

Oberton 12 B 450



KEY FEATURES:

- 99 db 1W / 1m average sensitivity
- 77 mm high temperature aluminium voice coil
- 900 W AES program power
- Powerful, vented 180 mm magnet structure
- Double aluminium demodulating rings for lower distortion and improved heat dissipation
- Silicone spider

Application : Woofer

The **12B450** loudspeaker is combining very good linearity and efficiency with high power handling capabilities, with use of 77 mm aluminium voice coil. It features vented aluminium die cast frame, 180 mm magnet structure and curvilinear paper cone. **12B450** is suitable for application as LF driver in small stage monitors and 2- way PA boxes with 1` HF driver.

SPECIFICATIONS

Nominal Diameter	12"/310 inch/mm
Impedance	8 Ohm
Minimum Impedance	6.22 Ohm
Power Capacity AES ¹	450 W
Program Power ²	900 W
Sensitivity	(200-2000 Hz) 99dB/W/m
Frequency Range	50 - 3000 Hz
Voice Coil Diameter	77 mm
Voice Coil Material	Aluminium
Voice Coil Former	Kapton™
Voice Coil Winding Depth	21 mm
Magnet Gap Depth	11 mm
Cone Material	Paper
Basket	Die cast aluminium
Magnet	Ferrite
Flux Density	1.20 T

THIELE-SMALL PARAMETERS

Resonance Frequency	46.29 Hz
Mechanical Efficiency Factor (Qms)	9.56
Electrical Efficiency Factor (Qes)	0.241
Total Q (Qts)	0.235
Equivalent Air Volume (Vas)	71.75 Litres
Diaphragm mass ind. airload (Mms)	60.97 grams
Voice Coil Resistance Re	5.07 Ohms
Effective Diagram Area (Sd)	514.7 cm ²
Peak Linear Displacement of Diaphragm (Xmax)*	± 7.75 mm
Mechanical Compliance of Suspension (Cms)	0.194 mm/N
BL Product (BL)	19.31 T.m
V.C. Inductance at 1 kHz (Le)	1.10 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	153 mm
Net Weight	7.5 kg

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.

Frequency Responce

