



**KEY FEATURES:**

**97.5 db 1W / 1m average sensitivity**

**100 mm high temperature sandwich voice coil**

**2600 W AES program power**

**Powerful, vented ferrite magnet structure**

**Double aluminium demodulating ring for lower THD and improved heat dissipation**

**Double silicone spider for improved excursion control and linearity**

**Water protected cone (front)**

**Application : High Power Bass**

The **18XB1300** ferrite bass loudspeaker is specially designed to deliver very high impact bass response, with exceptional high power capacity. It incorporates an 4" sandwich voice coil, double silicone spider assembly, carbone paper cone and die cast vented aluminium frame. Powerful, vented ferrite magnetic structure with double demodulating rings which reduced power compression. The result is high efficient transducer for subwoofer applications, with the ability to handle very high excursion with low distortion and reduced thermal power compression.

## SPECIFICATIONS

Nominal Diameter	18"/461 inch/mm
Impedance	8 Ohm
Minimum Impedance	7.02 Ohm
Power Capacity AES <sup>1</sup>	1300 W
Program Power <sup>2</sup>	2600 W
Sensitivity	(50-200 Hz) 97.5 dB/W/m
Frequency Range	35 - 1000 Hz
Voice Coil Diameter	100 mm
Voice Coil Material	Copper
Voice Coil Former	Glassfiber
Voice Coil Winding Depth	31 mm
Magnet Gap Depth	14 mm
Cone Material	Carbone paper
Basket	Die cast aluminium
Magnet	Ferrite
Flux Density	1.00 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.

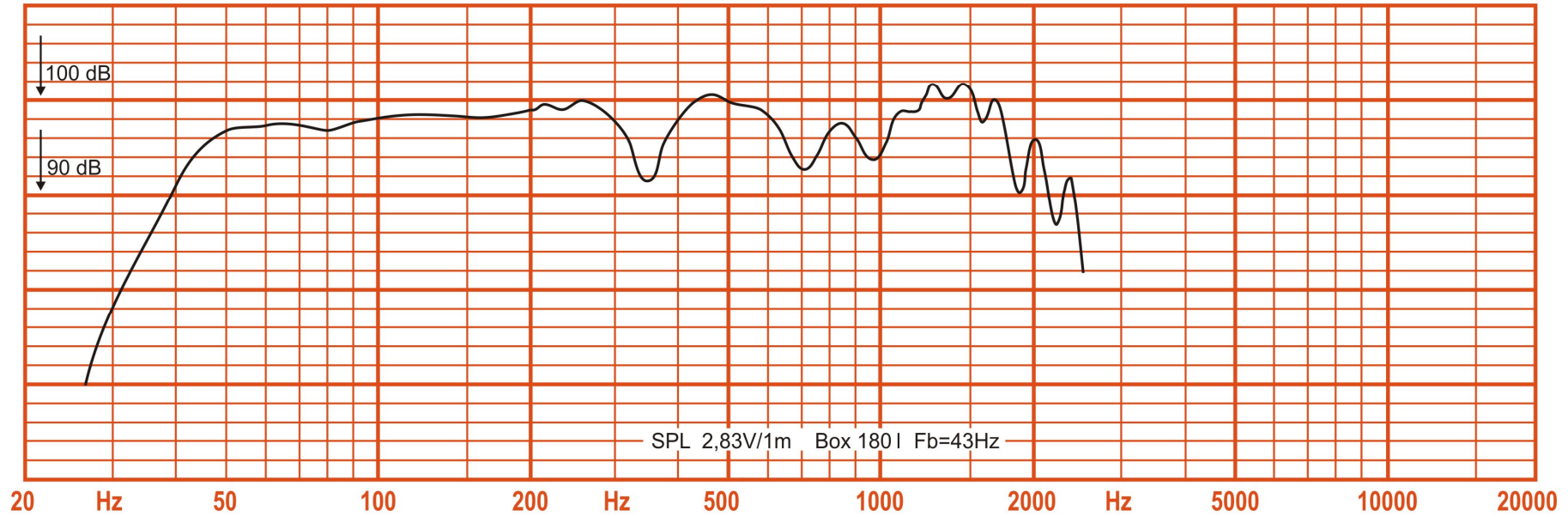
\* Linear Mathematical Xmax is calculated as:  $(H_{vc} - H_g)/2 + H_g/4$  where  $H_{vc}$  is the voice coil depth and  $H_g$  is the gap depth.

## THIELE-SMALL PARAMETERS

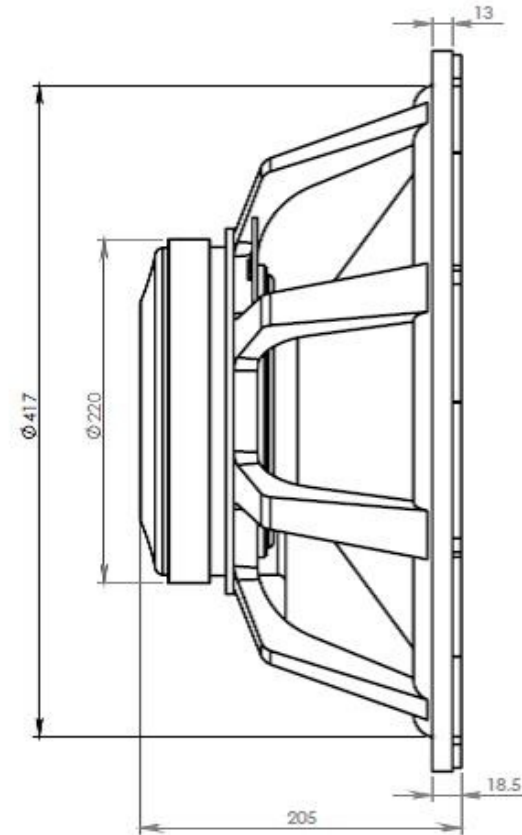
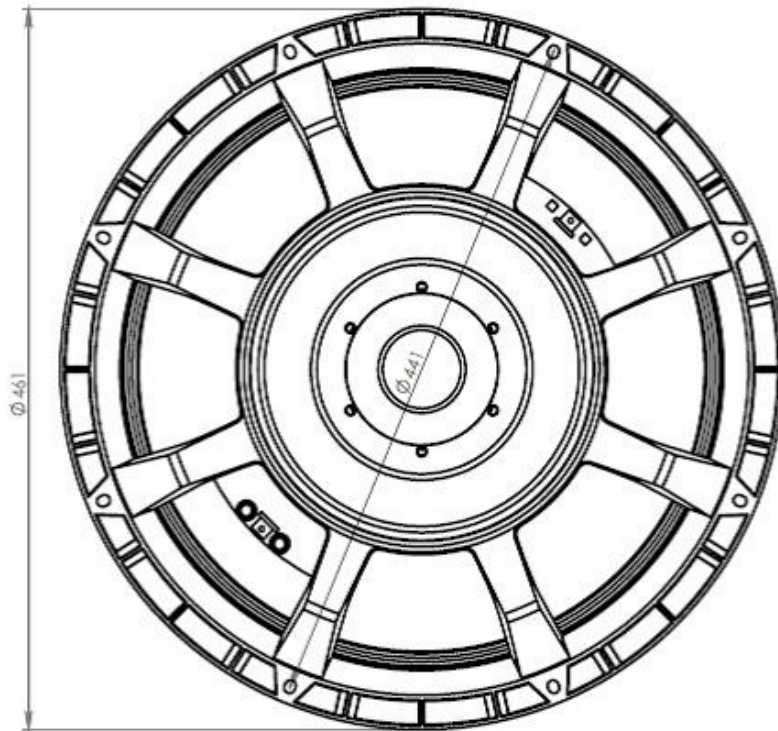
Resonance Frequency	35.16 Hz
Mechanical Efficiency Factor (Qms)	9.56
Electrical Efficiency Factor (Qes)	0.296
Total Q (Qts)	0.287
Equivalent Air Volume (Vas )	170.92 Litres
Diaphragm mass ind. airload (Mms)	206.35 grams
Voice Coil Resistance Re	5.20 Ohms
Effective Diagram Area (Sd)	1158 cm <sup>2</sup>
Peak Linear Displacement of Diaphragm (Xmax)*	± 11.5 mm
Mechanical Compliance of Suspension (Cms)	0.0993 mm/N
BL Product (BL)	28.30 T.m
V.C. Inductance at 1 kHz (Le)	1.92 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	205 mm
Net Weight	12.9 kg



Frequency Response



**OBERTON**

model: 18XB1300

Dimensions are in mm

Scale: 1:4