GRAS 45BC-11

KEMAR 1 LEMO





(200 V/LEMO)

ANSI: S3.36 IEC 60318-4 60318-7 ITU-T Rec. P.57 Type 3.3 ITU-T Rec. P.58 45BC-11 KEMAR

GRAS 45BC-12 KEMAR





Technology

GRAS 45BC-11 KEMAR 1 LEMO

ПП 35 Shore 00 KEMAR Knowles 1972 (KEMAR.us **KEMAR** S3.36/ASA58-2012 IEC 60318-7:2011 KEMAR KEMAR GRAS **KEMAR** 45BC KEMAR 45BC KEMAR DUT KEMAR 45BC KEMAR KEMAR 45BC-11 KEMAR 1 45BC-11 USB и п 35 Shore 00 45BC-11 GRAS GRAS 43BB KB5000/KB5001 10 kHz GRAS ITU-T P51 THD Rub & Buzz 1/3 100 dB 20 µPa 100 Hz 16 supra-aural circumaural kHz 43BB KEMAR 43BB IEC 60318-4 40HT KEMAR 5 6 40AH 10 kHz IEC 60318-4 10 kHz 13.5 kHz Q 26HG GRAS 26AC ¼" 40 G 7-pin LEMO 26HT 12HF 43BB



Specifications

| Connector type | | 7-pin LEMO (FGG.1B.307) |
|---|---------|-------------------------|
| Set sensitivity @ 250 Hz (±2 dB) | mV/Pa | 800 |
| Theoretical dynamic range lower limit with GRAS preamplifier | dB(A) | 10.5 |
| Theoretical dynamic range upper limit with GRAS preamplifier @ +28 V / ±14 V power supply | dB | 113 |
| Temperature range, operation | °C / °F | -30 to 60 / -22 to 140 |
| Temperature range, storage | °C / °F | -40 to 65 / -40 to 149 |
| Humidity range non condensing | % RH | 0 to 95% |
| ANSI standard | | S3.36 |
| IEC standard | | 60318-7 |
| ITU-T recommondations | | P. 58 |
| Weight | g / oz | 11.45 k / 404 |
| MOUTH SIMULATOR | | |
| Output impedance | Ω | 8 |
| Maximum power, continuous | W | 10 |
| Maximum power, pulsed 2 sec. | W | 50 |
| Input impedance | kΩ | 20 |
| Gain | dB | 10 |
| Input signal, max. | Vrms | 2 |
| Power supply, external | Vdc | 24 |

GRAS Sound & Vibration



Ordering info

| GRAS 45BC | KEMAR Head & Torso with GRAS mouth simulator, non-configured |
|--------------------|---|
| <u>GRAS KB5000</u> | Large Right Anthropometric Pinna 35 Shore 00 |
| <u>GRAS KB5001</u> | Large Left Anthropometric Pinna 35 Shore 00 |
| GRAS GR1874 | Ear Simulator Holder |
| GRAS GR0408 | External Ear Canal |
| GRAS GR0409 | Union Nut |
| <u>GRAS AA0035</u> | BNC to BNC Cable |
| GRAS 46BD | 1/4" CCP Pressure Standard Microphone Set (for mouth calibration) |
| <u>GRAS 43BB-1</u> | Low-noise Ear Simulator System, comprising: |
| GRAS RA0001 | Right Angled Adapter for 1/2" Microphone and 1/4" Preamplifier |
| GRAS RA0234 | Low-noise Ear Simulator |
| GRAS 26HG-S1 | 1/4" Preamplifier with 0.4 m Integrated Cable |
| GRAS 26HT | Gain and Filter Unit for 40HT |
| GRAS 12HF | 1-Channel Power Module for Low-noise Systems |
| <u>GRAS AA0059</u> | LEMO 7-pin - LEMO 7-pin Cable, 1 m |
| <u>GRAS AA0035</u> | BNC to BNC Cable |

For Ear Simulator Calibration

| GRAS 42AP | Intelligent Pistonphone (250 Hz or 251.2 Hz, 114 dB +/- 0.05 dB) |
|-------------|--|
| GRAS 42AA | Pistonphone (250 Hz, 114 dB +/- 0.08 dB) |
| GRAS RA0090 | 94 dB Pistonphone Coupler |

Pinna Simulators

| <u>GRAS KB5000</u> | Large Right Anthropometric Pinna 35 Shore 00 |
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Ordering info

| GRAS KB5001 | Large Left Anthropometric Pinna 35 Shore 00 |
|--------------------|---|
| GRAS KB0060 | KEMAR Small Right Ear 55 Shore 00 |
| GRAS KB0061 | KEMAR Small Left Ear 55 Shore 00 |
| GRAS KB0065 | KEMAR Large Right Ear 55 Shore 00 |
| GRAS KB0066 | KEMAR Large Left Ear 55 Shore 00 |
| <u>GRAS KB1060</u> | KEMAR Small Right Ear, 35 Shore 00 |
| GRAS KB1061 | KEMAR Small Left Ear 35 Shore 00 |
| GRAS KB1065 | KEMAR Large Right Ear 35 Shore 00 |
| GRAS KB1066 | KEMAR Large Left Ear 35 Shore 00 |
| GRAS KB0090 | KEMAR Large Right Ear (VA-Style/SQ) 55 Shore 00 |
| <u>GRAS KB0091</u> | KEMAR Large Left Ear (VA-Style/SQ) 55 Shore 00 |
| <u>GRAS KB1090</u> | KEMAR Large Right Ear (VA-Style) 35 Shore 00 |
| GRAS KB1091 | KEMAR Large Left Ear (VA-Style) 35 Shore 00 |

Ear Mould Simulators

| <u>GRAS KB0110</u> | Ear Mould Simulator for 2 mm Inner diameter tubing |
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| GRAS KB0111 | Ear Mould Simulator for 3 mm Inner diameter tubing |

Ear Canal Extension and Microphone Holder Kits (kits with 2 pcs and O-rings)

| GRAS RA0237 | Straight Ear Canal Extension Kit for KEMAR |
|-------------|--|
| GRAS RA0238 | VA-tapered Ear Canal Extension Kit for KEMAR |
| GRAS RA0239 | Ear canal Extension Kit w. silicone lining for KEMAR |
| GRAS RA0240 | Holder for long 1/2" microphone Kit for KEMAR |
| GRAS RA0241 | Holder for short 1/2" microphone Kit for KEMAR |
| GRAS RA0243 | Holder for 1/2" microphone Kit for KEMAR |
| GRAS RA0244 | O-ring kit for KEMAR, 2 pcs. |
| GRAS RA0249 | Straight Ear Canal Extension Kit for KEMAR, made of POM, for binaural hearing aid test |
| GRAS RA0250 | Tapered Ear Canal Extension Kit for KEMAR, made of POM, for binaural hearing aid test |



Ordering info

KEMAR Retrofit Kit for Binaural Hearing Aid Test

| <u>GRAS RA0251</u> | KEMAR Retrofit Kit for Binaural Hearing Aid Test: The Kit includes Ear Holder Plates, mounting bolts and the RA0249 and RA0250 Ear Canal Extension Kits. Included items are made of POM, Nylon and Teflon. |
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|--------------------|--|

Cables

| GRAS AA0046 | 3 m LEMO 7-pin - LEMO 7-pin Cable for Low-noise measuring system |
|-------------|---|
| GRAS AA0047 | 10 m LEMO 7-pin - LEMO 7-pin Cable for Low-noise measuring system |

Flight Case

| *************************************** | |
|---|---------------------|
| GRAS KM0094 | PELI Case for KEMAR |

Simulation Model of KEMAR

| GRAS KB3000 | Simulation Model of KEMAR with large pinnae |
|-------------|---|
| GRAS KB3001 | Simulation Model of KEMAR with small pinnae |

Stand for KEMAR

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|---|--------------------------------------|
| GRAS AL0026 | Loudspeaker stand for KEMAR, & 35 mm |
| | |

Miscellaneous

| GRAS KB0000 | KEMAR Handbook |
|-------------|-------------------|
| GRAS KB0010 | T-Shirt for KEMAR |

GRAS Sound & Vibration



GRAS Worldwide

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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

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