



*A more robust
and reliable
filter assembly*

F2P 050-120 Series T-Type Hydraulic Filters

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
- Available with $\beta_{x(c)} \geq 1000$ Glas-Tech[®] Media
- Optional Thermal Lockout
- Valve Options Include - Bypass, Reverse Flow & No Bypass

Product Description

The F2P 050-120 Series filter assemblies are rated for 6,000 psi (414 bar) service and flows to 120 gpm (454 lpm). The filters come standard with SAE ports or SAE flanges for leak-free operation. A variety of micron ratings and indicator options allow you to select the right filter for your application. F2P Series filters use PTI's Glas-Tech Media with Beta 1,000 filtration ratings (ISO 16889) providing high performance cost effective contamination control for the most demanding applications.



F2P 050-120 Series T-Type Hydraulic Filters

Technical Data

Pressure & Temperature Rating:

Operating Pressure:	6,000 psi (414 bar)
Proof Pressure:	9,000 psi (621 bar)
Burst Pressure:	12,000 psi (827 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 (6.8 bar) ±10%
Reverse Flow Valve Setting:	4 psid (.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

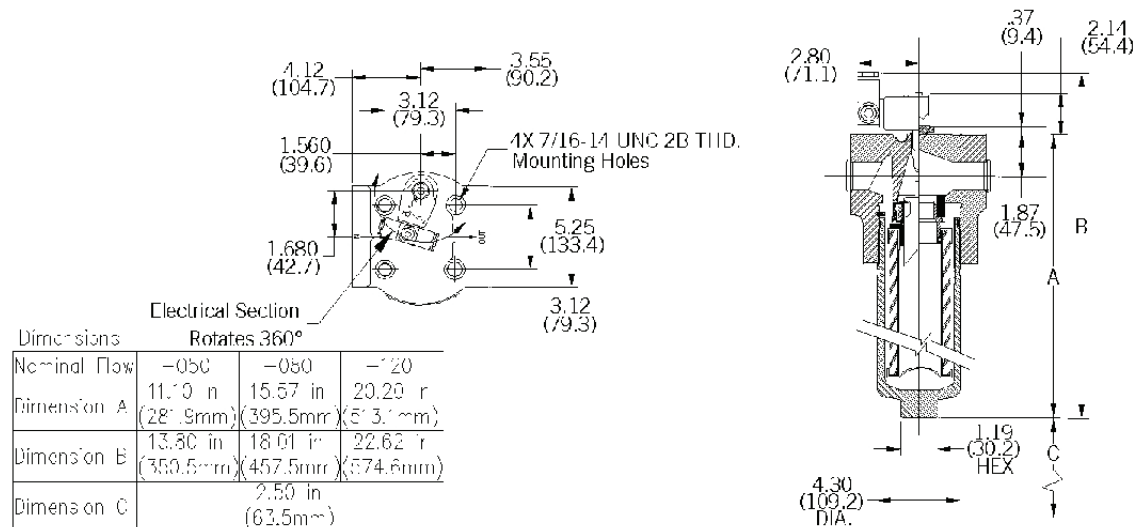
Seal Material Options:

- Buna
- Ethlene Propylene
- Viton

Filter Assembly (Housing & Element) Weight:

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

Dimensions*



* Dimensions in inches (mm)

Elements

Glas-Tech - High Performance Micro-Fiberglass Media

F2P 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

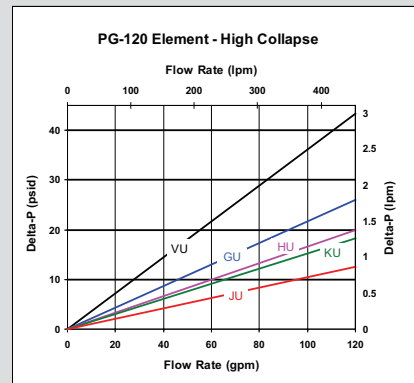
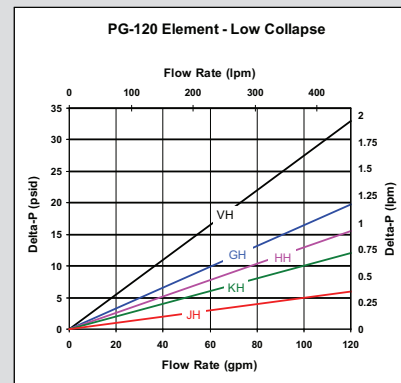
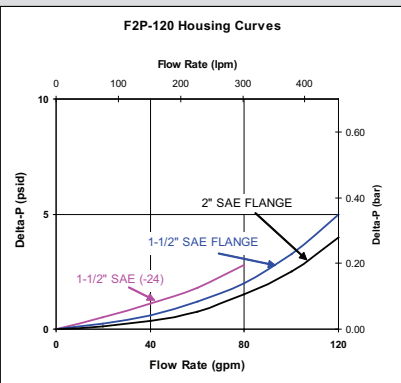
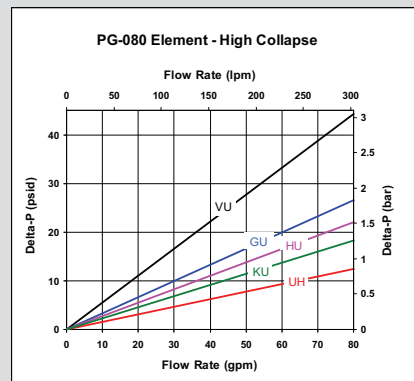
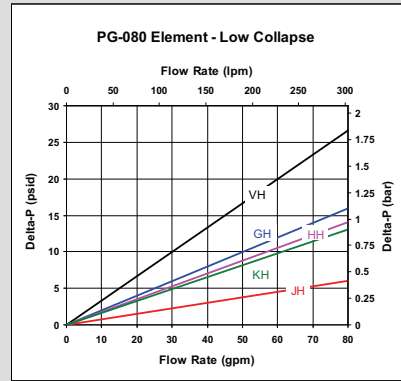
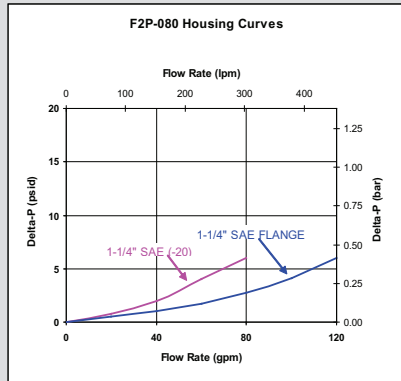
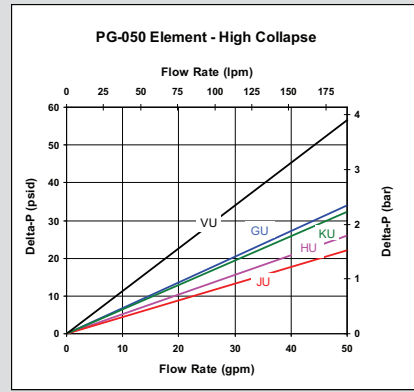
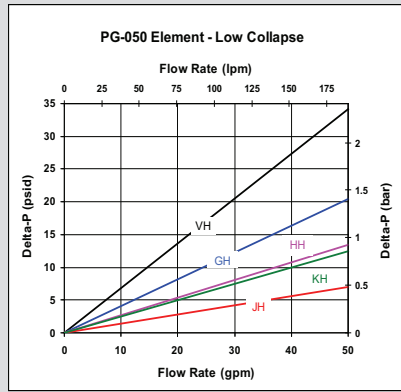
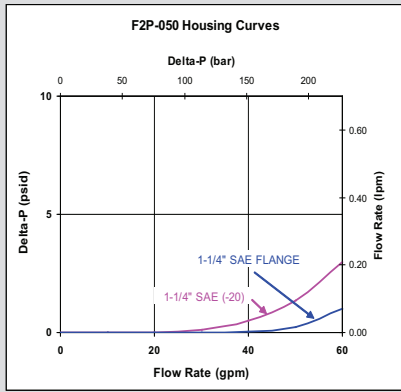
Multipass Test results per old ISO 4572 and new ISO 16889 test procedures
Particle size (x) in microns at which the Beta Ratio (β) is greater than or equal to the indicated value (200 or 1000).

Media	Per ISO 45729		Per ISO 16889	
	$\beta_x \geq 200$	$\beta_{x(c)} \geq 200$	$\beta_{x(c)} \geq 200$	$\beta_{x(c)} \geq 1000$
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

F2P	XXX	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
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
H	300 psi (21 bar)
U	3,000 psi (207 bar)
N	No Filter Element

Table 4 **Seals**

Code	Material
B	Buna
E	Ethylene Propylene
V	Viton

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) $\pm 10\%$
M	Visual/Electrical 75 psid (5.2 bar) $\pm 10\%$

Table 8 **Bypass**

Code	Option
N	Non-Bypass
L	100 psid (6.9 bar)
X	Reverse Flow Valve w/ Bypass Rev Flow Vlv Opens @.4 psid (.3 bar)

Table 9 **Drain Port**

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

Element

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

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
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
H	300 psi (21 bar)
U	3,000 psi (207 bar)



PTI Technologies, Inc.
501 Del Norte Boulevard
Oxnard, California 93030

(800) 331-2701
(805) 604-3700

