

# GRAS 26C1

1/2" CCP Preamplifier with  
BNC Connector, Low  
Frequency



Freq range: 1 Hz - 200 kHz  
Noise: 1.8  $\mu$ V Gain: -0.35 dB  
Special feature: Low frequency

The GRAS 1/2" Preamplifier GRAS 26C1 is a preamplifier optimized for low frequency use together with prepolarized condenser microphones. It is a small, robust unit and uses a GRAS CCP power supply (ICP<sup>®</sup>), e.g. GRAS 12AL. It has a very low inherent noise level, and a large dynamic range and a frequency response from below 1 Hz to above 200 kHz.

## Typical applications and use

CCP inputs

Prepolarized microphones

1/2" precision microphones

High levels and high frequencies

## Design

The GRAS 1/2" Preamplifier GRAS 26CI is a small, robust unit and uses a GRAS CCP power supply, e.g. GRAS 12AL. It has a very low inherent noise level, a large dynamic range and a frequency response from 1 Hz to above 200 kHz.

Its small ceramic thick-film substrate has a very high input impedance, and is shielded by a guard ring to minimise the influence of stray capacitance and microphonic interference.

The GRAS 26CI is provided with a built-in TEDS\* chip, and can be programmed as a single unit with a microphone fitted. It is primarily intended for the low frequency microphone 46AZ but can be used with all GRAS 1/2" prepolarized microphones and with adapters with other microphone sizes.

It has an integrated BNC output connector. The casing is made of stainless steel for maximum strength and durability.

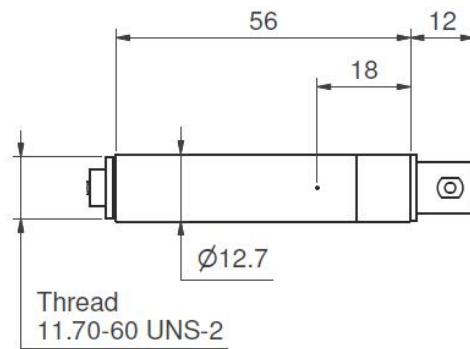
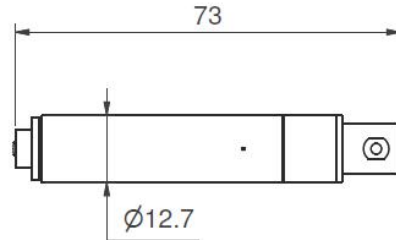
\* Transducer Electronic Data Sheet - as proposed by IEEE-P1451.4

Frequency range ( $\pm 0.2$ dB) with 18 pF microphone dummy	Hz	1 to 200 k
Slew rate	V/ $\mu$ s	20
Input impedance	G $\Omega$ // pF	40 // 0.4
Output impedance	$\Omega$	< 50
Output Voltage Swing, min. @ 24-28 V CCP voltage supply	V <sub>p</sub>	8
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	-0.35
Power supply (Constant Current Power)	mA	2 to 20 (typical 4)
DC bias voltage, typ.	V	12
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 - 95
TEDS UTID (IEEE 1451.4)		769 v. 0.9
Connector type		BNC
CE/RoHS compliant/WEEE registered		Yes / Yes, Yes
Weight	g / oz	26.0 / 0.92

Conditions: 23  $^{\circ}$ C Ambient temperature  
 4 mA / 24 V open loop CCP voltage  
 18 pF dummy microphone  
 3 m output coax-cable.

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

Dimensions in mm



## Optional items

<a href="#">GRAS AA0035</a>	3 m BNC - BNC Cable
GRAS AA0039-CL	Customized Length BNC - BNC Cable
<a href="#">GRAS AL0008</a>	1/2" Microphone Holder, POM
<a href="#">GRAS AL0012</a>	1/2" Microphone Holder, Stainless Steel
<a href="#">GRAS AL0005</a>	Swivel head
<a href="#">GRAS AL0006</a>	Tripod
<a href="#">GRAS RA0019</a>	Adapter for 1/4" microphone and 1/2" preamplifier
<a href="#">GRAS RA0073</a>	Adapter for 1" microphone and 1/2" preamplifier
<a href="#">GRAS RA0190</a>	Right-angled (90°) Adapter for 1/2" Microphone and 1/2" Preamplifier
<a href="#">GRAS RA0018</a>	20 dB Attenuator for prepolarized 1/2" microphones
<a href="#">GRAS RA0062</a>	20 pF Preamplifier-input Adapter for 1/2" preamplifiers
<a href="#">GRAS 12AL</a>	1-Channel CCP Power Module with A-weighting filter
<a href="#">GRAS 12AQ</a>	2-Channel Universal Power Module with signal conditioning and PC interface

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# GRAS Worldwide

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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 to industries where acoustic measuring accuracy and repeatability is of utmost importance in R&D, QA and production. This includes applications and solutions for customers within the fields of aerospace, automotive, audiology, and consumer electronics. GRAS microphones are designed to live up to the high quality, durability and accuracy that our customers have come to expect and trust.

**GRAS** Sound  
& Vibration