

Pall Filtroplast® Filter Elements

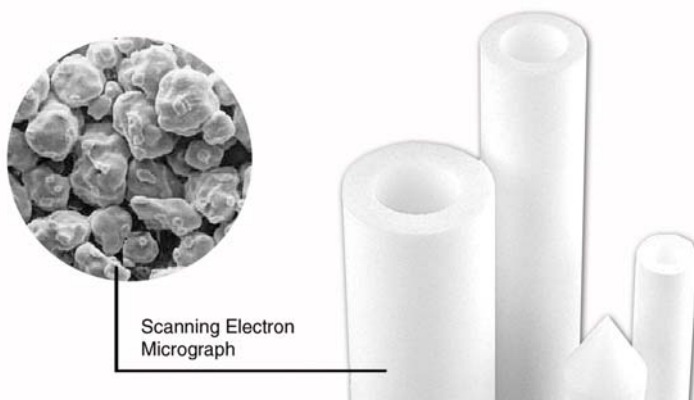
Description

Pall **Filtroplast** filter cylinders are a porous sintered plastic product of pure polyethylene (HDPE). Rigid elements of different dimensions and shapes are manufactured from special PE granules of defined size and particle distribution in a controlled sintering process. The filtration and aeration properties depend upon the pore size, which can be exactly influenced by both the raw material properties and the production parameters.

Based on the excellent chemical resistance the porous **Filtroplast** filter cylinders are suitable for the filtration of aggressive fluids and gases. **Filtroplast** porous elements can be manufactured with various connection parts as well as the media being manufactured as porous tiles.

Applications

- Particle filtration of liquids
 - Purification of cooling water, polish filtration and catalyst recovery
- Particle filtration of gases
 - Filtration of compressed air and particle separation from process gases.
- Support Body
 - For the production of Dia-Filtroplast® surface filter elements
- Aeration of liquids
 - Circulation of baths and the oxygenation of water
- Suction Device
 - Air removal from bag packing machines



Chemical Resistance¹

Filtroplast filter elements have an excellent chemical resistance. **Filtroplast** filter elements are hydrophobic and do not swell in water. They are resistant against alcohol, aliphatic hydrocarbons and organic fluids e.g. oil. They also resist strong alkalies, acids and saline solutions. Chemical cleaning using sodium hypochloride or hydrochloric acid is possible without any problems.

For more detailed information please refer to our brochure "Chemical resistance of **Filtroplast** and **Dia-Filtroplast** filter elements"

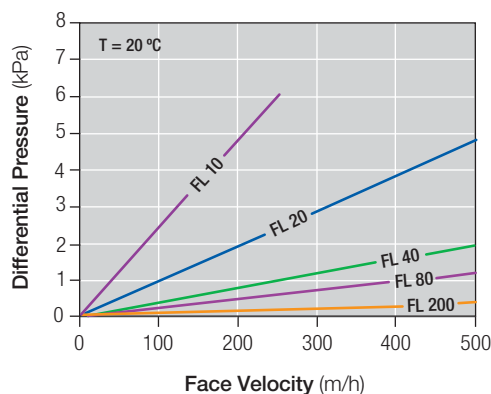
¹ As end use conditions can vary, it is the users responsibility to verify compatibility with their specific use conditions.

Technical Information

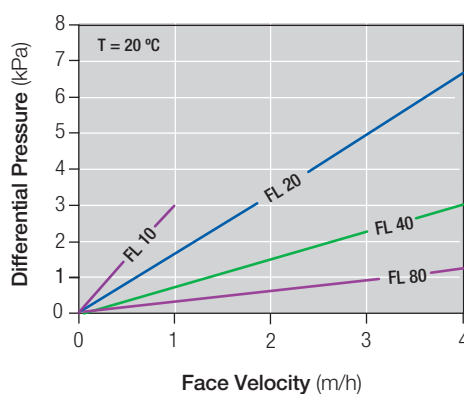
Filtroplast (FL)	10	20	40	80	200
Filtration Grade of Liquids	2.5 µm	5 µm	20 µm	30 µm	50 µm
Filtration Grade of Gases	<1 µm	2 µm	4 µm	6 µm	12 µm
Porosity	35 %	40 %	40 %	45 %	45 %
Material Density	0.6 g/cm ³	0.6 g/cm ³	0.6 g/cm ³	0.55 g/cm ³	0.6 g/cm ³
Specific Permeability	30 10 ⁻¹³ m ²	80 10 ⁻¹³ m ²	180 10 ⁻¹³ m ²	320 10 ⁻¹³ m ²	800 10 ⁻¹³ m ²
Burst Pressure	>15 bar	>15 bar	>15 bar	>15 bar	>20 bar
Maximum Temperature Resistance	80 °C	80 °C	80 °C	80 °C	80 °C
Expansion Co-efficient (25 - 80 °C)	2 10 ⁻⁴ /K	2 10 ⁻⁴ /K	2 10 ⁻⁴ /K	2 10 ⁻⁴ /K	2 10 ⁻⁴ /K
Dimensions (Do / Di)	70 / 40 mm	70 / 40 mm	70 / 40 mm	70 / 40 mm	70 / 40 mm

Flow vs Differential Pressure

Differential Pressure for Air Flow



Differential Pressure for Water Flow



General Information

- Filter elements can be easily machined
- Filter elements can be easily welded by heated tool welding
- Filter elements are hydrophobic and do not swell in water

Standard Dimensions

Filtroplast	Do / Di (mm)	Length* (mm)	Area (m²)	Weight (kg)
Cylinder	40 / 20	1000	0,126	0,50
	40 / 28	1000	0,157	0,75
	50 / 30	1000	0,157	0,75
	50 / 40	1000	0,157	0,45
	60 / 40	1000	0,188	0,95
	60 / 50	1000	0,188	0,50
	70 / 40	1000	0,220	1,55
	70 / 50	1000	0,220	1,10
	75 / 60	1000	0,236	0,95
	125 / 100	1000	0,393	2,65

Ordering Information

Part Number FL 10	Part Number FL 20	Part Number FL 40	Part Number FL 80	Part Number FL 200	Do / Di (mm) x Length (mm)
89470945	89471406	89471999	89472925	--	40 / 20 x 1000 mm
89472006	89470775	89470564	89472014	--	40 / 28 x 1000 mm
89472961	89473012	89580422	89580692	--	50 / 30 x 1000 mm
89470986	89470230	89471948	89472209	89580690	50 / 40 x 1000 mm
--	--	89472022	89580691	--	60 / 40 x 1000 mm
89472443	89582212	--	--	--	60 / 50 x 1000 mm
89470672	89470706	89470963	89472473	89472813	70 / 40 x 1000 mm
--	89471845	--	--	--	70 / 50 x 1000 mm
--	--	--	--	89473135	75 / 60 x 1000 mm
--	--	89473088	--	--	125 / 100 x 1000 mm

Please contact Pall for enquiries relating to dimensions not specified above.



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Please contact Pall Corporation for product applicability to specific National legislation and/or Regional Regulatory requirements for water and food contact use.

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