

# PL 81/A

## HIGH EFFICIENCY CEILING SPEAKER



### DESCRIPTION

The PL 81/A is a ceiling speaker featuring elegant design that can be flush-mounted in false ceilings or panels. It can also be attached to walls or ceilings using a special accessory for surface mount installation. The PL 81/A incorporates a 200 mm (8") dual cone loudspeaker that improves high frequency extension, and it is equipped with a line transformer that enables direct connection to constant voltage systems at 50 V or 100 V; a low impedance input (4 Ohm) is available as well. When connected to a 100 V, its power can be selected among the values 10 W, 5 W, 2.5 W or 1.25 W through the selection of transformer inputs wire. Installation is quick and easy thanks to a special three metal brackets system that avoids the need for using screws or other attachment elements.

### MAIN APPLICATIONS

- High intelligibility Speech and Background music
- Schools
- Shopping malls
- Hospital
- Museums
- Hotels
- Office building

### MAIN FEATURES

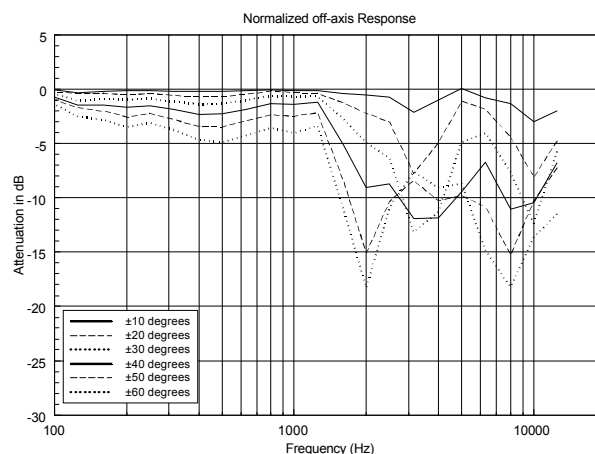
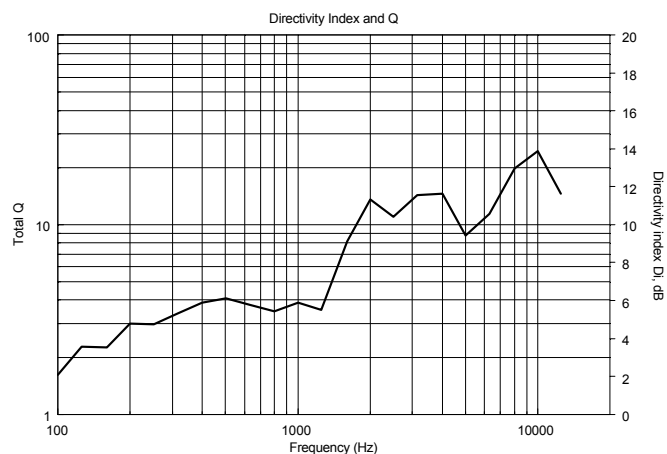
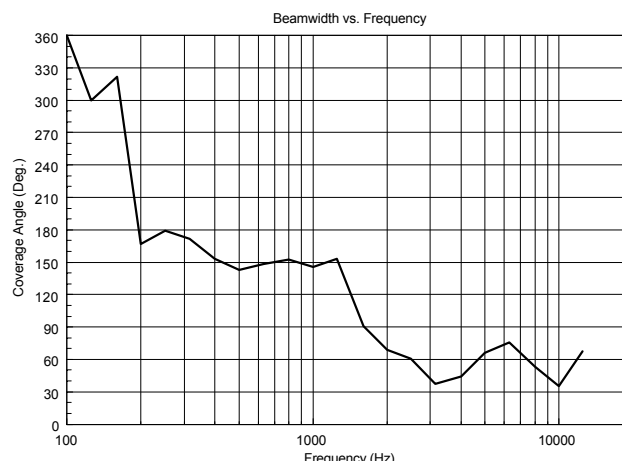
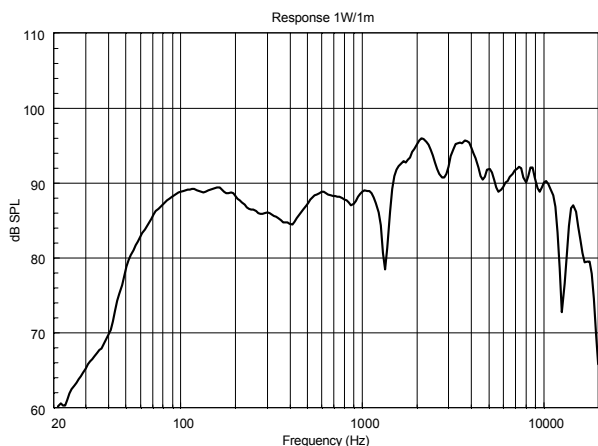
- 8" Dual-Cone wide-band speaker
- 10 / 20 Watt (RMS/Music Power)
- 40 Hz ÷ 18 kHz
- 110 dB (1 m / POWER MAX) max. SPL
- Incl. 100V transformer multitap
- Easy to install
- Simple power settings

### SPECIFICATIONS

Loudspeaker	8" dual cone extended range
Power (on 8 Ohm load)	10 / 20 W (RMS / Music power)
Power	10 W - 5 W - 2.5 W - 1.25 W (100V)
Sensitivity	97 dB (1 W / 1 m)
Mx. SPL (6 W / 1 m)	110 dB(A) (1 m / POWER MAX)
Frequency Response	40 Hz - 20 kHz
Angle of coverage	150° / 90° / 50° @ 1 / 2 / 4 kHz (hor.)
Connector	2 pin terminal strip
Body colour	White RAL 9010
Main body material	Plastic
Grill material	Steel
Dimensions	Ø 266 mm x 102 mm
Flush-mounting hole	Ø 242 mm
Max ceiling thickness	30 mm
Net weight	2.35 kg
Operating temperature	-25° to +55°
Relative humidity	90% non condensing



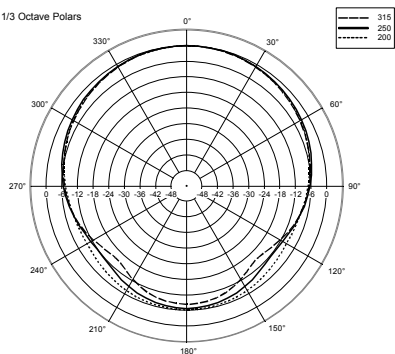
# PL 81/A



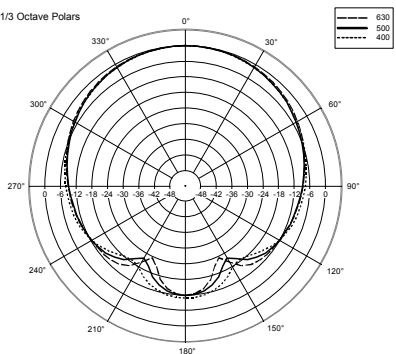
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## HORIZONTAL 1/3 POLAR PLOT

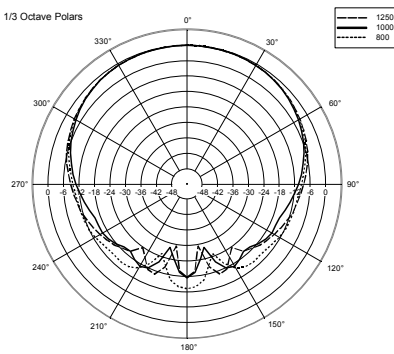
1/3 Octave Polars



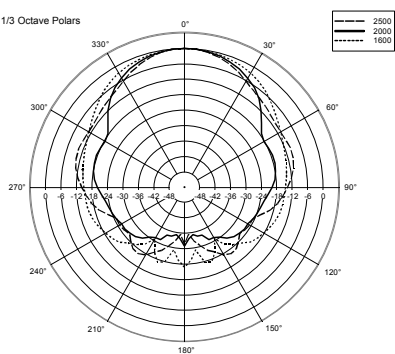
1/3 Octave Polars



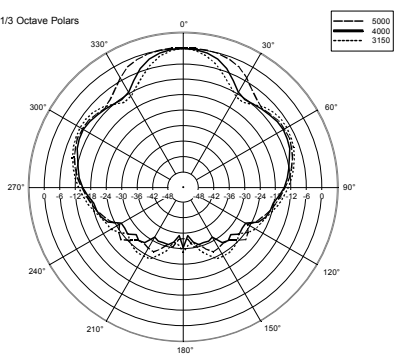
1/3 Octave Polars



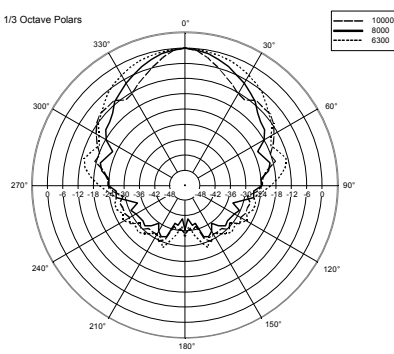
1/3 Octave Polars



1/3 Octave Polars



1/3 Octave Polars

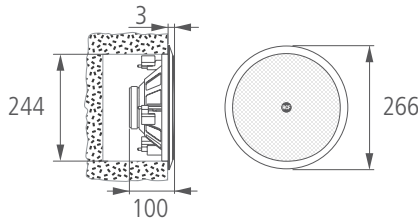


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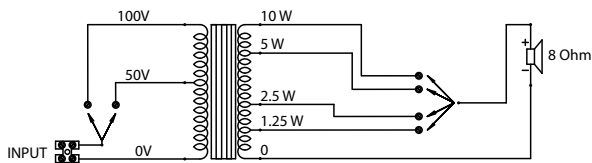
## PART NUMBERS

0006090

## DIMENSIONS (All data are in mm)



## SCHEMATICS



## POWER SELECTION

Define the colour cable to selected the chosen power value referring to the 100 V line (among 2 W – 4 W – 6 W – 8 W) so the correspondence impedance (among 5000  $\Omega$  – 2500  $\Omega$  - 1666  $\Omega$  – 1250  $\Omega$ )

0	50V	100V
INPUT		

50V	10 W	5 W	2.5 W	1.2 W
100V	10 W	5 W	2.5 W	1.2 W

## CERTIFICATIONS AND APPROVALS

- CE comply with European Community Directive 73/23/EEC and 93/768/EEC
- Environmental protection IP 40 homologation
- Self-Extinguishing plastic according to UL 94V0
- Speaker data according to IEC 268-5
- Safety according to IEC EN 60065:2002

## ACCESSORIES (included)

- Connection Terminal
- 3 metal brackets
- Nylon safety cable
- Steel Grill

## ACCESSORIES (not included)

- A 1380 Adapter for surface mount installation (code 133 20 031)

## INSTALLATION NOTES

Once removed the frontal grille the speaker can be simply and quickly installed into a hole in the ceiling cavity, secured by 3 metal brackets lead-screw rotating clamps.

The electrical connections are clearly labelled and made through the transformer.

The power can be easily selected by using common wire and the positive wire using the legend of the power available on the speaker.

Before the installation, verify that behind the false-ceiling there is enough room for loudspeakers: with respect to the loudspeaker front flange surface plane, an empty space at least 100 mm depth is required.

The PL 81/A is intended for indoor installations only.

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