

# GRAS 90AB



GRAS

ANSI S.1.40, S.1.43, S.1.11, S.3.6  
IEC 60318-1 & -2

GRAS Sound & Vibration  
Skovlytoften 33, 2840 Holte, Denmark  
[www.grasacoustics.com](http://www.grasacoustics.com)



GRAS 90AB                      TDH-39 HDA  
200 HDA280   HDA 300

GRAS

□□□□□□□□

- - 
  - 
  - /
- - /
  -

- 
- 
- 
- 



ANSI standard		S1.40, S1.43, S1.11, S3.6
IEC standard		60318-7

GRAS Sound & Vibration



GRAS 43AF-S4	NBS 9A 6cc
GRAS 40AG	½ ,
GRAS HW1001	
GRAS RA0039	IEC 60318
GRAS EL0001	LR6-AA 1.5 V ( 4 )
GRAS LI0039	



GRAS OP0001	(IEC 60318-5 2cc RA0113 1 )
GRAS OP0002	(46AF 10 m LEMO )
GRAS OP0003	(42AB )
GRAS KM0078	

## GRAS Sound & Vibration

# 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**  
9290 SW Nimbus Avenue  
Beaverton, OR 97008  
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)

**UK**  
**GRAS SOUND & VIBRATION**  
Unit 115, Gibson House,  
Ermine Business Park, Huntingdon,  
Cambridgeshire, PE29 6XU  
Tel: +44 (0) 7762 584 202  
[www.GRASacoustics.com](http://www.GRASacoustics.com)  
[sales-uk@grasacoustics.com](mailto:sales-uk@grasacoustics.com)

**CHINA**  
**GRAS SOUND & VIBRATION**  
Room 315, RuiBo Center(T1)  
Lane683, Shenhong Rd,  
Minhang District,  
Shanghai, China, 201107  
Tel: +86 21 64203370  
[www.GRASacoustics.cn](http://www.GRASacoustics.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 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)

[grasacoustics.com](http://grasacoustics.com)

**GRAS**  
An Axiometrix Solutions Brand