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3M Separation and Purification Sciences Division Data Sheet

3M[™] High Flow Series Housings for High Flow Series Filters

The 3M[™] High Flow series housing range is constructed of 316L stainless steel Housing body and 316 stainless steel (flanges, cartridge plug-base) and has a maximum allowable working pressure of 150 psi @ 250°F (10 bar @ 121°C). The outer surface finish is electropolished and the housing's internal finish is bead blasted.

3M High Flow Series filter housings are available in a variety of standard sizes to accommodate from 1 to 7 filter cartridges in 10-inch, 40-inch and 60-inch lengths. The standard housings are also designed to meet global requirements such as:

- European Pressure Equipment Directive 2014/68/EU
- ATEX Directive 2014/34/EU, for use in ATEX condition II 2 GD c IIC/IIIC
- Australian Standard AS 1210 Pressure Vessel
- ASME Section VIII Div2 U-stamp (US versions)
- Housing wetted parts are 316/316L stainless steel (Generally Regarded As Safe) with o-rings that are compliant for food contact.

Marking and documentation

The housings are clearly marked and delivered with a Certificate of Conformity. The user of these housings must ensure they are used in compliance with the requirements of local regulations, and in accordance with the instruction manual supplied.

Features & Benefits

Compact design

• Smaller diameter housing vs. those of conventional filters for a given flow rate

Robust cartridge center-post design

• Eliminates bulky support plates providing easy access to housing internals.

Manufactured from 316 and 316L stainless steel

- Excellent corrosion protection
- Generally regarded as safe for food contact

Upstream and downstream gauge ports and drains

Hinged cover (single-round housings) and user-friendly

- cover lifting device (multi-round housings)
- Allows for easy element change-outs

*Refer to Technical Support Guide for additional information.



Applications

Industrial Water:

- Municipal water
- Pre-RO filtration
- Reclaimed water
- Coolants
- Condensate

Chemical:

- Quench water
- Final product load-out
- Process cooling water

Petrochemicals:

- Waterflood
- Produced water
- Enhanced oil recovery
- Completion fluids
- Amine sweetening

Electronics:

- Pre-RO filtration
- Process cooling water

Food and Beverage:

- Process and blending water
- Bottled water
- Beer clarification

Housing Model	Housing OD (in/mm)	Inlet & Outlet Flange Size (in/DN)	Vent & Drain NPT (in/mm)	Maximum Flow (gpm/lpm)	Empty Weight (Ibs / kg)	Housing Dimension, approximate ² length x width x height (in / mm)
01HF101	8 / 203.2	2 / 50	0.25 / 6.35	85 / 320	39.7 / 18	L – 12 / 304.8 W – 8 / 203.2 H – 24 / 609.6
01HF40	8.5 / 216	4 / 100	0.25 and 0.75 (6.35 & 19.05)	350 / 1325	121.25 / 55	L – 60 / 1524 W – 9.9 / 252 H – 12.8 / 326
01HF60	8.5 / 216	4 / 100	0.25 and 0.75 (6.35 & 19.05)	500 / 1893	143.3 / 65	L – 81 / 2057 W – 9.9 / 252 H - 12.8 / 326

3M High Flow Filter Single Cartridge Housings, Model 01HF

 $^{\scriptscriptstyle 1}$ 10 inch High Flow housing is available only in non-ASME code design

² Single round 40 inch and 60 inch housing dimension without mounting legs: this allows for mounting the housings on a frame. Standard mounting legs are available as an optional accessory and can be obtained separately. Horizontal design mounting legs fits both 40" and 60" housings. Leg assemblies are also available for the housing for the 40" housing in the vertical orientation.

3M High Flow Filter Multi-Around Cartridge Housings, Models 03HF, 05HF, 07HF

Housing Model	Housing OD (in/mm)	Inlet & Outlet Flange Size (in/DN)	Vent & Drain NPT (in/mm)	Maximum Flow (gpm/lpm)	Empty Weight (Ibs / kg)	Housing Dimension, approximate length x width x height (in / mm)
03HF40	16 / 406	6 / 150	0.5 / 12.7	350 / 1325	489.5 / 222	L – 71.2 / 1808.5 W – 15.98 / 406 H – 39.4 / 1000
03HF60	16 / 406	8 / 200	0.5 / 12.7	500 / 1893	586.5 / 266	L – 94.25 / 2394 W – 15.98 / 406 H - 39.4 / 1000
05HF40	20 / 508	8 / 200	0.5 / 12.7	1550/5867	751.8 / 341	L – 75.1 / 1908 W – 20 / 508 H – 39.4 / 1000
05HF60	20 / 508	10 / 250	0.5 / 12.7	2450/9274	888.5 / 403	L – 98.2 / 2494 W – 20 / 508 H – 39.4 / 1000
07HF40	22 / 560	10 / 200	1/25.4	2450/9274	945.8 / 429	L – 81.6 / 2073 W – 22.1 / 560 H – 39.4 / 1000
07HF60	22 / 560	12 / 300	1/25.4	3500/13249	1084.7 / 492	L – 100.2 / 2545 W – 22.1 / 560 H – 39.4 / 1000





In addition to the standard housing designs, the 3M[™] High Flow can be built upon request to a wide range of specifications, design and construction standards. Please consult your local 3M SPSD representative for further information.

Oil & gas service:

Specially designed 3M High Flow Series housings are available upon request to accommodate requirements typically found in oil & gas applications:

- Corrosion allowances
- Higher pressure ratings
- Swing bolt closure design
- Non-destructive examination
- NACE (National Association of Corrosion Engineers) Compliance
- Post weld heat treatment

Intended Uses

The 3M High Flow Series Filter Housings Series Filters are intended for use in standard industrial filtration applications of aqueous fluids in accordance with the applicable product instructions and specifications.

3M High Flow Series Filter Housings Series Filter products are also intended for use with non-aqueous fluids where materials of construction are compatible. Certain limited 3M High Flow Series Filter Housings Series Filter products are also intended for use in Food and Beverage (F&B) applications. Refer to the specific 3M High Flow Series Filter Housings Series Filter product's data sheet to determine whether it includes a F&B designation and can be used for such applications. Since there are many factors that can affect a product's use, the customer and user remains responsible for determining whether the 3M product is suitable and appropriate for the user's specific application, including user conducting an appropriate risk assessment and evaluating the 3M product in user's application.

Restrictions on Use

3M advises against the use of these 3M products in any application other than the stated intended use(s), since other applications have not been evaluated by 3M and may result in an unsafe or unintended condition. Do not use in a medical device, drug, or cosmetic application or in applications involving life-sustaining medical applications or prolonged contact with internal bodily fluids or tissues. If you are considering using this 3M product for a restricted use, you must first contact 3M with information about your proposed application to request prior written authorization for supply for such use.

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