

Oberton 18 XB 700

KEY FEATURES:



- 98 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

Application: High Power Bass

The **18XB700** 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 220 mm magnetic structure, die cast vented aluminium frame 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	7.00 Ohm
Power Capacity AES ¹	1000 W
Program Power ²	2000 W
Sensitivity	(50-200 Hz) 98 dB/W/m
Frequency Range	35 - 1000 Hz
Voice Coil Diameter	100 mm
Voice Coil Material	Cooper
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	0.97 T

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.

THIELE-SMALL PARAMETERS

Resonance Frequency	36.10 Hz
Mechanical Efficiency Factor (Qms)	9.26
Electrical Efficiency Factor (Qes)	0.314
Total Q (Qts)	0.304
Equivalent Air Volume (Vas)	183.22 Litres
Diaphragm mass ind. airload (Mms)	182.62 grams
Voice Coil Resistance Re	5.17 Ohms
Effective Diagram Area (Sd)	1110 cm ²
Peak Linear Displacement of Diaphragm (Xmax)*	± 9 mm
Mechanical Compliance of Suspension (Cms)	0.1064 mm/N
BL Product (BL)	26.10 T.m
V.C. Inductance at 1 kHz (Le)	1.83 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	201 mm
Net Weight	12.55 kg

Frequency Response

