MR-mono, MR-modulo

MR-mono

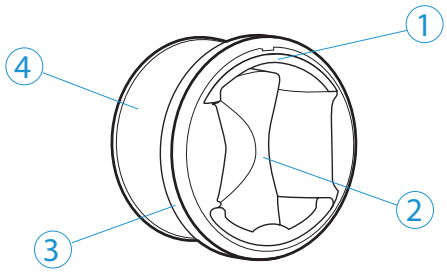
MR-modulo

Characteristics

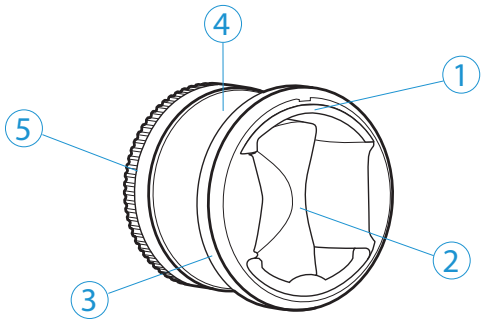
MR-mono and **MR-modulo** constant airflow regulators balance airflows in the ventilation or air conditioning ductworks.
Wide range of differential pressure (50 - 250 Pa) for the standard version and for the high-pressure version (150 - 650 Pa).
Flexible membrane inflates and deflates according to the difference in pressure between the upstream and downstream flow, thus modifying the airflow.
The **MR-modulo** incorporates a rotating ring for a tool-free airflow setting.

Material

(1) Removable clips in PC / ABS plastic (Euroclass fire ratings : B s3 d0),
(2) regulating silicon membrane,
(3) double-lip airtightness seal in elastomer,
(4) Housing in PC / ABS plastic (Euroclass fire ratings: B s3 d0),
(5) rotating adjustment ring in PC / ABS plastic for airflow setting (Euroclass fire ratings: B s3 d0).



MR-mono

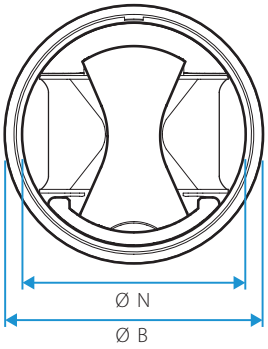


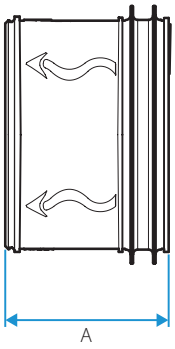
MR-modulo

The following information is directly indicated on the product:

- Flow direction, diameter in mm and inch, operating differential pressure range, code, production traceability,
- MR-mono: factory airflow calibration (both in m^3/h) and cfm),
- MR-modulo: airflow setting range correlation table (both in m^3/h and cfm).

MR-mono: dimensions and weight



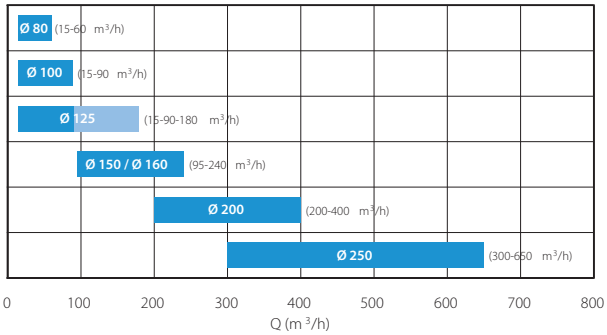


Ø duct [mm]	Ø N [mm]	Ø B [mm]	A [mm]	Weight [kg]
80	76	85	53	0,06
100	92	105	61	0,10
125	116	132	61	0,14
125	116	132	97	0,20
150	147	153	103	0,30
160	153	167	103	0,31
200	190	210	130	0,60
250	238	262	159	1,06

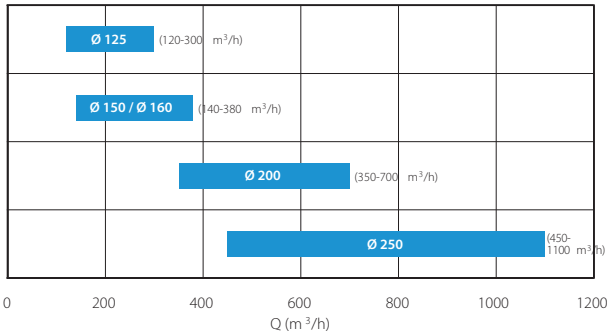
MR-mono: technical features

The MR Mono is available in a standard version (50–250 Pa) and high pressure version (150–650 Pa).

MR-mono standard range



MR-mono high pressure range

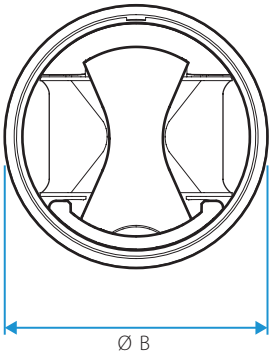


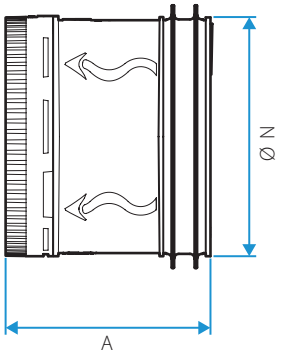
Airflow accuracy:
- +/- 5 m3/h for nominal flow ≤ 50 m³/h.
- +/- 10% for nominal flow > 50 m³/h.

Operating differential pressure range:
- Standard range: 50–250 Pa.
- High pressure range: 150–650 Pa.

Temperature range of use: 10–60 °C.

MR-modulo: dimensions and weight



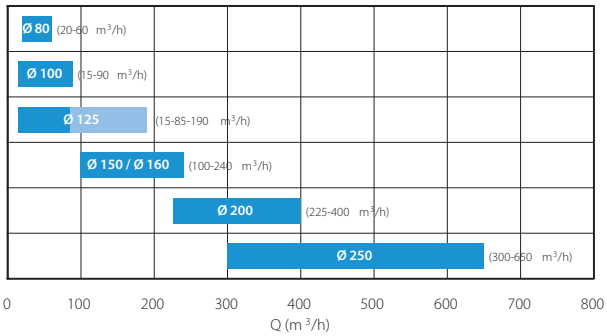


Ø duct [mm]	Ø N [mm]	Ø B [mm]	A [mm]	Weight [kg]
80	76	85	53	0,06
100	92	105	61	0,10
125	116	132	61	0,14
125	116	132	97	0,20
150	147	153	103	0,30
160	153	167	103	0,31
200	190	210	130	0,60
250	238	262	159	1,06

MR-modulo: technical features

The MR Modulo is available in a standard version (50 - 250 Pa).

MR-modulo - setting airflow range

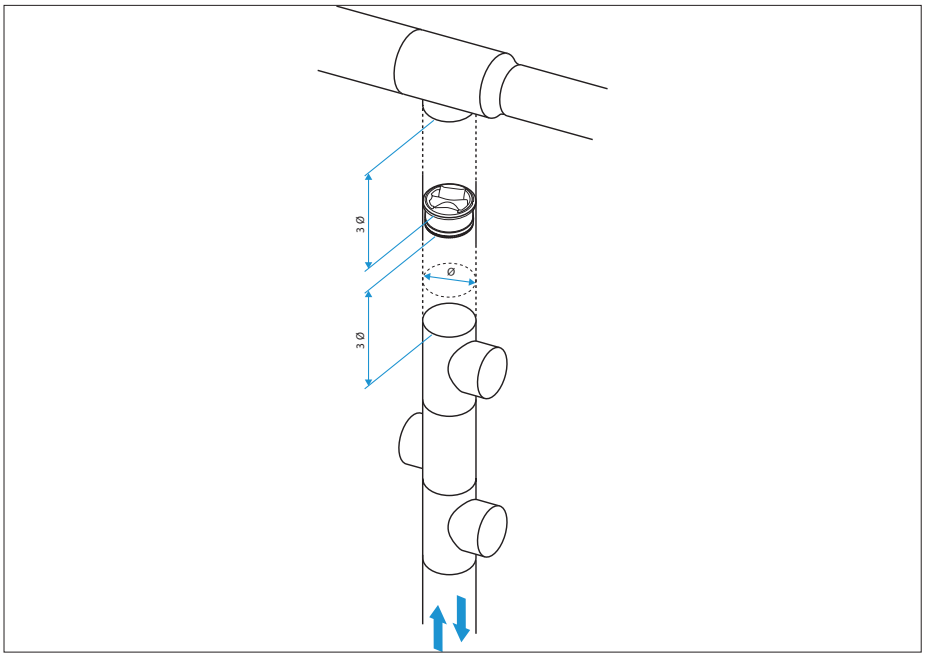


Airflow accuracy:
- +/- 5 m3/h for nominal flow ≤ 50 m3/h.
- +/- 10% for nominal flow > 50 m3h.

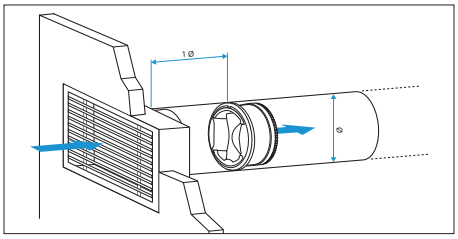
Operating Pressure range: 50–250 Pa.
Temperature range of use: -10–60°C.

Installation – typical applications

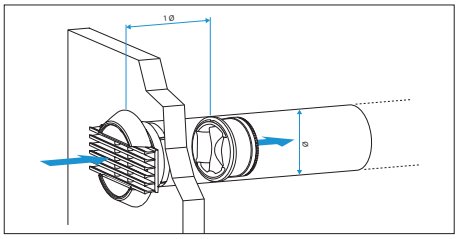
Airflow stabilization
for a ventilation or air-conditi -oning ductwork section.



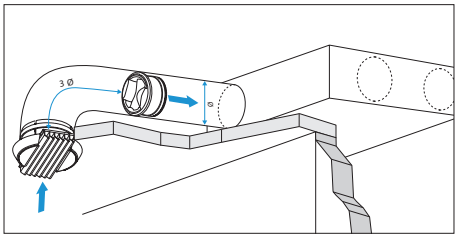
Exhaust airflow stabilization
In air extraction systems, we recommend a 1-diameter distance between the terminal and the MR to allow homogenization of air velocities in the duct and thus avoid acoustic or aeraulic disturbances.



1/ MR installed after a supply plenum box

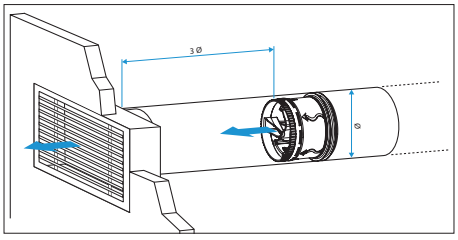


2/ MR installed after a BIM-type grille

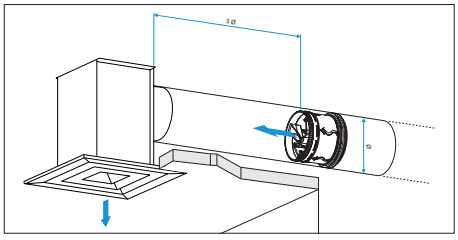


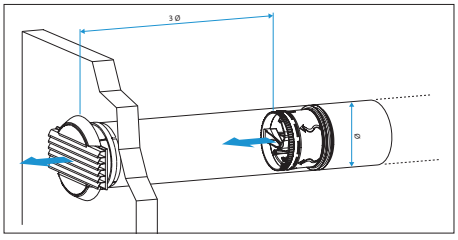
3/ MR installed before a fan coil

Supply airflow stabilisation
In air supply systems, we also recommend a distance of 3 diameters between the terminal and the MR to allow homogenization of the air velocities in the duct and thus avoid acoustic or aeraulics disturbances.



1/ MR installed before a supply plenum box

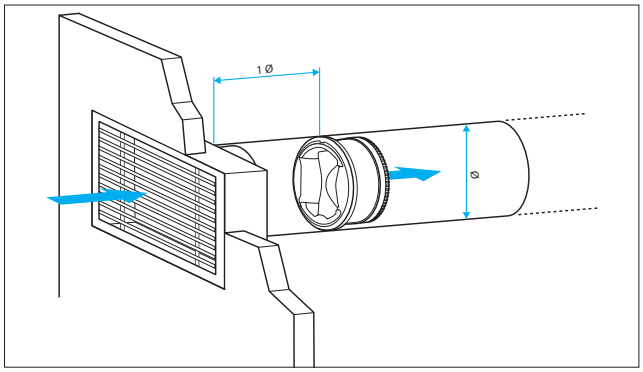




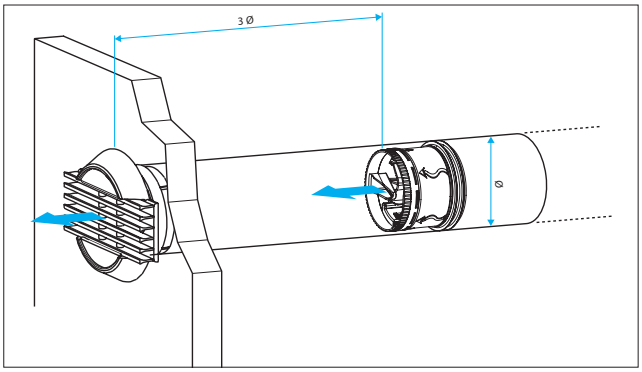
2/ MR installed before a BIM-type grille

Implementation

- MR-modulo and MR-mono will push-fit into circular ducts in close proximity to a take-off or a terminal.
- Observe the installation direction (corresponding to airflow) directly indicated with an arrow on the MR.
- Can be mounted either horizontally or vertically. There is no recommendation regarding the positioning of the membrane.
- In order to avoid acoustic and aeraulic interference it is recommended to respect a minimal distance between the MR and the terminal (grille / diffuser / inlet):
  - in extraction D = 3 ∅,
  - in supply D = 1 ∅.

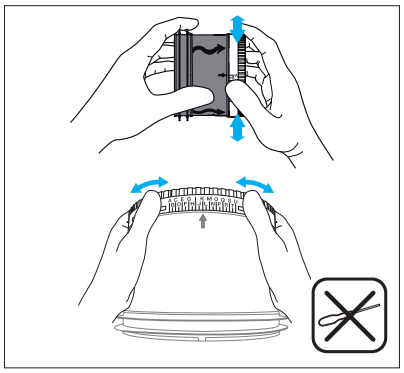


In extraction

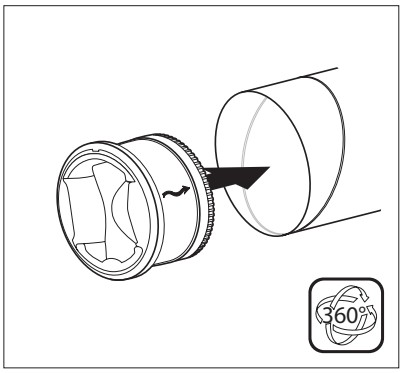


In supply

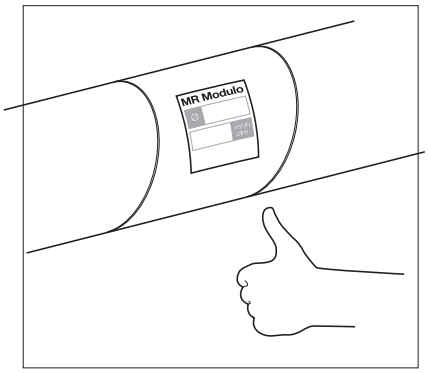
MR-modulo installation



1. Adujst the airflow setting
Rotate the adjustment ring for a tool-free airflow setting until the desired airflow is reached.



2. Position the MR-modulo
Introduce the MR in the duct according to the arrow showing the airflow direction. Minimum straight upstream and downstream distances must be observed.



3. Product localization
MR-modulo is delivered with a marker tag which will be completed (CAR diameter and airflow setting) and placed directly onto the duct to indicate where MR-modulo has been mounted.