

GRAS 40PM & GRAS 40PM-1

EQset™ Miniature Production Line Microphones



The 40PM & 40PM-1 are designed for production line testing. Their very small size makes them excellent for use in tight spaces. The very small aperture makes them perfect for testing of components like micro and miniature speakers as well as miniature microphones etc. Thanks to the revolutionary EQset technology, the microphones have a very small sensitivity deviation and the frequency response is very tight and flat, which makes post compensation and linearity un-necessary.



EQset™ technology

EQset microphones all have a uniformly fixed sensitivity and flat curve. This reduces measurement uncertainty and greatly simplifies microphone setup, monitoring, replacement, and corrections. EQset means that microphone setup and replacement can happen quickly and easily without any individual microphone adjustments or corrections.

GRAS 40PK

CCP Free-field QC Microphone, Short



40PK is designed for on-line test, but in confined spaces, where the focus is not so much on the correct acoustical performance as on the available test space.

40PP and 40PK microphones are CCP supplied and specified for measurements with relatively wide tolerances. They are smart-transducers and thereby allow for fast and easy exchange, provided the test equipment is TEDS compatible.

For tighter tolerances, higher transducer linearity and data resolution, we recommend to use our standard high quality measurement microphones.

The QC microphones can be sensitivity calibrated and fully repaired.

GRAS 40PP-10

CCP Free-field QC Microphone



40PP is designed for on-line test of products, where the focus is on acoustically correct setup with as little as possible disturbance of the acoustic field and DUT.

| Specifications | 40PM | 40PM-1 | Specifications | 40PP-10 | 40PK |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sensitivity at 250 Hz | 25 mV/Pa (nominal) | 20 mV/Pa (nominal) | Sensitivity at 250 Hz | 50 mV/Pa (nominal) | 18 mV/Pa (nominal) |
| Dynamic Range | | | Dynamic Range | | |
| Lower limit | < 30 dB(A) re. 20 µPa | < 30 dB(A) re. 20 µPa | Lower limit | < 33 dB(A) re. 20 µPa | < 26 dB(A) re. 20 µPa |
| Upper limit | 120 dB re. 20 µPa | 125 dB re. 20 µPa | Upper limit | 128 dB re. 20 µPa | 145 dB re. 20 µPa |
| Frequency Range | | | Frequency Range | | |
| ± 0.5 dB | 20 Hz – 10 kHz | 20 Hz – 20 kHz | ± 1.5 dB | 50 Hz – 5 kHz | - |
| ± 2 dB | 10 kHz – 20 kHz | - | ± 2 dB | 10 Hz – 20 kHz | 10 Hz – 10 kHz |
| Output Impedance | < 50 Ω | < 50 Ω | Output Impedance | < 50 Ω | < 50 Ω |

