

# LBC 3428/00 Horn Loudspeaker



## Security Systems



- Suitable for marine and industrial applications
- Glass reinforced polyester with strong, fire-retardant qualities
- Reduced maintenance costs
- Corrosion and chemical resistant
- Water- and dust-protected to class IP66 and IP67
- Complies with international installation and safety regulations

The Bosch LBC 3428/00 horn loudspeaker is specifically designed for excellent sound reproduction in marine applications and other industrial environments. It is rugged, water- and dust-protected, and resistant to the corrosive effects of sea water and most industrial atmospheres. Suitable for both stationary and mobile systems, its strength and good acoustic performance also makes it ideal for general commercial and industrial applications.

### Functions

The horn loudspeaker is made from a UV-stable, glass-reinforced polyester (GRP). This strong, fire-resistant and corrosion-resistant material is very reliable and reduces maintenance costs. GRP is also chemical resistant and thermally stable, making it ideal for even the harshest environments. The horns are weather-proof, and incorporate stainless steel mounting brackets with cover screws to increase corrosion resistance. They are fitted with a dual 20 mm gland entries (one gland is supplied as standard) to facilitate loop-through connection.

### Parts Included

Quantity	Component
1	LBC 3428/00 Horn Loudspeaker
1	Cable gland

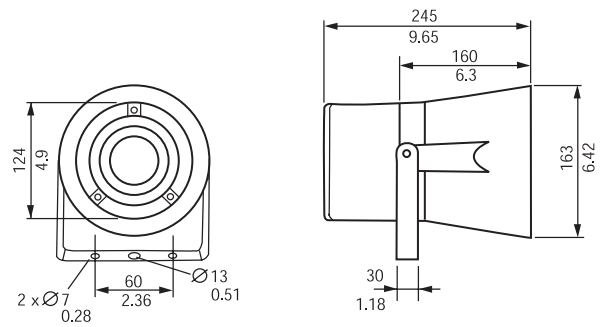
**Certifications and Approvals**

All Bosch loudspeakers are designed to withstand operating at their rated power for 100 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 extra reliability under extreme conditions, leading to higher customer satisfaction, longer operating life, and much less failure or performance deterioration.

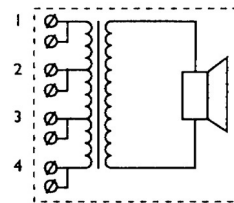
Safety	EN 60065
Water- and dust-protected	acc. to IEC 60529 IP66 and IP67

**Installation/Configuration Notes**

The horn loudspeakers include a built-in transformer with taps on the primary winding for different power settings. The horn loudspeakers are supplied with a sturdy mounting bracket allowing the sound beam to be accurately directed. The bracket has a ratchet facility to ensure it remains correctly positioned.

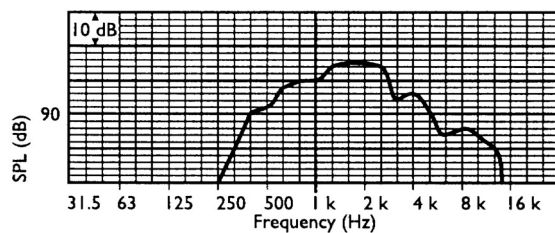


Dimensions (in mm/inches)

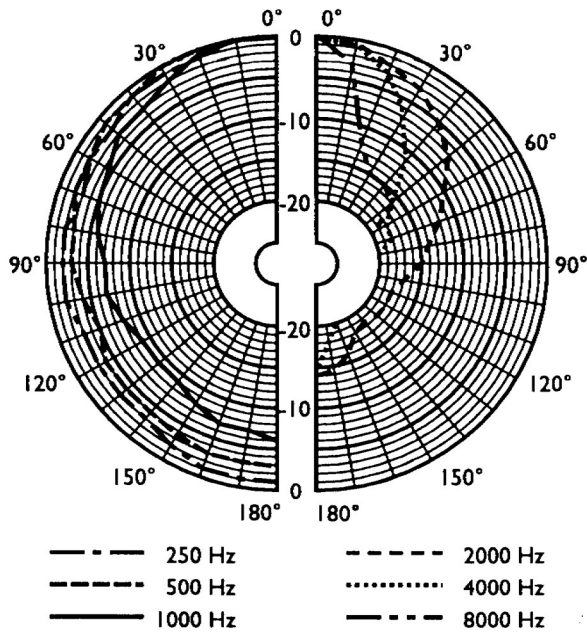


Transformer Tappings		Power
Common	Phase	15 W
1	2	15.0
2	3	7.5
3	4	5.0
1	3	4.0
2	4	2.0
1	4	0.8

Circuit diagram



Frequency response



Polar diagram (measured with pink noise)

Octave band (Hz)	125	250	500	1k	2k	4k	8k
SPL 1.1	-	79	96	102	105	98	87
SPL max.	-	91	108	114	117	110	99
Q-factor	-	1.5	1.9	3.2	6.8	15.8	51.3
Efficiency	-	0.07	2.7	6.2	5.9	0.5	0.1
H. angle	-	360	360	160	90	55	25
V. angle	-	360	360	160	90	55	25

Quick reference table

**Technical Specifications**

**Electrical\***

Max. Power	22.5 W
Rated Power (PHC)	15 W (15 - 7.5 - 5 - 4 - 2 - 0.8 W)
Sound Pressure Level at 15 W/1 W (at 1 kHz, 1 m)	114 dB / 102 dB (SPL)
Effective Frequency Range (-10 dB)	380 Hz to 5.5 kHz
Opening Angle (at 1 kHz/4 kHz, -6 dB)	160° / 55°
Rated Voltage	100 V
Rated Impedance	667 ohm

**Mechanical**

Connection	Screw terminal block (8 x 2.5 mm <sup>2</sup> )
Cable Diameter	8 mm (min) - 12 mm (max)
Dimensions	
Aperture Diameter	163 mm (6.4 in)
Overall Length	245 mm (9.6 in)
Color	Light grey (RAL 7035)
Weight	2.6 kg (5.72 lb)

**Environmental**

Ambient Temperature	-55°C to +55°C (-67°F to 131°F)
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\*) Technical performance data acc. to IEC 60268-5

**Ordering Information**

**Model & Description**

LBC 3428/00 Horn Loudspeaker  
for Harsh Environments, Circular, 15 W  
LBC 1256/00 EVAC Connection Adapter  
3-pole screw connector

**Americas:**

Bosch Security Systems  
130 Perinton Parkway  
Fairport, New York, 14450, USA  
Phone:+1 (0) 585 223 4060  
Fax:+1 (0) 585 223 9180  
security.sales@us.bosch.com  
<http://www.boschsecurity.us>

**Europe, Middle East, Africa:**

Bosch Security Systems B.V.  
P.O. Box 80002  
5600 JB Eindhoven, The Netherlands  
Phone:+31 (0) 40 27 83955  
Fax:+31 (0) 40 27 86668  
emea.securitysystems@bosch.com  
<http://www.boschsecurity.com>

**Asia-Pacific:**

Bosch Security Systems Pte Ltd  
38C Jalan Pemimpin  
Singapore 577180  
Phone:+65 6319 3450  
Fax:+65 6319 3499  
apr.securitysystems@bosch.com  
<http://www.boschsecurity.com>

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