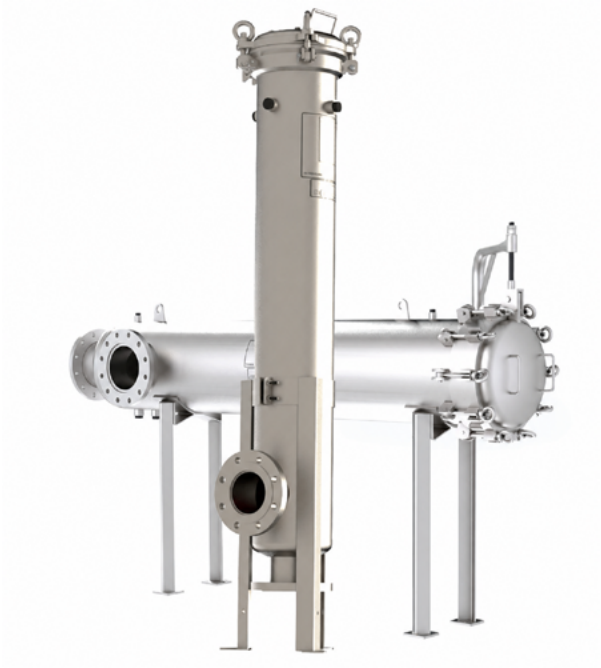
Industrial filtration

High Flow filter housing

The Thermo Scientific™ High Flow Filter 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 at 250°F (10 bar at 121°C). Most High Flow housings have a bead blasted internal finish and electropolished outer surface finish.

High Flow 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. Supplied o-rings are compliant with some food contact regulations, confirm prior to use.



Marking and documentation

The housings are clearly marked and delivered with a Certificate of Compliance as well as the applicable technical documentation. 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 and 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 davit arm assembly (multi-round housings)

- Allows for easy element change-outs

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
- Wine clarification

High Flow filter housings

Industrial High Flow filter single cartridge housings, model 1HF

Housing model	Housing OD (in/mm)	Inlet and outlet size (in/DN)	Vent and drain NPT (in/mm)	Maximum flow (gpm/lpm)	Empty weight (lbs/kg)	Overall housing dimensions length x width x height (in/mm)
1HF10[1]	8/203	2/50 (NPT male)	0.25/6	85/320	20/9	W – 12/305 W – 8/205 H – 23/570
1HF40[2]	8.5/216	4/100 (flange)	0.25/0.75 (6.35/19)	350/1,325	120/55	L – 60/1,500 W – 10/250 H – 13/325
1HF60[2]	8.5/216	4/100 (flange)	0.25/0.75 (6.35/19)	500/1,890	145/65	L – 80/2,060 W – 10/250 H – 13/325

[1] 10 inch High Flow filter housing is available only in non-ASME code design.

[2] Optional leg kits available for 1HF40 and 1HF60: horizontal 51045401 and vertical 51045201 (1HF40 only).

High Flow filter multi-round cartridge housings, models 3HF, 5HF, 7HF

Housing model	Housing OD (in/mm)	Inlet and outlet flange size (in/DN)	Vent and drain NPT (in/mm)	Maximum flow (gpm/lpm)	Empty weight (lbs/kg)	Overall housing dimensions length x width x height (in/mm)
3HF40	16/406	6/150	0.5/12	875/3,300	490/220	L – 71/1,810 W – 16/405 H – 40/1,000
3HF60	16/406	8/200	0.5/12	1,500/5,700	585/265	L – 94/2,395 W – 16/405 H – 40/1,000
5HF40	20/508	8/200	0.5/12	1,550/5,870	750/340	L – 75/1,910 W – 20/510 H – 40/1,000
5HF60	20/508	10/250	0.5/12	2,450/9,275	890/400	L – 100/2,495 W – 20/510 H – 40/1,000
7HF40	22/560	10/250	1/25	2,450/9,275	945/430	L – 82/2,075 W – 22/560 H – 40/1,000
7HF60	22/560	12/300	1/25	3,500/13,249	1,085/495	L – 100/2,545 W – 22/560 H – 40/1,000

High Flow Sanitary Design Filter Housing specifications

Sanitary High Flow filter housings are designed for critical filtration of aqueous and nonaqueous process fluids in the food and beverage industry. To reduce particle adhesion and minimize bacterial contamination, housings are manufactured in mechanically polished (surface roughness average of 0.8 µm externally and 0.4 µm internally) and electropolished 316L stainless steel, with standard sanitary tri-clamp connections.

The housing is capable of being disassembled with a removable center post to ease cleaning and a drain to allow recovery of unfiltered products and to reduce the risk of downstream contamination. The cover is secured with a clamp closure, allowing the housing to be opened quickly without tools.

Food and beverage service:

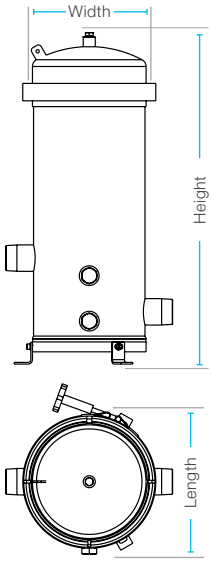
Specially designed Sanitary High Flow filter housings are tailored to deliver all of the system's benefits in a compact footprint:

- 316L stainless steel construction generally regarded as safe (GRAS)
- Internal and external polished surfaces
- Sanitary flange connections (for inlet, outlet, bleed, and drain ports)

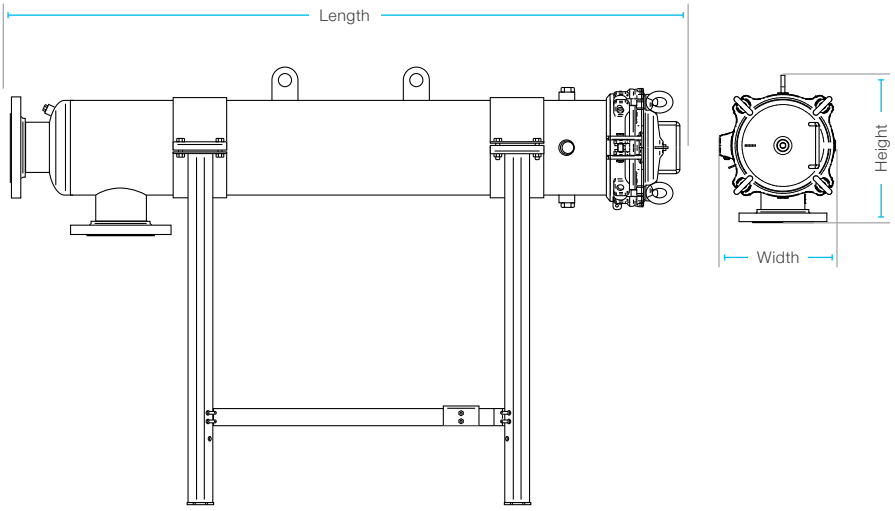
Housing part number	Housing OD (mm/in)	Material of construction	Inlet/outlet	Maximum flow	Height (mm/in)	Orientation	Drain	Vent	Gauge
1HF10	200/8	316L SS	2" sanitary	85	860/34	Vertical	½" sanitary	½" sanitary	1½" sanitary
1HF40	200/8	316L SS	3" sanitary	230	1,620/64	Vertical	½" sanitary	½" sanitary	1½" sanitary

Legs welded to body

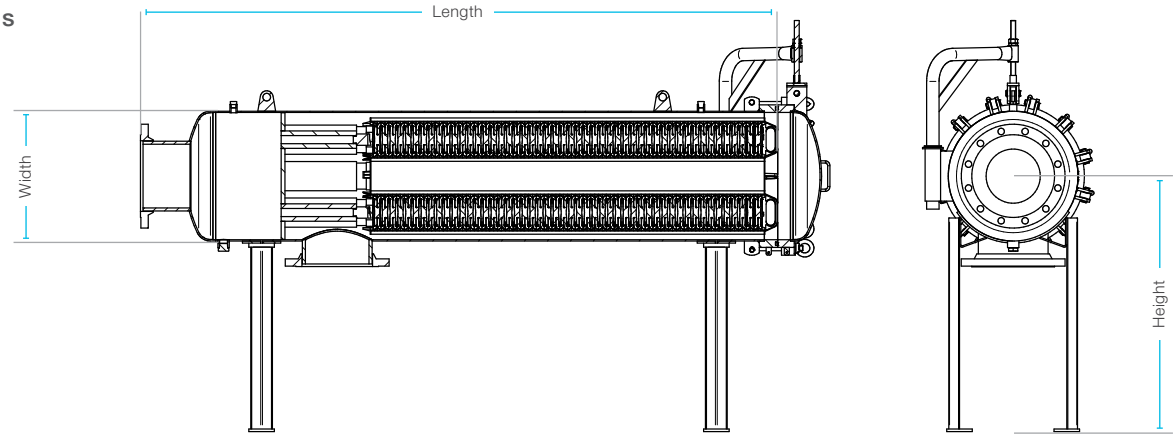
Model
1HF10



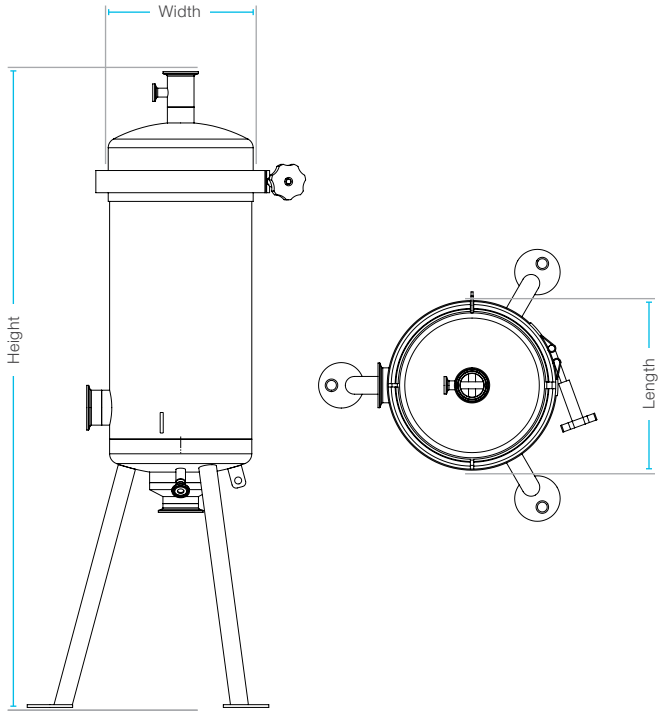
Models
1HF40
1HF60



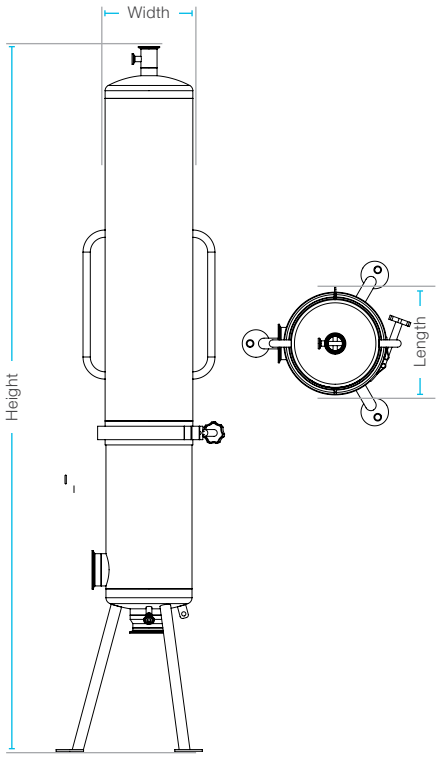
Models
3HF
5HF
7HF



Model 1HF10 Sanitary



Model 1HF40 sanitary



Custom housing options

In addition to standard housing designs, High Flow filter housings can be customized upon request to meet a wide range of specifications, design criteria, and manufacturing standards tailored to unique customer requirements. Specially engineered High Flow filter housings are available to support specific application needs and operating conditions.

For additional information and customization options, please contact your local Thermo Fisher Scientific filtration and separation representative.

- Corrosion allowance and National Association of Corrosion Engineers (NACE) compliance
- Post-weld heat treatment
- Sizing and connections
- Higher pressure rating
- Swing bolt or through bolt closure design
- Non-destructive examination

Intended Use: High Flow housings are intended for use in various applications such as industrial and food and beverage in accordance with the applicable filter product instructions and specifications.

Since there are many factors that can affect a product's use, the customer and user remain responsible for determining whether the Thermo Scientific product is suitable and appropriate for the user's specific application, including user conducting an appropriate risk assessment and evaluating the Thermo Scientific product in user's application for safety, regulatory compliance, performance and any other requirements.

Restrictions on Use: Thermo Fisher Scientific Inc. advises against the use of these Thermo Scientific products in any application other than the stated intended use(s) since other applications have not been evaluated by Thermo Fisher Scientific Inc. and may result in an unsafe or unintended condition. Refer to the applicable filter product instructions and specifications for product specific restrictions on use.

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by Thermo Fisher are based upon records, tests, or experience that Thermo Fisher believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any Thermo Fisher or third-party intellectual property rights is granted or implied with this information.

Product Selection and Use: Many factors beyond Thermo Fisher's control and uniquely within user's knowledge and control can affect the use and performance of a Thermo Scientific product in a particular application. As a result, end-user is solely responsible for evaluating the product and determining whether it is appropriate and suitable for end-user's application. Failure to properly evaluate, select, and use a Thermo Scientific product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

ALISMA FILTRATION

Authorised distributor of Thermo Scientific™ products in France.

www.alisma-filtration.com

For more information contact your Thermo Fisher Scientific sale representative or visit **thermofisher.com/industrialfiltration**

thermo scientific

© 2026 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. **DTAS-14324100 GBL 0626**