



# RIGID POCKET FILTERS PPL, PPM AND PPS

- **100% SYNTHETIC, CORROSION-FREE AND HUMIDITY-RESISTANT**
- **SELF SUPPORTING, LEAK-FREE WELDED POCKETS** - stay rigid in turbulent airstreams - eliminate shedding
- **MAXIMUM DUST HOLDING CAPACITY** due to unique design and Filtrair filter medium

## DESCRIPTION

Filtrair manufactures its own thermally bonded synthetic media for their PPL, PPM and PPS 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 highest possible functional security in even the most brutal air pressure and high dust-laden environments.

PPL, PPM and PPS rigid pocket filters are metal free and 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
- **FLAMMABILITY CLASSIFICATIONS** as per U.S. UL 900, class 2 and as per DIN 53'438, class K1/F1
- Independently tested filter range

## APPLICATIONS

Filtrair PPL, PPM and PPS G4 rigid filters serve as pre-filter 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. 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.

# RIGID POCKET FILTERS PPL, PPM AND PPS

## TECHNICAL DATA

| Filter type  | Unit              | PPL  | PPM  | PPS  |
|--|-------------------|------|------|------|
| Rated air flow (1/1 size)  | m <sup>3</sup> /h | 3400 | 4250 | 3400 |
| Initial pressure drop at rated air flow (3400 m <sup>3</sup> /h) | Pa                | 35   | 41   | 45   |
| Initial pressure drop at rated air flow (4250 m <sup>3</sup> /h) | Pa                | 50   | 55   | 65   |
| Recommended final pressure drop                                  | Pa                | 250  | 250  | 250  |
| Filter class per EN779:2012                                      | -                 | G4   | G4   | G4   |
| Dust holding capacity (ISO 12103 A2 Fine)                        | g/unit            | 1300 | 1300 | 520  |

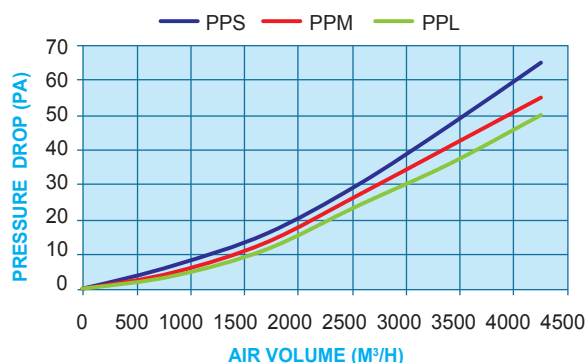
## ISO 16890 DATA

| Filter type                               | Unit   | PPL                   | PPM                   | PPS                   |
|---|--------|-----------------------|-----------------------|-----------------------|
| <b>CLASS TO ISO 16890</b>                 |        | <b>ISO COARSE 80%</b> | <b>ISO COARSE 80%</b> | <b>ISO COARSE 70%</b> |
| Particulate matter efficiency ePM10       | %      | 34                    | 34                    | 31                    |
| Initial gravimetric Arrestance            | %      | 83                    | 83                    | 74                    |
| Cut off particle size                     | µm     | >10                   | >10                   | >10                   |
| Dust holding capacity (ISO 12103 A2 Fine) | g/unit | 3920                  | 3920                  | 1560                  |

## PRODUCT GEOMETRIES

| Product                                | Unit   | PPL 1/1 | PPL 5/6 | PPL 1/2 | PPM 1/1 | PPM 5/6 | PPM 1/2 | PPS 1/1 | PPS 5/6 | PPS 1/2 |
|--|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Filter dimensions                      | mm   | 595*595 | 493*595 | 289*595 | 595*595 | 493*595 | 289*595 | 595*595 | 493*595 | 289*595 |
| Filter length                          | mm   | 620     | 620     | 620     | 510     | 510     | 510     | 330     | 330     | 330     |
| Filter medium area                     | m <sup>2</sup>   | 4,2     | 3,5     | 2,1     | 4,7     | 3       | 2,4     | 2,1     | 1,8     | 1       |
| Nr. of pockets                         | -  | 6       | 5       | 3       | 8       | 5       | 4       | 6       | 5       | 3       |
| Filter weight                          | kg   | 2       | 1,8     | 1,2     | 2,2     | 2       | 1,4     | 1,6     | 1,4     | 1,1     |
| Package - nr of filters per box        | unit   | 2       | 2       | 2       | 2       | 2       | 2       | 2       | 2       | 2       |
| Suitable for standard mounting frame   | mm   | 610*610 | 508*610 | 305*610 | 610*610 | 508*610 | 305*610 | 610*610 | 508*610 | 305*610 |
| Maximum continuous working temperature | °C   | ≤ 70    | ≤ 70    | ≤ 70    | ≤ 70    | ≤ 70    | ≤ 70    | ≤ 70    | ≤ 70    | ≤ 70    |
| Admissible relative humidity           | %  | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 100     |
| Maximum final operating pressure drop  | Pa   | 600     | 600     | 600     | 600     | 600     | 600     | 600     | 600     | 600     |
| Burst pressure drop                    | Pa   | > 6000  | > 6000  | > 6000  | > 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



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.

