3.8.2021 10NHCX

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NEW 10" Coaxial Neodymium Loudspeaker, 2.5" LF + 1.75" HF voice coil, 250 W + 40 W , 99 dB +110 dB



KEY FEATURES

- 99db SPL 1W / 1m (LF) average sensitivity
- 62 mm (2.5") high temperature voice coil (LF)
- 500 W AES program power (LF)
- Double aluminium demodulating rings
- Double neodymium magnet assembly
- Water protected cone (front)
- 1" exit HF neodymium compression driver
- 44 mm (1.75") HF high temperature voice coil
- 60 degrees nominal dispersion

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PART NUMBER: 13110N0108

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Application: Compact bass reflex boxes.

Description: The 10NHCX is a 10" / 1" coaxial transducer with integrated HF horn, designed for use in compact reflex enclosures with high SPL and nominal dispersion of 60 degrees.

The low profile, smooth curvilinear LF cone together with HF horn increase the SPL in vocal range, which ensure big headroom. The cone with water prove protective coating, allowing application in a wide range of environments. The state-of-the-art 62 mm (2.5 in) LF voice coil has Glassfiber former, which together with high temperature resistant resin ensure high reliability by high power.

The double aluminium demodulating rings reduce distortion and inductance and improve transient response. The neodymium 1" exit compression driver adopted is our ND2545 model.

The HF driver diaphragm assembly, using triple layer polyester dome this together with phasing plug improve linearity of frequency response in high end.

SPECIFICATIONS

Nominal diameter 263 mm (10 in)
Impedance LF 8 Ohm /HF 16 Ohm

Minimum impedance LF 6.6 Ohm Frequency range 70 - 20000 Hz

Dispersion angle 60 deg

LF unit

Sensitivity (200-1000 Hz) 99 dB Power Capacity AES ¹ 250 W Program Power ² 500 W

Voice Coil Diameter 62 mm (2.5 in)

Voice Coil Material Copper Clad Aluminium Wire Voice Coil Former Glassfiber

V.C. Winding Depth 12 mm
Magnet Gap Depth 7 mm
Cone Material Paper

Basket Die Cast Aluminium

Magnet Neodymium Flux Density 1.55 T

HF unit

Program power

Minimum impedance HF 12.74 Ohms DC resistance 10.6 Ohms Sensitivity (1-15 kHz) 110 dB Power capacity (1-20 kHz) 40 W

Voice coil diameter 44 mm (.75 in)

Winding material Copper Clad Aluminium Wire

80 W

Diaphragm material sandwich polyester

Flux density 1.9 T

THIELE-SMALL PARAMETERS

Fs 71.63 Hz
Qms 11.23
Qes 0.243
Qts 0.238
Vas 24.54 L
Mms 28.84 g

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 Re
 5.7 Ohms

 Sd
 317.3 cm2

 Xmax*
 ± 4.25 mm

 Cms
 0.171 mm/N

 BL
 17.44 T.m

 Le at 1kHz
 0.316 mH

1. AES standard. Power is calculated on rated minimum impedance. Measurement is in 30 L box enclosure tuned 60 Hz using a 50-1000 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.

MOUNTING INFORMATION

Overall diameter 263 mm (10 in)
Depth 167 mm
Baffle hole diameter 225 mm
Bolt circle diameter 244 mm

Mounting holes 8 with diam. 7 mm

Net weight 4.1 kg

LF Recone Kit:

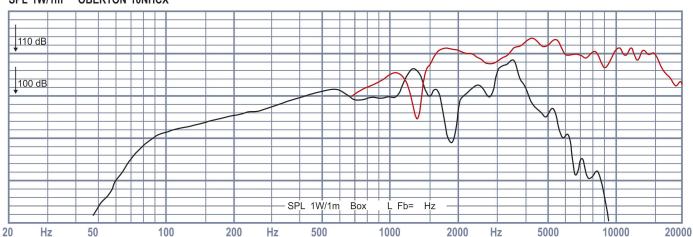
RK10NHCX, part No: R3110N0108

HF Service Kit:

Diaphragm assembly:

NDA45-16 PET part No: R411700316

SPL 1W/1m OBERTON 10NHCX

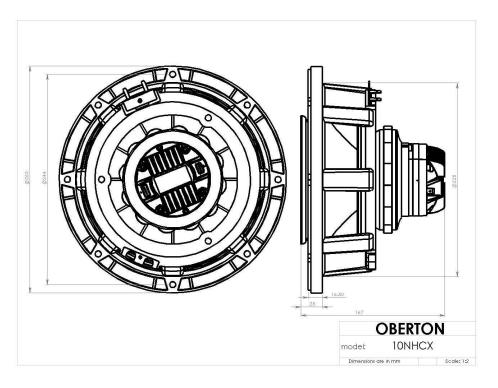


Frequency Response

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