

MF3

Medium Pressure Filter Assemblies

Ideal for mobile equipment return line applications as an alternative to spin-ons, on-board fuel and dispensing and hydrostatic charge circuits.

Max Operating Pressure: 1,200 psi (83 bar)

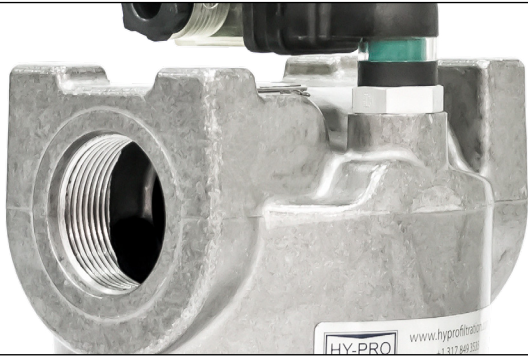


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Filtration starts with the filter.

DFE rated advanced media technologies provide the highest level of particulate capture and retention capabilities so your equipment operates unimpeded by contamination. With media options down to $\beta_{3[\mu]} \geq 4000$, + water absorption, you get the perfect element for your application, every time.



HF3 Compatible Design.

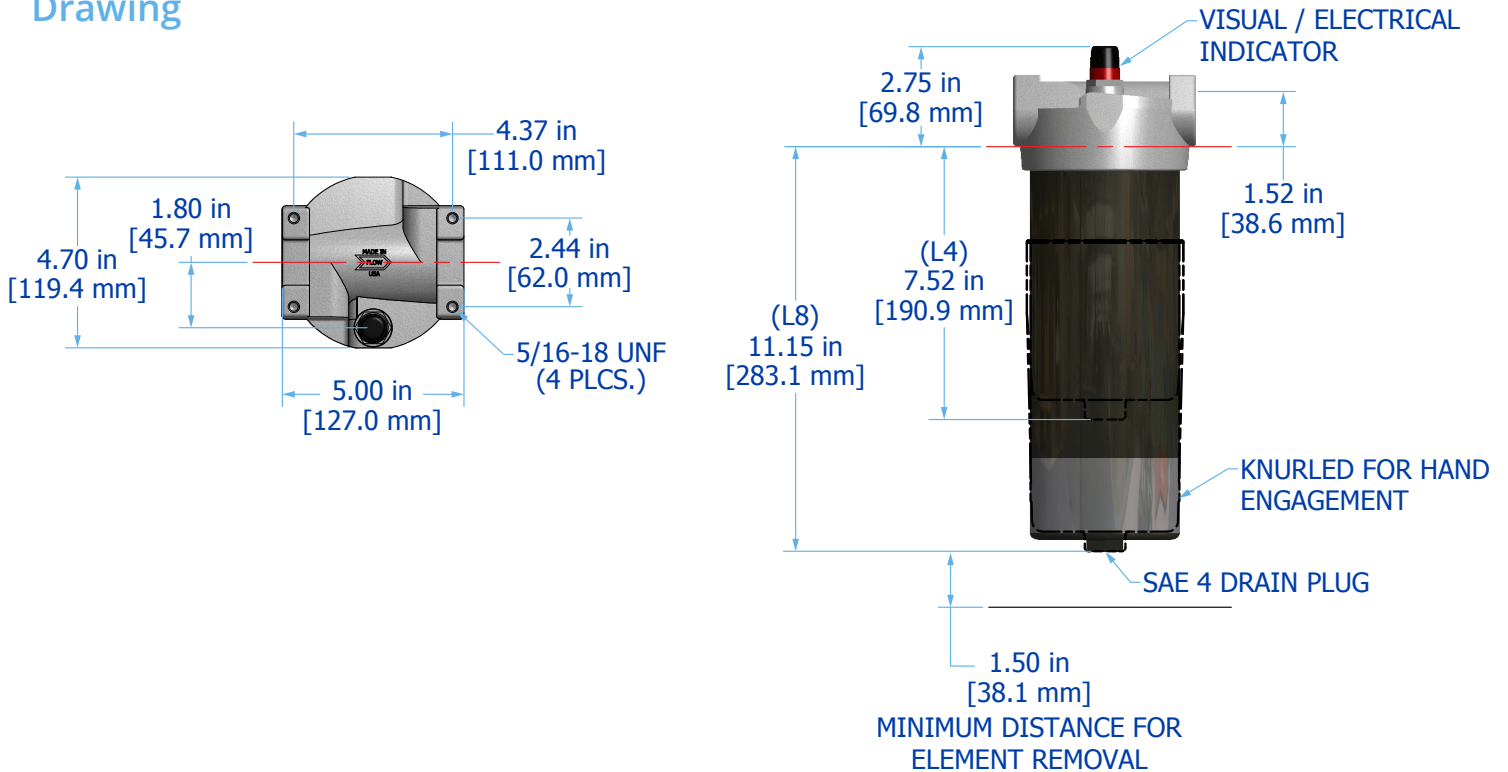
Port to port dimension, mounting pattern, and element design meet HF3 automotive specification. And with standard SAE drain ports, lightweight aluminum bowls, and knurled texture on the bowls provide ease for element servicing, you get all of the convenience you want with the compatibility you need.

Inherently versatile.

Unique internal flow paths providing a low clean pressure drop and element sizes from 4", the MF3 can be used in a variety of applications including Hydrostatic charge circuit for mobile equipment, CAT 5-Star service center, and return line alternative to spin-on assemblies.



MF3 Installation Drawing



MF3 Specifications

Dimensions See Installation Drawings on page 203 for model specific dimensions.

Operating Temperature	Fluid Temperature	Ambient Temperature
	30°F to 225°F (0°C to 105°C)	-4°F to 140°F (-20C to 60C)

Operating Pressure 1200 psi (83 bar) max

Burst Pressure 3000 psi (206.8 bar) max

ΔP Indicator Trigger 22 psid (1.52 bard) for 25 psid bypass
45 psid (3.10 bard) for 50 psid bypass and non bypass

Element Collapse Rating 290 psid (20 bard)

Materials of Construction	Head	Bowl	Element Bypass Valve	Element End Caps
	Cast aluminum	L4/L8: Cast aluminum	Nylon	Zinc or Tin coated carbon steel

Media Description	M	A	W
	G8 Dualglass, our latest generation of DFE rated, high performance glass media for all hydraulic & lubrication fluids. $\beta_{x_{10}}$ ≥ 4000	G8 Dualglass high performance media combined with water removal scrim. $\beta_{x_{10}}$ ≥ 4000	Stainless steel wire mesh media $\beta_{x_{10}}$ ≥ 2 ($\beta_x \geq 2$)

Replacement Elements To determine replacement elements, use corresponding codes from your assembly part number:
Filter Element Part Number HP60L[Length Code] - [Media Selection Code] [Seal Code] **Example** HP60L16-6MB

Fluid Compatibility Petroleum and mineral based fluids (standard). For polyol ester, phosphate ester, and other specified synthetic fluids use fluorocarbon seal option or contact factory.

Filter Sizing¹ Filter assembly clean element ΔP after actual viscosity correction should not exceed 10% of filter assembly bypass setting. See page 22 for filter assembly sizing guidelines & examples. For applications with extreme cold start condition contact Hy-Pro for sizing recommendations.

ΔP Factors ¹	Length	Units	Media						
			1M	3M	6M	12M	16M	25M	**W
L4		psid/gpm	0.459	0.357	0.268	0.186	0.171	0.149	0.027
		bard/lpm	0.008	0.007	0.005	0.003	0.003	0.003	0.000
L8		psid/gpm	0.324	0.252	0.206	0.156	0.151	0.143	0.026
		bard/lpm	0.006	0.005	0.004	0.003	0.003	0.003	0.000

¹Max flow rates and ΔP factors assume u = 150 SUS, 32 cSt. See filter assembly sizing guideline for viscosity conversion formula on page 22 for viscosity change.

MF3 Part Number Builder

MF3 -

Connection Element Length Bypass ΔP Indicator Media Seal

Connection	Port Option	Max Flow Rate
G20	1.25" G thread (BSPP)	75 gpm (284 lpm) ¹
N20	1.25" NPT	75 gpm (284 lpm) ¹
N24	1.5" NPT	100 gpm (379 lpm) ¹
S20	1.25" SAE	75 gpm (284 lpm) ¹
S24	1.5" SAE	100 gpm (379 lpm) ¹

Element Length	
4	4" (10 cm) nominal length filter element and housing
8	8" (20 cm) nominal length filter element and housing

Bypass	
1	25 psid (1.7 bard) bypass
3	50 psid (3.4 bard) bypass
X	No bypass

ΔP Indicator	
D	Visual with electric switch (DIN Connection)
V	Visual/Mechanical
X	No indicator (port plugged)

Media Selection	G8 Dualglass	G8 Dualglass + water removal	Stainless wire mesh
1M	$\beta_{3_{(C)}} \geq 4000$	3A $\beta_{5_{(C)}} \geq 4000$	25W 25μ nominal
3M	$\beta_{5_{(C)}} \geq 4000$	6A $\beta_{7_{(C)}} \geq 4000$	40W 40μ nominal
6M	$\beta_{7_{(C)}} \geq 4000$	12A $\beta_{12_{(C)}} \geq 4000$	74W 74μ nominal
12M	$\beta_{12_{(C)}} \geq 4000$	25A $\beta_{22_{(C)}} \geq 4000$	149W 149μ nominal
16M	$\beta_{17_{(C)}} \geq 4000$		
25M	$\beta_{22_{(C)}} \geq 4000$		

Seals	
B	Nitrile (Buna)
V	Fluorocarbon
E-WS ²	EPR seals + stainless steel support mesh

¹Maximum recommended flow rate based on velocity through port and internal flow path. Consult sizing guidelines or consult factory for sizing based on flow rate, viscosity, temperature, filter media selection.
²Only available with ΔP Indicator option "X" selected.

For all up to date option details and compatibilities, please reference our [Contamination Solutions Price List](#) or contact customer service.

Want to find out more? Get in touch.

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