

GRAS 45BC-15

KEMAR

Hi-Res

2 LEMO



200 V/LEMO

2

ANSI: S3.36, S3.25

IEC: 60318-4, in accordance with 60318-7

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

45BC-15 KEMAR

45BC-15

KEMAR

CCP

[GRAS 45BC-16](#)

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KEMAR

KEMAR Knowles 1972 (

KEMAR.us) ANSI

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

KEMAR KEMAR GRAS

supra-aural circumaural

KEMAR
DUT

45BC KEMAR 45BC KEMAR

KEMAR 45BC KEMAR
KEMAR

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45BC-15 KEMAR 50 kHz 45BC-15 KEMAR

USB

45BC-15 GRAS RA0403
KB5000/KB50001

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KEMAR

GRAS ITU-T P51
1/3 100 dB 20 µPa 100 Hz 16
kHz

2

KEMAR

5

6

Hi-Res

RA0403 Hi-Res

RA0403 Hi-Res IEC60318-4 10 kHz 13.5
kHz 20 kHz IEC60318-4
IEC60318-4 10 kHz 20 kHz ± 2.2 dB
20 kHz 50 kHz ± 3.2 dB
THD

IEC 60318-4 ITU-T P.57

GRAS 40BP 1/2

RA0403 _

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35 Shore

Set sensitivity @ 250 Hz (± 2 dB)	mV/Pa	1.6
Theoretical dynamic range lower limit with GRAS preamplifier	dB(A)	44
Theoretical dynamic range upper limit with GRAS preamplifier @ +120 V / ± 60 V power supply	dB	169
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 recommendations		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 45BC	KEMAR Head & Torso with GRAS mouth simulator, non-configured
GRAS KB5000	KEMAR Large Right Anthropometric Pinna 35 Shore 00
GRAS KB5001	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 RA0403	Hi-Res 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 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)
GRAS 42AG	Multifunction Sound Calibrator, Class 1

Pinna Simulators

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
GRAS KB1060	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
GRAS KB0091	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 1/4" 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

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

<u>GRAS AA0008</u>	LEMO 7-pin - LEMO 7-pin Cable, 3 m
<u>GRAS AA0009</u>	LEMO 7-pin - LEMO 7-pin Cable, 10 m

Flight Case

GRAS KM0094	PELI Case for KEMAR
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Simulation Model of KEMAR

GRAS KB3000	3D Simulation Model of KEMAR with large pinnae, stp file
GRAS KB3001	3D Simulation Model of KEMAR with small pinnae, stp file
GRAS KB3002	3D Simulation Model of KEMAR with anthropometric pinnae, stp file

Stand for KEMAR

GRAS AL0026	Stand for KEMAR, Ø 35 mm
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Miscellaneous (included in 45BC)

GRAS KB0000	KEMAR Handbook
GRAS KB0010	T-Shirt for KEMAR

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
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
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
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
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

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