

# Meteor MLS Natural Smoke Ventilator



### Data Sheet

Meteor MLS is a natural flap ventilator that is available in a wide range of sizes, louvre options and control options. It is suited to most industrial and commercial buildings and can provide both day to day and smoke ventilation, as well as permit the entry of natural daylight if fitted with polycarbonate lids.

It can be configured to provide the highest possible performance from a natural ventilator, with high aerodynamic performance, and provides options that can provide enhanced thermal and acoustic insulation:

- thermally and non-thermally broken frames
- uninsulated and insulated flaps and bases
- standard and acoustically insulated flaps and bases - Reduced Noise (RN) versions.

Meteor MLS has been exhaustively tested to EN 12101-2: 2003 in accredited third test laboratories and is CE marked. It achieves the following classifications:

Meteor MLS is manufactured of tough, corrosion resistant aluminium, alloy, grade 3005 in accordance with EN573-3, with stainless steel fixings. Meteor MLS is manufactured under the BS EN 9001 quality standard. Meteor MLS units are very low in maintenance requirements.

With minimal air leakage paths and extensive detailing of lid to base interfaces, including the design of seals, Meteor MLS is exceptionally air tight and highly thermally and acoustically insulated. Meteor MLS also has thermally broken options. For 'U' values turn over.

#### **OPTIONS**

#### Flap and base options

- A22: Double-skinned insulated aluminium base. Lids each comprising double-skinned aluminium with 30 mm thick, inflammable mineral wool insulation between.
- A33: As A22 but with thermally broken base and thermally broken lids.
- P22: Double-skinned insulated aluminium base. Lids each comprising an

aluminium frame surrounding a quadruple-wall, 10 or 16 mm thick, clear or opaque polycarbonate sheet.

- P33: As P22 but with thermally broken base and thermally broken lids.
- RN 33 / RN 45: Reduced Noise options. Double-skinned insulated aluminium base. Lids each comprising double-skinned aluminium with 30 mm thick, inflammable mineral wool insulation between and a 60mm air gap.

#### **Controls options**

- 24v dc or 230v ac electric controls, power to open and close. Option of a thermal release mechanism to open the vent at a pre-defined temperature irrespective of the incoming control signals.
- Pneumatic controls: double locking. Option of a thermal release mechanism to open the vent at a pre-defined temperature (68 or 93 °C) irrespective of the incoming control signals.
- Meteor MLS may be linked to a Weatherbeater controller to ensure that it closes when it is raining.

#### Other accessories

- Bird guards, insect guards, security guards, burglar guards
- Base extension plates, base covers and supports, sheeting closure pieces.

#### Paint finishes

Meteor MLS is available mill finish, polyester powder coated to a RAL colour, or with a special finish.

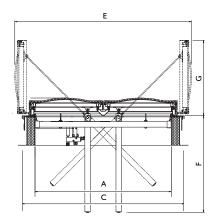
| Annex B              | Coefficient Cv:                    | from 0.60 to 0.80  |
|----------------------|------------------------------------|--------------------|
| С                    | Reliability:                       | RE 50/1000/10,000* |
| D                    | Snow load:                         | SL 500             |
| E                    | Low ambient temperature:           | T (-15)            |
| F                    | Wind suction load:                 | WL 1500            |
| G                    | Resistance to heat:                | В 300              |
| Performance of mater | rials of the vent (to EN 13501-1): | Class E            |

<sup>\*10,000</sup> when used as a day to day ventilator

#### MLS with PL control

P2L - two pneumatic cylinders, long version (L - long)

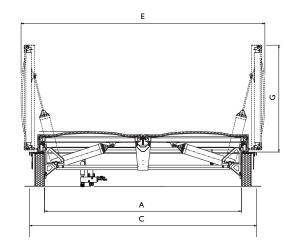
P4L - four pneumatic cylinders, long version (L - long)

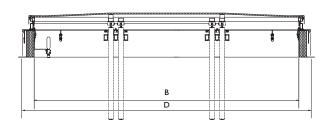


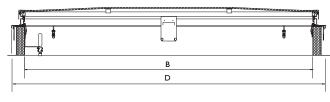
#### MLS with P2S control

Sizes 1828 and 2313

P2S - two pneumatic cylinders, short version (S - short)







## **DIMENSIONS**

| Type<br>- | Ventilato<br>width | or opening<br>length | Base dim<br>width | lensions<br>length | Lid open<br>dimensions | Cylinder<br>travel | Lid height<br>dimensions | Tota   | al ventilat | or 'U' va | llue      |
|-----------|--------------------|----------------------|-------------------|--------------------|------------------------|--------------------|--------------------------|--------|-------------|-----------|-----------|
| -         | Α                  | В                    | С                 | D                  | E                      | F                  | G                        | A22    | A33         | RN33      | P22       |
| -         | mm                 | mm                   | mm                | mm                 | mm                     | mm                 | mm                       | W/m²/K | $W/m^2/K$   | $W/m^2/K$ | $W/m^2/K$ |
| 1528      | 1200               | 2500                 | 1426              | 2726               | 1486-1603              | 840-970            | 664                      | 1.74   | 1.57        | 1.49      | 3.11      |
| 1828      | 1500               | 2500                 | 1726              | 2726               | 1766-1903              | 840-970            | 814                      | 1.65   | 1.48        | 1.39      | 3.10      |
| 2313      | 2000               | 1000                 | 2226              | 1226               | 2266-2403              | 840-970            | 1064                     | 1.69   | 1.52        | 1.44      | 3.10      |
| 2328      | 2000               | 2500                 | 2226              | 2726               | 2266-2403              | -                  | 1064                     | 1.56   | 1.37        | 1.29      | 3.09      |
| 2828      | 2500               | 2500                 | 2726              | 2726               | 2766-2903              | -                  | 1314                     | 1.50   | 1.31        | 1.22      | 3.08      |

#### ACOUSTIC PERFORMANCE

| Acoustics                            | MLS/3./P.22 or P.33 | MLS/3./A22 or A33 | MLS/3./RN22 |
|--------------------------------------|---------------------|-------------------|-------------|
| Avg. Insertion $R_{\mbox{\tiny em}}$ | 16.5                | 23.0              | 31.5        |
| Rated sound measurement R'w          | 21.0                | 27.0              | 33.0        |

Sound absorbtion as per EN 52210

Architectural Solutions

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Service and Maintenance