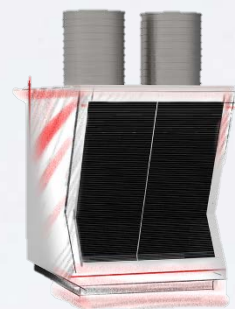


## TECHNICAL DATA SHEET

### Exhaust Silencer Deflector GF



#### Description

High-performance silencer, based on the innovative Slim Hurdle™ technology with thin baffles, designed to deliver high levels of sound attenuation while ensuring minimal pressure drop, compatible with low-pressure fans.

#### Intended use

Exhaust Silencer Deflector GF can be installed:

- To limit the noise emissions from fans of various configurations, including low-pressure models.
- On air handling units, refrigeration systems or heat pumps, to allow ventilation and thermal exchange while reducing noise emissions.
- On evaporative cooling towers or rooftop exhaust vents.

#### Features

- Internal baffles Thickness: 20 mm
- External Cladding Thickness: 13 mm
- Internal sound-absorbing layer: Noise Layer™ 10 Black – 918 gr/m<sup>2</sup>.
- Shear Damping Mass: Damping Bulk™ 7 Mag. – 5,1 kg/m<sup>2</sup>
- Operating Temperature Range: from -20°C to +70°C
- Sound Absorption Coefficient ( $\alpha_w$ ): 0,90 – 0,95

## Dimensions

Diameter: standard 800 – 900 - 1000 mm, available in custom size

## Fields of application

- Refrigeration Units, Evaporative Towers, AHUs
- Heating Plants, Power Stations, Technical Rooms
- Ventilation Systems, Air Intakes, Extraction Cowl
- Compressors, Cooling Units, Flue Gas Cleaning Systems
- Residential Building Installations

## Variants

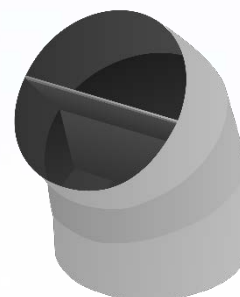
### Model Ring GF

- Height: 1000 mm.
- Sound-absorbing baffle system “double-H” geometry
- Net open area: up to 91%.
- Performance: 7-11 dB(A).



### Model Deflector GF

- Special feature: 45° curved geometry
- Sound-absorbing baffle system deflector
- Net open area: up to 93%.
- Performance: 6-13 dB(A).



### Model Curve GF

- Available in custom size.

The variable range of sound attenuation, evaluated over average frequency bands, is directly affected by the receiver's relative placement with respect to the silencer outlet.

### Enhanced aesthetic finish

All silencers are made of galvanised steel.

Coating available in 3 finishes (gloss, matte, and textured), customised in any colour from the full RAL chart.

### Pressure drop

Installed on high airflow system

- Ring GF: **9,7 Pa**
- Deflector GF: **15,1 Pa**

| <u>Ring GF</u>                     | <u>Risultati di calcolo</u> |           |
|------------------------------------|-----------------------------|-----------|
| Gas velocity in the duct           | 7.938                       | m/s       |
| Internal wall roughness            | 0.057313                    | r/d       |
| Reynolds number                    | 191638                      |           |
| Friction coefficient (Colebrook)   | 0.0766                      |           |
| Distributed pressure drop          | 2,26                        | Pa        |
| Localised pressure drop            | 7,44                        | Pa        |
| <b>Total dynamic pressure drop</b> | <b>9,70</b>                 | <b>Pa</b> |

### Acoustic performance (Insertion Loss)

Ring GF 1000

→  $R_w = 11 \text{ dB(A)}^*$

\* laterally oriented with respect to the silencer outlet

Deflector GF 45

→  $R_w = 13 \text{ dB(A)}^*$

\* oriented counter to the curve of the silencer

**Frequency performance profile:**

Mod Ring GF 1000

| Octave Band Frequencies (Hz) | 63  | 125 | 250 | 500  | 1000 | 2000 | 4000 | 8000 |
|------------------------------|-----|-----|-----|------|------|------|------|------|
| Measured attenuation (dB)    | 5,1 | 6,6 | 8,1 | 10,9 | 13,5 | 14,2 | 15,0 | 15,2 |

To ensure optimal results, the product must be installed following a thorough technical/acoustic assessment of the noise source. Surrounding sound-insulated structures or designated surfaces must provide an acoustic seal equal to or greater than that of the Silencer. For maximum effectiveness, installation by specialised personnel is strongly recommended.

The user is solely responsible for ensuring compliance with applicable laws and for obtaining necessary permits and authorisations.