



BOSCH
Invented for life

LBC 3428/00 Horn Loudspeaker



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 seawater 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 dual 20 mm gland entries (one gland is supplied as standard) to facilitate loop-through connection.

- ▶ 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 IP 66 and IP 67
- ▶ Complies with international installation and safety regulations

Certifications and Approvals

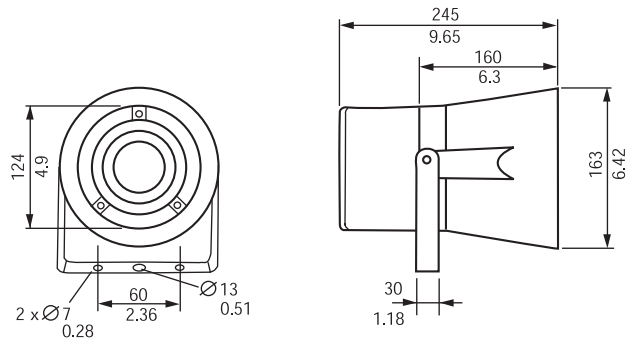
All Bosch loudspeakers are designed to withstand operating at their rated power for 100 continuous hours in accordance with IEC 268-5 Power Handling Capacity (PHC) standards. Bosch has also developed the Simulated Acoustical Feedback Exposure (SAFE) test to demonstrate that they can withstand two times 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.

Region	Certification	
Europe	CE	Declaration of Conformity
Safety		acc. to EN 60065
Water and dust protection		acc. to IEC 60529, IP 66 and IP 67

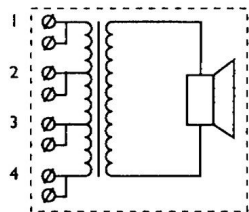
Installation/Configuration Notes

The Horn Loudspeaker includes a built-in transformer with taps on the primary winding for different power settings.

The Horn Loudspeaker is 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.



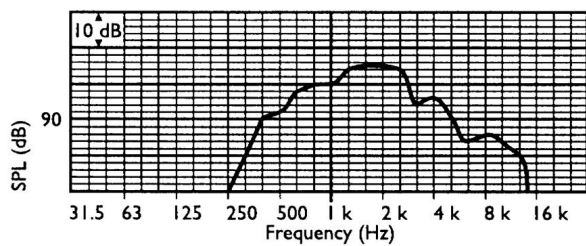
Dimensions in mm (in)



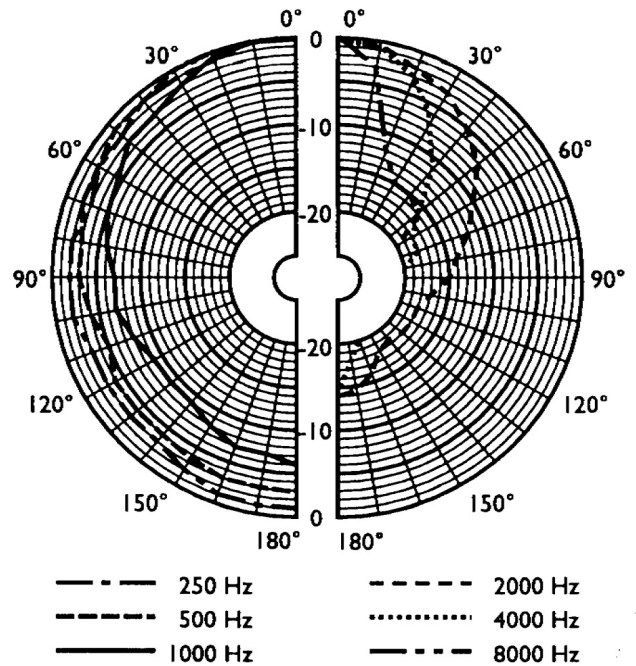
Transformer tapings Power

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)

	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
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

Acoustical performance specified per octave

Parts Included

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

Technical Specifications

Electrical*

Maximum power	22.5 W
Rated power	15 / 7.5 / 5 / 4 / 2 / 0.8 W
Sound pressure level at 15 W / 1 W (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
Connector	Screw terminal block

* Technical performance data acc. to IEC 60268-5

Mechanical

Dimensions (L x Dmax)	245 x 163 mm (9.6 x 6.4 in)
Weight	2.6 kg (5.72 lb)
Color	Light grey (RAL 7035)
Cable diameter	8 mm to 12 mm (0.31 in to 0.47 in)

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

LBC 3428/00 Horn Loudspeaker for harsh environments, circular, 15 W	LBC3428/00
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Accessories

LBC 1256/00 EVAC Connection Adapter 3-pole screw connector, 100 pieces	LBC1256/00
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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

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