



KEY FEATURES:

- 96 db SPL 1W / 1m (LF) average sensitivity
- 51 mm (2") high temperature voice coil (LF)
- 400 W AES program power (LF)
- Double aluminium demodulating rings
- Single neodymium magnet assembly
- Water protected cone
- 1" exit HF neodymium compression driver
- 44 mm (1.75") HF high temperature voice coil
- 80 degrees nominal dispersion
- Very light weight

Application: Stage monitors and compact bass reflex boxes.

Description:

The 10NCX1 is a 10" / 1" coaxial transducer designed for use in compact reflex enclosures and stage monitors with a nominal dispersion of 80 degrees. 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 51 mm (2 in) LF voice coil has Kapton former, which together with high temperature resistant resin ensure high reliability by high power.

Double aluminium demodulating rings on the magnet structure 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.

Because of design of single magnet assembly the speaker has low weight and compact size.

SPECIFICATIONS

Nominal Diameter 262 mm (10 inch)
Impedance LF 8 Ohm / HF 16 Ohm
Frequency Range 60 - 20000 Hz
Dispersion angle 80 deg

LF unit

Sensitivity (200-2000 Hz) 96 dB/W/m
Minimum Impedance 6.01 Ohm
Power Capacity AES ¹ 200 W
Program Power ² 400 W
Voice Coil Diameter 51 mm (2 in)
Voice Coil Material Cooper
Voice Coil Former Kapton
V. C. Winding Depth 14 mm
Magnet Gap Depth 9 mm
Cone Material Paper
Basket Die cast aluminium
Magnet Neodymium
Flux Density 0.90 T

HF unit

Sensitivity (200-2000 Hz) 106 dB/W/m
Minimum Impedance 12.37 Ohm
DC resistance 10.6 Ohm
Power Capacity (1-15 kHz) 40 W
Program power 80 W
Voice Coil Diameter 44 mm (1.75 in)
Voice Coil Material Aluminium
Diaphragm material Sandwich polyester
Flux Density 1.9 T

THIELE-SMALL PARAMETERS

Fs 67.95 Hz
Qms 9.96
Qes 0.428
Qts 0.428
Vas 11.98 Litres
Mms 26.9 grams
Re 5.35 Ohms
Sd 317.3 cm²
Xmax* ± 4.75 mm
Cms 0.204 mm/N
BL 11.98 T.m
Le at 1kHz 0.836 mH

MOUNTING INFORMATION

Overall Diameter 263 mm
Baffle Hole Diameter 225 mm
Mounting Holes 7 mm
Bolt Circle Diameter 244 mm
Depth 138 mm
Net Weight 2.7 kg

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.

Drawings

