

# CX15N251

## COAXIAL

### DESCRIPTION

The CX15N251 is a lightweight coaxial driver with excellent linearity and high efficiency. The CX15N251 radiates a coherent single spherical wave front with perfect dispersion control. The design is powered from a large sized single neodymium ring magnet that provides an extremely high flux density and BL factor. The new hyper-vented aluminium basket and magnetic assembly design provide an excellent heat dissipation and lower power compression. Special air-forced ventilations are provided for voice coil, magnet assembly and basket. A 2,5" voice coil combined a strength fibreglass former and aluminium wire drives the mid-bass cone with high efficiency and a good extension. The 1,7" dome compression driver, loaded to a 60° conical waveguide, provides a clear vocal output and a perfect high frequency extension.



### FEATURES

- 600 Watt continuous program power handling Mid-Bass
- 2.5-inch , fibreglass outside aluminum voice coil
- 101 dB Sensitivity
- 50 Hz - 3.0 kHz Frequency range
- Dual-forced air ventilation for minimum power compression
- Triple-roll surround and exponential cone geometry
- Demodulation ring
- 100 Watt Continuous program power handling HF
- 1.75-inch Diaphragm, 1.0-inch Exit Throat
- Frequency range: 1200Hz – 20kHz

## TECHNICAL SPECIFICATIONS

### General specifications

Nominal Diameter:	15 inch / 381 mm
Related Impedance:	8.00 ohm
Program Power (watt):	600 W
Power handling capacity (watt):	300 W
Sensitivity:	101.0 dB
Frequency range:	50 - 3000 Hz
Effective piston diameter:	330 mm / 12.99 inch
Max. Excursion Before Damage:	30 mm / 1.18 inch
Minimum Impedance (ohm):	6.4 ohm
Voice Coil Diameter:	2.5 inch / 63 mm
Voice Coil Material:	Aluminium
Voice Coil Winding Depth:	0.55 inch / 14 mm
Number of layers:	1
Kind of layers:	outside
Top Plate Thickness:	8 mm / 0.31 inch
Cone Design:	Curved
Surround Material:	Polycotton
Surround Design:	Triple roll
Magnets:	Neodymium
Dual-force air ventilation:	Yes
Demodulation Rings material:	Aluminium
Spider:	Single

### Thiele - small parameters

Resonance frequency (Fs):	55 Hz
DC resistance (Re) (ohm):	5.20 ohm
Mechanical factor:	8.00 Qms
Electrical factor:	0.37 Qes
Total factor:	0.35 Qts
Bl factor (Bl) (T x m):	18.10 T x m
Effective moving mass (Mms):	71.0 g
Equivalent Cas air loaded (Vas):	136.0 liters
Effective piston area (Sd):	0.090 m <sup>2</sup>
Max. linear excursion (Xmax):	5.0 mm
Voice coil inductance @ 1kHz (Le1k):	1.20 mH
Half-space efficiency (Eff):	5.00%

<b>General specifications driver</b>	Exit Throat Diameter:	1.0 inch / 25 mm
	Related Impedance:	8.00 ohm
	Program Power (watt):	100 W
	Power handling capacity (watt):	50 W
	Sensitivity:	109 dB
	Frequency range driver:	1200 - 20000 Hz
	Diaphragm Material:	Polymide
	Suspension Material:	Polymide
	Suspension Design:	Flat
	Minimum Impedance (ohm):	6.50 ohm
	Voice Coil Diameter driver:	1.75 inch / 44 mm
	Voice Coil Material:	Edgewound Aluminium
	Number of layers:	1.00
	Kind of layers:	outside
	Flux Density:	1.9 T
	Phase Plug Design:	2 slot
	Phase Plug Material:	PP Composite
Magnetics:	Neodymium	
<b>General specifications horn</b>	Throat Diameter:	25 mm / 1 inch
	Horizontal coverage angle:	60°
	Vertical coverage angle:	60°
	Cut-off Frequency:	1800 Hz
	Material:	Structural Polyurethane
<b>Mounting informations</b>	Overall diameter:	388 mm / 15.28 inches
	Bolt circle diameter:	369-373 mm / 14.53-14.69 inch
	Bolt hole diameter:	6 mm / 0.24 inch
	Front mount baffle cut-out:	357 mm / 14.06 inch
	Rear mount baffle cut-out:	358 mm / 14.09 inch
	Volume occupied by the driver:	2.9 liters / 0.11 ft <sup>3</sup>
<b>Standard compliance</b>	CE marking:	Yes
<b>Size</b>	Height:	174 mm / 6.85 inches
	Diameter:	388 mm / 15.28 inches
	Weight:	4.29 kg / 9.46 lbs
<b>Shipping informations</b>	Package Height:	240 mm / 9.45 inches
	Package Width:	440 mm / 17.32 inches
	Package Depth:	440 mm / 17.32 inches
	Package Weight:	5.9 kg / 13.01 lbs



**PART NUMBER**

- **11100070**

CX15N251

8ohm



