Product Data and Specifications

Features and applications

- 0 dB and +20 dB gain settings
- Linear, A-weighting and high-pass filter (20 Hz) settings
- CCP¹ inputs
- Prepolarized microphones
- ¹/₂-inch precision microphones
- High levels and high frequencies



Fig. 1 ¹/₂-inch Preamplifier Type 26CF

The G.R.A.S. ¹/₂-inch Preamplifier Type 26CF (Fig. 1) is a general purpose preamplifier optimised for use with prepolarized condenser microphones. It is a small, robust unit and uses a G.R.A.S. CCP¹ power supply, e.g. Type 12AL. It has low inherent noise level, a large dynamic range and a frequency response from 2.5 Hz to 100 kHz.

Gain and filter switch settings

There are two flush-mounted switches for selecting various combinations of gain and filtering, i.e.:

Gain switch settings:

0 dB - for normal microphone signals.

+20 dB - for boosting weak microphone signals.

Filter switch settings:

A-Weighting - as required in standard measurements.

Linear - to let the microphone signal pass unfiltered.

High-pass - to cut off unwanted low frequencies.

The frequency responses of the A-weighting filter is shown in Fig. 2.

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 Type 26CF can be used with all G.R.A.S. prepolarized microphones, namely:

¹/₂-inch microphones: Types 40AE, 40AD and 40AQ

¹/₄-inch microphones: Types 40BE and 40BD, using the optional ¹/₂-inch to ¹/₄-inch adaptor RA0019

It has an integrated BNC output connector.

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

G.R.A.S. Sound & Vibration

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CCP stands for "Constant Current Power" and describes G.R.A.S. power supplies that maintain a constant level of current for driving IEPE transducers like this preamplifier which can be used with prepolarized microphones such as Types 40AD, 40AE, 40AO and 40AQ.



1/2-inch CCP Preamplifier with gain and filters Type 26CF

Fig. 2 Frequency resonse of A-weighting filter shown graphically (compliant with IEC 61672-1 Class 1)

Specifications

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Frequency response (cable load 4.7 nF):	Power-supply:
2.5 Hz - 100 kHz	4 mA to 20 mA (typically 4 mA)
(typical for 0 dB gain and linear setting)	Maximum signal-output voltage (peak):
Input impedance:	±5.0V
20 G Ω, 0.4 p F	Temperature:
Output impedance (Cs = 20 p F, f=1000Hz):	$Operation: \dots -30 ^{\circ}C \text{ to } +70 ^{\circ}C$
<50Ω	Storage:40 °C to +85 °C
Noise (measured with 20 pF ¹ / ₂ -inch dummy mic.):	Relative humidity:
Linear, 0 dB: typically 8 µ V rms	Operation:
Linear, 20 dB: typically $65 \muVrms$	Storage:0 to 95%
A-weighted, $0 dB$; typically $10 \mu V rms$	Connector type:
High pass, $0 dB$: typically $10 \mu V rms$	BNC
A-weighting filter:	Dimensions and weight:
Compliant with IEC 61672-1 Class 1	Diameter:
High-pass filter:	Length:
3-pole butterworth, $-3 dB$ at 20 Hz	Weight:
Gain:	
Typically:	

G.R.A.S. Sound & Vibration reserves the right to change specifications and accessories without notice

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