

COAXIAL CX12G251

Professional Low Frequency Transducer

PART NUMBER **11100098**

Coax. Features

- 600 Watt continuous program power handling Mid-Bass
- 2.5-inch , fibreglass outside aluminium voice coil
- 99.5 dB Sensitivity
- 55 Hz - 3.5 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
- 2-slot, optimised geometry phase plug
- Kapton diaphragm
- Aluminium rear cover

The CX12G251 is a lightweight coaxial driver with excellent linearity and high efficiency.

The CX12G251 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.

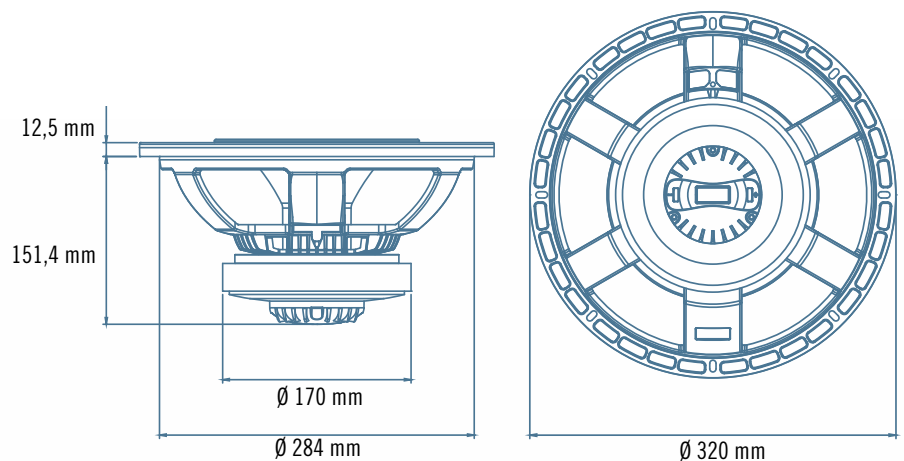
Special air-forced ventilations are provided for voice coil, magnet assembly and basket.

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.

Applications

The CX12G251 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.



55

3500

20

100

1.000

10.000

20.000

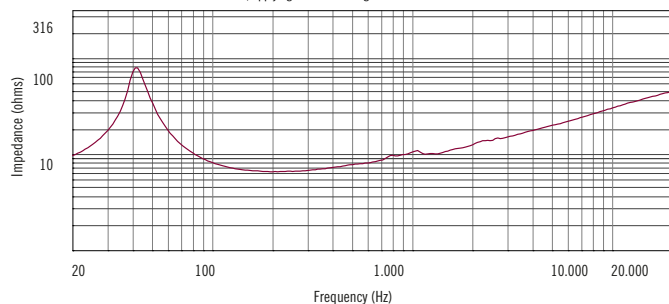
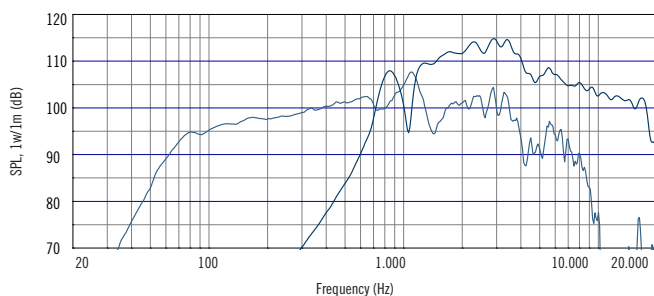


CX12G251 DRIVER

Nominal diameter	25,4/1,00	mm/inch
Rated impedance	8	ohm
Program power	100	Watts
Power handling capacity	50	Watts
Sensitivity 1W, 1m	110	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		
Diaphragm material	1-Outside	
Diaphragm design	Kapton	
Suspension material	Kapton	
Suspension design	Dome	
BL factor	Flat	T x m
Flux density	7,5	T
Phase plug design	1,6	
Phase plug material	2 slot	
Magnetics	Ferrite	

CX12G251 HORN

Throat diameter	25,4/1,00
Nominal coverage (-6dB)	60°
Cut-off Frequency	1800
Material	Structural Polyurethane



General Specifications

Nominal Diameter	300/12	mm/inch
Rated Impedance	8	ohm
Program Power ¹	600	Watts
Power handling capacity ²	300	Watts
Sensitivity ³	99,5	dB
Frequency Range	55 - 3500	Hz
Effective Piston Diameter	260/10,2	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	

Thiele - Small Parameters⁴

Resonance frequency	Fs	61	Hz
DC resistance	Re	5,2	ohm
Mechanical factor	Qms	4,2	
Electrical factor	Qes	0,37	
Total factor	Qts	0,34	
BL Factor	BL	14,4	T · m
Effective Moving Mass	Mms	38	gr
Equivalent Cas air load	Vas	71	liters
Effective piston area	Sd	0,053	m ²
Max. linear excursion (mathematical) ⁵	Xmax	4,8	mm
Voice - coil inductance @ 1KHz	Le1K	0,5	mH
Half-space efficiency	Eff	4,10	%

Mounting Information

Overall Diameter	320/12,6	mm/inch
Bolt Circle Diameter	294,5 - 304/11,6 - 11,9	mm/inch
Bolt Hole Diameter	5,5/0,22	mm/inch
Front Mount Baffle Cut-out	286/11,26	mm/inch
Rear Mount Baffle Cut-out	286/11,26	mm/inch
Depth	151/5,94	mm/inch
Volume occupied by the driver ⁶	2,7/0,10	liters/ft3

Shipping Information

Net Weight	6,7/14,77	Kg/Lbs
Shipping Weight	7,1/15,65	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.