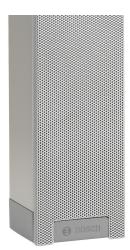


# LBC 3200/00 Line Array Indoor Loudspeaker

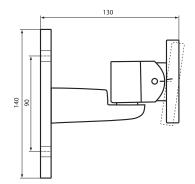


This loudspeaker, with its good directivity, can handle small and medium indoor environments such as congress venues, meeting rooms, showrooms and canteens. The full frequency range of the LBC 3200/00 makes it ideal for speech as well as music reproduction. Its exceptionally narrow housing (only 8 cm wide) makes it extremely unobtrusive.

#### **System Overview**

A wall bracket for mounting the line array onto walls and pillars is included with the loudspeaker. It is fully adjustable in two perpendicular planes for accurate positioning. For temporary installations, the LBC 3200/00 can be mounted on an LBC 1259/01 floor stand with an M10 threaded bolt without additional accessories.

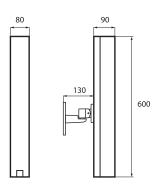
- Extended listening area
- Excellent intelligibility of speech and music
- Uniform distribution of natural sound throughout the room
- Suitable for any small to medium enclosures, from canteens to meeting rooms
- Extremely slim
- Voice evacuation compliant as standard
- Ideal combination of advanced acoustics and easy application
- Unrivalled sound quality for its size
- ► EN 54-24 and EN 60849 compliant



Dimensions in mm of included mounting bracket (with marked angle)



Detail mounting bracket



Dimensions in mm



Mounted on optional loudspeaker stand (LBC 1259/01)

A three-way, ceramic terminal block with screw connections suitable for loop-through wiring is located in a compartment at the base of the loudspeaker. There is also a switch, which allows the selection of nominal full power (30 W), half power (15 W), or quarter power (7.5 W). The compartment has knockout slots for cables.

# Functions

### **Range of Application**

The LBC 3200/00 is part of the XLA 3200 (eXtended Listening Area) range of line array loudspeakers. The positioning of the loudspeaker drivers\* has resulted in greatly improved audio directivity. The specially developed high quality drivers enable reproduction of remarkably clear, natural sound, giving excellent intelligibility of both speech and music. Greater coverage is achieved, so more people can be reached with perceptually perfect sound. All this makes this small line array loudspeaker very suitable for use in small to medium sized applications.

\*patent pending

#### Easy Installation

The positioning of the drivers in the array generates larger vertical opening angles for high frequencies, reducing the narrow 'beaming' of higher tones. As an example, the vertical opening angle is still 18° at 4 kHz. Having larger vertical opening angles makes installation easier, as the positioning of the loudspeakers is easier because they cover a wider area. An extremely wide horizontal opening angle of 130° at 4 kHz means that a single loudspeaker can provide natural sound reproduction over an extensive listening area.

### Suppressed Side Lobes

All conventional column loudspeakers produce a main lobe of sound, which is directed at listeners, and a number of unwanted side lobes. The LBC 3200/00 has highly suppressed side lobes in the vertical plane, typically at least 8 dB of suppression from the 500 Hz octave band at 90°. This provides a much clearer, less colored sound, and greatly reduces the possibilities for acoustic feedback.

#### **Sound Reproduction**

The positioning and very high quality of the 2 inch drivers contribute significantly in making the LBC 3200/00 a very efficient line array. With a sound pressure level of 106 dB at 1 m, at 30 W, loud and clear sound reproduction is possible even at a significant distance from the loudspeaker.

The high-quality loudspeaker drivers used in the LBC 3200/00 give excellent, natural sound reproduction of frequencies ranging from 190 Hz to 18 kHz. This ensures that all important frequencies for superb speech intelligibility are heard in the listening area.

#### **Emergency Compliant**

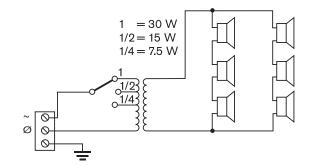
The loudspeakers ceramic terminal block, thermal fuse and heat-resistant, high-temperature wiring ensures that, in the event of a fire, damage to the loudspeaker does not result in failure of the circuit to which it is connected. This maintains system integrity, ensuring that loudspeakers within the same loudspeaker zone in other areas can still be used to inform people of the situation.

### **Certifications and Approvals**

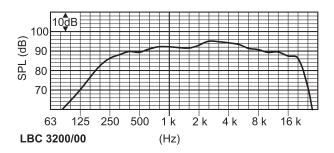
All Bosch loudspeakers are designed to withstand operation at their rated power for 100 hours in accordance with IEC 268-5 Power Handling Capacity (PHC) standards. These loudspeakers also comply with the Simulated Acoustical Feedback Exposure (SAFE) test, which demonstrates that they can withstand acoustical feedback at full power for short durations. This ensures extra reliability under extreme conditions, leading to higher customer satisfaction, longer operating life, and much less chance of failure or performance deterioration.

Region	Certificat	tion
Europe	CE	Declaration of Conformity
		Declaration of conformity EN50102 (IK07)
Poland	CNBOP	
Safety		acc. to EN 60065 and CE
Emergency		acc. to EN 54-24 / EN 60849
Impact		acc. to EN 50102, IK 07
Water and dust protection		acc. to IEC 60529, IP 32

#### Installation/Configuration Notes



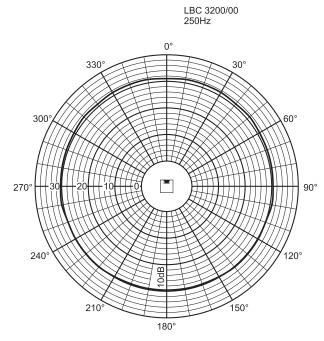
Circuit diagram



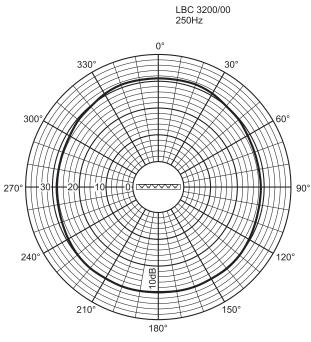
Frequency response

	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
SPL 1.1	87	89	91	93	93	89
SPL max.	102	104	106	108	108	104
Q-factor	1.3	2.2	4.5	11.6	25.7	58.9
H. angle (deg)	360	360	220	190	130	100
V. angle (deg)	360	120	70	32	18	10

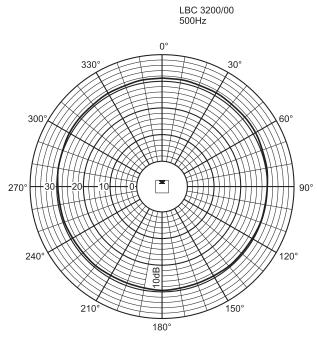
Acoustical performance specified per octave



Polar diagram horizontal

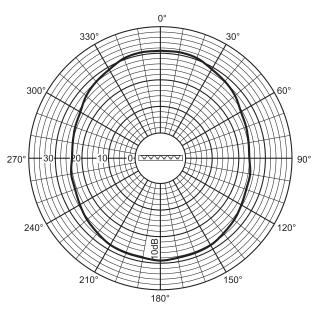


Polar diagram vertical

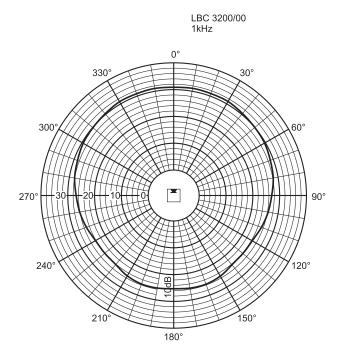


Polar diagram (horizontal)

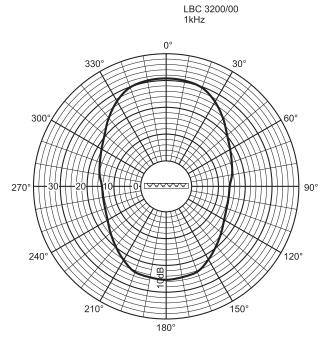
LBC 3200/00 500Hz



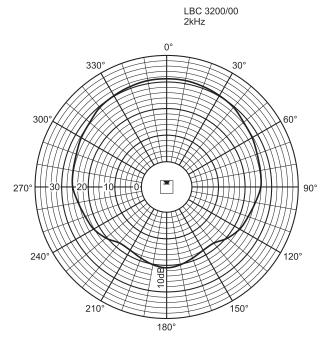
Polar diagram (vertical)

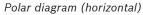


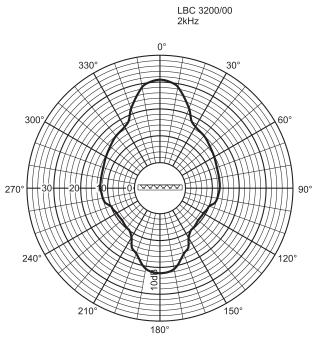
Polar diagram (horizontal)



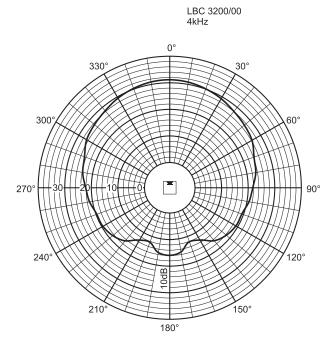
Polar diagram (vertical)



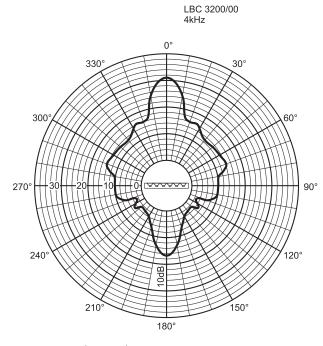




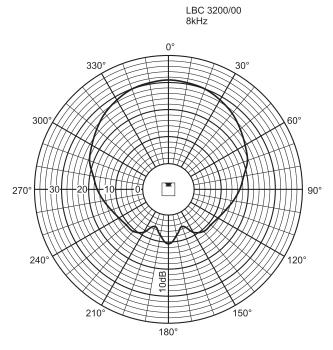
Polar diagram (vertical)



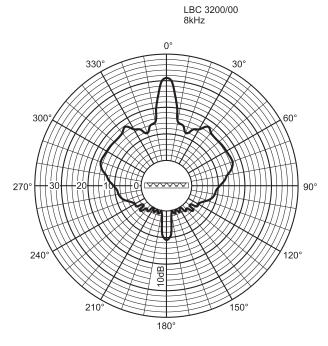
Polar diagram (horizontal)



Polar diagram (vertical)



Polar diagram (horizontal)



Polar diagram (vertical)

# **Parts Included**

Quantity	Component	
----------	-----------	--

- 1 LBC 3200/00 Line Array Loudspeaker
- 1 Wall mounting bracket

# **Technical Specifications**

## Electrical\*

Maximum power	45 W
Rated power	30/15/7.5W
Sound pressure level at 30 W / 1 W (1 kHz, 1 m)	106 / 91 dB (SPL)
Sound pressure level at 30 W / 1 W (2 kHz, 1 m)	108 / 93 dB (SPL)
Effective frequency range (-10 dB)	190 Hz to 18 kHz
Opening angle	1 kHz / 4 kHz (-6 dB)
horizontal	220°/130°
vertical	70°/18°
Rated input voltage	100 V
Rated impedance	333 ohm
Connector	Screw terminal block

\* Technical performance data acc. to IEC 60268-5

### Mechanical

Dimensions (H x W x D)	600 x 80 x 90 mm (23.62 x 3.15 x 3.54 in)
Weight	3 kg (6.6 lb)
Color	Light gray (matches RAL 9022)
Environmental	
Operating temperature	-25 °C to +55°C (-13 °F to +131 °F)
Storage temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative humidity	<95%

Ordering Information	
<b>LBC 3200/00 Line Array Indoor</b> <b>Loudspeaker</b> for small and medium indoor environments, 30 W	LBC3200/00
Accessories	
<b>LBC 1259/00 Universal Floorstand</b> Lightweight aluminum construction, foldable, M10 x 12 reducer flange.	LBC1259/00
LBC 1259/01 Universal Floorstand	LBC1259/01

Americas: Bosch Communications Systems 12000 Portland Avenue South Burnsville, Minnesota 55337, USA Phone: +1-800-392-3497 Fax: +1-800-955-6831 audiosupport@us.bosch.com www.boschsecurity.com

Europe, Middle East, Africa: Bosch Security Systems B.V. P.O. Box 80002 5600 JB Eindhoven, The Netherlands Phone: + 31 40 2577 284 Fax: +31 40 2577 330 emea.securitysystems@bosch.com www.boschsecurity.com

Asia-Pacific: Robert Bosch (SEA) Pte Ltd 11 Bishan Street 21 Singapore 573943 Phone: +65 6571 2600 Fax: +65 6571 2698 apr.securitysystems@bosch.com www.boschsecurity.com

#### Represented by

@ Bosch Security Systems Inc. 011 | Data subject to change without notice T869245835 | Cur: en-US, V22, 27 Jan 2011