2 CCP





(0 V/CCP)

ANSI S3.36, S3.25

IEC 60318-4

ITU-T P.57 3.3 ITU-T P.58

45BB-6 KEMAR TEDS

2-Ch CCP

KEMAR IEC 60318-4

LEMO GRAS 45BB-5 KEMAR

2 LEMO



# Technology

KEMAR Knowles 1972

KEMAR 5 6

KEMAR.us ANSI S3.36/ASA58-2012 IEC 60318-7:2011

KEMAR KEMAR GRAS

45BB KEMAR 45BB KEMAR KEMAR

\_ KEMAR

TEDS [[[[

CCP KEMAR IEEE 1451.4 TEDS v. 1.0 (TEDS)

45BB-6 KEMAR 55 Shore

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USB

45BB-6 IEC 60318-4 GRAS RA0045-S1 KB0065/KB0066

*IEC 60318-4* RA0045-S1

IEC 60318-4 ITU-T P.57

\_ RA0045-S1

KB0065/KB0066

KB0065 KB0066 55 Shore 00 IEC

ITU-T

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KEMAR 2

# Specifications

Connector type		BNC
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 CCP preamplifier	dB	146
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		60318-4 (former 60711), 60318-7 (former 60959)
ITU-T recommondations		P.380
Weight	g / oz	11.45 k / 404

**GRAS Sound & Vibration** 



# Ordering info

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GRAS 45BB	KEMAR Head & Torso, Non-configured
GRAS KB0065	KEMAR Large Right Ear 55 Shore 00
GRAS KB0066	KEMAR Large Left Ear 55 Shore 00
GRAS RA0237	Straight Ear Extension Canal Kit (2 pcs)
GRAS RA0045- S1	IEC 60318-4 Ear Simulator (Prepol. version, 2 pcs)
GRAS GR0408	Exterior Ear Canal
GRAS GR0409	Union Nut
GRAS 26CS	1/4" CCP Short Preamplifier (2 pcs)
GRAS RA0001	Adapter for 1/2" Microphone and 1/4" Preamplifier (2 pcs)
GRAS AA0018-S	Microdot-BNC Cable, 35 cm (2 pcs)
GRAS AA0035	BNC-BNC Cable, 3 m (2 pcs)

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GRAS 12AL	1-Channel CCP Power Module with A-weighting filter
GRAS 12AQ	2-Channel Universal Power Module with signal conditioning and PC interface

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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 RA0157	1/2" Calibration Adapter for KEMAR Pinna

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GRAS KB0060	KEMAR Small Right Ear 55 Shore 00
GRAS KB0061	KEMAR Small Left Ear 55 Shore 00



# Ordering info

<u>GRAS KB0065</u>	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
<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
GRAS KB0091	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
GRAS KB5000	KEMAR Large Right Anthropometric Pinna 35 Shore 00
GRAS KB5001	KEMAR Large Left Anthropometric Pinna 35 Shore 00

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

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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

<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 Exten-

sion Kits. Included items are made of POM, Nylon and Teflon.

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**GRAS RA0311** 

KEMAR Retrofit Kit for Anthropometric Concha and Canal Pinna.

The Kit includes Ear Simulator Holder, 2 finger screws and a 3 mm Allen Key.

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GRAS AA0034	BNC-BNC Cable, 2 m
GRAS AA0035	BNC-BNC Cable, 3 m
GRAS AA0036	BNC-BNC Cable, 5 m
GRAS AA0037	BNC-BNC Cable, 10 m

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GRAS KM0094	PELI Case for KEMAF
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### KEMAR [][[]

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

### **KEMAR** □□

GRAS AL0026	Loudspeaker stand for KEMAR, Ø 35 mm
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GRAS KB0000	KEMAR Handbook
GRAS KB0010	T-Shirt for KEMAR



# Ordering info

**GRAS Sound & Vibration** 



# **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

GRAS

An Axiometrix Solutions Brand

grasacoustics.com