



F7L 040 -100 Series Duplex Filter Assemblies

*Medium-Pressure
Hydraulic Filter Assemblies*



Features

- 2,400 psi (166 bar) operating pressure
- 40, 80 & 100 gpm (151, 303 & 379 lpm) nominal flow rates
- SAE -24 straight thread or SAE 4-bolt flange ports
- Elements available with $\beta_{X(c)} \geq 1000$ Glas-Tech III[®] media
- Optional DryPak[®] moisture control media
- Optional visual & electrical indicators
- Self locking transfer valve
- Automatic bleed-over valve



Technical Data

- Pressure & Temperature Rating
 - Operating Pressure: 2,400 psi (166 bar)
 - Proof Pressure: 3,600 psi (248 bar)
 - Burst Pressure: 8,000 psi (552 bar)
 - Operating Temperature: -40°F to +250°F (-40°C to +121°C)
- Materials of Construction
 - Head: Durable Iron
 - Bowl: Carbon Steel
- Bypass Options
 - Bypass Valve Setting: 100 psid (6.9 bar) ±10% Non-Bypass
- 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 - SPST NO or NC, DIN Connector
 - Thermal Lockout Options: Lockout below 70°F (21°C)
Release above 95°F (35°C)
- Seal Material Options
 - Seal Material: Buna
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.

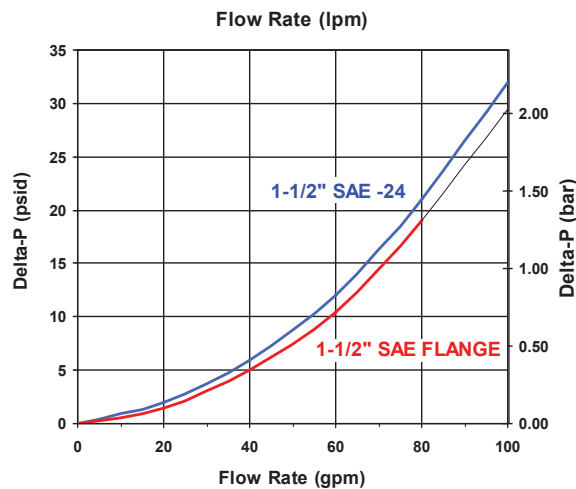
Filtration Rating

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).

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 F7L Series of medium pressure hydraulic filter assemblies utilize PG Series filter elements. Please see the PG Series Filter Element brochure for flow vs. pressure drop data.

Flow Rate/Pressure Drop Curves

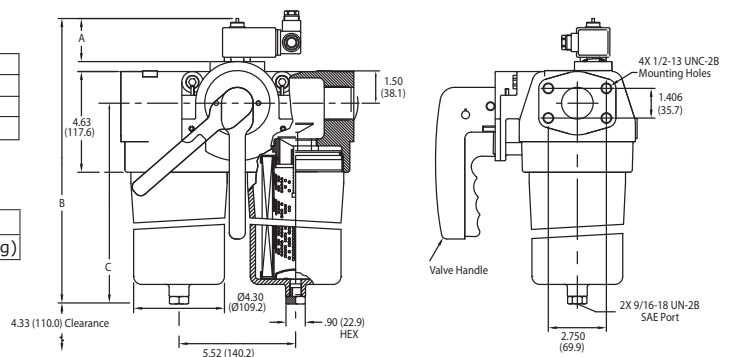


Pressure drop curves are based on 150 SUS (32 cSt) petroleum base hydraulic fluid of 0.9 S.G.
Filter Assembly ΔP = Housing ΔP + PG Element ΔP

Dimensions in Inches (mm)

Dimensions	-040	-080	-081	-100
Nominal Flow				
Dimension A	2.56 (65.0)	1.95 (49.5)	1.95 (49.5)	1.95 (49.5)
Dimension B	12.80 (325.1)	17.40 (442.0)	17.40 (442.0)	21.97 (558.0)
Dimension C	8.80 (223.5)	13.40 (340.4)	13.40 (340.4)	17.96 (456.2)

Filter Assembly (Housing & Element) Weight			
Size	040	080	100
Weight	68 lbs (30.8 kg)	84 lbs (38.1 kg)	98 lbs (44.5 kg)



Ordering Information

Assembly:

F7L	XXX	X	X	-	X	X	X	X	X
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TBL 1 TBL 2 TBL 3 TBL 4 TBL 5 TBL 6 TBL 7 TBL 8 TBL 9

Code	Nominal Flow
040	40 gpm (151 lpm)
080	80 gpm (303 lpm)
100	100 gpm (379 lpm)

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®
N	No Filter Element	

Code	Collapse Rating
H	300 psid (20 bar)
U	3,000 psid (207 bar)
N	No Filter Element

Code	Material
B	Buna
V	Viton®

Viton® is a registered trademark of DuPont Performance Elastomers

Code	Option
P	1-1/2" SAE (-24)
4	1-1/2" SAE Flange Code 61*

* SAE J518

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

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

* Thermal Lockout of Electrical signal only

Code	Option
D	Visual 75 psid (5.0 bar) ±10% Manual Reset
M	Visual/Electrical 75 psid (5.0 bar) ±10%
P	None (Blind Plug)

Code	Option
L	100 psid (6.9 bar) ±10%
N	None

Code	Option
X	Vent & Drain Ports

Element:

PG-	XXX	-	X	X	-	X
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TBL 1 TBL 2 TBL 3 TBL 4

Code	For Use With:
050	F7L 040
080	F7L 080
120	F7L 100

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®

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

Code	Option
Omit	Standard Element
W	DryPak® Configuration

For more info email: fluidpower@ptitechnologies.com



PTI Technologies Inc.
501 Del Norte Boulevard
Oxnard, California 93030
800-331-2701 • 805-604-3700
www.ptitechnologies.com



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