

LC1-PC20G6-6-IN Premium-sound ceiling loudspeaker, 20W



The LC1-PC20G6-6-IN is a high-efficiency, coaxial full-range premium ceiling loudspeaker providing excellent speech and music reproduction. This ceiling speaker gives sound distribution for a wide scope of ceiling mounted applications. These are ideal for hotels, restaurants, shopping centers, convention centers, office buildings, etc. where both speaker and music reproduction of high quality is required.

System overview

The LC1-PC20G6-6-IN is a circular shaped, ABS material ceiling loudspeaker and has full-range performance in the bandwidth of 70 Hz to 20 kHz. It comes with a poly cone tweeter for enhanced performance. The speaker has a line matching transformer to connect to a 100V output from an amplifier. The loudspeaker has power tapplings at full power (20W), half power (10W), and quarter power (5W) and 1/8th power (2.5W) to connect at different power levels.

Functions

The LC1-PC20G6-6-IN model ceiling speaker is for direct connection to a 100 V line output and is finished in white (RAL 9003) color. The ceiling loudspeaker comes with a 100 V transformer with taps on the primary winding to allow different power tapplings. Nominal full-power, half-power or quarter-power radiation (in 3 dB steps) can easily be selected by connecting the amplifier output to the appropriate tapping.

- ▶ Excellent sound reproduction
- ▶ Coaxial full-range speaker with poly cone tweeter
- ▶ Easy to install
- ▶ Simple power tapplings at full, half and quarter power
- ▶ Tested for PHC with 100 hours of continuous operation as per IEC60268-1&5

Regulatory information

All Bosch loudspeakers are designed to withstand operating at their rated power for 100 hours in accordance with IEC 60268-1 and IEC 60268-5 Power Handling Capacity (PHC) standards. Bosch has also developed the Simulated Acoustical Feedback Exposure (SAFE) test to demonstrate that the speakers can withstand two times their rated power for short durations. This ensures extra reliability under extreme conditions, leading to greater customer satisfaction, longer operating life, and much less chance of failure or performance deterioration.

- 100 hours PHC (Powering Handling Capacity) test in acc. to IEC 60268-1&5
- SAFE (Simulated Acoustic Feedback Exposure) test to withstand 50 sweep runs of square wave from low frequency to high frequency at twice the rated power, simulating feedback situation.

Installation/configuration notes

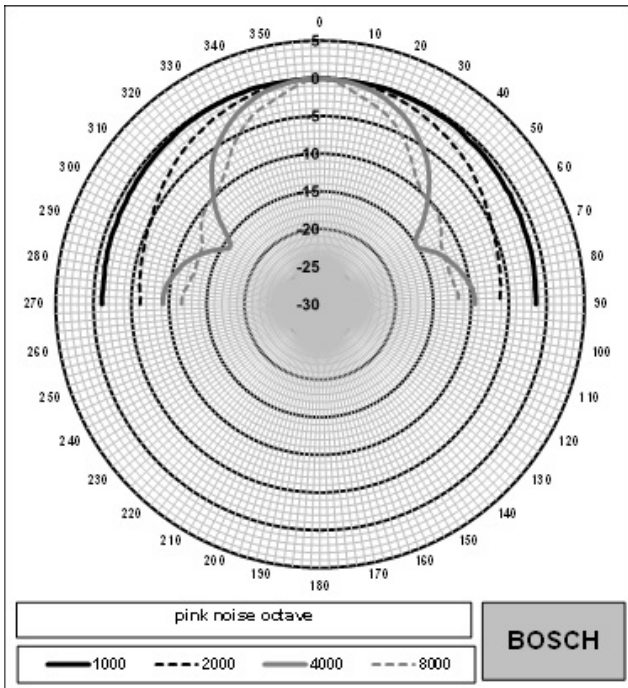


Fig. 1: Normalized polar plot

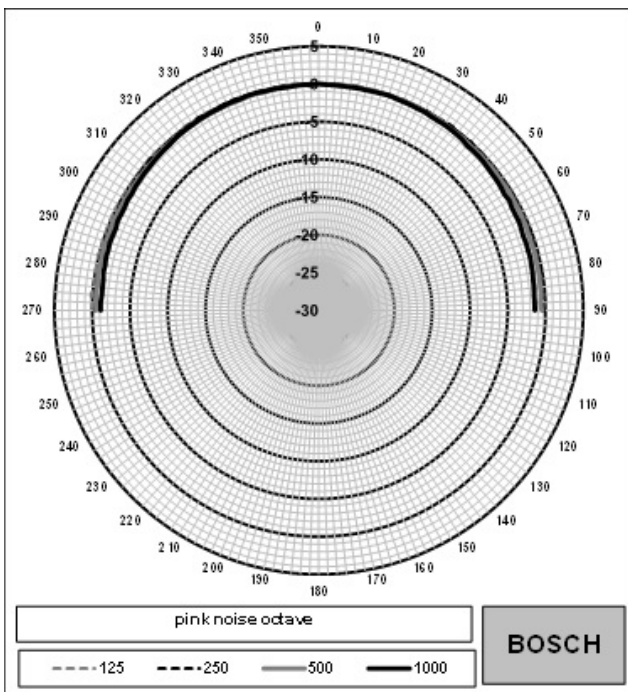


Fig. 2: Normalized polar plot

Acoustical performance specified per octave

	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
SPL 1w, 1m in dB	87.2	87.1	85.9	89.5	91.1	93.8	93.7

Opening	180	180	180	180	170	72	57
Angle (deg)							

Parts included

Quantity	Component
1	LC1-PC20G6-6-IN Premium-sound ceiling loudspeaker, 20 W

Technical specifications

Electrical

Maximum power	30 W
Rated power (PHC)	20 W
Power taps at 100 V	20 W - 10 W - 5 W - 2.5 W
Sound pressure level 1 kHz oct, 1 W, @1 m	89 dB (±3 dB)
Effective frequency range (-10 dB)	70 Hz to 20 kHz
Opening angles (-6 dB)	1 K: > 180° 2 K: 170° 4 K: 72° 8 K: 57°
Rated voltage	100 V
Rated impedance at rated power	500 / 1000 / 2000 / 4000 Ohm
Safety	Refer to EN 60065
Connection	Screw terminal connector(ABS)

Mechanical

Driver / Speaker diameter	5 in / 8 in
Tweeter	½ inch poly cone
Color	White (RAL 9003)
Weight	1.5 Kg

Ordering information

LC1-PC20G6-6-IN Premium-sound ceiling loudspeaker, 20W
Ceiling loudspeaker 20 W, circular, ABS material
Order number **LC1-PC20G6-6-IN | F.01U.317.665**

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