# COMBUSTION TURBINE AIR INTAKE FILTERS

Drop Safe® air intake filters from Filtration Group keeps air pollutants, both particles and water, from entering the turbine air inlet. As a result of DropSafe, the cleaner air increases turbine output and reliability. Inserting DropSafe also maintains scheduled service periods, preventing a forced outage.

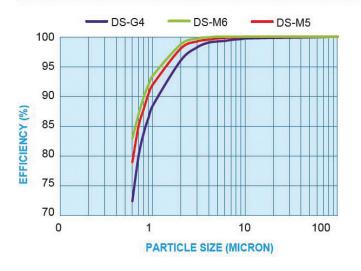


## DS-M5 and DS-M6-600 Drop Safe® Filters



### 

#### WATER DROPLET FOG SEPARATION EFFICIENCY



#### **Test Conditions and Remarks\***

Relative humidity of test air	≥ 95%
Upstream water fog concentration**	= 27 mg/m <sup>3</sup>
Upstream size range of fog	< 0.5 - 20 μm
Upstream mass median droplet diameter	= 6.0 µm
Downstream mass median droplet diameter (depending on filter type and efficiency)	approx. 0.6 µm
Measuring range of particle spectrometer	0.5 - 42 μm

<sup>\*</sup>Test filters new, conditioned with upstream fog for 140 h



#### **Technical Data**

Filter Type	Unit	DS-M5-600 LB	DS-M5-600 OS	DS-M5-300	DS-M6-600
Rated air flow (1/1 size)	cfm	2000	2000	2000	2000
Initial pressure drop at rated air flow (2000 cfm)	"w.g.	0.20	0.19	0.34	0.27
Initial pressure drop at rated air flow (2500 cfm)	"w.g.	0.30	0.29	0.44	0.34
Recommended final pressure drop	"w.g.	1.80	1.80	1,80	1.80
MERV* ASHRAE 52.2.2012	-	8	8	8	9
Average Arrestance	%	96	98	95	98
Dust holding capacity (Ashrae dust) 1.5 "w.g.	g/unit	850	1331	405	994
Water Fog separation test results	-	DS-M5-600 LB	DS-M5-600 OS	DS-M5-300	DS-M6-600
Test air flow	cfm	2500	2500	2500	2500
Water Fog separation efficiency	%	99.9	99.9	99.9	99.9
<b>Product Geometries</b>					
Filter dimensions	п	23.43*23.43	23, 43*23, 43	23, 43*23, 43	23, 43*23, 43
Filter length	п	24	24	12	24
Filter medium area	ft <sup>2</sup>	41	55	20	55
Nr. of pockets	-	6	8	6	8
Filter weight	lb	5.3	5.7	4.2	6.6
Package - nr of filters per box	unit	2	2	2	2
Suitable for standard mounting frame	п	24*24	24.24	24*24	24*24
Maximum continuous working temperature	°F	≤160	≤160	≤160	≤160
Admissible relative humidity	%	100	100	100	100
Maximum final operating pressure drop	"w.g.	2.4	2.4	2.4	2.4

 $<sup>^{\</sup>star}$  Minimum Efficiency Reporting Value (MERV) is a standard that rates the overall effectiveness of air filters.

Options available on request: Gasket on downstream, upstream or both sides

All data are average indicative values with usual manufacturing and testing tolerances. All specifications are subject to change without notice.

<sup>\*\*</sup> Representing a typical natural fine fog with a visibility of approx. 300 m, generated by injecting water with pressurised air nozzles into the test air flow and separation of coarse droplets by a demister