COAXIAL
CX15N251

Professional Low Frequency Transducer

PART NUMBER **11100070**

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.

Coax. Features

MID-BASS DRIVER

- 600 Watt continuous program power handling
- 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

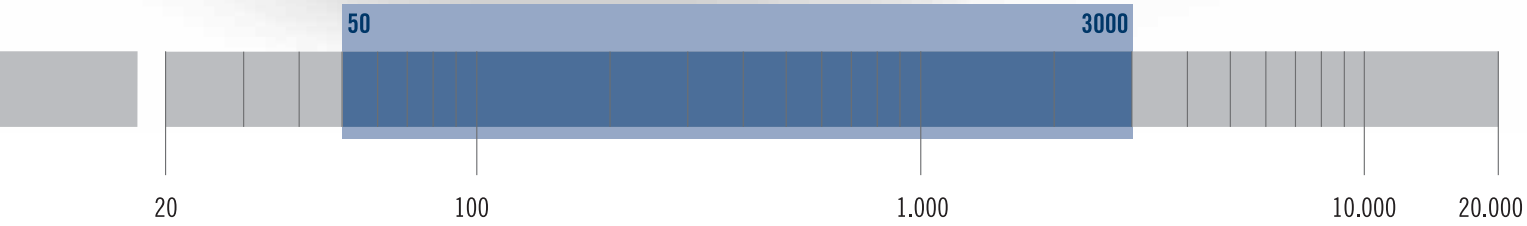
HF DRIVER

- 100 Watt Continuous program power handling
- 1.75-inch Diaphragm, 1.0-inch Exit Throat
- Frequency range: 1200Hz – 20kHz
- 2-slot, optimised geometry phase plug
- Polyester diaphragm
- Aluminum rear cover

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 80° conical waveguide, provides a clear vocal output and a perfect high frequency extension.

Applications

The CX15N251 is the perfect lightweight solution for vocal applications, stage monitoring and compact 2-way reflex enclosures.
Ideal in designs where a constant radial directivity pattern is a requirement.
is designed for use in compact reflex enclosures and stage monitor.

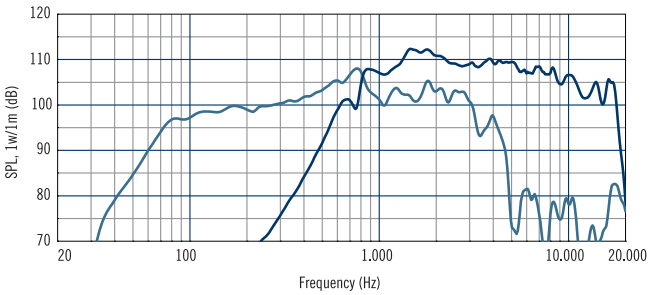


CX15N251 DRIVER

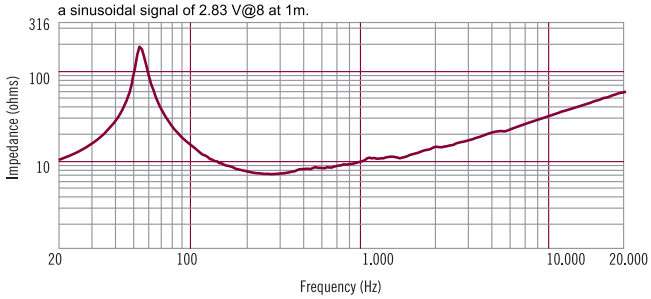
Nominal diameter	25.4/1.0	mm/inch
Rated impedance	8	ohm
Program power	100	Watts
Power handling capacity	50	Watts
Sensitivity 1W, 1m	109	dB
Frequency range	1200 - 20000	Hz
Minimum impedance	6.5	ohm
Voice Coil diameter	44.4/1.75	mm/inch
Voice Coil material	Edgewound Aluminum	
Number of layers	1- Outside	
Diaphragm material	Polyester	
Diaphragm design	Dome	
Suspension material	Polyester	
Suspension design	Flat	
BL factor	7.5	T x m
Flux density	1.9	T
Phase plug design	2 slot	
Phase plug material	Composite	
Magnetics	Neodymium	

CX15N2 51 HORN

Throat diameter	25.4/1.0
Nominal coverage (-6dB)	60°
Cut-off Frequency	1800
Material	Structural Polyurethane



Frequency response curve of the loudspeaker make in a hemispherical, free field and mounted in a reflex box with an internal volume of 50 litres and tuned at 60Hz, applying a sinusoidal signal of 2.83 V@8 at 1m.



Impedance magnitude curve measured in free air.

General Specifications

Nominal Diameter	380/15	mm/inch
Rated Impedance	8	ohm
Program Power [1]	600	Watts
Power handling capacity [2]	300	Watts
Sensitivity [3]	101	dB
Frequency Range	50 - 3000	Hz
Effective Piston Diameter	330/13	mm/inch
Max Excursion Before Damage (peak to peak)	30/1.18	mm/inch
Minimum Impedance	6,4	ohm
Voice Coil Diameter	64/2.52	mm/inch
Voice Coil Material	Aluminum	
Voice Coil Winding Depth	14/0.55	mm/inch
Number of layers	1	
Top Plate Thickness	8/0.31	
Cone Material	No pressed pulp	mm/inch
Cone Design	Curved	
Surround Material	Polycotton	
Surround Design	Triple-roll	
Demodulation Ring	Aluminum	

Thiele - Small Parameters [4]

Resonance frequency	Fs	55	Hz
DC resistance	Re	5.2	ohm
Mechanical factor	Qms	8	
Electrical factor	Qes	0.37	
Total factor	Qts	0.35	
BL Factor	BL	18.1	T · m
Effective Moving Mass	Mms	71	gr
Equivalent Cas air load	Vas	136	liters
Effettive piston area	Sd	0.086	m^2
Max. linear excursion (mathematical) [5]	Xmax	4.8	mm
Voice - coil inductance @ 1KHz	Le1K	1.2	mH
Half-space efficiency	Eff	5.0	%

Mounting Information

Overall Diameter	388/15.3	mm/inch
Bolt Circle Diameter	369-373.5/14.5-14.7	mm/inch
Bolt Hole Diameter	5.5/0.21	mm/inch
Front Mount Baffle Cut-out	357/14.60	mm/inch
Rear Mount Baffle Cut-out	358/14.09	mm/inch
Depth	161/6.34	mm/inch
Volume occupied by the driver [6]	2.9/0.10	liters/ft3

Shipping Information

Net Weight	3.8/8.38	Kg/Lbs
Shipping Weight	4.8/10.58	Kg/Lbs

Notes to Specifications

1 Program Power is defined as 3 dB greater than AES power. - 2 AES standard. - 3 Sensitivity measurement is based on a 500-2,5 kHz pink noise signal with input power of 2.83V @ 8 Ohms. - 4 Thiele-Small parameters are measured after a 2 hour warm up period running the loudspeaker at full power handling capacity. - 5 The maximum linear excursion is calculated as: (Hvc - Hg)/2 + Hg/4 where Hvc is the voice coil depth and Hg the gap depth. - 6 Calculated for front mounting on 18 mm thick board.