



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 magnet assembly
- Water protected cone (front)
- 1" exit HF compression driver
- 44 mm (1.75") HF high temperature voice coil
- 90 degrees nominal dispersion

PART NUMBER: 12110F0108

Application: Compact reflex boxes.

Description: The 10CX is a 10" / 1" coaxial transducer designed for use in compact reflex enclosures with a nominal dispersion of 90 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 glassfiber former, which together with high temperature resistant resin ensure high reliability by high power.

A double aluminium demodulating rings reduce distortion and inductance and improve transient response. The special cone made of cellulose with carbon fibers improves waterfall response.

The 1" exit compression driver adopted is our D2544 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 with single magnet assembly the speaker has light weight and compact size.

SPECIFICATIONS

Nominal Diameter 263 mm (10 inch)
Impedance LF 8 Ohm / HF 16 Ohm
Frequency Range 65 - 20000 Hz
Dispersion angle 90 deg

LF unit

Sensitivity (200-2000 Hz) 96 dB/W/m
Minimum Impedance 6.24 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 Glassfiver
V. C. Winding Depth 13 mm
Magnet Gap Depth 9 mm
Cone Material Paper with carbon fibers
Basket Die cast aluminium
Magnet Ferrite
Flux Density 0.91 T

HF unit

Sensitivity (200-2000 Hz) 107 dB/W/m
Minimum Impedance 12.59 Ohm
DC resistance 10.53 Ohm
Power Capacity (1-20 kHz) 40 W
Program power 80 W
Voice Coil Diameter 44 mm (1.75 in)
Voice Coil Material CCAW*
Diaphragm material Sandwich polyester
Flux Density 1.9 T

THIELE-SMALL PARAMETERS

Fs 64.22 Hz
Qms 11.11
Qes 0.39
Qts 0.38
Vas 32.32 Litres
Mms 27.25 grams
Re 5.2 Ohms
Sd 297 cm²
Xmax* ± 4.25 mm
Cms 0.2254 mm/N
BL 12.05 T.m
Le at 1kHz 0.68 mH

MOUNTING INFORMATION

Overall Diameter 263 mm
Baffle Hole Diameter 225 mm
Mounting Holes 7 mm
Bolt Circle Diameter 244 mm
Depth 141 mm
Net Weight 4.5 kg

SERVICE KITS:

LF - Recone kit: RK10CX part No: R2110F0108
HF - Diaphragm: NDA45-16 part No: R411700316

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.

* Copper Clad Aluminium Wire

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

Frequency Response

SPL 1W/1m OBERTON 10CX

