

# Oberton 18 NXB 800



## KEY FEATURES:

- 97 db 1W / 1m average sensitivity
- 100 mm high temperature sandwich voice coil
- 2200 W AES program power
- Vented neodymium magnet assembly with massive heatsink
- Triple aluminium demodulating rings for lower distortion and improved heat dissipation
- Double silicone spider for improved excursion control and linearity
- Water protected cone (front)

## Application : Power bass

The **18NXB800** neodymium bass loudspeaker is specially designed to deliver high impact bass response, with exceptional high power capacity. It incorporates an 4`` sandwich voice coil, kevlar paper cone, a powerful, vented neodymium magnetic structure with massive heatsink, die cast vented aluminium frame with triple aluminium demodulating rings, which reduced power compression, and double silicone spider assembly. This results in an incredible high efficient transducer for subwoofer applications, with the ability to handle high excursion with low distortion and reduced thermal power compression.

## SPECIFICATIONS

Nominal Diameter	18"/461 inch/mm
Impedance	8 Ohm
Minimum Impedance	6.98 Ohm
Power Capacity AES <sup>1</sup>	1100 W
Program Power <sup>2</sup>	2200 W
Sensitivity	(50-200 Hz) 97 dB/W/m
Frequency Range	36 - 1000 Hz
Voice Coil Diameter	100 mm
Voice Coil Material	Copper
Voice Coil Former	Glassfiber
Voice Coil Winding Depth	30 mm
Magnet Gap Depth	14 mm
Cone Material	Kevlar paper
Basket	Die cast aluminium
Magnet	Neodymium
Flux Density	1.05 T

## THIELE-SMALL PARAMETERS

Resonance Frequency	38.02 Hz
Mechanical Efficiency Factor (Q <sub>ms</sub> )	6.57
Electrical Efficiency Factor (Q <sub>es</sub> )	0.336
Total Q (Q <sub>ts</sub> )	0.319
Equivalent Air Volume (V <sub>as</sub> )	139.5 Litres
Diaphragm mass ind. airoload (M <sub>ms</sub> )	208.66 grams
Voice Coil Resistance R <sub>e</sub>	5.00 Ohms
Effective Diagram Area (S <sub>d</sub> )	1110 cm <sup>2</sup>
Peak Linear Displacement of Diaphragm (X <sub>max</sub> )*	± 11.5 mm
Mechanical Compliance of Suspension (C <sub>ms</sub> )	0.08 mm/N
BL Product (BL)	27.67 T.m
V.C. Inductance at 1 kHz (L <sub>e</sub> )	2.04 mH

## MOUNTING INFORMATION

Overall Diameter	461 mm
Baffle Hole Diameter	416 mm
Number of Mounting Holes	8 elliptic 7 x 8,5 mm
Bolt Circle Diameter	438/441 mm
Overall Depth	217mm
Net Weight	8.95 kg

1. AES standard. Power is calculated on rated minimum impedance. Measurement is in 180 L box enclosure tuned 43 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 X<sub>max</sub> is calculated as:  $(H_{vc} - H_g)/2 + H_g/4$  where H<sub>vc</sub> is the voice coil depth and H<sub>g</sub> is the gap depth.

## Frequency Responce

