

# GRAS 26CK

1/2" CCP Standard Preamplifier  
with Microdot Connector, Very  
Short



Freq range: 2.5 Hz - 200 kHz  
Noise: 1.8  $\mu$ V Gain: -0.45 dB  
Special feature: For confined spaces

The GRAS 26CK 1/2" Preamplifier, Very Short is a very small preamplifier optimized for use with prepolarized condenser microphones. It is a robust unit that uses a constant current power (CCP) supply. The 26CK has a very low inherent noise level, a large dynamic range, and a frequency response from below 2 Hz to above 200 kHz.

## Typical applications and use

- For use in confined spaces
- High-frequency measurements
- High-pressure measurements
- Sound intensity measurements
- Near-field measurements
- Anechoic boxes
- Hearing-aid measurements

## Design

The small, ceramic thick-film substrate in the 26CK has a very high input impedance and is shielded by a guard ring, which minimizes the influence of stray capacitance and microphonic interference.

The 26CK is delivered with Generation II TEDS. The calibration data is programmed into the built-in TEDS according to IEEE 1451.4 using UDID I27-0-0-0U. If your measurement platform supports Transducer Electronic Data Sheets you will be able to read and write data like properties and calibration data.

Generation II TEDS chip (DS2431) may require updated system software.

It can be used with the following GRAS prepolarized microphones:

- 40AE 1/2" Prepolarized Free-Field Microphone
- 40AD 1/2" Prepolarized Pressure Microphone
- 40AO 1/2" Prepolarized Pressure Microphone, High Frequency
- 40AQ 1/2" Prepolarized Random Incidence Microphone

The 26CK has an integrated Microdot output connector.

The casing is made of stainless steel for maximum strength and durability.

## Calibration

Before leaving the factory, GRAS products are tested and calibrated by GRAS, and an individual test certificate is included with the product.

GRAS Sound & Vibration continually strives to improve the quality of our products for our customers; therefore, the specifications and accessories are subject to change.

|                                                             |                             |                        |
|-------------------------------------------------------------|-----------------------------|------------------------|
| 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                                            | $\Omega$                    | <50                    |
| Output Voltage Swing, min. @ 24-28 V CCP voltage supply     | Vp                          | 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                    |
| High-pass filter @3dB cut-off                               | Hz                          | TBD                    |
| Gain                                                        | dB                          | -0.45                  |
| Power supply (Constant Current Power)                       | mA                          | 2 to 20 (typ. 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 to 95                |
| TEDS UDID (IEEE 1451.4)                                     |                             | I27-0-0-0U             |
| Connector type                                              |                             | Microdot 10/32         |
| CE/RoHS compliant/WEEE registered                           |                             | Yes / Yes, Yes         |
| Weight                                                      | g / oz                      | TBD                    |

Conditions: 23  $^{\circ}$ C Ambient temperature

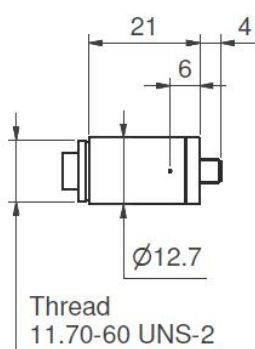
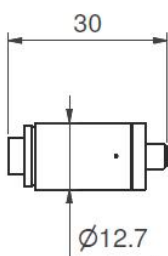
4 mA / 24 V open loop CCP voltage

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 AA0070</a>    | 3 m Microdot - BNC Cable                                                   |
| <a href="#">GRAS AA0073-CL</a> | Customized Length Microdot - BNC Cable                                     |
| <a href="#">GRAS AA0087-CL</a> | Customized Length Microdot - Microdot 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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than 40 countries

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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