



Pall Corporation

Compact Cartridge Filters and Housings

For laboratory and pre-production evaluation of inks, resists, developers, slurries and other industrial fluids



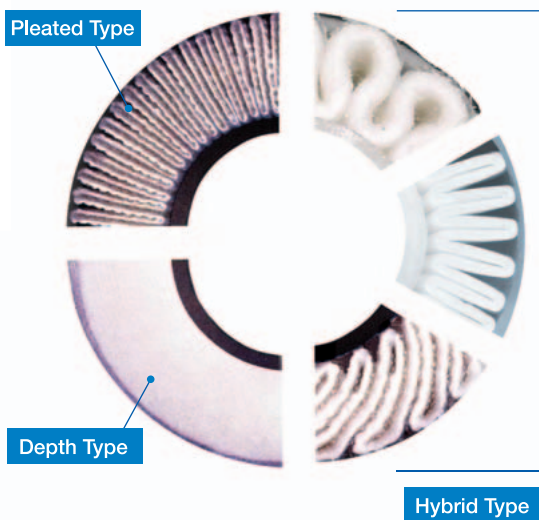
Filtration. Separation. Solution.SM

Compact Cartridge Filters for Filtration Evaluation

Optimized filters for laboratory testing, process development and small-scale evaluations



Cross-section of filter media configurations



Please refer to the relevant data sheets or Pall.com for filter specifications.

Please contact your local Pall office or www.Pall.com for more detail on filterability test protocols, process evaluation and filter housings.

Since research and development laboratories often work with small volumes of liquid, Pall has developed a series of one-inch test filters for rapid sample evaluation, with minimum hold-up of valuable product. Inks, resists and developers including many other liquids from the semiconductor, microelectronics and general chemical industries can be tested with these compact filter cartridges.

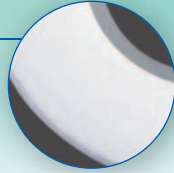
These 25.4 mm (1-inch) cartridge filters are smaller versions of Pall's standard-size 254 mm (10-inch) filters which have a long history in various industrial fields. They are ideal for selecting the best filter medium and micron removal rating for the application. They also enable users to easily optimize operating conditions for scale-up.

- Available in 25.4 mm (1 in) or 35.5 mm (1.4 in) lengths (nominal)
- Selection of filter media configurations to optimize performance
- Available in four filter media for compatibility with a wide range of liquids
- Designed for direct and accurate scale-up to full-size filters
- Enables quick, easy and accurate filter evaluations



Profile® II Filters

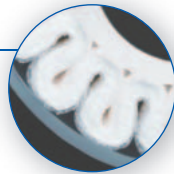
- ① Filter medium : Polypropylene
- ② Cartridge length : 25.4 mm / 1 in
- ③ Gasket : EPDM (standard)
- ④ Reference data sheet : E1, IJ1770
- ⑤ Minimum order quantity : 6 pcs



Removal Ratings (µm)	Part Numbers
0.2	5EC4888389002J
0.3	5EC4888389003J
0.5	5EC4888389005J
0.7	5EC4888389007J
1.0	5EC4888389010J
2	5EC4888389020J
3	5EC4888389030J
5	5EC4888389050J
7	5EC4888389070J
10	5EC4888389100J
20	5EC4888389200J
30	5EC4888389300J
40	5EC4888389400J
70	5EC4888389700J
90	5EC4888389900J

Profile® Star Filters

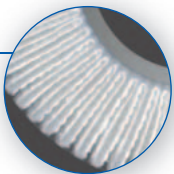
- ① Filter medium : Polypropylene
- ② Cartridge length : 35.5 mm / 1.4 in
- ③ Gasket : EPDM (standard)
- ④ Reference data sheet : E64, IJ1769
- ⑤ Minimum order quantity : 6 pcs



Removal Ratings (µm)	Part Numbers
0.8	H1A1A0081J
1.0	H1A1A0101J
1.5	H1A1A0151J
3	H1A1A0301J
5	H1A1A0501J
10	H1A1A1001J
20	H1A1A2001J
40	H1A1A4001J
90	H1A1A9001J

Water Fine Filters

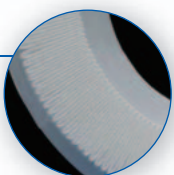
- ① Filter medium : Polysulfone
- ② Cartridge length : 35.5 mm / 1.4 in
- ③ Gasket : EPDM (standard)
- ④ Reference data sheet : E-2135, IJ1787
- ⑤ Minimum order quantity : 5 pcs



Removal Ratings (µm)	Part Numbers
0.1	WFN 0.1-TFUE 147
0.2	WFN 0.2-TFUE 147
0.45	WFN 0.45-TFUE 147
0.8	WFN 0.8-TFUE 147
1.2	WFN 1.2-TFUE 147

Ultipor® N66 Filters

- ① Filter medium : Nylon 66
- ② Cartridge length : 25.4 mm / 1 in
- ③ Gasket : EPDM (standard)
- ④ Reference data sheet :
- ⑤ Minimum order quantity : 6 pcs



Removal Ratings (µm)	Part Numbers
0.1	PUY01NIEYJ
0.2	PUY01NAEYJ
0.45	PUY01NBWJ

Nexis® A Filters

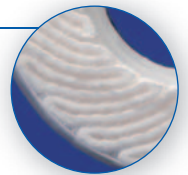
- ① Filter medium : Polypropylene
- ② Cartridge length : 35.5 mm / 1.4 in
- ③ Gasket : EPDM (standard)
- ④ Reference data sheet : 1668-9
- ⑤ Minimum order quantity : 5 pcs



Removal Ratings (µm)	Part Numbers
0.5	NXA 0.5-TFU-DOEE 47
1	NXA 1-TFU-DOEE 47
3	NXA 3-TFU-DOEE 47
5	NXA 5-TFU-DOEE 47
10	NXA 10-TFU-DOEE 47

Profile® UP Filters

- ① Filter medium : Polypropylene
- ② Cartridge length : 25.4 mm / 1 in
- ③ Gasket : EPDM (standard)
- ④ Reference data sheet : E31
- ⑤ Minimum order quantity : 6 pcs



Removal Ratings (µm)	Part Numbers
2	PUY01UY020J
4.5	PUY01UY045J
6	PUY01UY060J
10	PUY01UY100J
20	PUY01UY200J
30	PUY01UY300J
40	PUY01UY400J
50	PUY01UY500J

Poly-Fine® XLD Filters

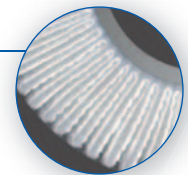
- ① Filter medium : Polypropylene
- ② Cartridge length : 35.5 mm / 1.4 in
- ③ Gasket : EPDM (standard)
- ④ Reference data sheet : 1689-5, IJ1786
- ⑤ Minimum order quantity : 5 pcs



Removal Ratings (µm)	Part Numbers
1.5	XLD 1.5-TFUE 147
3	XLD 3-TFUE 147
4.5	XLD 4.5-TFUE 147
10	XLD 10-TFUE 147

Ultipor® GF-HV Filters

- ① Filter medium : Glass Fiber
- ② Cartridge length : 25.4 mm / 1 in
- ③ Gasket : EPDM (standard)
- ④ Reference data sheet : MEGFHVEN
- ⑤ Minimum order quantity : 6 pcs



Removal Ratings (µm)	Part Numbers
0.1	PUY01ZU001ZJ
0.45	PUY01ZU0045J
1	PUY01ZU010ZJ
2	PUY01ZU220ZJ
3	PUY01ZU030ZJ
6	PUY01ZU640ZJ
10	PUY01ZU100ZJ

Low Volume Test Filter Housing for the Laboratory

Part Number : SVFH-1



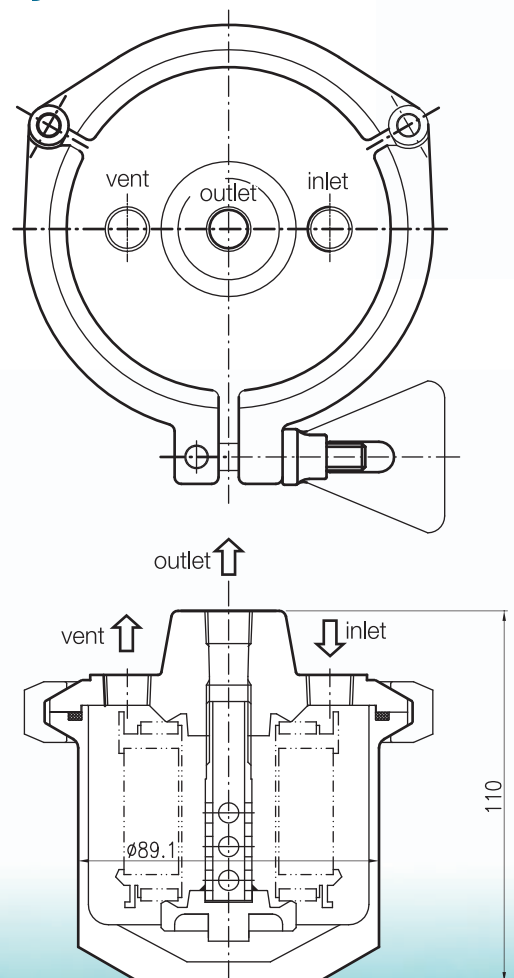
- Self-supporting on a flat surface; does not require a stand
- Inlet, outlet and vent ports are conveniently located on top of filter housing
- Heavy duty closure clamp allows for quick and easy filter change-outs

Materials	
Head	316 stainless steel
Bowl	316 stainless steel
Clamp	304 stainless steel
O-ring	FEP encapsulated fluoroelastomer
Surface finish	Electropolished

Specifications	
Operating pressure	0.49 MPa / 71 psid
Operating temperature	40 °C / 104 °F
Weight	2.8 kg
Volume	360 cm ³

Connections*	
Inlet/Outlet	Rc 1/4
Vent/Drain	Rc 1/4

* Contact Pall for other options



Dimensions in mm

Example of Test Equipment Set-up



Recommendations for Filterability Testing

- Install a pressure gauge and vent valve on one of the two inlet ports on the filter housing.
- Place a flow meter between the pump and filter housing when testing under constant flow conditions.
- Select a pump having minimal pulsation.
- Ensure that the filter housing is located on the discharge side of the pump.
- For constant pressure applications, use a pressurized tank to feed the liquid to the filter housing.
- Use agitation with dispersions prone to settling out.
- Fully vent air through the vent valve prior to closing it.
- Monitor connections for leaks, especially when the differential pressure increases. Follow fitting suppliers recommendations.

Low Volume Test Filter Housing for Evaluation on Manufacturing Lines

Part Number : SVFH-2

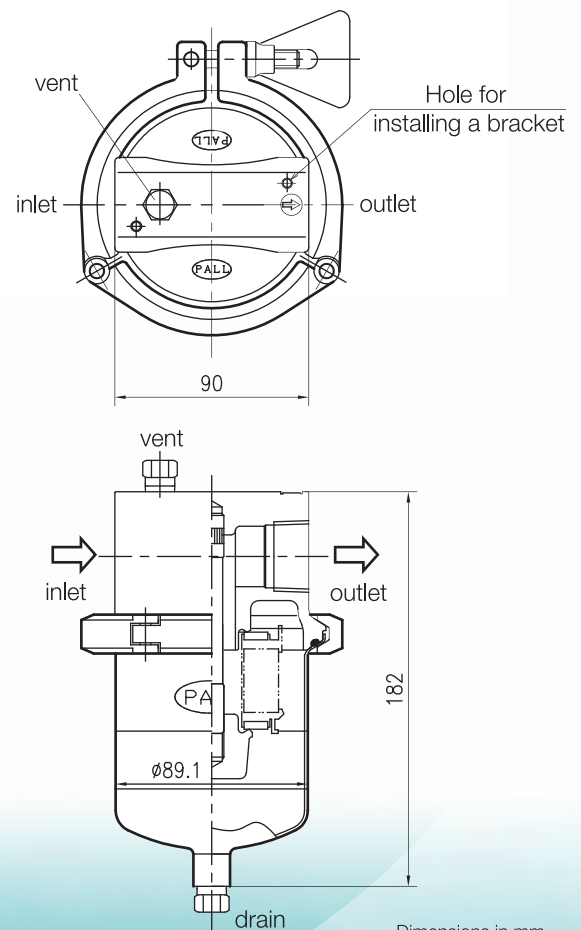


- ❑ Housing design enables filter testing during process operations
- ❑ Filter bowl can be mounted in any orientation
- ❑ Housing accommodates test filters configured for direct and accurate scale-up to full-sized filter cartridges

Materials	
Head	316 stainless steel
Bowl	316 stainless steel
Clamp	304 stainless steel
O-ring	FEP encapsulated fluoroelastomer
Surface finish	Electropolished

Specifications	
Operating pressure	0.49 MPa / 71 psid
Operating temperature	40 °C / 104 °F
Weight	2.3 kg
Volume	500 cm ³

Connections	
Inlet/Outlet	Rc 1
Vent/Drain	Rc 1/4



Dimensions in mm

Low Volume Test Filter Housing with Inline Sanitary Connections

Part Number : SVFH-3

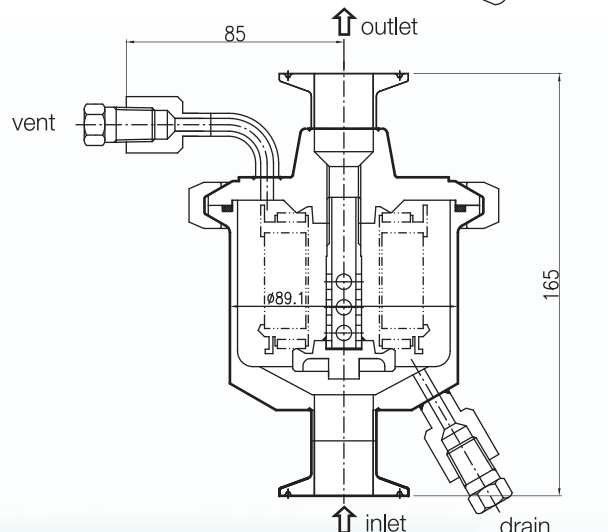
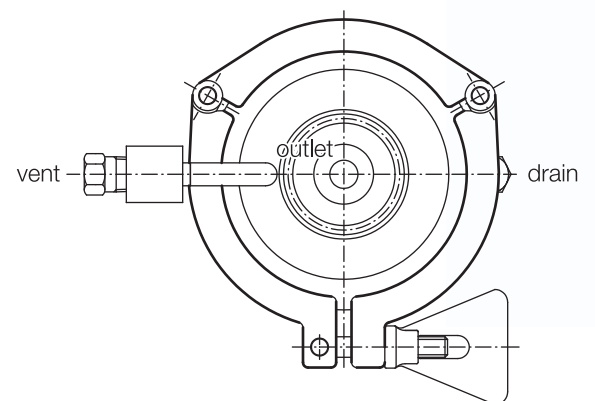


- Housing design enables filter testing during process operations
- Sanitary clamp (flange type) and sanitary ferrule connections

Materials	
Head	316 stainless steel
Bowl	316 stainless steel
Clamp	304 stainless steel
O-ring	FEP encapsulated fluoroelastomer
Surface finish	Electropolished

Specification	
Operating pressure	0.49 MPa / 71 psid
Operating temperature	40 °C / 104 °F
Weight	3.7 kg
Volume	410 cm ³

Connections	
Inlet/Outlet	IDF 1S (1 in sanitary)
Vent/Drain	Rc 1/4



Dimensions in mm

Note : Liquid flow is from the bottom of the housing to the top. To replace a filter, drain the housing, remove it from the piping and then open it to change-out the cartridge.



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