CCP Intensity Probe Type 50GI

Product Data

Typical Applications

- Sound intensity measurements
- Sound source location
- Sound power measurements
- IEC 61043 standard measurements
- Sound source ranking
- Sound intensity mapping

Type 50GI is a sound intensity probe for direct connection to signal analyzers or data acqusition devices with IEPE inputs. The probe includes a pair of phase-matched prepolarized precision microphones which meet the requirements in IEC standard 61043* for a class-1 intensity probe. The small rugged ½" CCP preamplifiers ensure minimum disturbancies to the sound field for accurate measurements in the full frequency range.

The probe set includes solid interchangeable spacers for microphone separations from 12 mm to 100 mm so that the probe can cover the frequency range from 50 Hz to 10 kHz.

All components are made specifically for sound intensity applications. Each small ¼" diameter by 40 mm long microphone preamplifier is housed in a robust stainless steel casing, which enables novel probe designs for reducing disturbances to the sound field otherwise brought about by the effects of shadows and diffraction, and a symmetry which enables reliable calibrations as described in the proposed standard (ISO/DIS 9614-2) for sound power measurements using sound intensity measurements.

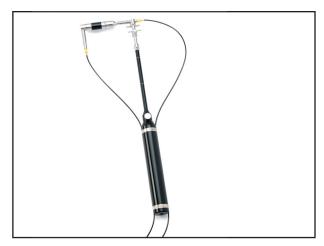


Fig. 1 Intensity Probe Type 50GI

The CCP Intensity Probe Type 50GI comprises:

- Sound Intensity Microphone Pair Type 40GK (see separate data sheet)
- two CCP Microphone Preamplifiers Type 26CB (see separate data sheet)
- · four solid spacers of various lengths
- windscreen
- · probe handle.

The Type 50GI is delivered in a carrying case as a ready-to-use kit, complete with all the above accessories.

The microphones are ½" free-field prepolarized microphones with a uniquely-designed pressure equalisation system which ensures extremely well defined phase characteristics.

The microphones and preamplifiers are mounted on a swivel head on the telescopic arm of the Remote-control handle. To cover the full frequency range from 50 Hz to 10 kHz, the Type 50Gl probe is delivered with four solid spacers for spacing the microphones at 12 mm, 25 mm, 50 mm and 100 mm. These spacers can be easily interchanged without dismantling the probe.

^{*}IEC 61043, Electroacoustics, Instruments for the Measurement of Sound Intensity - Measurements with Pairs of Pressure Sensing Microphones 1993 for Class 1 Sound intensity probes.



Specifications

See also Product Data for Type 40GK and Type 26CB.

Accessories

Accessories Included Microphone set
½" Free-field Sound IntensityMicrophone setType 40GISpacer, 100 mmGR0044Spacer, 50 mmGR0043Spacer, 25 mmGR0042Spacer, 12 mmGR0041Straight adapterRA0003Angled adapterRA0001
1/4" CCP Preamplifier set Type 26CB
3-m cable (supplied with Type 26CB) AA0018
Probe handle
Windscreen
Optional Accessories Power Module, single-channel CCP Type 12AL Power Module, dual-channel Type 12AQ 8-mm Spacer for microphone separation: GR0045 Microphone Adapter (microdot-microdot (female) AE0046 5-m Cable (microdot-BNC)
Intensity Calibrator
Pistonphone with built-in barometer and thermometer (recommended) Type 42AP
Pistonphone
Two-port Calibration Coupler (for Pistonphones Type 42AP or 42AARA0024

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

