

Chemgard™ PFA Housings

■ Metal-free housings for high-purity microelectronics chemical and water applications



Millipore's Chemgard PFA filter housings are designed to meet the high purity standards of process fluids used to manufacture contamination-sensitive semiconductor devices. Constructed of Teflon® PFA 440 HP, the Chemgard PFA housings are unmatched in chemical compatibility, cleanliness, durability and high temperature performance.

Non-contaminating, Metal-free

Chemgard PFA housings are designed and manufactured with no metal parts, threads or components. No metal parts are required for installation.

Superior Sealing Mechanism

Chemgard housings utilize an external O-ring and non-rotating bowl to ensure a leak-proof, torsion-free seal. Filter installation is easy.

Low Cost of Ownership

The unique O-ring seal and closure ensure integrity and safety. Teflon fluoropolymer resin construction provides cleanliness and durability. These factors contribute to a low cost of ownership.

Accommodates a Wide Range of Filters

Chemgard PFA housings are offered in 5-, 10-, 12- and 20-inch lengths to accommodate a wide variety of Millipore filters. These include QuickChange™ AT and ATX cartridges, Durapore® pleated cartridges, Wafergard® PF40 and PF80 stacked disc filters and Wafergard F-40 stacked-disc filters.

Versatile Installation

Chemgard housings are available with butt weld pipe, Flaretek® fittings, and NPTF inlet/outlet connections. The drain and vent locations allow versatility during installation.

Ideal for the Clean Room

The smooth housing surfaces are ideal for clean room conditions where low particle contamination is essential. Each Chemgard housing is double bagged using clean room polybags to ensure that it arrives contamination-free and ready for use.

Specifications

Materials

Housing: Teflon PFA 440HP head, bowl and plugs

O-ring: Viton® fluoroelastomer encapsulated with Teflon fluoropolymer resin (2-344)

Locking Ring: PVDF (non-wetted part)

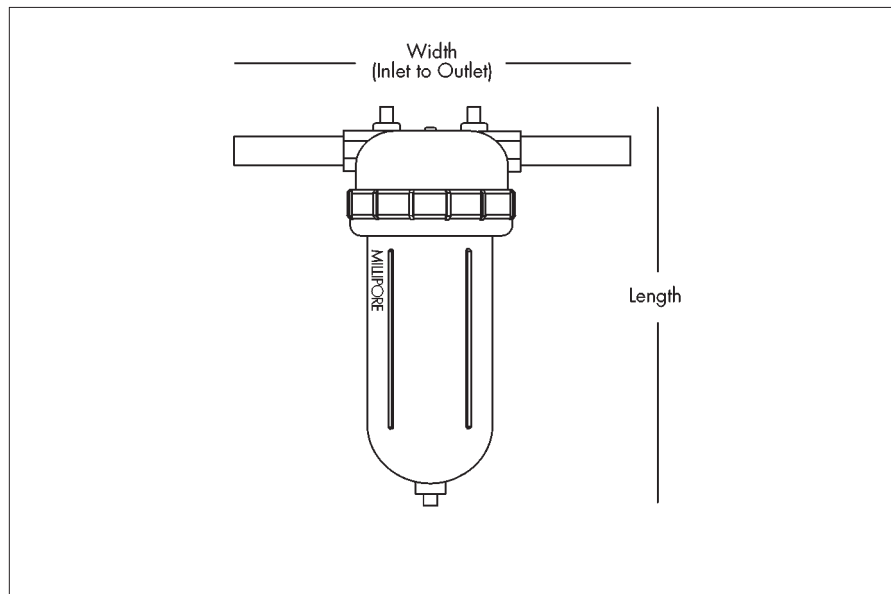
Connections

Inlet/Outlet on housing head:

¾" Flaretek, ¾" NPTF, ¾" and 1" butt weld pipe, 1" tube

Upstream/downstream vent and drain:

¼" Flaretek fitting, ¼" NPTF, ¼" butt weld pipe, ¼" center vent available
Code O 2-222 O-ring cartridge connection.



Chemgard PFA Housing	Length 5" (±0.03)	10" (±0.03)	12" (±0.07)	20" (±0.15)	Width (Inlet to Outlet)
¾" Flaretek fitting, ¼" Flaretek fitting vents and drain	34.0 cm (13.4 in)	46.0 cm (18.1 in)	52.1 cm (20.5 in)	68.8 cm (27.1 in)	27.9 cm (11.0 in)
¾" NPTF fitting, ¼" NPTF vents and drain	21.1 cm (8.5 in)	33.3 cm (13.1 in)	39.4 cm (15.6 in)	60.7 cm (23.9 in)	16.5 cm (6.5 in)
¾" NPTF fitting, ¼" NPTF vents, center vent and drain	—	33.3 cm (13.1 in)	39.4 cm (15.6 in)	60.7 cm (23.9 in)	16.5 cm (6.5 in)
¾" short butt weld pipe fitting, no vents, ¼" Flaretek fitting drain	—	38.6 cm (15.3 in)	45.7 cm (18.1 in)	62.7 cm (24.7 in)	22.9 cm (9.0 in)
¾" short butt weld pipe fitting, ¼" butt weld vents and drain	25.0 cm (10.2 in)	37.1 cm (14.6 in)	43.2 cm (17.0 in)	64.3 cm (25.3 in)	22.9 cm (9.0 in)
¾" long butt weld pipe fitting, ¼" NPTF drain	—	37.1 cm (14.6 in)	39.4 cm (15.6 in)	—	35.6 cm (14.0 in)
1" short butt weld pipe fitting, ¼" butt weld vents and drain	25.0 cm (10.2 in)	37.1 cm (14.6 in)	43.2 cm (17.0 in)	64.3 cm (25.3 in)	22.9 cm (9.0 in)
1" long butt weld pipe fitting, no vents, ¼" Flaretek fitting drain	—	—	—	62.7 cm (24.7 in)	35.6 cm (14.0 in)
1" tube with ¼" NPTF vents, center vent and drain	—	33.3 cm (13.1 in)	39.4 cm (15.6 in)	60.7 cm (23.9 in)	25.6 cm (10.0 in)
¾" Flaretek fitting, ¼" Flaretek fitting vents, ¼" NPTF drain	—	39.4 cm (15.6 in)	—	—	27.9 cm (11.0 in)

Millipore recommends using a Chemgard housing wrench for proper installation.

Operating Conditions

Maximum Operating Pressure

Butt weld and NPTF:

3 bar (43 psig) at 100 °C

9 bar (130 psig) at 25 °C

¾" Flaretek fitting:

3 bar (43 psig) at 100 °C

7.5 bar (110 psig) at 25 °C

Maximum Operating Temperature

100 °C (230 °F)

Ordering Information

Description	5" Housing	10" Housing	12" Housing	20" Housing
Chemgard PFA Housing with:				
¾" Flaretek fitting, ¼" Flaretek fitting vents and drain	YY46 S01 OF	YY46 101 OF	YY46 121 OF	YY46 221 OF
¾" NPTF fitting, ¼" NPTF vents and drain	YY46 S01 OA	YY46 101 OA	YY46 121 OA	YY46 221 OA
¾" NPTF fitting, ¼" NPTF vents, center vent, and drain	—	YY46 103 OA	YY46 123 OA	YY46 223 OA
¾" Short butt weld pipe fitting, no vents, ¼" Flaretek fitting drain	—	YY46 100 4B	YY46 120 4B	YY46 220 OB
¾" Short butt weld pipe fitting, ¼" butt weld vents and drain	YY46 S01 OB	YY46 101 OB	YY46 121 OB	YY46 221 OB
¾" Long butt weld pipe fitting, ¼" NPT bowl drain	—	YY46 101 NB	YY46 120 NB	YY46 220 NB
1" Short butt weld pipe fitting, ¼" butt weld vents and drain	YY46 S01 4B	YY46 101 4B	YY46 121 4B	YY46 221 4B
1" Long butt weld pipe fitting, no vents, ¼" Flaretek fitting drain	—	—	—	YY46 220 4L
1" Tube, ¼" NPTF vents, center vent and drain	—	YY46 103 4T	YY46 123 4T	YY46 223 4T
¾" Flaretek fitting, ¼" Flaretek fitting vents, ¼" NPTF drain	—	YY46 101 NF	—	—

Description	Catalogue No.
Accessories	
5" PFA bowl (12.7 cm) with ¼" butt weld drain	YY46 S01 70
10" PFA bowl (25.4 cm) with ¼" butt weld drain	YY46 101 70
10" PFA bowl with ¼" Flaretek fitting drain	YY46 101 80
PFA plugs, ¼" NPTM, 4/pk	YY55 000 05
PFA adapter 2-222 to 2-118, 2/pk	YY45 101 80
Tool kit (wrench and O-ring extractor tool)	YY46 000 01
12" PFA bowl with ¼" butt weld drain	YY46 121 70
12" PFA bowl with ¼" Flaretek drain	YY46 121 80
Wall-mount bracket	YY46 101 90
Clamp assembly	YY36 101 80
10" cartridge adapter	YY45 101 40
PF-1 TP cartridge, 10" PFA adapter	YY45 101 40
20" PFA cartridge adapter for PFA 20" universal housing	YY46 221 91
20" PFA adapter for PVDF 20" universal housing	YY46 221 90
Replacement O-rings	
Viton fluoroelastomer encapsulated with Teflon fluoropolymer resin O-ring, 2-344, 3/pk	YY46 101 02
Kalrez® 2-344, 1/pk	YY46 101 08

Notes: Mounting clamps and plugs for vents and drains are included with all PFA Chemgard housings.

20" Chemgard housings are compatible with all 20" cartridge filters and contain a cartridge adapter.

12" housings contain a 10" cartridge filter adapter and are compatible with all 10" cartridge filters.

10" housings accommodate Millipore 10" cartridges only.

Optional 2-222 to 2-118 adapter available.

To Place an Order or Receive Technical Assistance

For additional information call the nearest number listed below:

In the U.S. and Canada, call toll-free **1-800-MILLIPORE (1-800-645-5476)**

In the U.S., Canada and Puerto Rico, fax orders toll-free **1-800-MILLIFX (1-800-645-5439)**

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Lit. No. PF733 Rev. 2 Printed in U.S.A. 12/98 98-1009

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