

# GRAS RA0018

20 dB Attenuator for prepolarized 1/2" microphones



Length: 47.5 mm  
Diam.: 12.70 mm

**Recommendation:** Choose a microphone with low sensitivity instead of using the RA0018.

RA0018 is a 20 dB attenuator for inserting between a 1/2" prepolarized microphone and preamplifier. It will attenuate the output signal of the microphone by 20 dB in order to avoid overloading of the preamplifier. The RA0018 is useful when measuring very high sound pressure levels using a preamplifier with limited dynamic range. The RA0018 will work properly only with prepolarized microphones. For externally-polarized microphones, use the RA0016.

**Recommendation:** Choose a microphone with low sensitivity instead of using the RA0018.

### Introduction

The GRAS RA0018 is a 20 dB attenuator for inserting between a 1/2" prepolarized microphone and preamplifier. It will attenuate the output signal of the microphone by 20 dB in order to avoid overloading the preamplifier. The RA0018 is useful when measuring very high sound pressure levels using a preamplifier with limited dynamic range. The RA0018 will work properly only with prepolarized microphones. For externally polarized microphones, use the RA0016.

### Design

For precision measurements, the actual combination of microphone, attenuator and preamplifier should be calibrated with a precision calibrator like GRAS 42AA Pistonphone. The attenuation of the microphone signal is obtained by a capacitive voltage divider, and depends on both the microphone capacity and the preamplifier input impedance.

### 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 consumables like batteries, cables and windscreens we offer a 6 month warranty.



# GRAS Worldwide

Subsidiaries and distributors in more  
than 40 countries

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## 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 and related equipment for industries where acoustic measuring accuracy and repeatability are of the utmost importance. This includes applications and solutions for customers within the fields of aerospace, automotive, audiology, consumer electronics and other highly demanding industries. GRAS microphones are designed to live up to the high quality, durability and accuracy that our customers have come to expect, trust and require.

GRAS Sound & Vibration is represented through subsidiaries and distributors in more than 40 countries and is part of Axiometrix Solutions, a leading test solutions provider comprised of globally recognized measurement brands. Read more at [www.grasacoustics.com](http://www.grasacoustics.com)

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