

Oberton 15 B 500



KEY FEATURES:

- **99 db 1W / 1m average sensitivity**
- **77 mm high temperature sandwich voice coil**
- **1000 W AES program power**
- **Powerful, vented 180 mm magnet structure**
- **Double aluminium demodulating rings for lower distortion and improved heat dissipation**
- **Double silicone spiders for improved excursion control and linearity**
- **Water protected cone (front)**

Application : High power woofer

15B500 loudspeaker combining good linearity and efficiency with high power handling capabilities, with use of 77 mm voice coil. It features aluminium die cast frame, water protected cone, 180 mm vented magnet structure and 20 mm high voice coil. It has aluminum demodulating rings that reduces distortions and improves cooling of voice coil. 15B500 is suitable for application in a wide variety of enclosure types and particularly as LF driver in 2- or 3- way systems.

SPECIFICATIONS

Nominal Diameter	15"/388 inch/mm
Impedance	8 Ohm
Minimum Impedance	6.39 Ohm
Power Capacity AES ¹	500 W
Program Power ²	1000 W
Sensitivity	(60-2000 Hz) 99 dB/W/m
Frequency Range	38 - 2500 Hz
Voice Coil Diameter	77 mm
Voice Coil Material	Copper
Voice Coil Former	Glassfiber
Voice Coil Winding Depth	20 mm
Magnet Gap Depth	11 mm
Cone Material	Paper
Basket	Die cast aluminium
Magnet	Strontium ferrite
Flux Density	1.20

THIELE-SMALL PARAMETERS

Resonance Frequency	38.20 Hz
Mechanical Efficiency Factor (Qms)	12.06
Electrical Efficiency Factor (Qes)	0.274
Total Q (Qts)	0.268
Equivalent Air Volume (Vas)	145.82 Litres
Diaphragm mass ind. airload (Mms)	114.40 grams
Voice Coil Resistance Re	5.23 Ohms
Effective Diaphragm Area (Sd)	829.6 cm ²
Peak Linear Displacement of Diaphragm (Xmax)*	±7.25 mm
Mechanical Compliance of Suspension (Cms)	0.152 mm/N
BL Product (BL)	22.91 T.m
V.C. Inductance at 1 kHz (Le)	1.25 mH

MOUNTING INFORMATION

Overall Diameter	388 mm
Baffle Hole Diameter	354 mm
Number of Mounting Holes	8 elliptic 7x8 mm
Bolt Circle Diameter	370/372 mm
Overall Depth	169 mm
Net Weight	7.8 kg

1. AES standard. Power is calculated on rated minimum impedance. Measurement is in 120 L box enclosure tuned 56 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 Response

