust
and reliable
filter assembly*

F1L Series T-Type Hydraulic Filters

Medium Pressure Hydraulic Filter Assemblies

Features

- 2,000 psi (138 bar) Operating Pressure
- 25 gpm (95 lpm) Nominal Flow Rate
- SAE -16 Straight Thread Ports
- Available with $\beta_{X(c)} \geq 1000$ Glas-Tech[®] Media
- Optional Visual & Electrical Indicators

Product Description

The F1L Series filter assemblies are rated for 2,000 psi (138 bar) service and flows to 25 gpm (95 lpm). The filters come standard with SAE -16 straight thread o-ring ports for leak-free operation. A variety of micron ratings and indicator options allow you to select the right filter for your application. F1L Series Filters use PTI's Glas-Tech Media with Beta 1,000 (ISO 16889) filtration ratings providing high performance cost effective contamination control for the most demanding applications.



F1L Series T-Type Hydraulic Filters

Technical Data

Pressure & Temperature Rating:

Operating Pressure:	2,000 psi (138 bar)
Proof Pressure:	3,000 psi (207 bar)
Burst Pressure:	6,000 psi (414 bar)
Operating Temperature:	-40 °F to +250 °F (-40 °C to +121 °C)

Materials of Construction:

Head:	Aluminum Alloy
Bowl:	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)

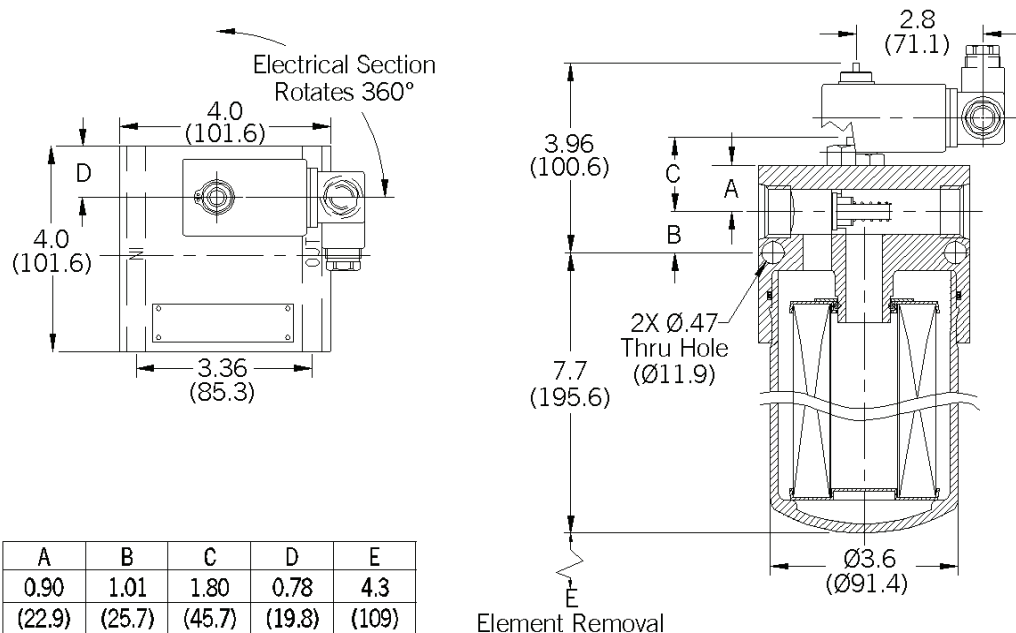
Seal Material Options:

- Buna
- Ethlene Propylene
- Viton

Filter Assembly (Housing & Element) Weight:

Size	025
Weight	8.7 lbs (4.0 kg)

Dimensions*



A	B	C	D	E
0.90	1.01	1.80	0.78	4.3
(22.9)	(25.7)	(45.7)	(19.8)	(109)

* Dimensions in inches (mm)

Elements

Glas-Tech - High Performance Micro-Fiberglass Media
 F1L filter assemblies incorporate F1L series filter elements and are available in V, G, H, K and J medias. F1L 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.

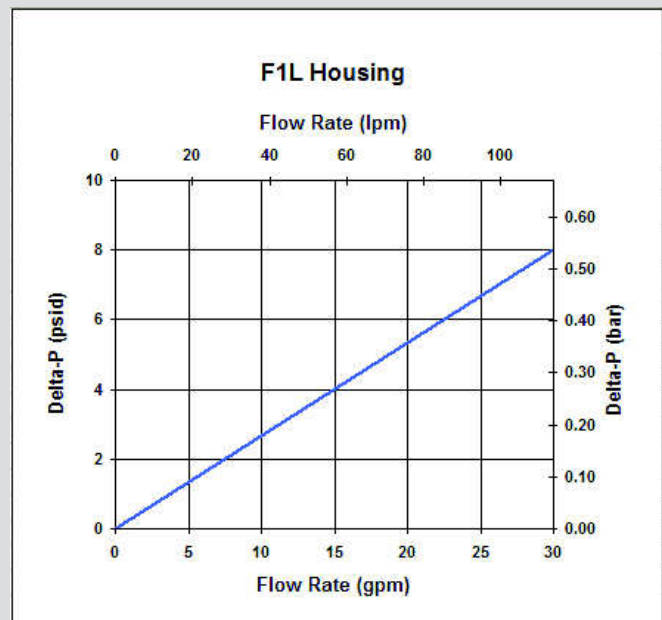
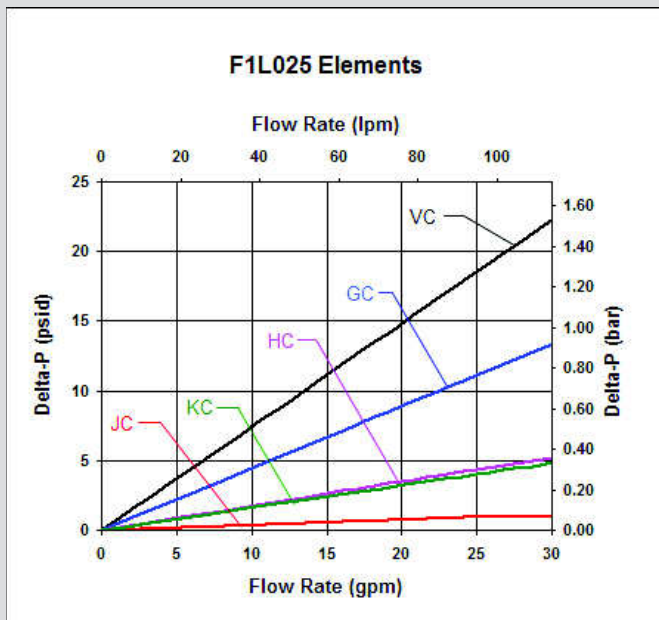
Filtration Rating

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

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



Ordering Information

Assembly

F1L	XXX	X	X	-	X	M	X	X	H	N
TBL 1	TBL 2	TBL 3	TBL 4	TBL 5	TBL 6	TBL 7	TBL 8	TBL 9		

F1L Series Filters

Table 1 Size	
Code	Nominal Flow
025	25 gpm (95 lpm)

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
N	No Filter Element	

Table 3 Collapse	
Code	Collapse Rating
C	75 psid (5 bar)
N	No Filter Element

Table 5 Port	
Code	Option
M	1" SAE (-16)

Table 4 Seals	
Code	Material
B	Buna
E	Ethylene Propylene
V	Viton

Table 6 Thermal Lockout	
Code	Option
O	None
T*	Thermal Lockout - NO
U*	Normally Closed - NC

Table 7 Indicator	
Code	Option
B	Visual 32 psid (2.2 bar) $\pm 10\%$ Manual Reset
K	Visual/Electrical 32 psid (2.2 bar) $\pm 10\%$
Q	Visual 32 psid (2.2 bar) $\pm 10\%$ Self Resetting

Table 8 Bypass	
Code	Option
H	50 psid (3.5 bar) $\pm 10\%$

Table 9 Drain Port	
Code	Option
N	None

* Options only available for K code Indicator (See Table 7)

Element

F1L	-	025	-	X	C	-	X
TBL 1	TBL 2	TBL 3	TBL 4				

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