



## F5D 070-150 Series In-Tank Filter Assemblies

*Double Layer Media With  
High-Dirt-Holding Capacity*

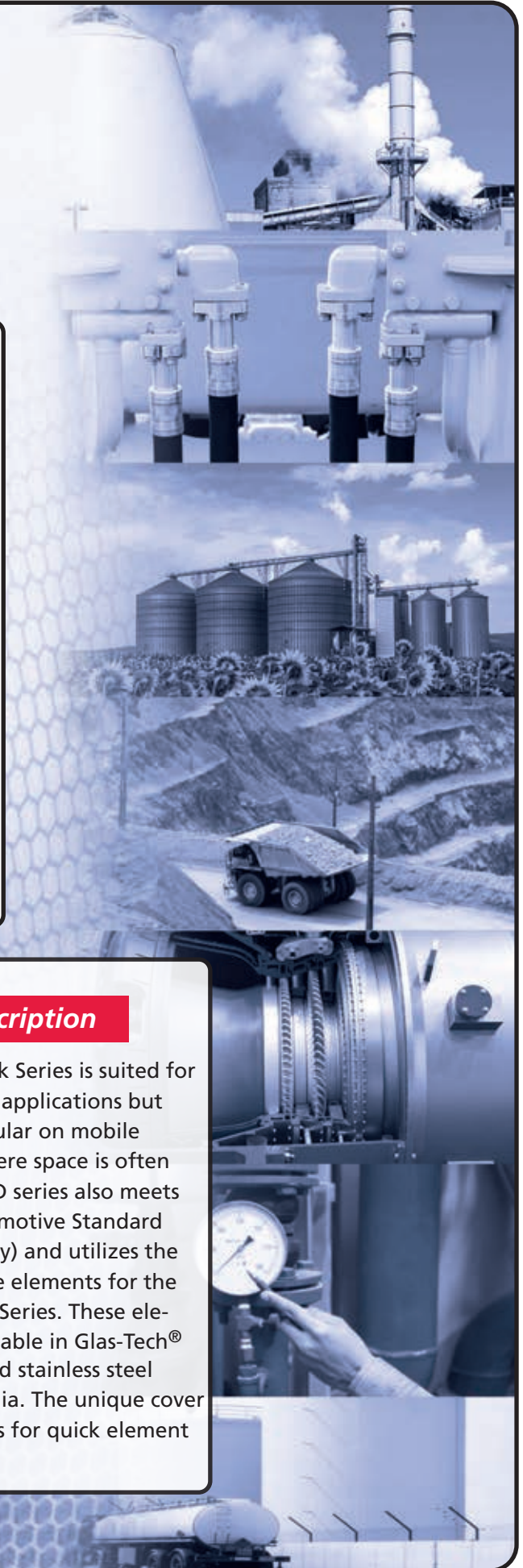


### Features

- 150 psi (10 bar) operating pressure
- Element collapse rating of 75 psid (5 bar) & 150 psid (10 bar)
- 70, 100 & 150 gpm (265, 379 & 568 lpm) nominal flow rates
- NPT or SAE straight thread ports
- Elements available with Glas-Tech III®  $\beta_{X(C)} \geq 1000$  media
- Optional visual & electrical gauges / switches
- 3 & 25 psid bypass options available

### Product Description

The F5D In-Tank Series is suited for most hydraulic applications but extremely popular on mobile equipment where space is often critical. The F5D series also meets the AIAG Automotive Standard (Model 100 only) and utilizes the PTI interchange elements for the Schroeder "K" Series. These elements are available in Glas-Tech®  $\beta_{X(C)} \geq 1000$  and stainless steel wire mesh media. The unique cover design provides for quick element replacement.



## Technical Data

- Pressure & Temperature Rating
 

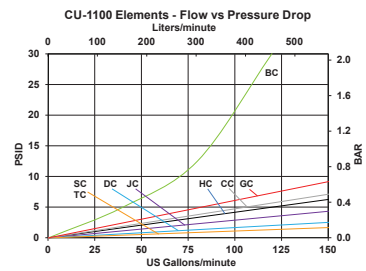
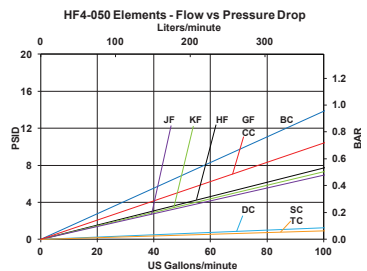
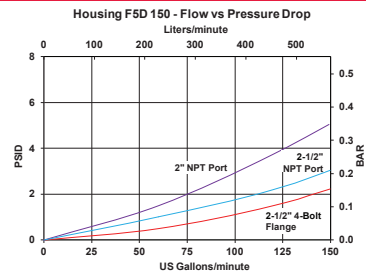
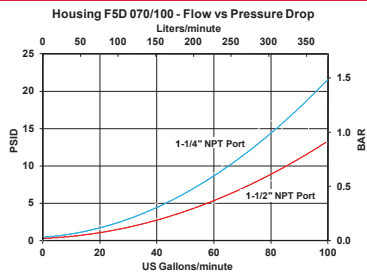
Operating Pressure:	150 psi (10 bar)
Proof Pressure:	225 psi (16 bar)
  
- Materials of Construction
 

Head:	Cast Aluminum
Bowl:	Zinc Plated Steel
  
- Bypass Options
 

Bypass Valve Setting:	3 psi (0.2 bar) ± 10%
	25 psi (1.7 bar) ± 10%
  
- Seal Material Options
 

Seal Material:	Buna
	Viton®

## Flow Rate/Pressure Drop Curves



Note: The F5D-100 Housing requires two (2) each HF4-050 Filter Elements.  
 Use one-half of the pressure drop values above when calculating total pressure drop for F5D-100 applications.

Pressure drop curves are for clean elements using 150 SUS (32 cSt) petroleum base hydraulic fluid of 0.9 S.G.  
 Filter Assembly  $\Delta P$  = Housing  $\Delta P$  + Element  $\Delta P$

## Filtration Rating

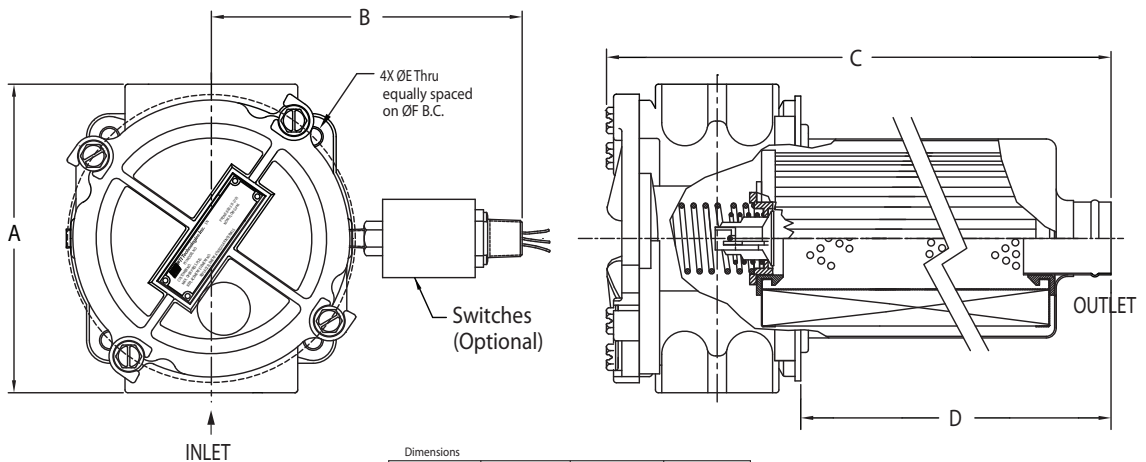
Multipass test results per old ISO 4572 and new ISO 16889 test procedures.  
Particle size (x) in microns at which the Beta Ratio ( $\beta$ ) is greater than or equal to the indicated value (200 or 1000).

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

Code	Micron Rating	Media
B	3 $\mu$ m	Cellulose
C	10 $\mu$ m	Cellulose
D	25 $\mu$ m	Cellulose
R	238 $\mu$ m Nominal	CRES Wire Mesh
S	75 $\mu$ m Nominal	CRES Wire Mesh
T	149 $\mu$ m Nominal	CRES Wire Mesh

## Dimensions in Inches (mm)



Dimensions

Nominal Flow	-070	-100	-150
Dimension A	6.70 (170)	6.70 (170)	8.74 (222)
Dimension B	6.80 (173)	6.80 (173)	6.85 (174)
Dimension C	15.47 (393)	23.40 (594)	21.90 (556)
Dimension D	11.30 (288)	19.30 (490)	16.30 (414)
Dimension E	0.44 (11)	0.44 (11)	0.41 (10)
Dimension F	6.25 (159)	6.25 (159)	8.68 (220)

## Order Information

### Assembly:



Table 1 Size	
Code	Nominal Flow
070	70 gpm (265 lpm)
100	100 gpm (379 lpm)
150	150 gpm (568 lpm)

Table 2 Filtration /Collapse Rating			
Code	Micron Rating	Media	Collapse Rating
BC <sup>1</sup>	3 µm	Cellulose	75 psid
CC <sup>1</sup>	10 µm	Cellulose	75 psid
DC <sup>1</sup>	25 µm	Cellulose	75 psid
GC <sup>2</sup>	$\beta_{7(c)} \geq 1000$	Glas-Tech	75 psid
HC <sup>2</sup>	$\beta_{9(c)} \geq 1000$	Glas-Tech	75 psid
KC <sup>2</sup>	$\beta_{15(c)} \geq 1000$	Glas-Tech	75 psid
JC <sup>2</sup>	$\beta_{24(c)} \geq 1000$	Glas-Tech	150 psid
TC <sup>2</sup>	149 µm	CRES	75 psid
GF <sup>3</sup>	$\beta_{7(c)} \geq 1000$	Glas-Tech	150 psid
HF <sup>3</sup>	$\beta_{9(c)} \geq 1000$	Glas-Tech	150 psid
KF <sup>3</sup>	$\beta_{15(c)} \geq 1000$	Glas-Tech	150 psid
JF <sup>3</sup>	$\beta_{24(c)} \geq 1000$	Glas-Tech	150 psid
N	No Filter Element		

Table 3 Seals	
Code	Material
B	Buna
V*	Viton®

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

Table 4 Ports	
Code	Port Style
F*	1-1/4" NPT
N*	1-5/8"-12 SAE
G*	1-1/2" NPT
P*	1-17/8" x 12 SAE
4*	1-1/2" SAE 4-Bolt Flange
H**	2" NPT
S**	2-1/2" SAE 4-Bolt Flange

Table 5 Gauge Options	
Code	Type
5	Pressure Gauge (Color Coded Dial)
6	Electric Pressure Switch
7	Gauge & Switch
P	None (Plugged)
2	Visual Vacuum Switch
3	Electric Vacuum Switch

\* Model F5D - 070 & F5D -100 only  
\*\* Model F5D - 150 only

1 Available for all models  
2 Available only for F5D 150  
3 Available only for F5D 070 & 100

Table 6 Gauge Ports	
Code	Type
2	2 each 1/8" NPT Inlet Side
4*	2 each 1/4" NPT Inlet Side

Table 7 Bypass	
Code	Option
R	3 psid (0.2 bar) ±10%
F	25 psid (1.7 bar) ±10%

Table 8 Options	
Code	Option
N	None

\* On Model F5D - 150 only

### Element: Model 070 & 100



Note: Model F5D 070 requires one (1) HF4-050 element.  
Model F5D 100 requires two (2) HF4-050 Elements.

Table 2 Seals	
Code	Material
B	Buna
V*	Viton®

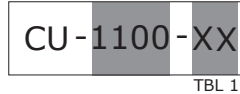
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### Table 1 Filtration /Collapse Rating

Code	Micron Rating	Media	Collapse Rating
BC	3 µm	Cellulose	75 psid
CC	10 µm	Cellulose	75 psid
DC	25 µm	Cellulose	75 psid
GF	$\beta_{7(c)} \geq 1000$	Glas-Tech	150 psid
HF	$\beta_{9(c)} \geq 1000$	Glas-Tech	150 psid
KF	$\beta_{15(c)} \geq 1000$	Glas-Tech	150 psid
JF	$\beta_{24(c)} \geq 1000$	Glas-Tech	150 psid
SF	74 µm	CRES	150 psid
TF	149 µm	CRES	150 psid

Table 3 Options	
Code	Options
Omit	Standard Element
W	DryPak® Configuration

### Element: Model 150



### Table 1 Filtration /Collapse Rating

Code	Micron Rating	Media	Collapse Rating
BC	3 µm	Cellulose	75 psid
CC	10 µm	Cellulose	75 psid
DC	25 µm	Cellulose	75 psid
GC	$\beta_{7(c)} \geq 1000$	Glas-Tech	75 psid
HC	$\beta_{9(c)} \geq 1000$	Glas-Tech	75 psid
KC	$\beta_{15(c)} \geq 1000$	Glas-Tech	75 psid
JC	$\beta_{24(c)} \geq 1000$	Glas-Tech	75 psid
SC	74 µm	CRES	75 psid
TC	149 µm	CRES	75 psid
RC	238 µm	CRES	75 psid

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