

## LCZ-UM12-IN Ceiling loudspeaker 12W, metal



The LCZ-UM12-IN is a 12 W loudspeaker with integrated circular metal grille. It has excellent audio performance and is easy to install with its integral mounting clips. The loudspeaker is suitable for high ceiling applications.

### Functions

The LCZ-UM12-IN has a perforated metal grille, finished in an attractive off-white color. The LCZ-UM12-IN has a single piece 12W, dual cone loudspeaker.

A 100 V matching transformer is mounted on the back of the frame. It can be used in areas with high ceiling as well as in shops, departmental stores, offices, sports halls, hotels and restaurants.

The loudspeaker has been tested for operation at rated power for 100 hours in accordance with IEC 268-5 Power Handling Capacity (PHC) standards.

### Installation/configuration notes

Installation is easy with integral clips that securely hold the ceiling loudspeaker in its cut-out. The line matching transformer mounted on the ceiling loudspeaker can be tapped for nominal full power, half power and quarter power radiation to adjust in 3dB steps.

- ▶ Excellent speech and music reproduction
- ▶ High sound pressure level
- ▶ Ideal for high ceiling applications

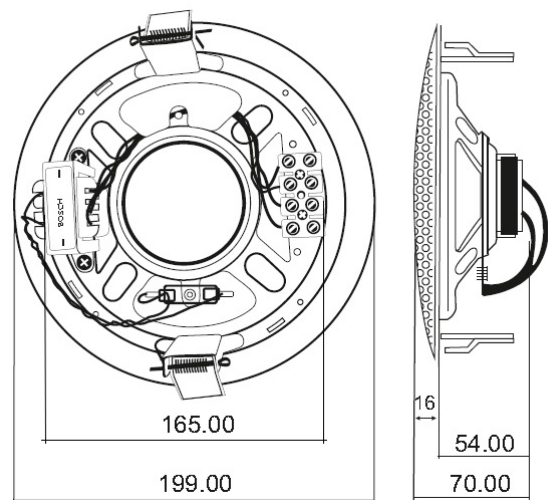


Fig. 1: Dimensions in mm

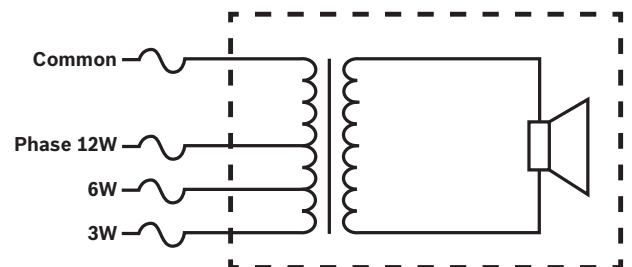


Fig. 2: Circuit Diagram

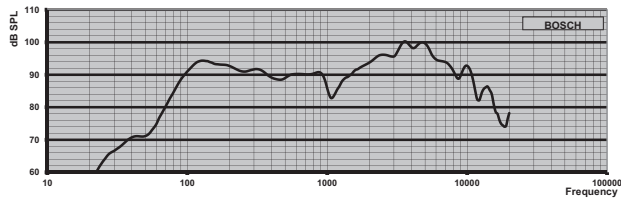


Fig. 3: Frequency Response

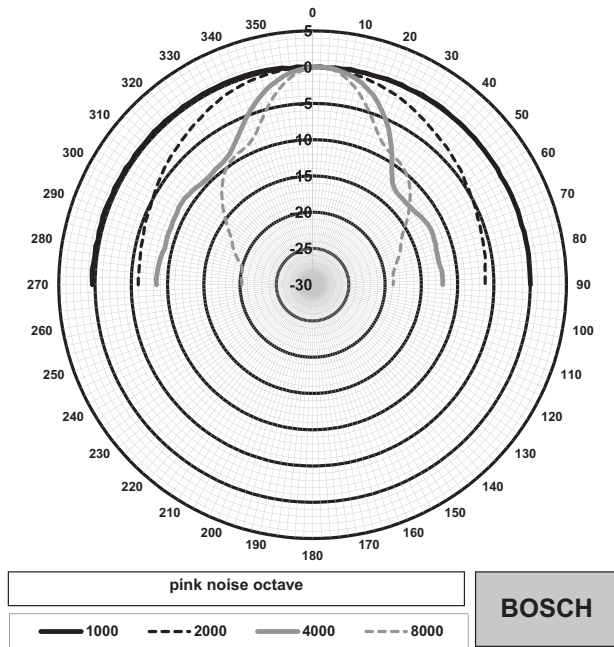


Fig. 4: Normalized polar plot

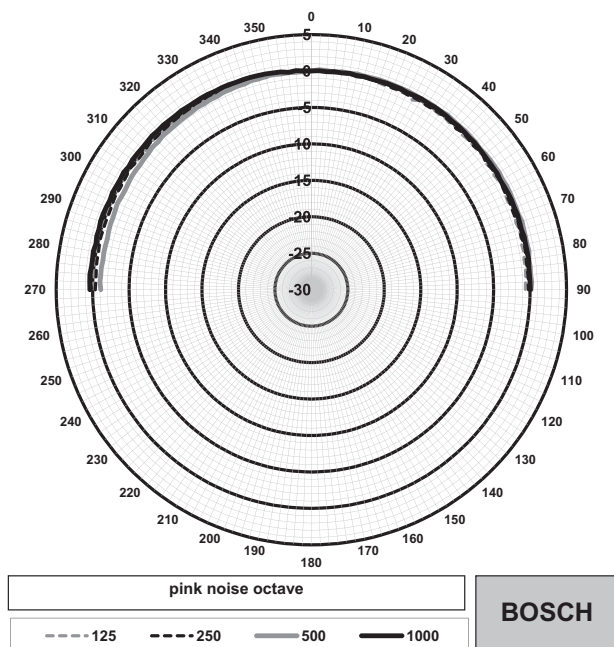


Fig. 5: Normalized polar plot

Octave band sensitivity\*

|              | Octave SPL<br>1W/1m | Total octave SPL<br>1W/1m | Total octave SPL<br>Pmax/1m |
|--------------|---------------------|---------------------------|-----------------------------|
| 125 Hz       | 93.0                | -                         | -                           |
| 250 Hz       | 91.5                | -                         | -                           |
| 500 Hz       | 89.6                | -                         | -                           |
| 1000 Hz      | 88.7                | -                         | -                           |
| 2000 Hz      | 94.0                | -                         | -                           |
| 4000 Hz      | 98.5                | -                         | -                           |
| 8000 Hz      | 92.5                | -                         | -                           |
| A-weighted   | -                   | 91.7                      | 101.6                       |
| Lin-weighted | -                   | 92.2                      | 102.2                       |

(1/1)th octave band sensitivity

Octave band opening angles

|         | Horizontal | Vertical |  |
|---------|------------|----------|--|
| 125 Hz  | 180        | 180      |  |
| 250 Hz  | 180        | 180      |  |
| 500 Hz  | 180        | 180      |  |
| 1000 Hz | 180        | 180      |  |
| 2000 Hz | 173        | 173      |  |
| 4000 Hz | 50         | 50       |  |
| 8000 Hz | 37         | 37       |  |

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

#### Parts included

| Quantity | Component                                   |
|----------|---------------------------------------------|
| 1        | LCZ-UM12-IN Ceiling loudspeaker 12 W, metal |

#### Technical specifications

##### Electrical

|                                                   |                         |
|---------------------------------------------------|-------------------------|
| Rated Power                                       | 12 W (12 W / 6 W / 3 W) |
| Maximum power                                     | 18 W                    |
| Sound Pressure Level at<br>12W / 1 W (1 kHz, 1 m) | 99 dB / 88.7 dB         |
| Effective frequency range                         | 70 Hz to 17 kHz(-10dB)  |

|                                |                       |
|--------------------------------|-----------------------|
| Opening angle (1kHz/4kHz,-6dB) | 175° / 50°            |
| Rated impedance                | 833 Ohm               |
| Rated input voltage            | 100 V                 |
| Connector                      | 4 Pole Screw Terminal |

#### Mechanical

|                       |                  |
|-----------------------|------------------|
| Diameter              | 200 mm           |
| Cutout diameter       | 165 mm           |
| Depth                 | 70 mm            |
| Weight                | 1.3 kg           |
| Color                 | Off White        |
| Operating temperature | -5 °C to +55 °C  |
| Storage temperature   | -40 °C to +70 °C |

#### Ordering information

##### **LCZ-UM12-IN Ceiling loudspeaker 12W, metal**

Ceiling loudspeaker 12 W, perforated metal grille, integral clips for easy installation

Order number **LCZ-UM12-IN | F.01U.294.063**

