

# COMBUSTION TURBINE AIR INTAKE FILTERS

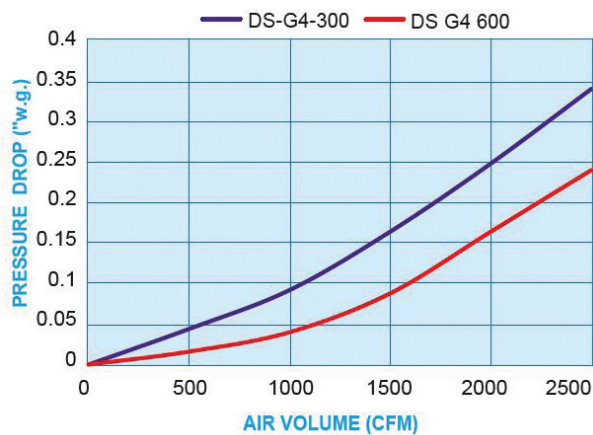
Drop Safe® air intake filters from Filtration Group keeps air pollutants, both particles and water, from entering the turbine air inlet. As a result of DropSafe, the cleaner air increases turbine output and reliability. Inserting DropSafe also maintains scheduled service periods, preventing a forced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



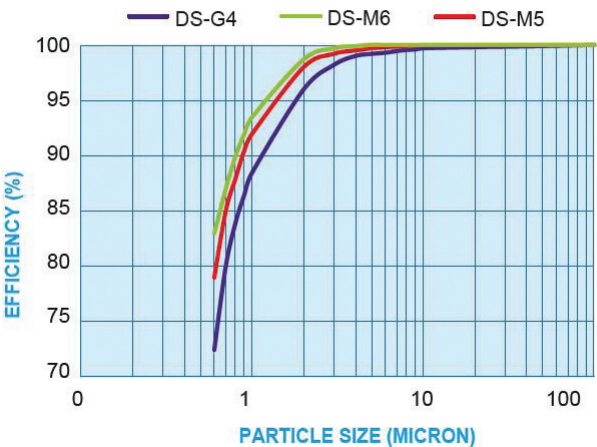
# DS-G4-300 and -600 Drop Safe® Filters



PRESSURE DROP vs AIR VOLUME



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            |

\*Test filters new, conditioned with upstream fog for 140 h

## Technical Data

| Filter Type  | Unit            | DS-G4-600   | DS-G4-300     |
|--|-----------------|-------------|---------------|
| Rated air flow (1/1 size)                          | cfm             | 2000        | 2000          |
| Initial pressure drop at rated air flow (2000 cfm) | "w.g.           | 0.14        | 0.19          |
| Initial pressure drop at rated air flow (2500 cfm) | "w.g.           | 0.22        | 0.29          |
| Recommended final pressure drop                    | "w.g.           | 1,00        | 1.00          |
| MERV* ASHRAE 52.2.2012                             | -               | 7           | 7             |
| Average Arrestance                                 | %               | 92          | 91            |
| Dust holding capacity (Ashrae dust) 1 "w.g.        | g/unit          | 850         | 591           |
| Water Fog separation test results                  | -               | DS-G4-600   | DS-G4-300     |
| Test air flow                                      | cfm             | 2500        | 1250          |
| Water Fog separation efficiency                    | %               | 99.7        | 99.7          |
| <b>Product Geometries</b>                          |                 |             |               |
| Filter dimensions                                  | "               | 23.43*23.43 | 23, 43*23, 43 |
| Filter length                                      | "               | 24.4        | 12.2          |
| Filter medium area                                 | ft <sup>2</sup> | 41          | 20            |
| Nr. of pockets                                     | -               | 6           | 6             |
| Filter weight                                      | lb              | 5.3         | 4.0           |
| Package - nr of filters per box                    | unit            | 2           | 2             |
| Suitable for standard mounting frame               | "               | 24*24       | 24.24         |
| Maximum continuous working temperature             | °F              | ≤160        | ≤160          |
| Admissible relative humidity                       | %               | 100         | 100           |
| Maximum final operating pressure drop              | "w.g.           | 2.4         | 2.4           |

\* Minimum Efficiency Reporting Value (MERV) is a standard that rates the overall effectiveness of air filters.

\*\* 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

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.