



F4E 050-070 Series Spin-On Filter Assemblies

For Hydraulic and Lube Oil Applications



Features

- 200 psi (14 bar) operating pressure
- Element collapse rating of 75 psid (5 bar)
- Static burst pressure 300 psi (21 bar)
- 50 & 70 gpm (189 & 265 lpm) nominal flow rates
- Elements available with Glas-Tech III® Bx(c) ≥ 1000 media
- Optional cellulose media
- NPT or SAE straight thread ports
- Optional visual indicator
- Interchangeable with competitor spin-ons



Technical Data

- Pressure & Temperature Rating
 - Operating Pressure: 200 psi (14 bar)
 - Burst Pressure: 300 psi (21 bar)
 - Operating Temperature: -40°F to +250°F (-40°C to +121°C)
- Materials of Construction
 - Head: Aluminum Alloy
 - Spin-on Can: Steel
- Bypass Valve
 - Bypass Valve Setting: 25 psid (1.7 bar) ±10%
 - 3 psid (0.2 bar) ±10%
 - No bypass
- Differential Pressure Indicators
 - Visual Indicator: 18 psid (1.2 bar) ±10% activation
- 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

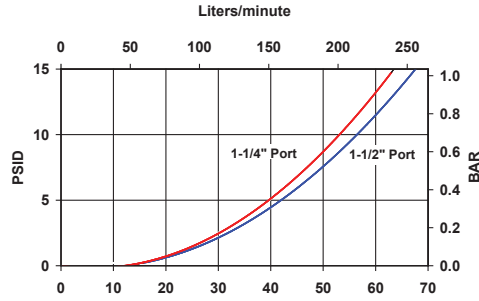
Multipass test results per old ISO 4572 and new ISO 16889 test procedures.
Particle size (x) in microns at which the Beta Ratio (β) is greater than or equal to the indicated value (200 or 1000).

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

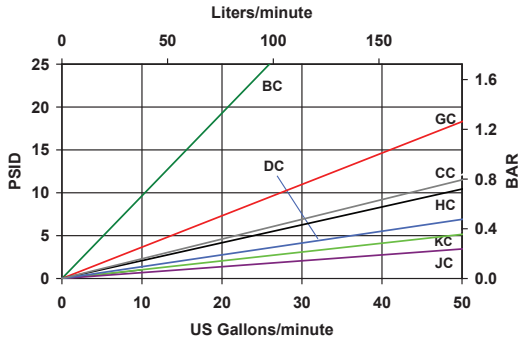
F4E filter elements are also available with 10 μ m & 25 μ m nominal water removal media and 3 μ m, 10 μ m & 25 μ m nominal cellulose media. Please refer to ordering information on back page.

Flow Rate/Pressure Drop Curves

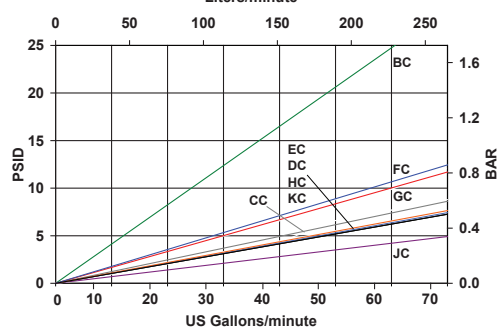
Housing F4E 050/070 - Flow vs Pressure Drop



F4E 050 Elements - Flow vs Pressure Drop

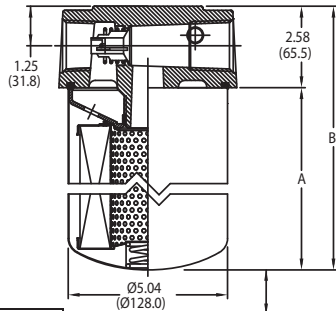


F4E 070 Elements - Flow vs Pressure Drop



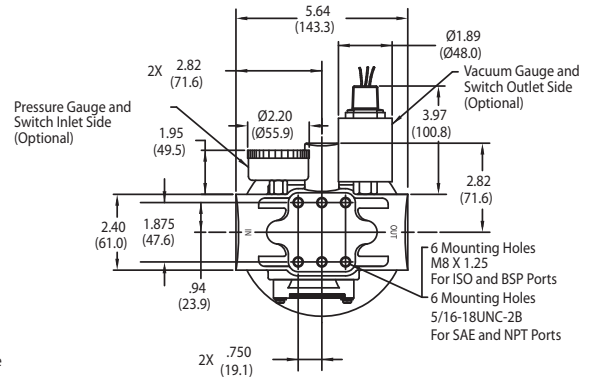
Pressure drop curves are based on 150 SUS (32 cSt) petroleum base hydraulic fluid of 0.9 S.G. Filter Assembly $\Delta P = \text{Housing } \Delta P + \text{Element } \Delta P$

Assembly Dimensions in Inches (mm)

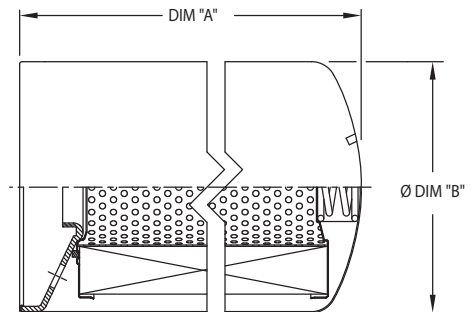
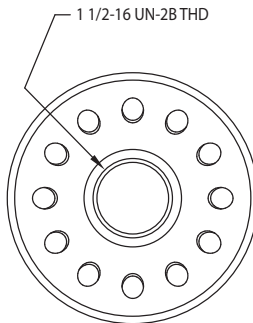


Dimensions

Nominal Flow	-050 & -051	-070 & -071
Dimension A	6.9 (175)	10.8 (274)
Dimension B	9.5 (240)	13.4 (341)



Element Dimensions in Inches (mm)



Dimensions

Nominal Flow	-050 & -051	-070 & -071
Dimension A	6.9 (175)	10.8 (274)
Dimension B	5.0 (128)	5.0 (128)

Ordering Information

Assembly:

F4E	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)
051*	50 gpm (189 lpm)
070	70 gpm (265 lpm)
071*	70 gpm (265 lpm)

*Lip Seal Required

Table 4 Seals

Code	Material
B	Buna
V	Viton®

Viton® is a registered trademark of DuPont Performance Elastomers

Table 2 Filtration Rating

Code	Micron Rating	Media
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
B	3 μ m	Cellulose
C	10 μ m	Cellulose
D	25 μ m	Cellulose
E	10 μ m	Water Removal
F	25 μ m	Water Removal
N	No Filter Element	

Table 3 Collapse

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

Table 5 Port

Code	Option
F	1-1/4" NPT
G	1-1/2" NPT
N	1-5/8" - 12 SAE
P	1-7/8" - 12 SAE

Table 6 Gauge Options

Code	Option
O	None
2	Vacuum Gauge
3	Vacuum Switch
5	Color Code Gauge
6	Pressure Switch

Table 7 Indicators & Ports

Code	Option
L	Visual 18 psid (1.2 bar) \pm 10%
3	4 x 1/8" NPT Ports
N	None

Indicator located on Right side when looking at inlet port

Table 8 Bypass

Code	Option
N	Non-Bypass
C	15 psid (1 bar)
F	25 psid (1.7 bar)
R	3 psid (0.2 bar)

Table 9 Visual Indicator Loc

Code	Option
R **	Right Side
L **	Left Side
N	None

** when looking at inlet port

Element:

F4E	-	XXX	-	X	C	-	X
TBL 1	TBL 2	TBL 3	TBL 4				

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For more info email: fluidpower@ptitechnologies.com



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