

GRAS 26AH

1/2" SysCheck Preamplifier with 3 m integrated cable



Freq range: 2.5 Hz - 200 kHz

Noise: 1.8 μ V

Gain: -0.35 dB

Special feature: SysCheck

The GRAS 26AH ½-inch Preamplifier with SysCheck is a small and robust unit optimised for acoustic measurements using condenser microphones. It has a very low inherent noise level, a wide dynamic range and a frequency response from below 2 Hz to above 200 kHz.



Typical application & use

Precision measurements

Low-pressure measurements

General-purpose preamplifiers

Design

All GRAS microphone preamplifiers are based on a small ceramic thick-film substrate with a very high input impedance. The ceramic substrate is shielded by a guard ring to minimise the influence of stray capacitance and microphonic interference. The casing is made of stainless steel for maximum strength and durability. The small dimensions of the 26AH ensures reliable operation under humid conditions owing to the heat generated by internal power dissipation.

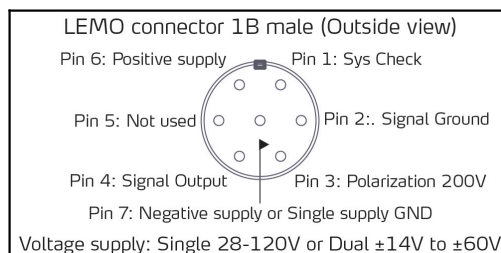
GRAS 26AH has SysCheck for easy remote verification of the measurement chain. It allows you to send a test signal to an RC network in the preamplifier. This signal is applied to pin 1 of the 7-pin LEMO cable/connector. SysCheck does not result in a signal proportional to the microphone's sensitivity, but it gives you a way to determine whether your system is stable. SysCheck cannot replace a proper acoustic calibration of the microphone.

Compatibility

The preamplifier is 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.

Preamplifier Type 26AH is provided with a 3 m high-quality cable terminating with a 7-pin LEMO series 1B plug.

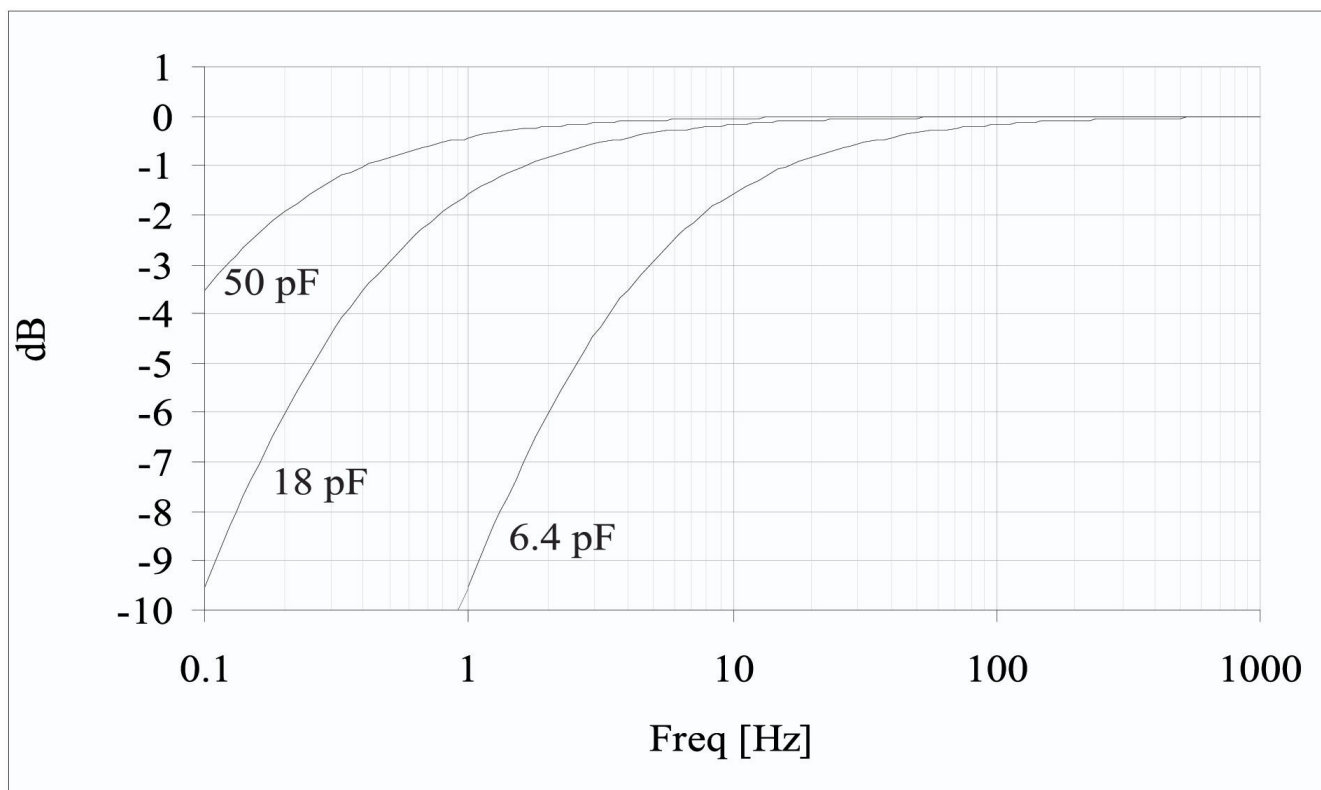
Connector



7-pin LEMO 1B male (ext. view)

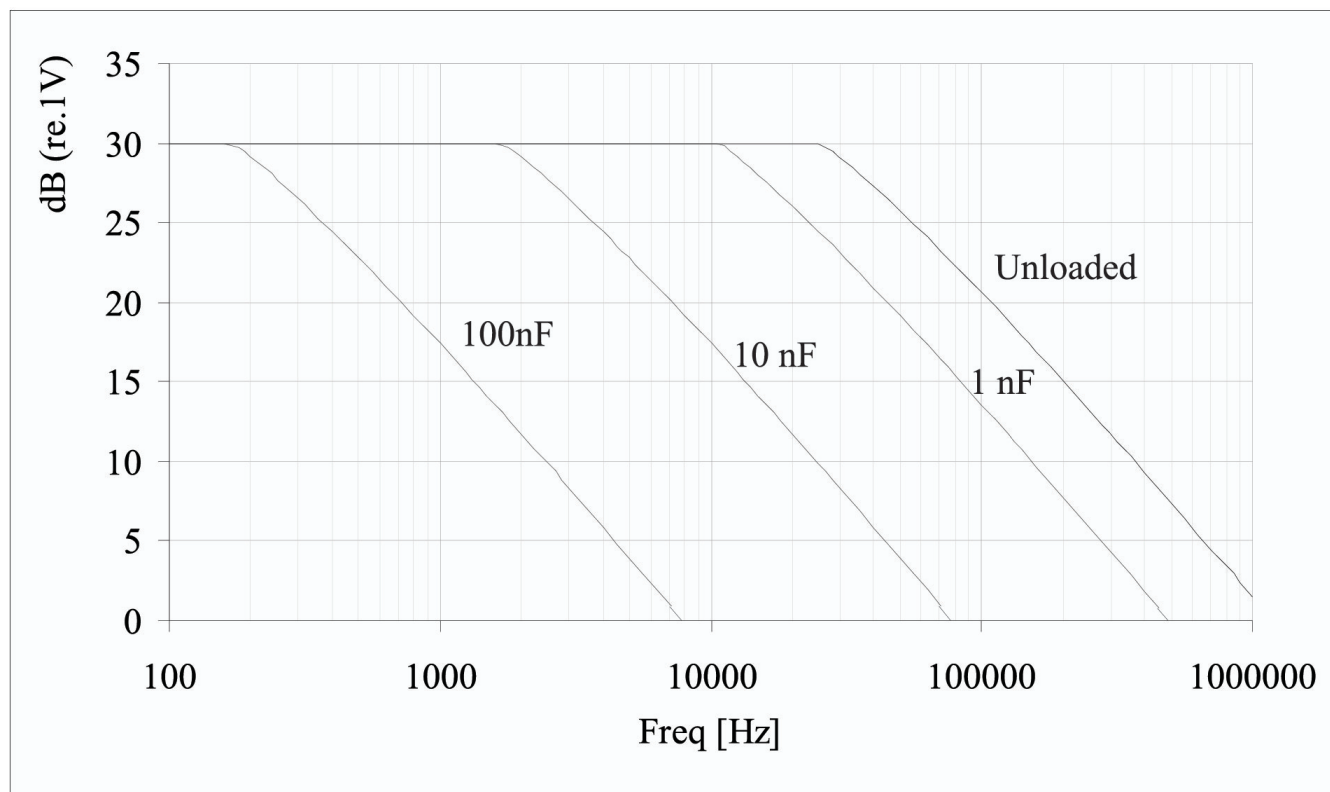
Frequency range (± 0.2 dB) with 18 pF microphone dummy	Hz	2.5 to 200 k
Slew rate	V/ μ s	20
Input impedance	G // pF	20 // 0.4
Output impedance		75
Output Voltage Swing, max. @ ± 14 V/+28V power supply	Vp	12
Output Voltage Swing, max. @ ± 60 V/+120V power supply	Vp	50
Noise (A-Weighted) max.	μ V	2.5
Noise (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
High-pass filter @3dB cut-off	Hz	TBD
Gain	dB	-0.35
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	$0.5 \times V_s + 4$
DC-offset, balanced supply	V	-1 to 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	32.0 / 1.13

Conditions: 23 $^{\circ}$ C Ambient temperature, ± 60 V/+120V power supply, 18 pF dummy microphone, 3 m output cable.



Low frequency response for various microphone capacities

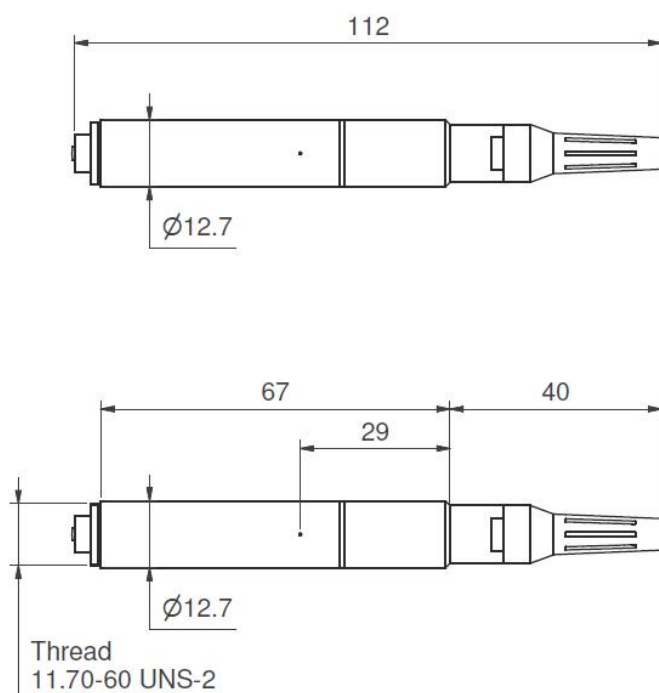




Max. RMS output signal for various cable loads with 120 V supply

GRAS Sound & Vibration reserves the right to change specifications and accessories without notice.

Dimensions in mm



Optional items

GRAS AA0020-CL	Customized Length LEMO 7-pin - LEMO 7-pin Cable
GRAS AL0008	1/2" Microphone Holder, POM
GRAS AL0012	1/2" Microphone Holder, Stainless Steel
GRAS AL0005	Swivel head
GRAS AL0006	Tripod
GRAS RA0019	Adapter for 1/4" microphone and 1/2" preamplifier
GRAS RA0073	Adapter for 1" microphone and 1/2" preamplifier
GRAS RA0190	Right-angled (90°) Adapter for 1/2" Microphone and 1/2" Preamplifier
GRAS RA0016	20 dB Attenuator for externally polarized 1/2" microphones
GRAS RA0062	20 pF Preamplifier-input Adapter for 1/2" preamplifiers
GRAS 12AA	2-Channel Power Module with gain, filters and SysCheck generator
GRAS 12AQ	2-Channel Universal Power Module with signal conditioning and PC interface

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We Make Microphones

Tradition

Since the establishment in 1994, GRAS has been 100% dedicated to developing and manufacturing high-quality measurement microphones and related acoustic equipment.

Innovation

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.

Quality

At GRAS we know that in order for you to trust your measurement results; signal quality, stability and robustness are essentials. We design and build them to perform under real life conditions – and beyond.

