

# RIGID POCKET FILTERS PFL AND PFS

- 100% SYNTHETIC, CORROSION-FREE AND HUMIDITY-RESISTANT
- FLAMMABILITY CLASSIFICATIONS AS PER U.S. UL 900, CLASS 2 AND DIN 53'438, CLASS K1/F1
- FILTER RANGE INDEPENDENTLY TESTED

### **DESCRIPTION**

Filtrair manufactures its own thermally bonded synthetic medium for their PFL and PFS rigid pocket filters. The depth-loading medium is manufactured in a progressive density multi-layering technique to ensure high dust holding capacity with lowest pressure drop. For the user, this results in long filter life and low energy and maintenance costs.

The pocket filter medium is inherently rigid, with a welded rib construction to form a pocket with the higest possible function security in even the most brutal air pressure and high dust-laden environments.

PFL and PFS rigid pocket filters are metal free an thus do not corrode, can be incinerated and withstand 100% humidity environments with ease.

#### **FEATURES AND BENEFITS**

- Aerodynamic wedge-shape, tubular POCKET SPACERS minimum air flow resistance, maximum turbine output
- POCKETS integrated in injection moulded, impact-proof PU header - gives filter a burst strength of < 6000 Pa</li>
- UNIQUE proprietary Filtrair filter medium providing maximum dust holding capacity
- For ALL TYPES OF ENVIRONMENTS: high dust, moisture and water mist content as well as high velocity
- **SELF SUPPORTING**, leak-free welded pockets stay rigid in turbulent airstreams eliminate shedding
- FILTRAIR PFL AND PFS filters may be disposed of by incineration

#### **APPLICATIONS**

Filtrair PFL and PFS rigid filters serve as very efficient pre or final filters in air intake systems of combustion engines, industrial plants and in all HVAC applications. They are suitable for filtration in any environmental condition - including offshore, marine - and in any climate - including tropical (high humidity). They efficiently remove airborne particulate matter but also snow, mist and fog. Where subsequent final filters are placed, they protect them from coarser dust, salt and fog, thus significantly prolonging their life and increasing their operational safety.

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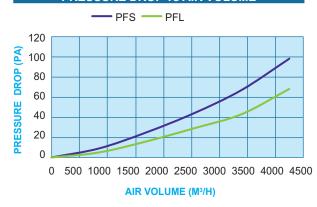
TECHNICAL DATA								
Product	Unit	PFL	PFS					
Rated air flow (1/1 size)	m³/h	3400	3400					
Initial pressure drop at rated air flow (3400 m³/h)	Pa	45	55					
Initial pressure drop at rated air flow (4250 m³/h)*	Pa	68	75					
Recommended final pressure drop	Pa	450	450					
Filter class per EN779:2012	-	M5	M5					
Dust holding capacity (Ashrae dust) 450 Pa	g/unit	1050	480					

ISO 16890 TECHNICAL DATA									
Class To ISO 16890		*ePM10 55%	*ePM10 50%						
Particulate matter efficiency									
ePM <sub>1,0</sub>	%	4	3						
ePM <sub>2,5</sub>	%	13	10						
ePM <sub>10</sub>	%	56	50						
Cut off Particle size	μm	10	10						
Dust holding capacity (ISO 12103 A2 Fine)	g/unit	3850	1450						

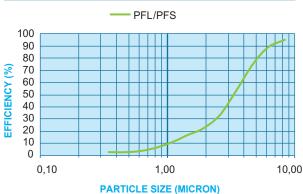
<sup>\*</sup> classification @ 4250 m³/h

PRODUCT GEOMETRIES									
Product	Unit	PFL 1/1	PFL 5/6	PFL 1/2	PFS 1/1	PFS 5/6	PFS 1/2		
Filter dimensions	mm	595*595	493*595	289*595	595*595	493*595	289*595		
Filter length	mm	620	620	620	330	330	330		
Filter medium area	$m^2$	4,2	3,5	2,1	2,1	1,8	1		
Nr. of pockets	-	6	5	3	6	5	3		
Filter weight	kg	2,3	1,8	1,3	1,6	1,3	1		
Package - nr of filters per box	unit	2	2	2	2	2	2		
Suitable for standard mounting frame	mm	610*610	508*610	305*610	610*610	508*610	305*610		
Maximum continious working temperature	°C	≤ 70	≤ 70	≤ 70	≤ 70	≤ 70	≤ 70		
Admissible relative humidity	%	100	100	100	100	100	100		
Maximum final operating pressure drop	Pa	600	600	600	600	600	600		
Burst pressure drop	Pa	> 6000	> 6000	> 6000	> 6000	> 6000	> 6000		
Options available on request Gasket 6 mm on downstream, on upstream side or on both sides									

## PRESSURE DROP vs AIR VOLUME



# **EFFICIENCY vs PARTICLE SIZE**



All data are average indicative values with usual manufacturing and testing tolerances. We reserve the right to modify performance data without prior notice. Specific performance data will require our written confirmation. Filtrair® is the registered trade mark of Filtrair bv.



Filtrair B.V.

De Werf 16
8447 GE Heerenveen
The Netherlands
P. +31 (0) 513 - 626 355
E. marketing-filtrair@filtrationgroup.com
www.filtrair.com