

# 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 DSReverse 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 manufacturers 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**

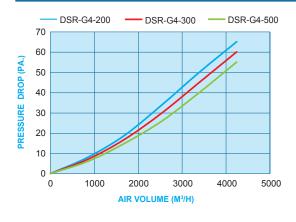
- Unique combination of coalescer and particle filter in one front filter drainage
- For extreme environments; high moisture and water mist content, high velocity
- Self-supporting, leak free welded pockets stay rigid when wet and turbulent air -
- DSR-G4-300 and DSR-G4-500 need to be supported by an inner frame
- Pockets are water tight integrated in injection molded, impact proof PU header, burst strength of > 6000 Pa
- Unique proprietary, progressive Filtrair filter media with special permanent hydrophobic treatment
- Available in filter class G4 per EN779:2012

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TECHNICAL DATA							
Product	Unit	DSR-G4-200	DSR-G4-300	DSR-G4-500			
Rated air flow (1/1 size)	m³/h	3400	3400	3400			
Initial pressure drop at rated air flow (3400 m³/h)	Pa	50	45	40			
Initial pressure drop at rated air flow (4250 m³/h)	Pa	65	60	55			
Recommended final pressure drop	Pa	250	250	250			
Filter class per EN779:2012	-	G4	G4	G4			
Average Arrestance	%	90	91	92			
Average Efficieny	%	n.a.	n.a.	n.a.			
Dust holding capacity (Ashrae dust) 450 Pa	g/unit	240	500	650			

PRODUCT GEOMETRIES							
Product Geometries	Unit	DSR-G4-200	DSR-G4-300	DSR-G4-500			
Filter dimensions	mm	595*595	595*595	595*595			
Filter length	mm	200	330	485			
Filter medium area	m <sup>2</sup>	1,4	2,1	3,4			
Nr. of pockets	-	6	6	6			
Filter weight	kg	1,2	1,8	2,2			
Package - nr of filters per box	unit	6	2	2			
Suitable for standard mounting frame	mm	610*610	610*610	610*610			
Maximum continious working temperature	°C	≤ 70	≤ 70	≤ 70			
Admissible relative humidity	%	100	100	100			
Maximum final operating pressure drop	Pa	600	600	600			
Burst pressure drop	Pa	> 6000	> 6000	> 6000			
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.



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