

# GRAS KB5000

Right Anthropometric Pinna 35  
Shore 00



- Anatomically shaped concha and ear canal
- Improved fit and repeatability
- Outer pinna with improved collapsibility
- Resilient mounting

KB5000 is a right anthropometric pinna for KEMAR for accurate and repeatable testing of headphones and earphones. It has anatomically correct ear-entrance and ear-canal with correct soft ear helix and provides perfect sealing and insertion accuracy for headphones and earphones. The hardness is 35 Shore 00

KB5000 is a right pinna with anthropometric concha and ear canal for KEMAR. It is made of soft silicone, 35 Shore 00 hardness.

The external shape of the pinna is identical to that of the standardized KEMAR pinna, but concha and canal have been modified so that they closely mimic the properties of a real human ear. The ear canal has been extended and is an integral part of the pinna that now seals directly against the ear simulator. Like the human ear, the ear canal now has the 1st and 2nd bend, and the interface with the concha is oval.

This shape makes it possible to achieve good insertion accuracy and sealing with anatomically shaped in-ear transducers such as ear-bud headphones, in-ear hearing protectors, and insert hearing aids. Controlling the insertion depth is easy, leading to better insertion consistency and improved repeatability of measurements. The better fit and seal also means that the low frequency response is improved. It will allow you to reproduce base response, as well as effectively measure (active & passive) attenuation.

The outer pinna has the same shape as the standardized pinna, but the flexibility has been improved to better mimic the way the human ear collapses when supra-aural and circum-aural earphones are mounted. When measuring the frequency response of these types of headphones, more reliable and repeatable measurements can be achieved because of the improved collapsibility of the pinna.

The pinna is screwed onto the ear simulator which in turn is fixed with screws that ensure that the pinna is held firmly in place. Therefore, the mounting is very stable, and it is possible to mount and dismount DUTs repeatedly without compromising the seal.



# GRAS Worldwide

Subsidiaries and distributors in more  
than 40 countries

GRAS SOUND & VIBRATION A/S  
Skovlytoften 33  
2840 Holte  
Denmark  
Tel: +45 4566 4046  
gras@gras.dk

GRAS SOUND & VIBRATION USA  
2234 East Enterprise Parkway  
Twinsburg, OH 44087  
United States  
Tel: +1 330 425 1201  
sales@gras.us

GRAS SOUND & VIBRATION UK  
Building 115  
Bedford Technology Park Thurleigh,  
MK44 2YA Bedford  
United Kingdom  
Tel: +44 1234 639552  
sales@gras.co.uk

GRAS SOUND & VIBRATION CHINA LTD.  
Rm 1606, Kodak House II  
No. 39 Healthy Street East North Point  
Hong Kong  
China  
Tel: +852 2833 9987  
sales@gras.com.cn



## 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