Horn Loudspeaker

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- Suitable for marine and industrial applications in humidity-, chlorine- and salty environments
- Tough, high impact ABS material with UL94 V0 fire-retardant properties
- ▶ Water- and dust-protected to class IP 67
- ▶ Type approval certified EN 60945

The compact Horn Loudspeaker LH2-UC06 is specifically designed for excellent sound reproduction in marine applications and other industrial environments.

The units are rugged, water- and dust-protected, and resistant to the corrosive effects of seawater and most industrial atmospheres.

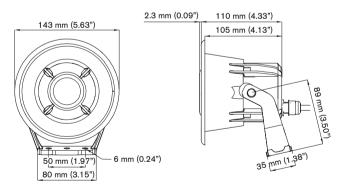
The horn loudspeaker is made from a high impact ABS material. This strong, fire-resistant and corrosion resistant material is chemical resistant and thermally stable, making it ideal for even the harshest environments. The horn is standard supplied with corrosion resistant ABS mounting bracket.

Functions

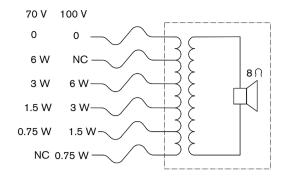
The horn loudspeaker is standard supplied with a sturdy ABS mounting bracket allowing the sound beam to be accurately directed.

The horn loudspeaker is supplied with a 1 m color-coded 6-core cable, with each color connected to a different primary tap on the matching transformer. This makes it easy to select nominal full-power, half-power, quarter-power or eight-power radiation (i.e. in 3 dB steps) without opening the unit during installation. The horn loudspeaker can be optionally flush mounted in a diameter hole of 110 mm (4.33") in a wall or ceiling by means of 4 screws (not

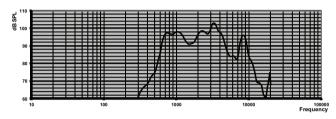
standard supplied). In this case, the bracket is removed and 4 marked holes – at the rear of the horn rim – needs to be drilled.



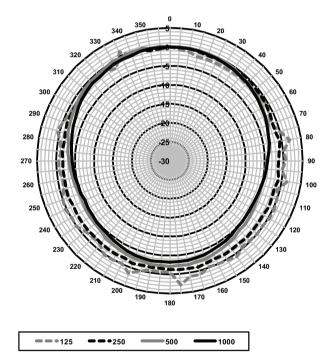
Dimensions in mm and (inch)

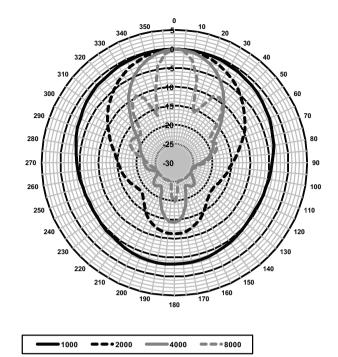


Circuit diagram



Frequency response





Polar diagrams (measured with pink noise)Acoustical performance specified per octave* (all measurements are done with a pink noise signal; the values are in dB SPL).

Octave band sensitivity * Octave SPL Total octave Total octave 1W/1m SPL SPL 1W/1m Pmax/1m 125 Hz 47.9 --250 Hz 59.7 _ -500 Hz 87.3 -1000 Hz 97 -2000 Hz 96.1 4000 Hz 96.8 --8000 Hz 90.8 -A-weighted -93.3 100.5 Lin-weighted -92.7 100.0

Octave band opening angles

| | Horizontal | Vertical | |
|---------|------------|----------|--|
| 125 Hz | 360 | 360 | |
| 250 Hz | 360 | 360 | |
| 500 Hz | 360 | 360 | |
| 1000 Hz | 360 | 360 | |

| 2000 Hz | 92 | 92 | |
|---------|----|----|--|
| 4000 Hz | 59 | 59 | |
| 8000 Hz | 25 | 25 | |

Acoustical performance specified per octave * (all measurements are done with a pink noise signal; the values are in dB SPL).

Certifications and approvals

Quality assurance

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 improved reliability under extreme conditions, leading to higher customer satisfaction, longer operating life, and lessons the chance of failure or performance deterioration.

| Safety | According to EN 60065 |
|---------------------------|------------------------------|
| Type approval certified | According to EN 60945 |
| Water and dust protection | According to EN 60529, IP 67 |
| Salt mist | According to IEC 60068-11 |
| Chlorine resistant | According to IEC 60068-2-60 |
| Wind force resistant | According to Bft 11 |
| | |

| Region | Certification | |
|--------|---------------|--------------|
| Europe | CE | (Conformity) |
| | CE | (Compliance) |
| | CE | (IP) |

Parts included

| 1 | LH2-UC06 Horn Loudspeaker |
|---|---------------------------|
| 1 | Installation instruction |

Technical specifications

Electrical*

| Maximum power | 9 W |
|--|-------------------|
| Rated power (PHC) | 6 W |
| Power tapping | 6/3/1.5/0.75W |
| Sound pressure level at rated power / 1 W (1 kHz, 1 m) | 105 / 97 dB (SPL) |
| Effective frequency range (- 10 dB) | 600 Hz to 5 kHz |

| Opening angle at 1 kHz / 4 kHz (-6 dB) | 360° / 60° |
|--|-----------------------------------|
| Rated input voltage | 70/100V |
| Rated impedance | 833 / 1667 ohm |
| Electrical connection | 1 m (39.37 in) 6-core fixed cable |

* Technical performance data according to IEC 60268-5

Mechanical

| Dimensions (H x W x D) | 159 x 143 x 136 mm (6.26 x 5.63 x 5.35 in) |
|---------------------------|---|
| Weight | 1.18 kg (2.60 lb) |
| Color | Light grey (RAL 7035) |
| Material horn | High impact ABS |
| Material mounting bracket | High impact ABS |
| | |

Environmental

| Operating temperature | -30 °C to +70 °C (-22 °F to +158 °F) |
|-----------------------|--------------------------------------|
| Storage temperature | -40 °C to +70 °C (-40 °F to +158 °F) |
| Relative humidity | <95% |

Ordering information

Horn Loudspeaker

Horn Loudspeaker 6 W, ABS IP 67 housing, high-quality speech and music reproduction, IP67 water and dust protected, salt mist and chlorine resistant, EN 60945 certified, light grey RAL7035. Order number **LH2-UC06**

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