

Application Report

Flow Sensors

Flowbox

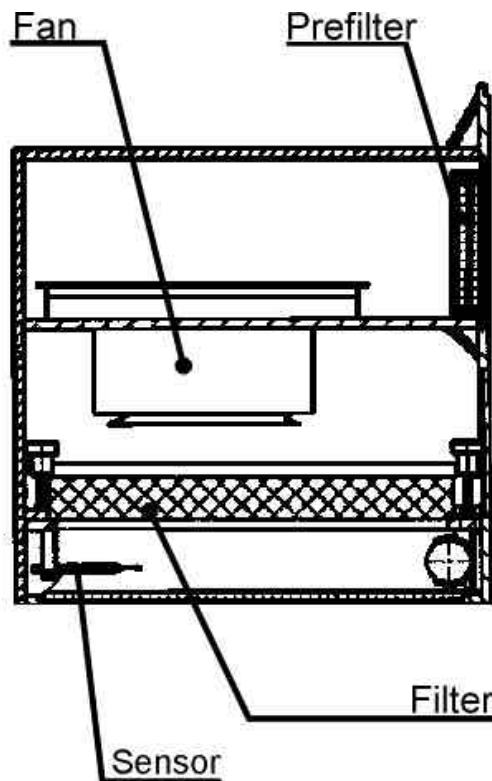
Description of the application:

The Flowbox is a fan unit for a cleanroom application, in this case a wet cleaning cabinet for silicon wafers.

The Flowbox creates a laminar air flow inside the cleaning cabine. This laminar air flow directly influences the cleaning process and effects the security of the installation.

The flow speed normally lies within a range of 0,3 to 0,45 m/s

The air speed deviation must be less than 10% of the selected value. If the selected air speed can not be achieved, this indicates that the filter is soiled and must be replaced immediately.



Function of the sensor:

Measuring of the speed of the laminar air flow. (Measuring range 0,1 to 1 m/s)

Location of the sensor:

Under the filter.

Branch:

Cleanroom

Sensor type used:

SS 20.502
0..1 m/s 90 mm
0..10 V

Reasons to choose a SCHMIDT sensor:

Was the best in a comparison test made by the customer.

Can even detect lowest air speeds

Highly precise measurements with high repeatability

Linear output signal

Signal transformer integrated

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Notices:

This application is very similar to Filter Fan Modules. FFMs are a standardized components with standardized sizes, which are used to build

- ◆ Flowboxes
- ◆ Laminar Flow Workspaces

Clean Workbenches.