



F2P 050-120 Series T-Type Hydraulic Filter Assemblies

High-Pressure Hydraulic Filter Assemblies



Features

- 6,000 psi (414 bar) operating pressure
- Element collapse ratings of 300 & 3000 psid (21 & 307 bar)
- 50, 80 & 120 gpm (189, 303 & 454 lpm) nominal flow rates
- SAE ports or SAE flanges
- Elements available with $\beta_{X(C)} \geq 1000$ Glas-Tech III[®] media
- Optional DryPak[®] moisture control media
- Optional thermal lockout
- Valve options include - bypass, reverse flow & no bypass



Technical Data

- **Pressure & Temperature Rating**
 - Operating Pressure: 6,000 psi (414 bar)
 - Proof Pressure: 9,000 psi (621 bar)
 - Burst Pressure: 12,000 psi (828 bar)
 - Operating Temperature: -40°F to +250°F (-40°C to +121°C)
- **Materials of Construction**
 - Head: Ductile Iron
 - Bowl: Steel
- **Bypass Options**
 - Bypass Valve Setting: 100 psid (6.9 bar) ±10%
 - Reverse Flow Valve Setting: 4 psid (0.3 bar)
- **Differential Pressure Indicators**
 - Visual Indicator : 75 psid (5.2 bar) ±10% activation, manual reset
 - Visual Electrical Indicator: 75 psid (5.2 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)*
* Thermal lockout of electrical signal only
- **Seal Material Options**
 - Seal Material: Buna, Viton® or Ethylene Propylene

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.

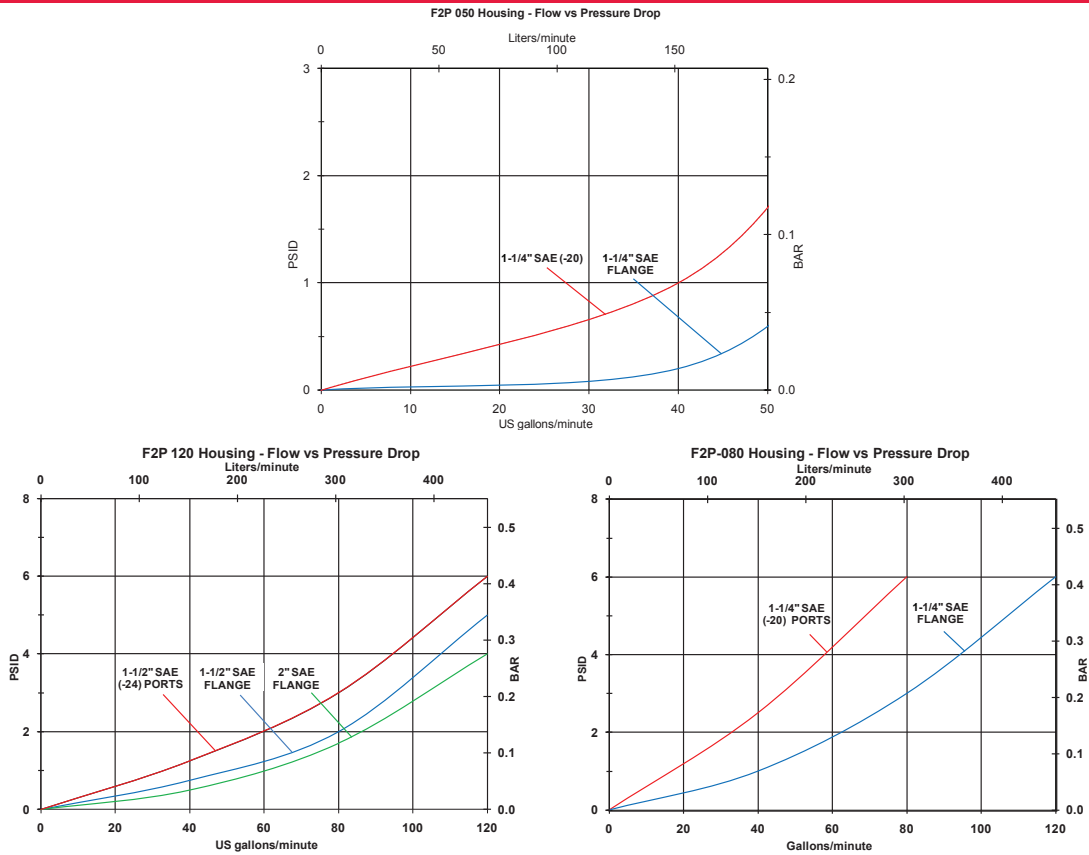
Filtration Rating

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).

Code	Per ISO 4572		Per ISO 16889	
	$\beta_x \geq 200$		$\beta_{x(c)} \geq 200$	$\beta_{x(c)} \geq 1000$
V	1μm		4.2μm	4.2μm
G	3μm		5μm	7μm
H	6μm		7μm	9μm
K	12μm		12μm	15μm
J	23μm		21μm	24μm

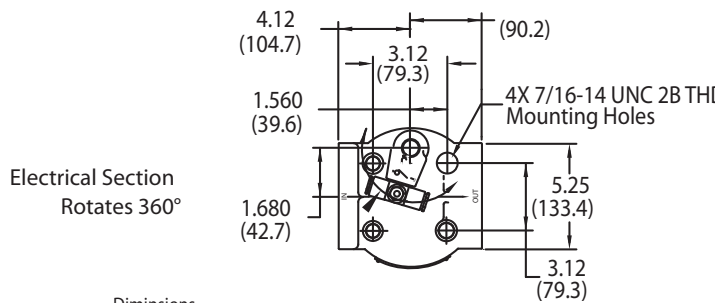
The PTI Technologies F2P series of high pressure hydraulic filter assemblies utilize PG series filter elements. Please see the PG series filter element brochure for flow vs pressure drop data and other media options.

Flow Rate/Pressure Drop Curves



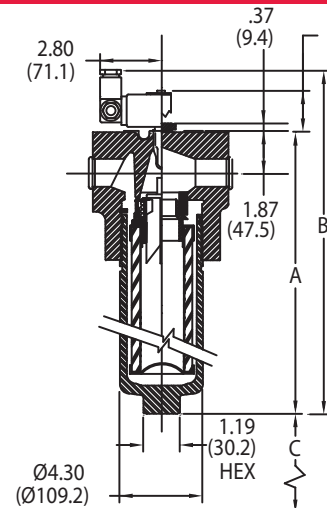
Pressure drop curves are based on 150 SUS (32 cSt) petroleum base hydraulic fluid of 0.9 S.G.
 Filter Assembly ΔP = Housing ΔP + PG Element ΔP

Dimensions in Inches (mm)



Dimensions

Nominal Flow	-050	-080	-120
Dimension A	11.10 (281.9)	15.57 (395.5)	20.20 (513.1)
Dimension B	13.80 (350.5)	18.01 (457.5)	22.62 (574.6)
Dimension C	2.50 (63.5) Bowl Removal Clearance		



Filter Assembly Weight

Size	050	080	120
Weight	27.1 lbs (12.3 kg)	34.4 lbs (15.6 kg)	40.6 lbs (18.4 kg)

Ordering Information

Assembly:

F2P XXXX 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
050	50 gpm (189 lpm)
080	80 gpm (303 lpm)
120	120 gpm (454 lpm)

Table 2 Filtration Rating

Code	Micron Rating	Media
N	No Filter Element	

Table 3 Collapse

Code	Collapse Rating
H	300 psid (21 bar)
U	3,000 psid (207 bar)
N	No Filter Element

Table 4 Seals

Code	Material
B	Buna N
V	Viton®
E	Ethylene Propylene

Viton® is a registered trademark of DuPont Performance Elastomers

Table 5 Port

Code	Option
N	1-1/4" SAE (-20)
5	1-1/4" SAE Flange - code 62*
7	1-1/4" SAE Flange - code 61*
P	1-1/2" SAE (-24)
4	1-1/2" SAE Flange - code 61*
2	1-1/2" SAE Flange - code 62*
U	2" SAE Flange - code 62*

Table 6 Thermal Lockout

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

* Only available for M Series Indicator (See Table 7)

* Thermal Lockout of Electrical signal only

Table 7 Indicator

Code	Option
P	None (Boss Plugged)
D	Visual 75 psid (5.2 bar) ±10%
M	Visual/Electrical 75 psid (5.2 bar) ±10%

Table 8 Bypass

Code	Option
N	Non-Bypass
L	100 psid (6.9 bar)
X	Reverse Flow Valve w/ Bypass Rev Flow Valve Opens @ 4 psid (0.3 bar)

Table 9 Drain Port

Code	Option
N	None (050 only)
D	3/8 BSP (080 & 120 only)

Element:

Sold Separately

PG - XXX - X X - X

TBL 1 TBL 2 TBL 3 TBL 4

Table 2 Filtration Rating

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

Table 3 Collapse

Code	Collapse Rating
H	300 psid (21 bar)
U	3,000 psid (207 bar)

Table 1 Size

Code	Nominal Flow
050	50 gpm (189 lpm)
080	80 gpm (303 lpm)
120	120 gpm (454 lpm)

Table 4 Options

Code	Option
Omit	Standard Element
W	DryPak® Configuration

For more info email: fluidpower@ptitechnologies.com



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