



# REVERSE POCKET FILTERS DSR-G4-200, -300 AND -500

- **DSR pocket filters – Reverse premium coalescer and pre-filters with high water repellent properties**

## APPLICATION

Filtrair DSR reverse pocket filters are unique premium coalescer pre-filters in reverse air flow direction. The DSR pocket filters serve as efficient pre or final filters in air intake systems of Gas turbines in any environmental condition (including off-shore, marine) and in any climate (including tropical). They efficiently remove air borne particulate matter but also snow, mist and fog acting as a filter and a coalescer in one. DSR filters are specially designed for the elimination of free water and air borne salt crystals. Where subsequent final filters are placed, they protect them not only from coarse dust but also from running in wet conditions. The DSR filters do significantly prolong the filter life time of the final filter and also increase their operational safety.

## FILTER MEDIA

Filtrair manufactures its own premium coalescing media for DSR filters. The depth loading media is of progressive structure for high dust holding capacity and contains permanent hydrophobic treatment and tackifier throughout the medium depth to repel water and retain their operational safety. The DSR filters are made of rigid self-supporting pockets. The DSR-G4-200 does not need to be supported by an inner frame

## WATER DROPLET SEPARATION TESTING

Filtrair tested its DSR filters not only for particulate separation (EN779 @ Ashrae 52.2) but also for water droplet separation. The latter is relevant when operating DSR filters with air containing free water in droplet form to avoid that dissolved solids penetrate the filter in liquid form.

## FEATURES AND BENEFITS

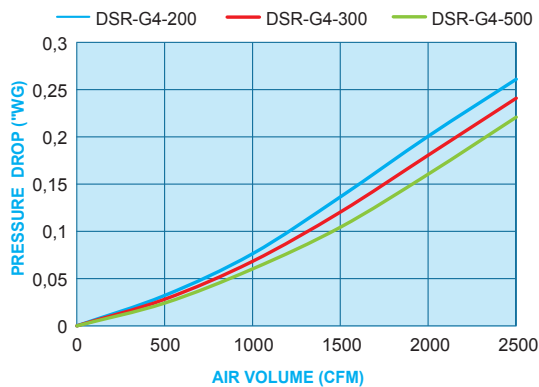
- Unique combination of coalescer and particle filter in one – front filter drainage
- For extreme environments; high moisture and water mist content, high velocity
- Selfsupporting, leak free welded pockets - stay rigid when wet and at turbulent air.
- DSR-G4-200 no inner frame needed / requested up to 3530 cfm – fast change out, no spare parts
- DSR-G4-300 and DSR-G4-500 need to be supported by an inner frame
- Pockets are water tight integrated in injection molded, impact proof PU header, burst strength of > 24" w.g.
- Unique proprietary, progressive Filtrair filter media with special permanent hydrophobic treatment

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| TECHNICAL DATA                                     |        |            |            |            |
|--|--------|------------|------------|------------|
| Product  | Unit   | DSR-G4-200 | DSR-G4-300 | DSR-G4-500 |
| Rated air flow (1/1 size)                          | cfm    | 2000       | 2000       | 2000       |
| Initial pressure drop at rated air flow (2000 cfm) | " WG   | 0.20       | 0.18       | 0.16       |
| Initial pressure drop at rated air flow (2500 cfm) | " WG   | 0.26       | 0.24       | 0.22       |
| Recommended final pressure drop                    | " WG   | 1,80       | 1,80       | 1,80       |
| MERV* ASHRAE 52.2.2012                             | -      | 7          | 7          | 7          |
| Average Arrestance                                 | %      | 90         | 91         | 92         |
| Dust holding capacity (Ashrae dust) 1,5 " WG       | g/unit | 240        | 500        | 650        |

| PRODUCT GEOMETRIES                     |   |             |             |             |
|--|---|-------------|-------------|-------------|
| Product Geometries                     | Unit  | DSR-G4-200  | DSR-G4-300  | DSR-G4-500  |
| Filter dimensions                      | "   | 23.43*23.43 | 23.43*23.43 | 23.43*23.43 |
| Filter length                          | "   | 7.9         | 13.0        | 19.1        |
| Filter medium area                     | sqft  | 15.1        | 22.6        | 36.6        |
| Nr. of pockets                         | -   | 6           | 6           | 6           |
| Filter weight                          | lb  | 2.6         | 4.0         | 4.9         |
| Package - nr of filters per box        | unit  | 6           | 2           | 2           |
| Suitable for standard mounting frame   | "   | 24*24       | 24*24       | 24*24       |
| Maximum continuous working temperature | °F  | ≤ 160       | ≤ 160       | ≤ 160       |
| Admissible relative humidity           | %   | 100         | 100         | 100         |
| Maximum final operating pressure drop  | "WG   | 2.4         | 2.4         | 2.4         |
| Burst pressure drop                    | "WG   | >24         | >24         | >24         |
| Options available on request           | Gasket 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.

