

LBD0606/54 Ceiling Speaker 6W with MFD, EN54

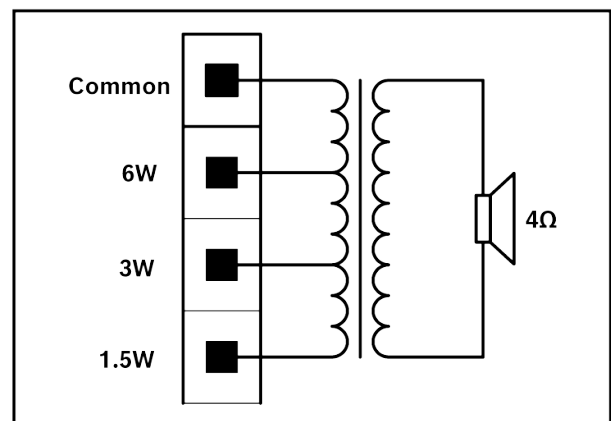


The voice alarm loudspeaker LBD0606/54 of 6 W is EN 54 certified. The loudspeaker is designed for buildings where the performance of the systems for verbal evacuation announcements is governed by regulations. The ceiling speaker includes a metal fire dome (MFD) tested to withstand high temperatures.

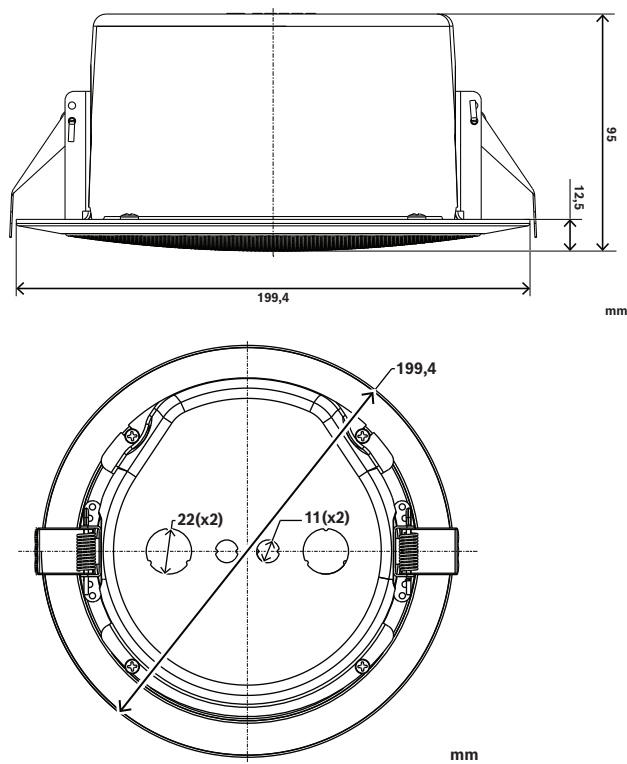
System overview

The speaker assembly consists of a single-piece, 6 W dual cone voice alarm loudspeaker, with a 100 V matching transformer mounted on the back. The wide frequency range means better speech and music reproduction. The speaker comes with a metal fire dome (MFD) assembled with four self-tapping screws. The MFD has knockout holes for two cable glands. The ceiling speaker has a 100 V matching transformer with taps on the primary winding for full power, half-power and quarter-power radiation. The LBD0606/54 has spring clamps on the rear, which can easily mount the loudspeaker into a false ceiling. The front has a circular metal grille. The appearance and neutral white color are unobtrusive in virtually all interiors. The speaker is certified to be used in indoor applications with voice alarm systems. The loudspeaker is designed to operate at its rated power for 100 hours in accordance with the IEC 268-5 Power Handling Capacity (PHC) standards.

- ▶ Suitable for speech and music reproduction
- ▶ Flush-mounting in ceiling cavity
- ▶ Easy to install
- ▶ Simple power setting
- ▶ EN 54-24 certified



Dimensions



Regulatory information

Certified for	Acc. to
Emergency	EN 54-24
Water and dust protection	EN 60529-IP21C
Hazardous substance	RoHS
Safety	EN 60065

Installation/configuration notes

This is a professional product that should be installed, used and maintained by trained professionals only.

Parts included

Quantity	Component
1	LBD0606/54 Ceiling Speaker 6W with MFD, EN54

Technical specifications

Electrical

Maximum power (W)	9 W
Rated power (W)	6 W
Transformer taps 100 V line (W)	1.5 W; 3 W; 6 W
Sensitivity (1 W, 1 m, 1 kHz octave) (dB)	93 dB
Sensitivity (1 W, 4 m, 100 Hz - 10 kHz) (dB), acc. EN 54-24	78.50 dB
Sound pressure level (rated power, 1 m, 1 kHz octave) (dB)	100 dB
Sound pressure level (rated power, 4 m, 100 Hz - 10 kHz) (dB), acc. EN 54-24	84 dB
Frequency range (-10 dB) (Hz)	330 Hz – 15,000 Hz
Coverage angle HxV (-6 dB, 500 Hz) (°)	185° x 185°
Coverage angle HxV (-6 dB, 1 kHz) (°)	180° x 180°
Coverage angle HxV (-6 dB, 2 kHz) (°)	142° x 142°
Coverage angle HxV (-6 dB, 4 kHz) (°)	57° x 57°
Rated input voltage (V)	100 V
Rated impedance 100 V line (Ω)	1667 Ω @6 W; 3333 Ω @3 W; 6667 Ω @1.5 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.

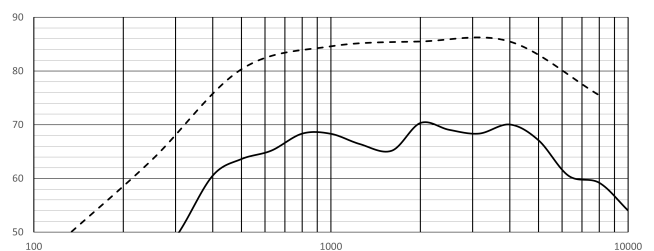


Fig. 1: Frequency response graph (— 1/3rd octave dB SPL @1 W(100 Hz — 10 kHz), 4 m; -- 1/1th octave dB SPL @1 W(100 Hz — 10 kHz), 1 m)

(1/3) rd octave band	dB SPL at 4 m
100	30
125	32.3
160	32.6
200	31.8
250	42.1
315	50.9
400	60.5
500	63.6
630	65.2
800	68.4
1000	68.3
1250	66.4
1600	65.2
2000	70.3
2500	69.1
3150	68.4
4000	70.1
5000	67.1
6300	60.5
8000	59.2
10000	54

(1/1) th octave band	dB SPL at 1 m
125	48.6
250	63.5
500	80.3
1000	84.6
2000	85.5
4000	85.5
8000	75.5

To meet EN 54-24 requirements, below stated 1/3 and 1 octave band equalization is required:

Freq [Hz]	BW	Q-factor	Gain
502	1/3	4.318477	-3.0
1002	1/3	4.318477	8.0
1262	1	1.414214	4.0
1782	1/3	4.318477	3.0
6324	1/3	4.318477	3.0

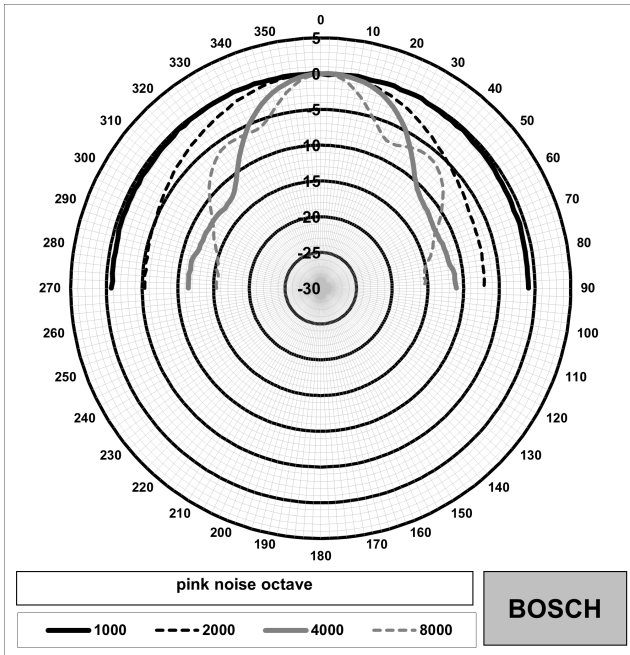


Fig. 2: Polar diagram (high frequency part)

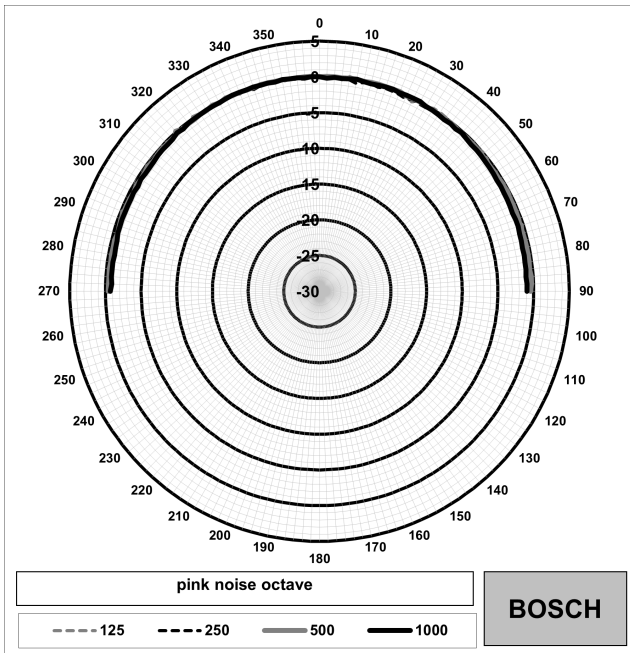


Fig. 3: Polar diagram (low frequency part)

Mechanical

Dimensions (Ø x H) (mm)	199 mm x 95 mm
Cutout diameter (mm)	170 mm
Weight (kg)	1 kg
Color (RAL)	RAL 9016 Traffic white
IP rating	IP21C

Environmental

Operating temperature (°C)	-5 °C – 55 °C
Storage temperature (°C)	-40 °C – 55 °C
Operating relative humidity, non-condensing (%)	95%

Ordering information

LBD0606/54 Ceiling Speaker 6W with MFD, EN54

EN 54 certified ceiling loudspeaker of 6 W with a circular metal grille and spring clamps for mounting. Includes the metal fire dome.

Order number **LBD0606/54 | F.01U.418.133**



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