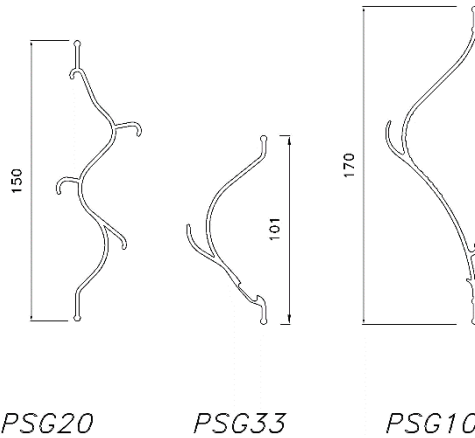


AIRPAK PSG Droplet Eliminator Specification

The PSG Droplet Eliminators are of an extruded aluminium casing and aluminium or polypropylene blade design. The eliminators are specially designed to meet the elimination of water droplet needs from air intakes, and downstream of cooling coils and humidifiers. They are available in three styles:

- PSG 10 Eliminator - This is a medium performance eliminator for air velocities between 2 & 6m/s, featuring low pressure drop and good performance down to a small droplet size. Primarily suited to fitting after humidifiers and at inlets to AIRPAK air handling units. Available with either extruded polypropylene or aluminium blades.
- PSG 20 Eliminator – This is a high performance eliminator designed to be used for severe conditions. Featuring a triple bank design with four weather stops, it is suitable for air velocities between 1 & 4m/s. This eliminator is particularly useful for where the droplet size is small e.g. humidifiers and fog. Available only with extruded polypropylene blades.
- The PSG 33 eliminator is a compact cost effective eliminator designed to be used for air velocities between 2 & 5m/s with a minimal air pressure drop. These are ideally suited to fitting after coils and at inlets to AIRPAK air handling units. Available with either extruded polypropylene or aluminium blades.





Eliminator Blade Profiles

Droplet Formation and Size Distribution

Entrained liquid does not consist of the same sized droplets, but as a broad spectrum of droplets sizes that may be characterised with a normal distribution centred about some mean or average. The average droplet size depends very much on the mechanism by which they are generated.

- Hydraulic spray nozzles generate particles of diameter greater than 50µm
- Pneumatic spray nozzles generate particles of diameter greater than 10µm, with upper limits reaching 1000µm
- Mist from surface evaporation consists of droplets in the range of 3µm and greater, through distributions with average diameter of 20µm.
- Condensate from cooling coils are typically an average of 20µm.
- Fog consists of droplets in the range of 3µm and smaller, with an average typically in the submicron range.

The PSG eliminators have been an independently laboratory tested for pressure drop and droplet elimination performance, as per the following graphs.

