

# GRAS 26AG

1/2" Insert Voltage Preamplifier with Integrated Connector



Freq range: 2.5 Hz - 200 kHz

Noise: 1.8  $\mu$ V

Gain: -0.25 dB

Special feature: Insert voltage for determining open-circuit sensitivity of a microphone

The GRAS 26AG is a small robust preamplifier with insert voltage calibration facility. 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 26AG preamplifier ensures reliable operation under humid conditions owing to the heat generated by internal power dissipation.

## Compatibility

The 26AG 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.

The 26AG is integrated with a 7-pin LEMO series 1B plug and comes with an insert-voltage calibration facility for determining the open-circuit sensitivity of condenser microphones.

## Connector

LEMO connector 1B male (Outside view)

Pin 6: Positive supply Pin 1: Insert Voltage

Pin 5: Not used Pin 2: Signal Ground

Pin 4: Signal Output Pin 3: Polarization 200V

Pin 7: Negative supply or Single supply GND

Voltage supply: Single 28-120V or Dual ±14V to ±60V

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

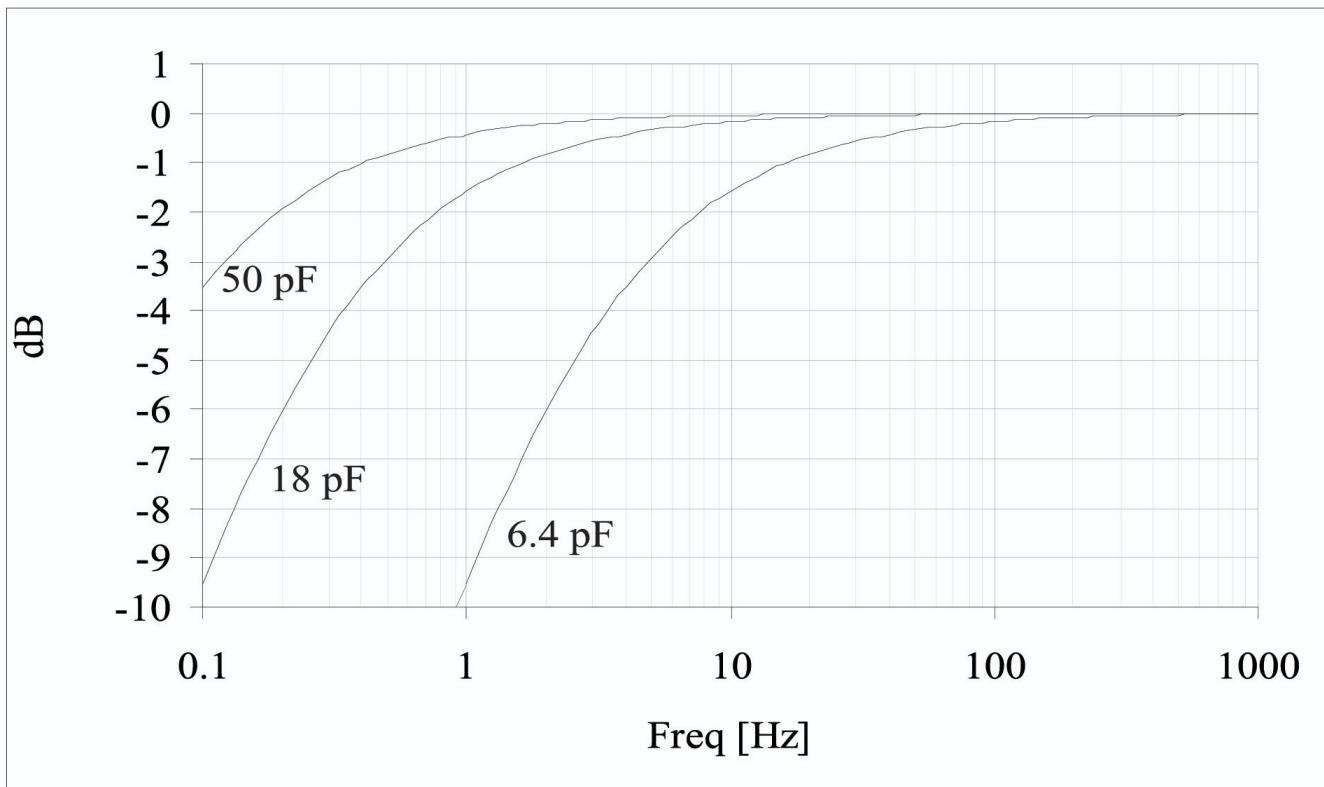
# Specifications

## GRAS 26AG 1/2" Insert Voltage Preamplifier with Integrated Connector

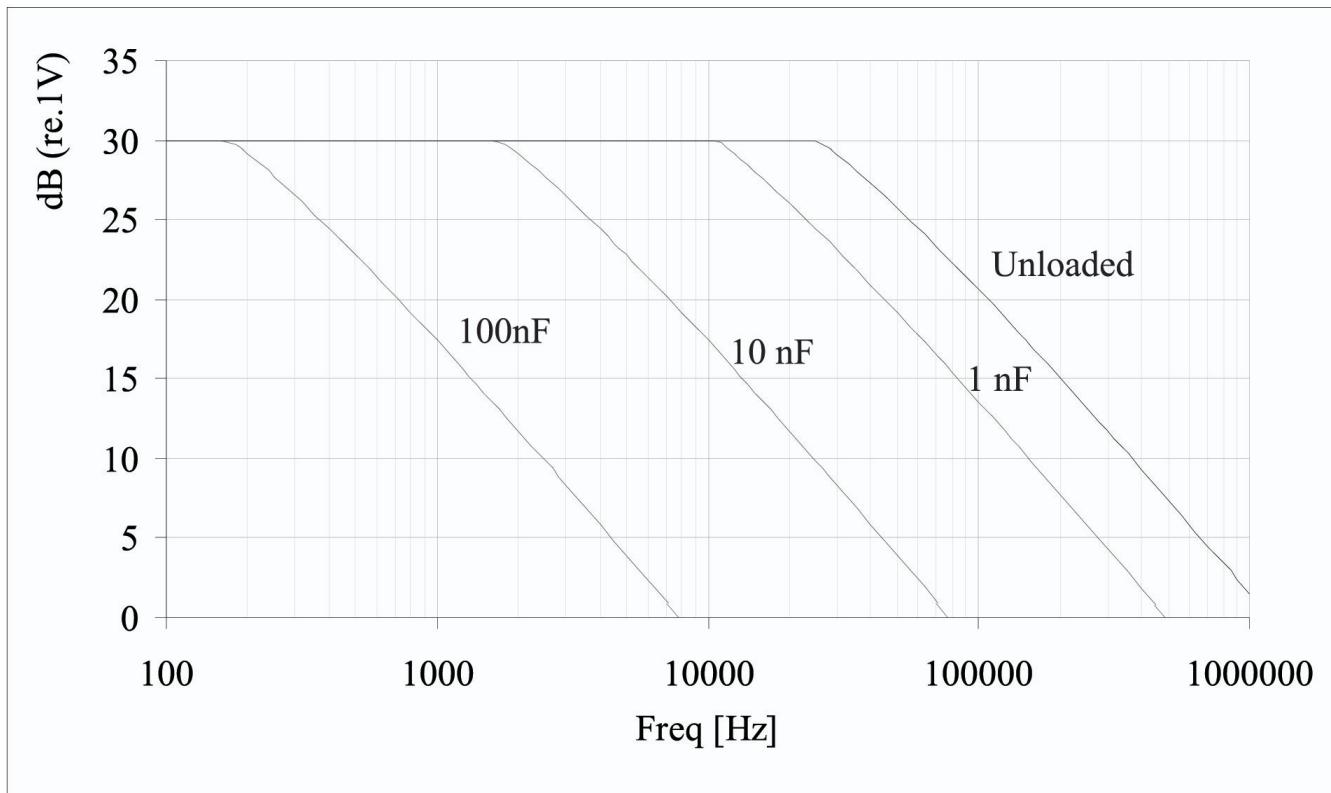
Page: 3

Frequency range ( $\pm 0.2$ dB) with 18 pF microphone dummy	Hz	2.5 to 200 k
Slew rate	V/ $\mu$ s	20
Input impedance	G $\Omega$ // pF	20 // 0.4
Output impedance	$\Omega$	75
Output Voltage Swing, max. @ $\pm 14V/+28V$ power supply	Vp	12
Output Voltage Swing, max. @ $\pm 60V/+120V$ power supply	Vp	50
Noise (A-Weighted) max.	$\mu$ V	2.5
Noise (A-Weighted) typ.	$\mu$ V	1.8
Noise (Linear 20 Hz – 20 kHz) max.	$\mu$ V	6
Noise (Linear 20 Hz – 20 kHz) typ.	$\mu$ V	3.5
Gain	dB	-0.25
Power supply, single	V	28 to 120
Power supply, balanced	V	$\pm 14$ to $\pm 60$
DC-offset, min., single supply	V	0.5 x Vs - 1
DC-offset, max., single supply	V	0.5 x Vs + 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	34.0 / 1.24

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



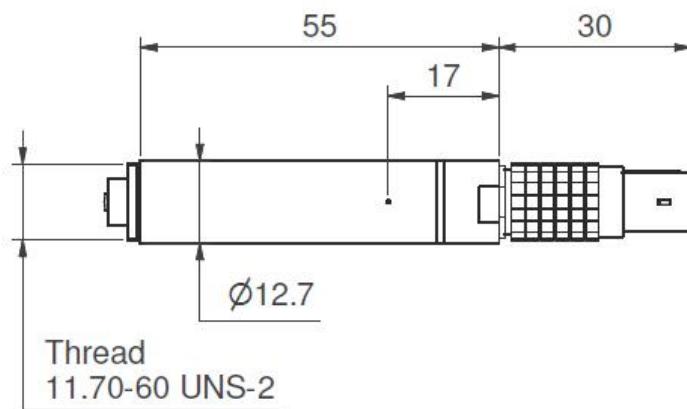
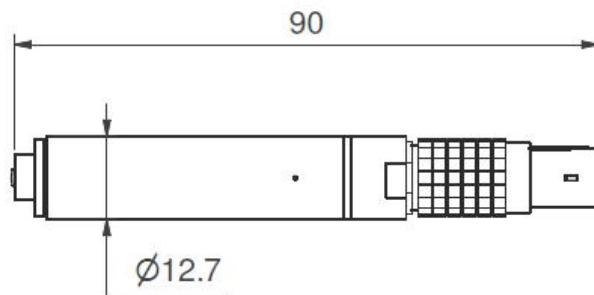
*Low frequency response for various microphone capacities*



*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 AA0008](#)

3 m LEMO 7-pin - LEMO 7-pin Cable

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

# 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](http://www.GRASacoustics.com)  
[gras@grasacoustics.com](mailto: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](http://www.GRASacoustics.com)  
[sales-usa@grasacoustics.com](mailto: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](http://www.GRASacoustics.com)  
[sales-uk@grasacoustics.com](mailto: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](http://www.GRASacoustics.cn)  
[cnsales@grasacoustics.com](mailto: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](http://www.grasacoustics.com)

[grasacoustics.com](http://grasacoustics.com)

**GRAS**  
An Axiometrix Solutions Brand