

Oberton 15 XB 700

KEY FEATURES:



- 97 db 1W / 1m average sensitivity
- 100 mm high temperature sandwich voice coil
- 2000 W AES program power
- Powerful, vented 220 mm magnet structure
- Aluminium demodulating ring for lower distortion and improved heat dissipation
- Double silicone spider for improved excursion control and linearity
- Water protected cone
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Application : High power bass

15 XB 700 is a high power long coil 15 inch bass loudspeaker design to reinforce low frequency range at very high sound power levels. It features a 4" sandwich voice coil, vented aluminium frame with integrated demodulating ring, 220 mm magnet structure and double spider assembly. It is suitable for tuned reflex or horn loaded enclosures for high level subwoofer applications.

SPECIFICATIONS

Nominal Diameter	15"/385 inch/mm
Impedance	8 Ohm
Minimum Impedance	7.05 Ohm
Power Capacity AES ¹	1000 W
Program Power ²	2000 W
Sensitivity	(100-200 Hz) 95 dB/W/m
Frequency Range	37 - 2000 Hz
Voice Coil Diameter	100 mm
Voice Coil Material	Copper
Voice Coil Former	Glassfiber
Voice Coil Winding Depth	25 mm
Magnet Gap Depth	14 mm
Cone Material	Kevlar paper
Basket	Die cast aluminium
Magnet	Ferrite
Flux Density	0.98 T

THIELE-SMALL PARAMETERS

Resonance Frequency	37.2 Hz
Mechanical Efficiency Factor (Qms)	9.2
Electrical Efficiency Factor (Qes)	0.292
Total Q (Qts)	0.283
Equivalent Air Volume (Vas)	111.02 Litres
Diaphragm mass ind. airload (Mms)	158.39 grams
Voice Coil Resistance Re	5.19 Ohms
Effective Diagram Area (Sd)	829.6 cm ²
Peak Linear Displacement of Diaphragm (Xmax)*	±9 mm
Mechanical Compliance of Suspension (Cms)	0.115
BL Product (BL)	25.64 T.m
V.C. Inductance at 1 kHz (Le)	1.9 mH

MOUNTING INFORMATION

Overall Diameter	388 mm
Baffle Hole Diameter	354 mm
Number of Mounting Holes	8 with dia. 7mm
Bolt Circle Diameter	370 / 372 mm
Overall Depth	179.4 mm
Net Weight	11.95 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.

