

# GRAS RA0357

Random Incidence Corrector for 146AE



## Introduction

RA0357 is a random-incidence corrector for use with GRAS 146AE with the blue protection grid mounted. When it is mounted on the grid of the 146AE free-field microphone, the combination complies with ANSI Standard S1.4 Type 1 for diffuse field measurements in the audio-frequency range.

## Design

The combination is designed to measure the sound pressure as it existed before the microphone and corrector were introduced into a diffuse sound field. At higher frequencies, the presence of the microphone/corrector combination in the sound field will change the sound pressure. In general, this sound pressure will increase due to reflections and diffraction, but will vary with incidence angle. The RA0357 random-incidence corrector is designed so that its combination with a GRAS 146AE free-field microphone results in a diffraction response that compensates for the mechanical response of the free-field microphone, assuming that the sound waves arrive at random from all directions.

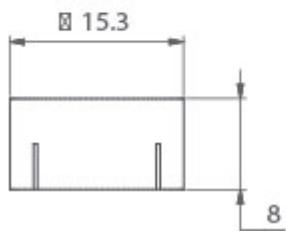
The RA0357 provides diffuse field correction up to 10 kHz.

## Typical Applications

The RA0357 adds flexibility to the already versatile 146AE which now can also be used in sound fields where the sound comes from all directions, that is in diffuse sound fields. This makes it ideal for measurements in car cabin, engine compartments and similar closed cavities.

|          |  |                       |
|----------|--|-----------------------|
| Material |  | POM                   |
| Standard |  | IEC 60651, Appendix B |

Dimensions in mm



# GRAS Worldwide

Subsidiaries and distributors in more than 40 countries

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## About GRAS Sound & Vibration

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