# **Oberton 18 B 450**



### **KEY FEATURES:**

- 98 db 1W / 1m average sensitivity
- 77 mm high temperature sandwich voice coil
- 1000 W AES program power
- Powerful, vented 180 mm magnet structure
- Aluminium demodulating ring for lower distortion and improved heat dissipation
- Silicone spider

## **Application : Power bass**

The 18B450 has been specially designed for low frequency reproduction in bass reflex enclosures. It feature vented die cast aluminium frame, 180 mm magnet structure and 3" voice coil. It is suitable for economic subwoofer application.

#### SPECIFICATIONS

Nominal Diameter Impedance Minimum Impedance Power Capacity AES 1 Program Power <sup>2</sup> Sensitivity Frequency Range Voice Coil Diameter Voice Coil Material Voice Coil Former Voice Coil Winding Depth Magnet Gap Depth Cone Material Basket Magnet Flux Density

18"/461 inch/mm 8 Ohm 6.40 Ohm 500 W 1000 W (50 - 200 Hz) 98 dB/W/m 35 – 1000 Hz 77 mm Copper Glassfiber 20 mm 11 mm Paper Die cast aluminium Ferrite 1.2 T

#### THIELE-SMALL PARAMETERS

Resonance Frequency	34.38 Hz
Mechanical Efficiency Factor (Qms)	8.03
Electrical Efficiency Factor (Qes)	0.357
Total Q (Qts)	0.342
Equivalent Air Volume (Vas )	241.55 Litres
Diaphragm mass ind. airload (Mms)	152.76 grams
Voice Coil Resistance Re	5.29 Ohms
Effective Diagram Area (Sd)	<b>1110</b> cm <sup>2</sup>
Peak Linear Displacement of Diaphragm (Xmax)*	± 7.25 mm
Mechanical Compliance of Suspension (Cms)	0.140 mm/N
BL Product (BL)	22.12 T.m
V.C. Inductance at 1 kHz (Le)	1.49 mH

#### **MOUNTING INFORMATION**

Overall Diameter	461 mm
Baffle Hole Diameter	416 mm
Number of Mounting Holes	8 eliptic 7 x 8,5 mm
Bolt Circle Diameter	438/441 mm
Overall Depth	192.5 mm
Net Weight	8.55 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 Xmax is calculated as: (Hvc - Hg)/2 + Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.

**Frequency Responce** 



