

# GRAS AM0071

Windscreen for 1/4" Microphones



Outer diameter: 90 mm  
Hole diameter: 6 mm  
Material: Foam

AM0071 contains 5 spherical windscreens for 1/4" microphones optimized for sound pressure measurements under free-field conditions.

## Introduction

The AM0071 contains 5 spherical windscreens specially designed and optimized for use with 1/4" microphone sets for sound pressure measurements under free-field conditions, e.g. in situations where the wind comes from more and unpredictable directions. The windscreen is mounted by pushing it as far as possible over the microphone and preamplifier.

## Design

When a microphone is placed in a laminar flow, turbulence is created which in turn results in unwanted pressure variations on the diaphragm. By using a windscreen the pressure variations are moved as far away from the diaphragm as possible.

Theoretically this supports a "the-bigger-the-better design", but in practice it is a compromise between air speed reduction, practical size and self-induced noise. Self-induced noise is wobble-noise which is generated, when the windscreen starts moving around the microphone.

The GRAS spherical windscreens are all size optimized and their special, open-cell foam structure and number of pores per inch<sup>2</sup> (ppi), are designed to resist a humid environment and at the same time not influence the sound pressure measurement result significantly.

Frequency dependent attenuation is to be expected if the windscreen gets wet. Therefore windscreens are not intended as rain protection of the microphone.

## Alternatives

If longer duration of outdoor monitoring is required, we suggest that you look for the GRAS semi-permanent and permanent outdoor microphone solutions.

If the turbulence reduction is not sufficient for your type of measurement, we suggest the intensity measurement technique that suppresses background noise effectively. GRAS has a wide range of 2D, 3D and wide-frequency intensity probes supporting both CCP and LEMO input modules.

If you need to make sound pressure measurements in a well-defined laminar airflow, e.g. in a wind-tunnel, we suggest that you look for GRAS nosecones. Alternatively look for our surface microphones or our new flush-mounted microphone concept.

## Quality & Warranty

GRAS accessories are made of stainless steel, alloys and high-quality composites. These items are covered by a 2 year warranty respecting their intended use.

On wear products like cables and windscreens, we offer a 6 month warranty.



# GRAS Worldwide

Subsidiaries and distributors in more  
than 40 countries

## HEAD OFFICE, DENMARK GRAS SOUND & VIBRATION

Skovlytoften 33  
2840 Holte  
Denmark  
Tel: +45 4566 4046  
[www.grasacoustics.com](http://www.grasacoustics.com)  
[gras@grasacoustics.com](mailto:gras@grasacoustics.com)

## USA GRAS SOUND & VIBRATION

5750 S.W. Arctic Drive  
Beaverton, OR 97005  
Tel: 503-627-0832  
Toll Free: 800-231-7350  
[www.grasacoustics.com](http://www.grasacoustics.com)  
[sales-usa@grasacoustics.com](mailto:sales-usa@grasacoustics.com)

## CHINA GRAS SOUND & VIBRATION

Room 303, Building T6  
Hongqiaohui, 990, Shenchang Road  
Minhang District, Shanghai  
China, 201106  
Tel: +86 21 64203370  
[www.gras.com.cn](http://www.gras.com.cn)  
[cnsales@grasacoustics.com](mailto:cnsales@grasacoustics.com)



## ABOUT GRAS SOUND & VIBRATION

GRAS is a worldwide leader in the sound and vibration industry. We develop and manufacture state-of-the-art measurement microphones to industries where acoustic measuring accuracy and repeatability is of utmost importance in R&D, QA and production. This includes applications and solutions for customers within the fields of aerospace, automotive, audiology, and consumer electronics. GRAS microphones are designed to live up to the high quality, durability and accuracy that our customers have come to expect and trust.

**GRAS** Sound & Vibration