

LB8-UM06E Cabinet loudspeaker 6W metal square



The LB8-UM06E is a general purpose, cost effective 6 W cabinet loudspeaker for speech and background music reproduction. Suitable for 100 V connection with power tapping for adjusting the sound level to meet the needs of the respective area. The robust, yet aesthetically designed metal enclosure offers protection in areas where vandalism is a potential hazard.

Functions

Voice Alarm applications

Voice alarm loudspeakers are specifically designed for use in buildings where system performance for verbal evacuation announcements is governed by regulations. The LB8-UM06E Loudspeaker is designed for use in voice alarm systems and is EN 54-24 certified and compliant with British standard BS 5839-8.

Protection

The loudspeakers have built-in protection to ensure that fire damage to the loudspeakers does not cause failure of 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.

Connections

The loudspeakers have a ceramic screw-terminal connection block, thermal fuse and heat-resistant, high-temperature wiring.

- ▶ Suitable for speech and music reproduction
- ▶ Robust metal enclosure
- ▶ EN 54-24 certified
- ▶ BS 5839-8 compliant

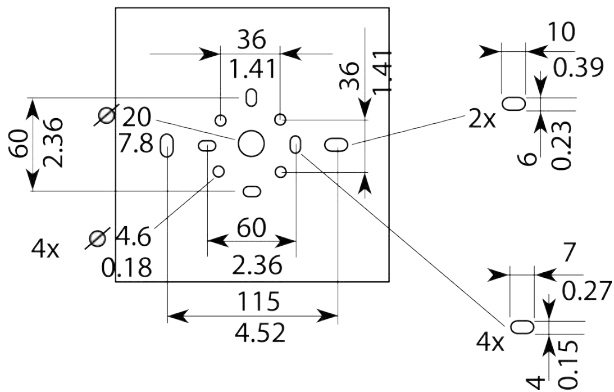
Regulatory information

All Bosch loudspeakers are designed to withstand operating at their rated power for 100 continuous hours in accordance with IEC 268-5 Power Handling Capacity (PHC) standards. Bosch has also developed the Simulated Acoustical Feedback Exposure (SAFE) test to demonstrate that they can withstand two times their rated power for short durations. This ensures improved reliability under extreme conditions, leading to higher customer satisfaction, longer operating life, and lessens the chance of failure or performance deterioration.

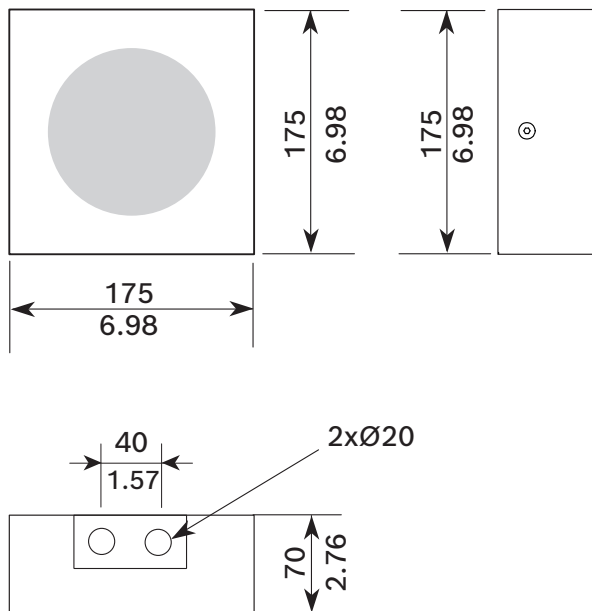
Safety	According to IEC/EN 62368-1
Emergency	According to EN 54-24 According to BS 5839-8
Water and dust protection	According to IEC/EN 60529, IP21C

Region	Regulatory compliance/quality marks
Europe	DoP CE
Poland	CNBOP

Installation/configuration notes



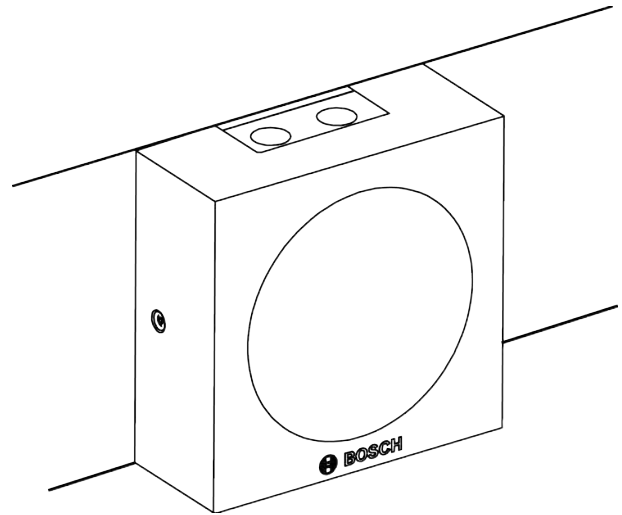
Mounting dimensions in mm (in)



Dimensions in mm (in)

Mounting

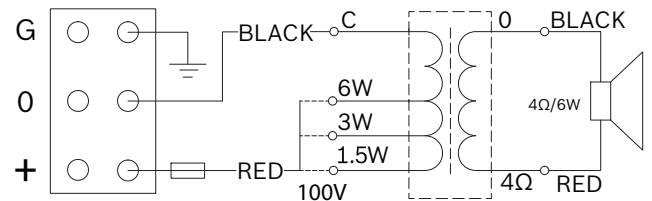
The cabinet is designed for surface mounting. The back-box of the cabinet provides a selection of mounting holes, even for mounting onto U40/50 and MK installation boxes. The back-box has two knockout holes on the topside for two cable glands for loop-through connection.



Surface mounting

Terminal block

The cabinet has a three-way ceramic terminal block with screw connection and thermal fuse suitable for loop-through wiring (including earth). Three primary taps are provided on the matching transformer to allow selection of nominal full-power, half-power or quarter-power radiation (in 3 dB steps).



Circuit diagram

Parts included

Quantity	Component
1	LB8-UM06E Cabinet loudspeaker metal square
1	Quick installation guide

Technical specifications

Electrical*	
Maximum power (W)	9 W
Rated power (W)	6 W
Transformer taps	6 W; 3 W; 1.5 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	79 dB
Sound pressure level (rated power, 1 m, 1 kHz octave) (dB)	101 dB
Sound pressure level (rated power, 4 m, 100 Hz - 10 kHz) (dB) acc. EN 54-24	85 dB
Frequency range (-10 dB) (Hz)	210 Hz – 18,000 Hz
Coverage angle HxV (-6 dB, 500 Hz) (°)	360° x 360°
Coverage angle HxV (-6 dB, 1 kHz) (°)	185° x 185°
Coverage angle HxV (-6 dB, 2 kHz) (°)	126° x 126°
Coverage angle HxV (-6 dB, 4 kHz) (°)	116° x 116°
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, free-field.
- 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.

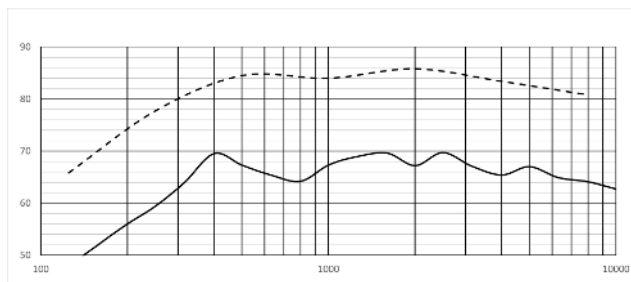
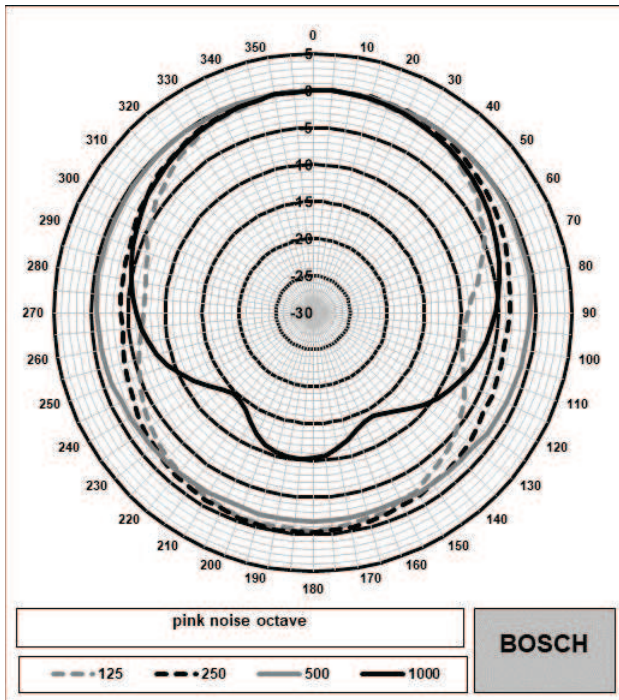


Fig. 1: Frequency response graph (— 1/3rd octave dB SPL @1 W(100 Hz – 10 kHz), 4 m; -- 1/1th octave dB SPL @1 W(100 Hz – 10 kHz), 1 m)

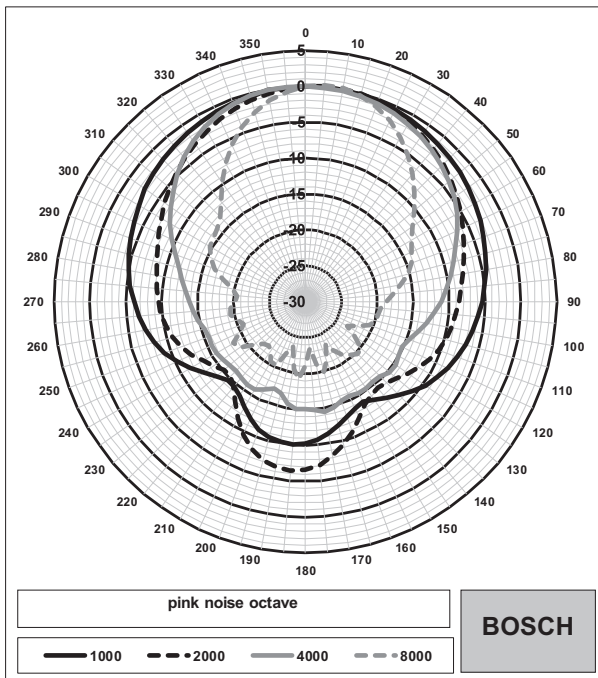
(1/3) rd octave band	dB SPL at 4 m
100	40.9
125	47.6
160	52.2
200	56.0
250	59.4
315	63.9
400	69.5
500	67.3
630	65.4
800	64.2
1000	67.3
1250	68.9
1600	69.6
2000	67.2
2500	69.7
3150	67.1
4000	65.4
5000	67.0
6300	64.9
8000	64.1
10000	62.7

(1/1) th octave band	dB SPL at 1 m
125	65.8
250	77.7
500	84.5
1000	84
2000	85.8
4000	83.4

(1/1) th octave band	dB SPL at 1 m
8000	80.8



Polar diagram (low frequency part)



Polar diagram (high frequency part)

Mechanical

Dimensions (H x W x D) (mm)	175 mm x 175 mm x 70 mm
Dimensions (H x W x D) (in)	6.98 in x 6.98 in x 2.76 in

Weight (kg)	1.64 kg
Weight (lb)	3.61 lb
Color (RAL)	RAL 9003 Signal white
Speaker size (mm)	104,6 mm
Speaker size (in)	4 in.
Magnet weight (g)	170 g
Magnet weight (oz)	6 oz
Connector type	3-pin ceramic

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
Operating relative humidity, non-condensing (%)	0% – 95%



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 1438-CPR-0729

EN 54-24:2008
 Loudspeaker for voice alarm systems for fire detection
 and fire alarm systems for buildings
 Cabinet loudspeaker 6W metal square
 LB8-UM06E
 Type A
 DoP: LP032935v1

Ordering information

LB8-UM06E Cabinet loudspeaker 6W metal square

EN 54-24 certified, RAL 9003 white.

Can only be ordered in multiples of six packed in one box.

Order number **LB8-UM06E | F.01U.377.176**

F.01U.427.980

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