

Oberton 12 NB 600



KEY FEATURES:

- 95 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
- Double silicone spider for improved excursion control and linearity
- Water protected cone (front)

Application : High power woofer

The **12NB600** loudspeaker combining good linearity and efficiency with high power handling capabilities. It features 100 mm aluminium voice coil, double silicone spider, 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. 12NB600 is suitable for application as LF driver in compact 2- way and compact bass boxes.

SPECIFICATIONS

Nominal Diameter	12"/315 inch/mm
Impedance	8 Ohm
Minimum Impedance	7.21 Ohm
Power Capacity AES ¹	600 W
Program Power ²	1200 W
Sensitivity	(100 -1000 Hz) 95 dB/W/m
Frequency Range	50 - 2000 Hz
Voice Coil Diameter	100 mm
Voice Coil Material	Cooper
Voice Coil Former	Glass fiber
Voice Coil Winding Depth	22 mm
Magnet Gap Depth	14 mm
Cone Material	Kevlar paper
Basket	Die Cast Aluminium
Magnet	Neodymium
Flux Density	1.02 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: $(Hvc - Hg)/2 + Hg/4$ where Hvc is the voice coil depth and Hg is the gap depth.

THIELE-SMALL PARAMETERS

Resonance Frequency	50.85 Hz
Mechanical Efficiency Factor (Qms)	6.97
Electrical Efficiency Factor (Qes)	0.2
Total Q (Qts)	0.194
Equivalent Air Volume (Vas)	35.66 litres
Diaphragm mass ind. airload (Mms)	101.61 grams
Voice Coil Resistance Re	4.95 Ohms
Effective Diagram Area (Sd)	514.7 cm ²
Peak Linear Displacement of Diaphragm (Xmax)*	±7.5 mm
Mechanical Compliance of Suspension (Cms)	0.096 mm/N
BL Product (BL)	28.39 T.m
V.C. Inductance at 1 kHz (Le)	1.82 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 Responce

