



## KEY FEATURES:

**99 db 1W / 1m average sensitivity**

**100 mm high temperature sandwich voice coil**

**1200 W AES program power**

**Vented neodymium magnet assembly with massive heatsink**

**Double aluminium demodulating rings for lower distortion and improved heat dissipation**

**Water protected cone (front)**

## Application : High power woofer

The **12NB601** loudspeaker combining good linearity and efficiency with high power handling capabilities. It features 100 mm aluminium voice coil, silicone spider, vented aluminium die cast frame and vented neodymium magnet structure. The used inside double demodulating rings ensure ultra low distortion. The massive heatsink improves the cooling of the magnet structure, which reduce power compression. 12NB601 is suitable for application as LF driver in compact 2- way and compact bass boxes including application in bass horns.

## SPECIFICATIONS

Nominal Diameter	12"/315 inch/mm
Impedance	8 Ohm
Minimum Impedance	6.04 Ohm
Power Capacity AES <sup>1</sup>	600 W
Program Power <sup>2</sup>	1200 W
Sensitivity	(200 -2000 Hz) 99 dB/W/m
Frequency Range	50 – 3000 Hz
Voice Coil Diameter	100 mm
Voice Coil Material	Aluminium
Voice Coil Former	Kapton
Voice Coil Winding Depth	23 mm
Magnet Gap Depth	11 mm
Cone Material	Paper with glassfiber
Basket	Die Cast Aluminium
Magnet	Neodymium
Flux Density	1.30 T

1. AES standard. Power is calculated on rated minimum impedance. Measurement is in 65 L box enclosure tuned 63 Hz using a 40-400 Hz band limited pink noise test signal applied continuously for 2 hours.

2. Program power is defined as 3db greater than AES Power Capacity.

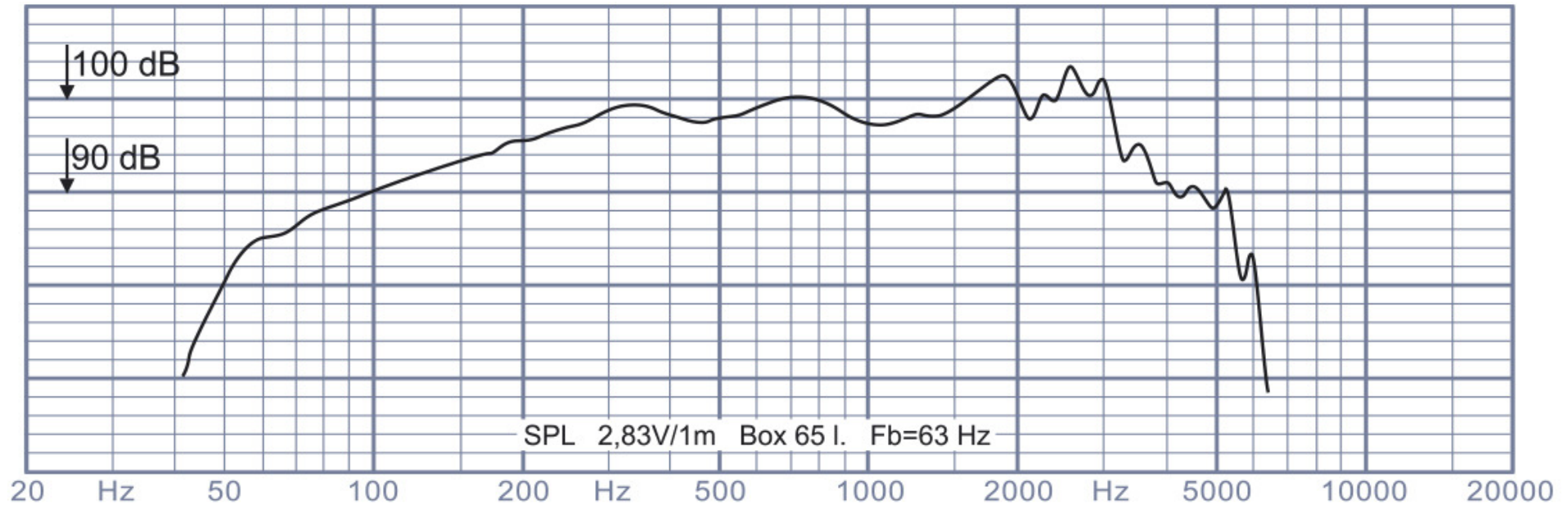
\* Linear Mathematical Xmax is calculated as:  $(H_{vc} - H_g)/2 + H_g/4$  where Hvc is the voice coil depth and Hg is the gap depth.

## THIELE-SMALL PARAMETERS

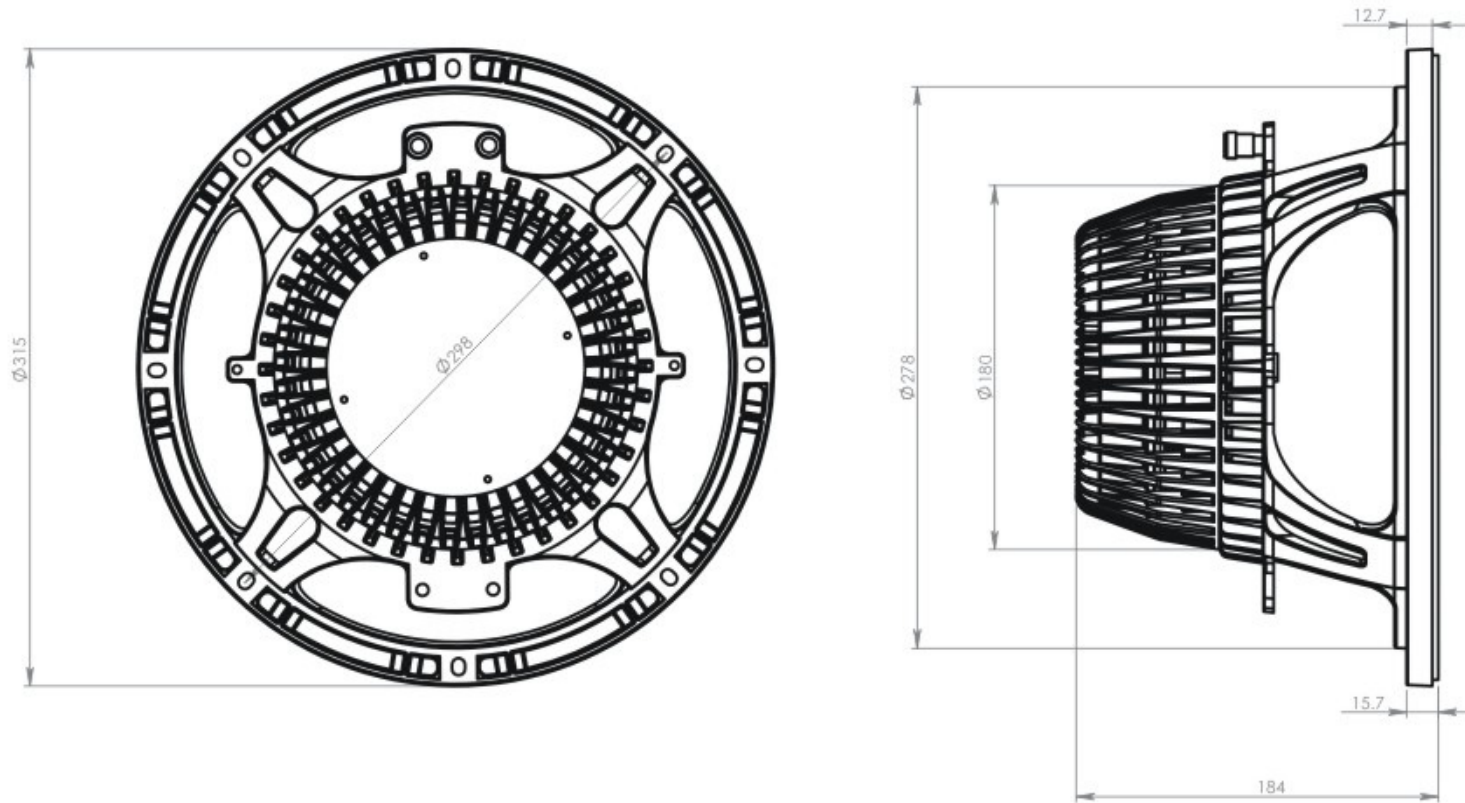
Resonance Frequency	50.47 Hz
Mechanical Efficiency Factor (Qms)	10.02
Electrical Efficiency Factor (Qes)	0.315
Total Q (Qts)	0.305
Equivalent Air Volume (Vas )	38.71 litres
Diaphragm mass ind. airload (Mms)	95.03 grams
Voice Coil Resistance Re	5.48 Ohms
Effective Diagram Area (Sd)	514.7 cm <sup>2</sup>
Peak Linear Displacement of Diaphragm (Xmax)*	±8.75 mm
Mechanical Compliance of Suspension (Cms)	0.105 mm/N
BL Product (BL)	22.91 T.m
V.C. Inductance at 1 kHz (Le)	0.97 mH

## MOUNTING INFORMATION

Overall Diameter	315 mm
Baffle Hole Diameter	280 mm
Number of Mounting Holes	8 elliptic 7x8 mm
Bolt Circle Diameter	296 / 298 mm
Overall Depth	184 mm
Net Weight	7.8 kg



Frequency Response



**OBERTON**

model: 12NB600

Dimensions are in mm

Scale: 1:3