



G.R.A.S. 26AK 1/2" Standard Preamplifier with Integrated Connector

Freq range: 2.5 Hz to 200 kHz
Noise: 1.8 μ V
Gain: -0.25 dB
Special feature: General purpose

The 26AK is a 1/2" microphone preamplifier with integrated 7-pin LEMO male connector. The CCP equivalent is G.R.A.S. 26CA.

Technology

Introduction

G.R.A.S. 26AK is a preamplifier designed for general purpose in the laboratory and field and accommodates directly for all IEC 61094 standardized 1/2" externally polarized measurement microphones.

It is rugged and reliable and can handle microphone signals up to 50 V_{peak} within 2 Hz to 200 kHz. The printed circuit board is made by use of thick-film substrate technology and optimized with respect to maximum suppression of microphonics and moisture rejection.

The high-quality, standard 7-pin LEMO male connector is integrated into the preamplifier and ensures that only one type of connector and cable is required for both connection and extension.

26AK is factory calibrated individually and delivered with a calibration chart stating its A-weighted and linear self-noise.

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Compatibility

These preamplifiers are compatible with ½-inch microphones as defined in international standard IEC1094 Measurement Microphones, Part 4: Specifications for working standard microphones. The mounting thread (11.7 mm - 60 UNS-2) is compatible with other available makes of similar microphone preamplifiers.

G.R.A.S. 26AK is integrated with a 7-pin LEMO series 1B plug.

Specifications

Frequency range (± 0.2 dB) with 18 pF microphone dummy	Hz	2.5 to 200 k
Slew rate	V/ μ s	20
Input impedance	G Ω // pF	20 // 0.4
Output impedance	Ω	75
Output Voltage Swing, max. @ ± 14 V/+28V power supply	V _p	12
Output Voltage Swing, max. @ ± 60 V/+120V power supply	V _p	50
Noise (A-Weighted) max.	μ V	2.5
Noise (A-Weighted) typ.	μ V	1.8
Noise (Linear 20 Hz – 20 kHz) max.	μ V	6
Noise (Linear 20 Hz – 20 kHz) typ.	μ V	3.5
Gain	dB	-0.25
Power supply, single	V	28 to 120
Power supply, balanced	V	± 14 to ± 60
DC-offset, min., single supply	V	$0.5 \times V_s - 1$
DC-offset, max., single supply	V	$0.5 \times V_s + 4$
Temperature range, operation	$^{\circ}$ C / $^{\circ}$ F	-30 to 70 / -22 to 158
Temperature range, storage	$^{\circ}$ C / $^{\circ}$ F	-40 to 85 / -40 to 185
Humidity range non condensing	% RH	0 to 95
Connector type		7-pin LEMO (FGG.1B.307)

CE/RoHS compliant/WEEE registered		Yes / Yes, Yes
Weight	g / oz	TBD / TBD

Conditions: 23 °C Ambient temperature, ±60V/+120V power supply, 18 pF dummy microphone, 3 m output cable.

Ordering info

G.R.A.S. AA0008	3 m extension cable (7-pin1B LEMO)
G.R.A.S. AA0008	10 m extension cable (7-pin1B LEMO)
G.R.A.S. AA0012	30 m extension cable (7-pin1B LEMO)
G.R.A.S. AA0014	100 m extension cable (7-pin1B LEMO)
G.R.A.S. RA0017	1-inch to ½-inch adaptor for use with G.R.A.S. 1-inch microphones
G.R.A.S. RA0019	¼-inch to ½-inch adaptor for use with G.R.A.S. ¼-inch microphones



We make Microphones

Tradition

Since the establishment in 1994, G.R.A.S. have been 100% dedicated to developing and manufacturing high-quality measurement microphones and related acoustic equipment. Founded by the Danish acoustics pioneer Gunnar Rasmussen who for more than 60 years has contributed to the world of sound and vibration with his unique ideas and designs. From the first reproducible 1" condenser measurement microphone that enabled quality measurements and instrumentation for acoustic calibration, Mr. Rasmussen's ingenuity and foresight led to the world's most popular acoustic sensor: The 1/2" measurement microphone. Then the 1/4" and 1/8" microphones followed with outstanding dynamic and high-frequency capability that brought higher definition and transparency into impulse noise diagnostics. Many variants have been made available over the years; all based on Gunnar Rasmussen's original 1" pressure microphone design.

Innovation

At G.R.A.S., we and our customers benefit daily from Mr. Rasmussen's exceptional understanding of acoustics, physics, electronics and measurement needs. Not only in R&D but throughout the organisation, we are proud to develop, produce and offer the broadest range of high-quality measurement microphones and accessories in the industry. And as a family company, now owned and managed by the two sons, Per Rasmussen and Peter Wulf-Andersen, we safeguard our heritage and knowledge to help create new opportunities with our customers. We work with everybody with an interest in sound or noise within the fields of aerospace, automotive, audiology, consumer electronics, noise monitoring, building acoustics and telecommunications, metrology, education, consultancy, legislation and system integration.

Quality

All our microphones are solely produced in stainless steel and in a quality that allows for a 5 year warranty. Should you by mistake damage the diaphragm on a G.R.A.S. microphone, our special technique enables repair at very reasonable price.

Partners

G.R.A.S. is represented worldwide in more than 40 countries by subsidiaries and distributors. Whether you are searching for a multi-channel solution or just a replacement microphone for your sound level meter G.R.A.S. will help solve your needs. Visit gras.dk for your local G.R.A.S. partner.