



# F1L 025 Series T-Type Hydraulic Filter Assemblies

## Medium-Pressure Hydraulic Filter Assemblies



## Features

- 2,000 psi (138 bar) operating pressure
- 25 gpm (95 lpm) nominal flow rate
- Elements available with  $\beta_{X(c)} \geq 1000$  Glas-Tech III® media
- Optional cellulose media
- SAE -16 straight thread ports
- Optional visual & visual/electrical indicators



## 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 Valve**
  - Bypass Valve Setting: 50 psid (3.4 bar) ±10%  
Integrated Into Housing
- **Differential Pressure Indicators**
  - Visual Indicator: 32 psid (2.2 bar) ±10% activation, manual reset  
32 psid (2.2 bar) ±10% activation, self reset
  - Visual Electrical Indicator: 32 psid (2.2 bar) ±10% activation Contacts -  
SPDT NO or NC, DIN Connector
  - Thermal Lockout Options: Lockout below 70°F (21°C)  
Release above 95°F (35°C)  
Contacts - SPDT NO or NC, DIN Connector
- **Seal Material Options**
  - Seal Material: Buna  
Ethylene Propylene  
Viton®

## Elements

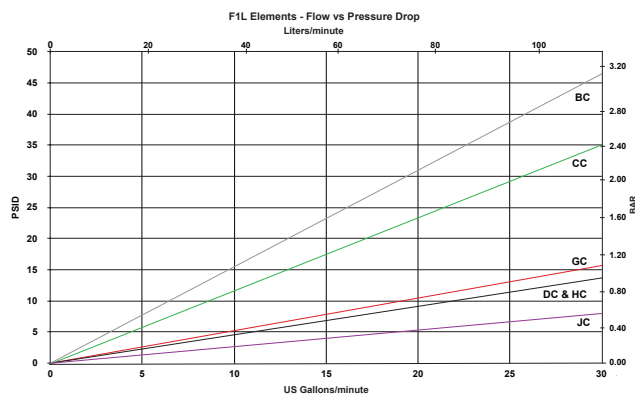
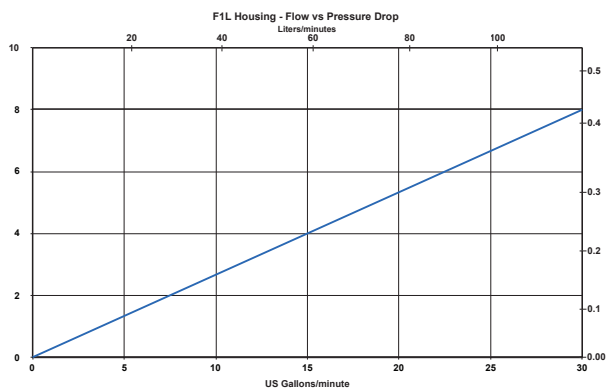
PTI filter elements are manufactured with the highest quality materials. PTI filter elements feature multi-layer construction for increased dirt-holding capacity and low pressure drop. PTI elements provide cost-effective contamination control for the most demanding applications. All elements are tested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

## 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 4572	Per ISO 16889	
	$\beta_x \geq 200$	$\beta_{x(c)} \geq 200$	$\beta_{x(c)} \geq 1000$
G	3	5	7
H	6	7	9
J	23	21	24

## 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  $\Delta P = \text{Housing } \Delta P + \text{Element } \Delta P$

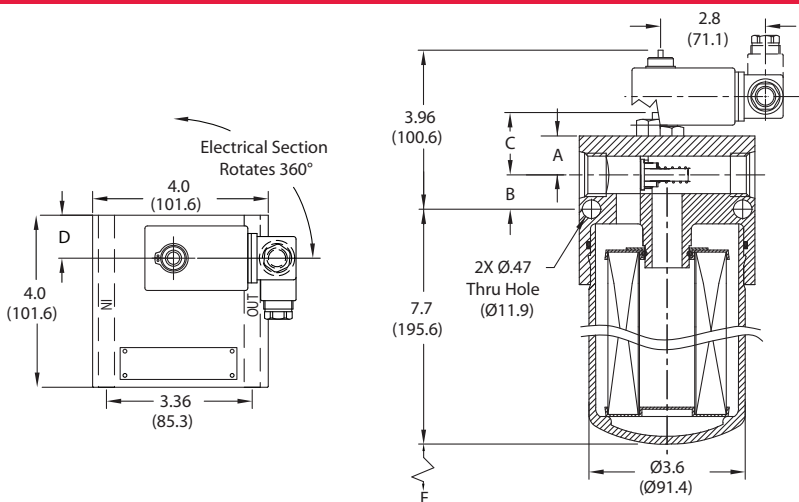
## Assembly Dimensions in Inches (mm)

Dimensions

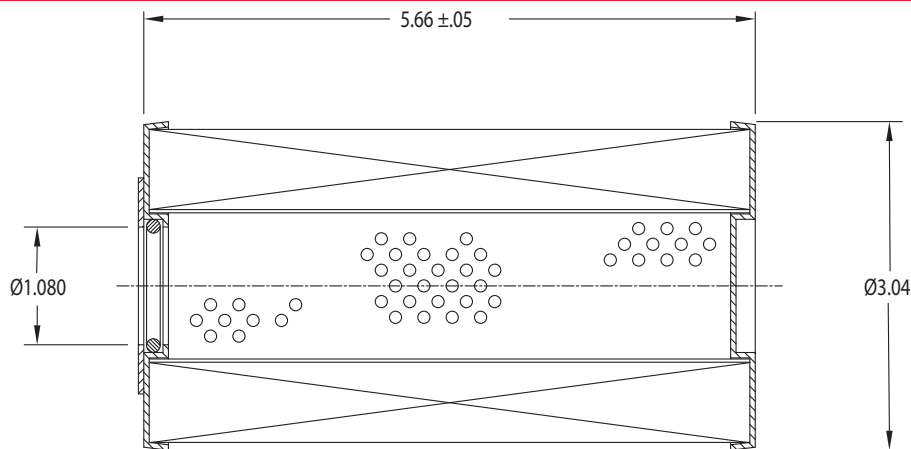
A	B	C	D	E
0.90	1.01	1.80	0.78	4.3
(22.9)	(25.7)	(45.7)	(19.8)	(109)

Filter Assembly (Housing & Element) Weight

Size	025
Weight	8.7 lbs (4.0 kg)



## Element Dimensions in Inches (mm)



## Ordering Information

### Assembly:

F1L	XXXXX	X	-	X	X	X	X	X	X
TBL 1	TBL 2	TBL 3	TBL 4	TBL 5	TBL 6	TBL 7	TBL 8	TBL 9	

**Table 1**    **Size**

Code	Nominal Flow
025	25 gpm (95 lpm)

**Table 2**    **Filtration Rating**

Code	Micron Rating	Media
G	$\beta_{7(c)} \geq 1000$	Glas-Tech III®
H	$\beta_{9(c)} \geq 1000$	Glas-Tech III®
J	$\beta_{24(c)} \geq 1000$	Glas-Tech III®
B	3 $\mu$ m	Cellulose
C	10 $\mu$ m	Cellulose
D	25 $\mu$ m	Cellulose
N	No Filter Element	

**Table 3**    **Collapse**

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

**Table 4**    **Seals**

Code	Material
B	Buna N
E	Ethylene Propylene
V	Viton®

**Table 6**    **Thermal Lockout**

Code	Option
O	None
T*	Thermal Lockout - N.O.
U*	Thermal Lockout - N.C.

\*Glas-Tech elements only Viton® is a registered trademark of DuPont Performance Elastomers

**Table 5**    **Port**

Code	Option
M	1 " SAE (-16)

\* Table 7 K option only

**Table 7**    **Indicator**

Code	Option
B	Visual 32 psid (2.2 bar) ±10% Manual Reset
K	Visual/Electrical 32 psid (2.2 bar) ±10%
Q	Visual 32 psid (2.2 bar) ±10% Self Resetting

**Table 8**    **Bypass**

Code	Option
H	50 psid (3.4 bar) ±10%

**Table 9**    **Drain Port**

Code	Option
N	None

### Element:

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

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