

## HFE Filter Housing

### Description

The HFE filter housings are designed to accommodate the Pall High-Flow Emflon® filter cartridges. Typical applications include bulk nitrogen (N<sub>2</sub>) and compressed dry air (CDA) used in the semiconductor, flat panel display and photovoltaic manufacturing processes.

- Holds 1 or 3 cartridges
- Available in 508 mm (20 in) or 1,016 mm (40 in) lengths
- Flow rates from 1,000 Nm<sup>3</sup>/h (588 scfm) to 20,000 Nm<sup>3</sup>/h (11,770 scfm) and above
- Bolted closure with clamp option
- Lifting davit standard with 3-around housings
- Connections are in-line “T” configuration
- Options to meet high or standard purity specifications

### Specifications

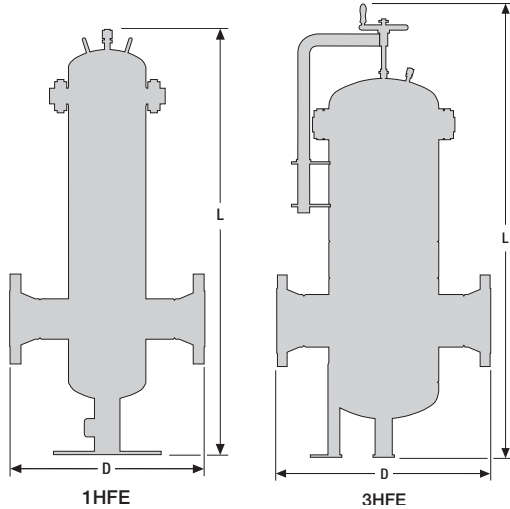
<b>Materials</b>	<ul style="list-style-type: none"> <li>• 304L or 316L Stainless Steel</li> <li>• Surface Treatment: Electropolished or cleaned for oxygen service*</li> <li>• &lt; 0.25 µm (10 µin) or &lt; 0.63 µm (25 µin) Ra internal surface finish</li> <li>• O-ring seal: Fluorocarbon (standard), other options available upon request</li> </ul>
<b>Connections</b>	<ul style="list-style-type: none"> <li>• 80A up to 400A JIS Flange and butt weld connections</li> <li>• 2" up to 6" ANSI Flange and butt weld connections</li> <li>• Others available upon request</li> </ul>
<b>Operating Conditions</b>	<ul style="list-style-type: none"> <li>• Maximum Operating Pressure:               <ul style="list-style-type: none"> <li>- Standard Pressure: 1.7 MPa at 100°C (250 psig @ 212°F)</li> <li>- High Pressure Option: 2.5 MPa at 100°C (363 psig @ 212°F)</li> </ul> </li> </ul>



<b>Certifications</b>	<ul style="list-style-type: none"> <li>• EU Pressure Equipment Directive: Housings have been evaluated for compliance with the European Union's Pressure Equipment Directive 97/28/EC and are CE marked (please refer to CE marked housing options on page 2)</li> <li>• ASME: Housings are designed, manufactured and stamped in accordance with the ASME Code (please refer to ASME code stamped housing options on page 2)</li> </ul>
<b>Leak Rating</b>	<ul style="list-style-type: none"> <li>• 100% helium leak tested to 10<sup>-6</sup> atm-cm<sup>3</sup>/s</li> </ul>

\* Housing with Emflon filters are not for use in oxygen service.

## Dimensions



	Number of cartridges	Filter length	Nominal length (L)	Nominal diameter (D)
1HFE1	1	508 mm (20 in)	1218 mm (47.9 in)	553 mm (21.8 in)
1HFE2	1	1,016 mm (40 in)	1715 mm (67.5 in)	553 mm (21.8 in)
3HFE1	3	508 mm (20 in)	1913 mm (75.3 in)	889 mm (35.0 in)
3HFE2	3	1,016 mm (40 in)	2410 mm (94.9 in)	889 mm (35.0 in)

Please contact Pall Microelectronics for detailed dimensions on specific housing part numbers.

## Part Numbers/Ordering Information

1 HFE 2 3 - G 4 5 6 7 8 - 9 - 10

Table 1

Code	Number of cartridges per housing
1	1
3	3

Table 2

Code	Filter length
2	508 mm (20 in)
4	1,016 mm (40 in)

Table 3

Code	Material
4	304L SST
6	316L SST

Table 4

Code	Interior finish
Blank	As received
L	0.25 µm (10 µin) Ra
LL	0.63 µm (25 µin) Ra

Table 5

Code	Design pressure
None	1.7 MPa (250 psig)
H	2.5 MPa (363 psig)

Table 6

Code	Connection size and style
2T	2 inch x 0.065 inch wall butt weld tube
3T	3 inch x 0.065 inch wall butt weld tube
3F	3 inch Sch 40 300# ANSI RFWN flange
4T	4 inch x 0.083 inch wall butt weld tube
4F	4 inch Sch 40 300# ANSI RFWN flange
6P	6 inch Sch 40 butt weld pipe
6F	6 inch Sch 40 300# ANSI RFWN flange
8P	8 inch Sch 40 butt weld pipe
8F	8 inch Sch 40 300# ANSI RFWN flange

Table 8

Code	Option
Blank	Electropolished
C9	O <sub>2</sub> Cleaned

Table 7

Code	Description
1	CE marked
2	ASME Section VII Div I
3	CE and ASME

Table 9

Code	O-ring material
H	FKM-1
H1	PTFE Encapsulated FKM-1

Table 10

Code	Option
Blank	Bolted closure
C	Clamp style closure



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