

LCE-06CWE Ceiling loudspeaker, 6W, ABS, EN54-24

Ceiling Entry Level



The LCE-06CWE is a cost-effective EN54-24 certified 6 W ceiling loudspeaker. It provides excellent speech, background music and alarm tone reproduction for a wide scope of applications.

Construction

The LCE-06CWE has an ABS frame and back can with a metal grille. The back can easily be removed with only one screw. It has two grommets for loop-through wiring and a ceramic 3 pole connector enabling 6 W or 3 W tapping. The rim designs looks very elegant. The color of the loudspeaker and back can is white, RAL 9003. The design and fresh white color makes this loudspeaker a very good fit in virtually all interiors.

Functions

Voice Alarm

The LCE-06CWE is designed for voice alarm and public address applications. It is certified to EN 54-24 and complies with BS 5839-8 and EN 50849.

Protection

The LCE-06CWE has a built-in thermal protection to ensure that fire damage to the loudspeakers does not cause failure to the connected circuit. In this way system integrity is maintained, ensuring loudspeakers in other areas can still be used to inform people of the situation. It has a provision to mount the loudspeaker line monitoring boards PRA-EOL or PRA-EOB on the outside of the back can.

Connection

The loudspeaker has a ceramic screw-terminal block and a thermal fuse.

- ▶ Suitable for speech, music and alarm tone reproduction
- ▶ Simple power tapping selection
- ▶ Elegant design
- ▶ Easy and quick installation
- ▶ EN54-24 certified

Regulatory information

Regulatory information

All Bosch loudspeakers are designed to withstand operating at their rated power for 100 continuous hours in accordance with IEC 60268-5 Power Handling Capacity (PHC) standards. This ensures improved reliability under extreme conditions, leading to higher customer satisfaction and longer operating life and lessen the chance of failure or performance deterioration.

Safety	EN 62368-1:2014+A11 IEC 62368-1:2018 Ed.3
Emergency	EN54-24
Water and dust protection	EN 60529, IP21C

Region	Regulatory compliance/quality marks
Europe	DoP CE
UAE	UAE CoC

Installation/configuration notes

Mounting

The loudspeaker is equipped with two friendly spring clamps for easy and tight mounting. The back can has two pre-fixed grommets for loop-through connections. The back can is secured with one screw.

Terminal Block

The loudspeaker has a three-way ceramic terminal block with screw connection and thermal fuse. Two primary taps are provided on the matching transformer to allow selection of nominal full-power or half-power radiation (in 3 dB steps).

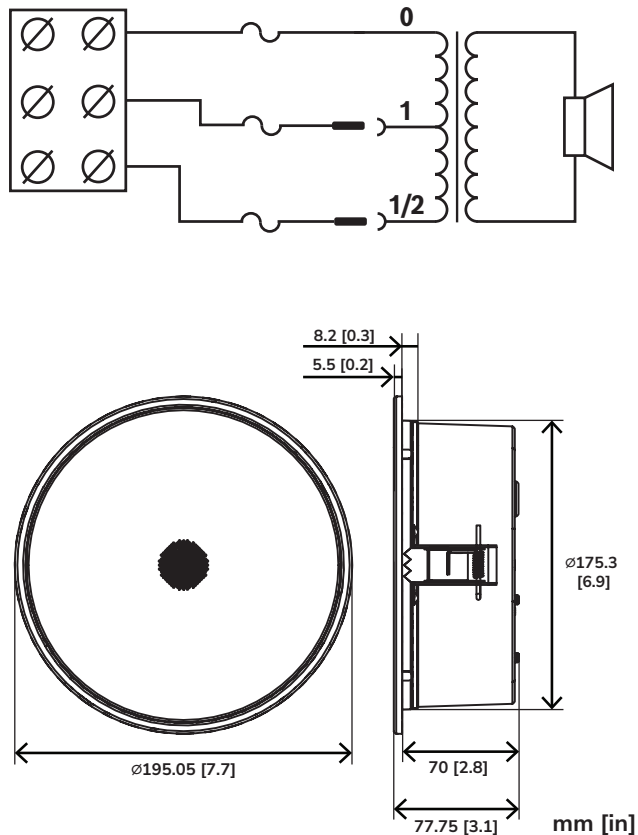


Fig. 1: Dimensions

Parts included

Quantity	Component
6	LCE-06CWE Ceiling loudspeaker, back can, 6 W, ABS
1	Quick installation guide

Technical specifications

Acoustic*

Rated power (W)	6 W
Transformer taps (W)	6 W; 3 W
Rated input voltage (V)	100 V
Connector type	3-pin plastic connector
Wire gauge	0.8 mm ² - 2.5 mm ² AWG 18 - AWG 14

Sensitivity (1 W, 1 m, 1 kHz Octave) (dB)	90.2 dB
Sensitivity (1 W, 1 m, 100 Hz - 10 kHz) (dB)	91.9 dB
Sensitivity (1 W, 4 m, 100 Hz - 10 kHz) (dB), acc. EN54-24	79 dB
SPL (Rated power, 1 m, 1 kHz Octave) calculated (dB)	98 dB
SPL (Rated power, 1 m, 100 Hz - 10 kHz) calculated (dB)	99.8 dB
SPL (Rated power, 4 m, 100 Hz - 10 kHz) (dB), acc. EN54-24	88 dB
Effective frequency range (1 kHz Octave, -10 dB)	185 Hz - 16.5 kHz
Effective frequency range (100 Hz - 10 kHz, -10 dB)	182 Hz - 17.12 kHz
Coverage angle HxV (-6 dB, 500 Hz) (°)	180° x 180°
Coverage angle HxV (-6 dB, 1 kHz) (°)	165° x 165°
Coverage angle HxV (-6 dB, 2 kHz) (°)	155° x 155°
Coverage angle HxV (-6 dB, 4 kHz) (°)	80° x 80°
Transducer impedance (Ω)	8 Ω
Rated impedance 100 V line (Ω)	3333 Ω @3 W
	1667 Ω @6 W

*Technical performance data acc. to IEC 60268-5

Note:

- The specification data was measured in an anechoic chamber, mounted in an IEC-baffle.
- The reference plane is on the grille surface and perpendicular to the reference axis.
- The reference axis is perpendicular to the center point of the front grille surface.
- The horizontal plane contains the reference axis and is perpendicular to the reference plane.

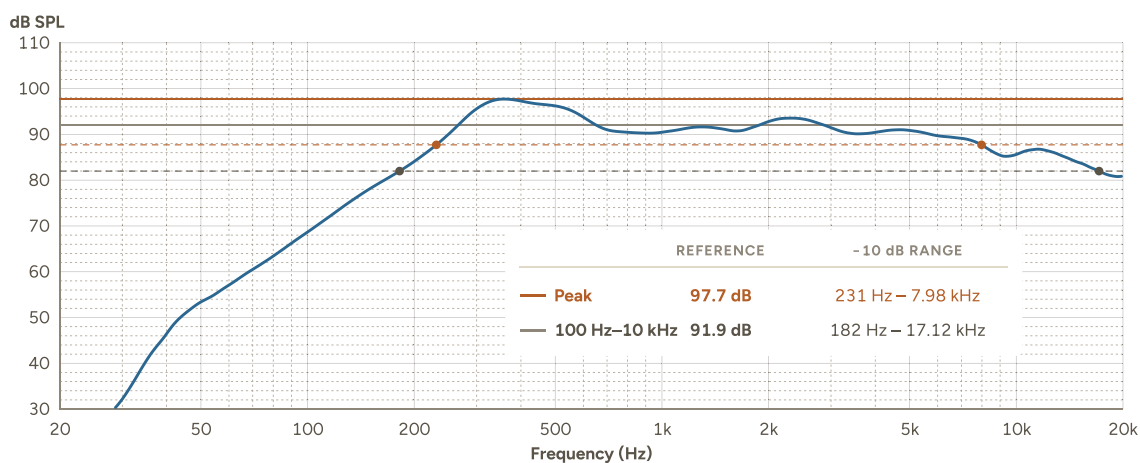
Mechanical

Dimensions (Ø x D) (mm)	195.05 mm x 77.75 mm
Dimensions (Ø x D) (in)	7.7 in x 3.1 in
Mounting cutout (mm)	180 mm
Mounting cutout (in)	7.08 in
Mounting depth (mm)	75 mm
Mounting depth (in)	2.95 in
LF Transducer size (mm)	152.4 mm
LF Transducer size (in)	6 in

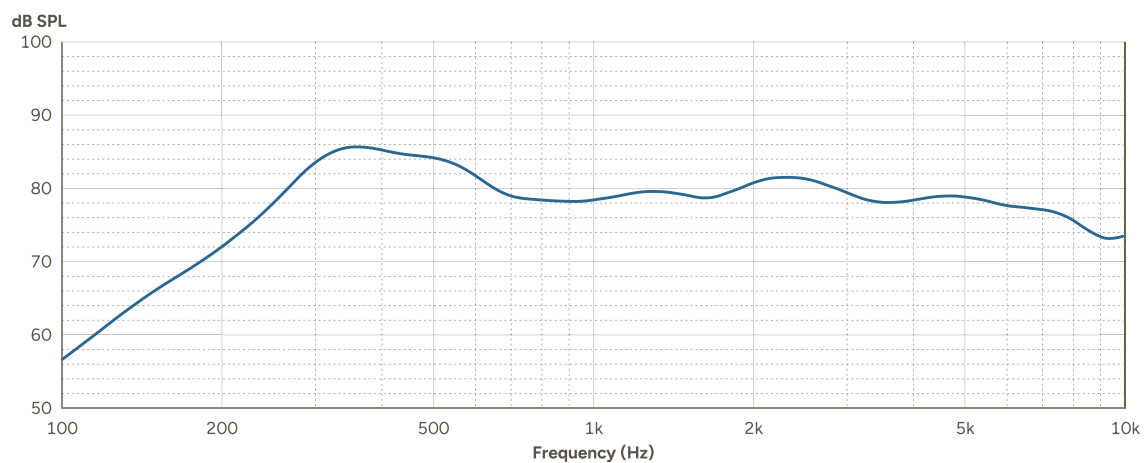
Material	Frame: ABS Grill: Aluminum
Color (RAL)	RAL 9003 Signal white
Weight (kg)	0.77 kg
Weight (lb)	1.69 lb

Environmental

Operating temperature (°C)	-10 °C – 55 °C
Operating temperature (°F)	14 °F – 131 °F
Storage temperature (°C)	-40 °C – 70 °C
Storage temperature (°F)	-40 °F – 158 °F
IP rating	IP21C
Operating relative humidity, non-condensing (%)	0% - 95%



Frequency response — SPL @ 1 W, 1 m, running 1/3-octave smoothing (each point averaged over $\pm 1/6$ octave). Effective range from the peak and the energy-averaged (RMS pressure) reference over 100 Hz–10 kHz. NOTE: dips $< 1/9$ octave disregarded per IEC 60268-5.



Frequency response — SPL @ 1 W, 4 m (calculated, EN 54-24), running 1/3-octave smoothing (each point averaged over $\pm 1/6$ octave).
EN 54-24 bandwidth limits marked at 100 Hz and 10 kHz.

Ordering information

LCE-06CWE Ceiling loudspeaker, 6W, ABS, EN54-24
6 W Ceiling loudspeaker, Flush-mount, EN54-24 certified,
ABS frame, spring clamps.
Order number **LCE-06CWE | F.01U.435.578**



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