



KEY FEATURES:

- 98 db SPL 1W / 1m (LF) average sensitivity
- 100 mm (4") high temperature voice coil (LF)
- 800 W AES program power (LF)
- Aluminium demodulating ring
- Silicon spider
- Copper plated pole piece and top plate (LF)
- Water protected cone - front
- 1.4" exit HF neodymium compression driver
- 72 mm (2.85") HF high temperature voice coil
- 60 degrees conical integrated horn

Application: High Quality stage monitors and compact bass reflex boxes.

Description: The 12H4CX72 is a 12" / 1.4" coaxial transducer designed for use in compact reflex enclosures and stage monitors with a nominal dispersion 60 degrees conical.

The low profile, smooth curvilinear LF cone provides smooth response within its intended frequency range and water prove protective coating, allowing application in a wide range of environments. The state-of-the-art extreme light 100 mm (4 in) LF voice coil ensure low Mms which gives perfect voice reproduction.

The aluminium demodulating ring in the magnet structure reduces distortion and inductance and together with copper plated pole piece and top plate improve transient response.

The neodymium 1.4" exit compression driver adopted is our ND72HB model.

The HF driver diaphragm assembly, using hybrid dome this together with phasing plug improve linearity of frequency response in high end. The double magnetic structure allow to get maximum performance.

The HF part of magnet structure has cooper ring on the pole piece, which reduces the inductance figure of frequencies above 10 kHz, improving phase and impedance linearisation. This ensures extremely high SPL in the high end of the frequency response.

SPECIFICATIONS

Nominal diameter 315 mm (12 in)
Impedance LF 8 Ohm /HF 16 Ohm
Minimum impedance LF 7.28 Ohm
Frequency range 60 - 18000 Hz
Dispersion angle 60 deg conical

LF unit

Sensitivity (200-1000 Hz) 98 dB
Power Capacity AES ¹ 400 W
Program Power ² 800 W
Voice Coil Diameter 100 mm (4 in)
Voice Coil Material CCAW
Voice Coil Former Glass fiber
V. C. Winding Depth 6 mm
Magnet Gap Depth 12 mm.
Cone Material Paper with Kevlar fibers
Basket Die Cast Aluminium
Magnet Neodymium
Flux Density 1.37 T

HF unit

Minimum impedance HF 11.29 Ohms
DC resistance 10 Ohms
Sensitivity (1-10 kHz) 110 dB
Power capacity (1-20 kHz) 100 W
Program power 200 W
Voice coil diameter 72 mm (2.85 in)
Winding material CCAW*
Diaphragm material Hybrid
Flux density 2 T

THIELE-SMALL PARAMETERS

Fs 49.90 Hz
Qms 10,326
Qes 0.259
Qts 0.252
Vas 74,72 L
Mms 50,36 g
Re 6.5 Ohms
Sd 515 cm²
Xmax* ± 4.5 mm
Cms 0.202 mm/N
BL 19.92 T.m
Le at 1kHz 0.445 mH

MOUNTING INFORMATION

Overall diameter 315 mm (12 in)
Depth 242 mm
Baffle hole diameter 280 mm
Bolt circle diameter 296/298mm
Mounting holes 280 mm
Net weight 10,1 kg

1. AES standard. Power is calculated on rated minimum impedance.

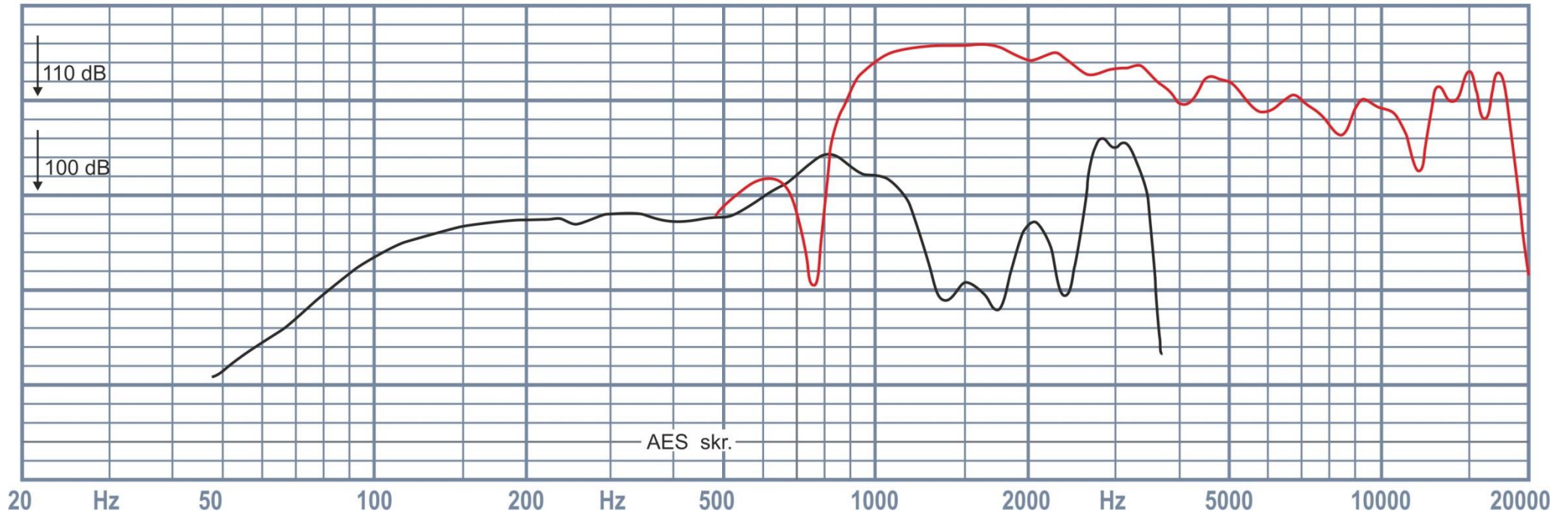
Measurement is in 65 L box enclosure tuned 63 Hz using a 50-500 Hz band limited pink noise test signal applied continuously for 2 hours.

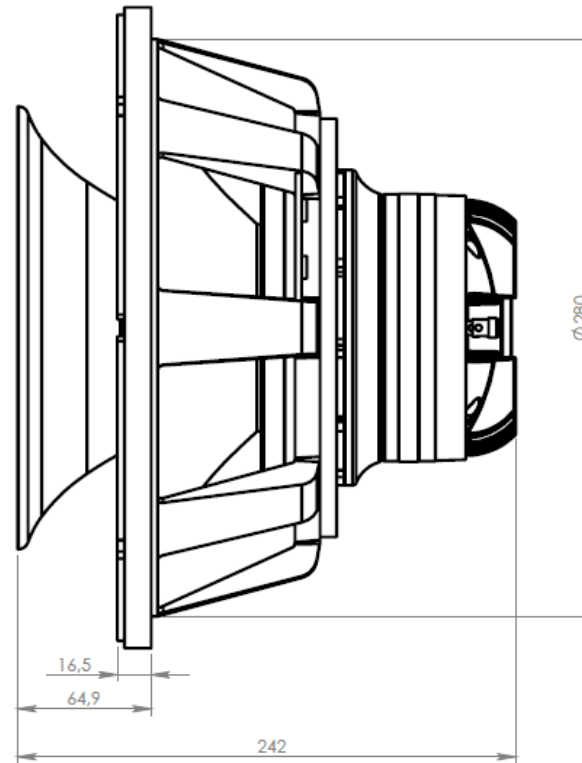
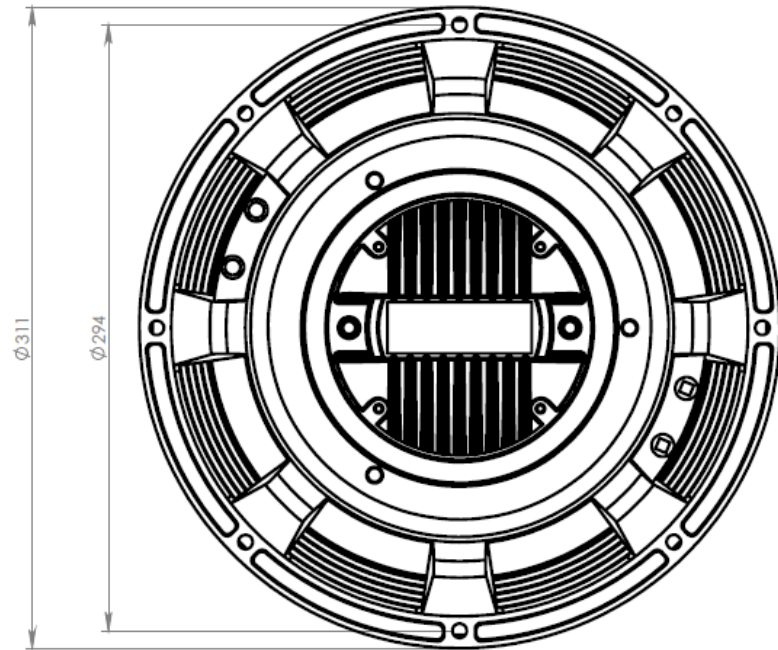
2. Program power is defined as 3db greater than AES Power Capacity.

** Copper Clad Aluminium Wire*

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

SPL 1W/1m OBERTON 12H4CX72





OBERTON

model: 12H4CX72

Dimensions are in mm

Scale: 1:3