GRAS 45BC-9

KEMAR 2 LEMO





200 V/LEMO ANSI: S3.36, S3.25 IEC: 60318-4, 60318-7 ITU-T Rec. P.57 Type 3.3 ITU-T Rec. P.58 45BC-9 KEMAR IEC 60318-4 45BC-9

CCP GRAS 45BC-10

KEMAR 2 CCP



Technology

GRAS 45BC-9 KEMAR 2 LEMO

supra-aural circumaural KEMAR Knowles 1972 (**KEMAR** KEMAR.us DUT S3.36/ASA58-2012 IEC 60318-7:2011 KEMAR KEMAR GRAS 45BC KEMAR 45BC KEMAR KEMAR 45BC KEMAR KEMAR 45BC-9 KEMAR 45BC-9 KEMAR USB 45BC-9 60318-4 GRAS RA0045 KEMAR KB5000/KB50001 KEMAR 5 GRAS ITU-T P51 1/3 100 dB 20 µPa 100 Hz 16 kHz 60318-4 RA0045 IEC 60318-4 ITU-T P.57 **GRAS 40AG 1/2"** RA0045 35 Shore 00 **KEMAR**



GRAS 45BC-9 KEMAR 2 LEMO

Specifications

Connector type		7-pin LEM0 (FGG.1B.307)
Set sensitivity @ 250 Hz (±2 dB)	mV/Pa	12.5
Set sensitivity @ 250 Hz (±2 dB)	dB re 1V/Pa	-38.5
Theoretical dynamic range lower limit with GRAS preamplifier	dB(A)	25
Theoretical dynamic range upper limit with GRAS preamplifier @ +28 V / ±14 V power supply	dB	151
Theoretical dynamic range upper limit with GRAS preamplifier @ +120 V / ±60 V power supply	dB	163
Resonance frequency	kHz	13.5
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, S3.25
IEC standard		60318-7
ITU-T recommondations		P. 58
Weight	g / oz	11.45 k / 404
MOUTH SIMULATOR		
Output impedance		8
Maximum power, continuous	W	10
Maximum power, pulsed 2 sec.	W	50
Input impedance	k	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
GRAS KB5000	KEMAR Large Right Anthropometric Pinna 35 Shore 00
<u>GRAS KB5001</u>	KEMAR Large Left Anthropometric Pinna 35 Shore 00
GRAS GR0408	External Ear Canal (for calibration, 2 pcs)
GRAS GR0409	Union Nut (for GR0408, 2 pcs)
GRAS GR1874	Ear Simulator Holder (2 pcs)
GRAS RA0045	IEC 60318-4 Ear Simulator (2 pcs)
GRAS 26AS-S3	1/4" Standard Preamplifier with 0.4 m cable, Short (2 pcs)
GRAS GR0010	Adapter for 1/2" Microphone and 1/4" Preamplifier (2 pcs)
GRAS AA0008	3 m LEMO 7-pin - LEMO 7-pin Cable (2 pcs)
GRAS 46BP-1	1/4" LEMO Pressure Standard Microphone Set (for calibration of mouth)

Power Modules for Externally Polarized Ear Simulators and Microphones

GRAS 12AK	1-Channel Power Module with gain, filters and SysCheck generator
GRAS 12AD	1-Channel Power Module
GRAS 12AA	2-Channel Power Module with gain, filters and SysCheck generator
GRAS 12AR	2-Channel Power Module
GRAS 12AQ	2-Channel Universal Power Module with signal conditioning and PC interface

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)

Pinna Simulators

GRAS KB0060	KEMAR Small Right Ear 55 Shore 00



Ordering info

<u>GRAS KB0061</u>	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
<u>GRAS KB1065</u>	KEMAR Large Right Ear 35 Shore 00
<u>GRAS KB1066</u>	KEMAR Large Left Ear 35 Shore 00
<u>GRAS KB0090</u>	KEMAR Large Right Ear (VA-Style/SQ) 55 Shore 00
<u>GRAS KB0091</u>	KEMAR Large Left Ear (VA-Style/SQ) 55 Shore 00
GRAS KB1090	KEMAR Large Right Ear (VA-Style) 35 Shore 00
GRAS KB1091	KEMAR Large Left Ear (VA-Style) 35 Shore 00

Ear Mould Simulators

GRAS KB0110	Ear Mould Simulator for 2 mm Inner diameter tubing
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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Extension Cables

GRAS AA0008	LEMO 7-pin - LEMO 7-pin Cable, 3 m
GRAS AA0009	LEMO 7-pin - LEMO 7-pin Cablee, 10 m

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

GRAS AL0026	Loudspeaker stand for KEMAR, & 35 mm

Miscellaneous

GRAS KB0000	KEMAR Handbook
GRAS KB0010	T-Shirt for KEMAR

GRAS Sound & Vibration



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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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