



KEY FEATURES

115 mm (4.5") high temperature sandwich voice coil

3200 W AES program power

Vented neodymium magnet assembly with massive heatsink

Double aluminium demodulating rings for lower distortion and improved heat dissipation

Double silicone spiders for improved excursion control and linearity

Water protected cone with carbon fibers

Application : High power bass

The **18NXB1601** neodymium bass loudspeaker is specially designed for horn application to deliver very high impact bass response, with exceptional high power capacity. It incorporates an 4.5" sandwich voice coil, double silicone spider assembly, paper cone with carbon fibers and die cast vented aluminium frame. Powerful, vented neodymium magnetic structure with massive heatsink and double demodulating rings reduced power compression. The result is high efficient transducer for bass horn 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	6.89 Ohm
Power Capacity AES ¹	1600 W
Program Power ²	3200 W
Sensitivity	depends on the horn
Frequency Range	30 - 250 Hz
Voice Coil Diameter	115 mm (4.5")
Voice Coil Material	Copper
Voice Coil Former	Glassfiber
Voice Coil Winding Depth	32 mm
Magnet Gap Depth	14 mm
Cone Material	Paper with carbon fibers
Basket	Die cast aluminium
Magnet	Neodymium
Flux Density	1.1 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.

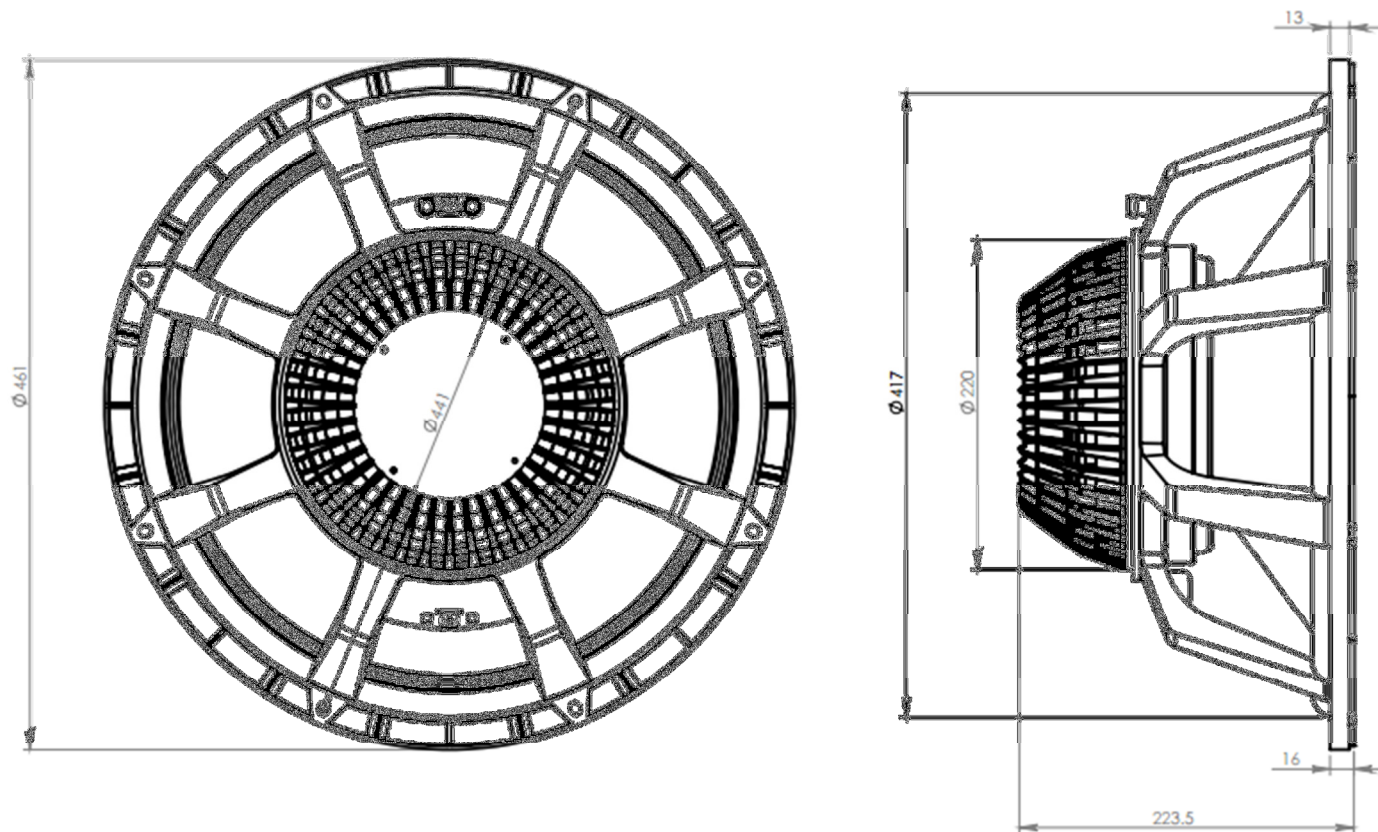
* Linear Mathematical Xmax is calculated as: $(H_{vc} - H_g)/2 + H_g/4$ where Hvc is the voice coil depth and Hg is the gap depth.

THIELE-SMALL PARAMETERS

Resonance Frequency	34.64 Hz
Mechanical Efficiency Factor (Qms)	5.75
Electrical Efficiency Factor (Qes)	0.301
Total Q (Qts)	0.286
Equivalent Air Volume (Vas)	146.23 Litres
Diaphragm mass ind. airload (Mms)	248.5 grams
Voice Coil Resistance Re	5.18 Ohms
Effective Diagram Area (Sd)	1158 cm ²
Peak Linear Displacement of Diaphragm (Xmax)*	± 12.5 mm
Mechanical Compliance of Suspension (Cms)	0.0849 mm/N
BL Product (BL)	30.48 T.m
V.C. Inductance at 1 kHz (Le)	1.20 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	224 mm
Net Weight	11.7 kg



OBERTON

model: 18NXB1601

Dimensions are in mm

Scale: 1:4