

COAXIAL CX15G251

Professional Low Frequency Transducer

PART NUMBER **11100099**

Coax. Features

- 600 Watt continuous program power handling Mid-Bass
- 2.5-inch , fibreglass outside aluminium voice coil
- 100 dB Sensitivity
- 50 Hz - 3.5 kHz Frequency range
- Dual-forced air ventilation for minimum power compression
- Triple-roll surround and exponential cone geometry
- 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 CX15G251 is a lightweight coaxial driver with excellent linearity and high efficiency.

The CX15G251 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.

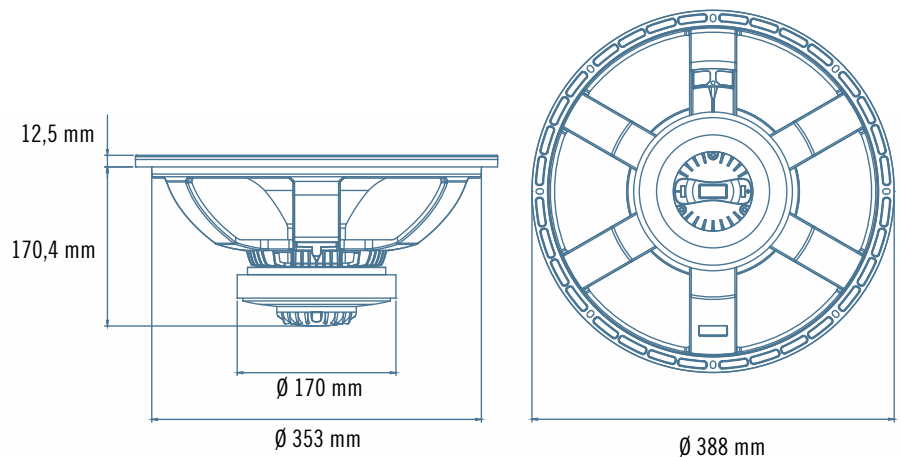
A 2,5" voice coil combined a strength fibreglass former and aluminium wire drives the mid-bass cone with high efficiency and a good extension.

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 CX15G251 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.



50

3500

20

100

1.000

10.000

20.000

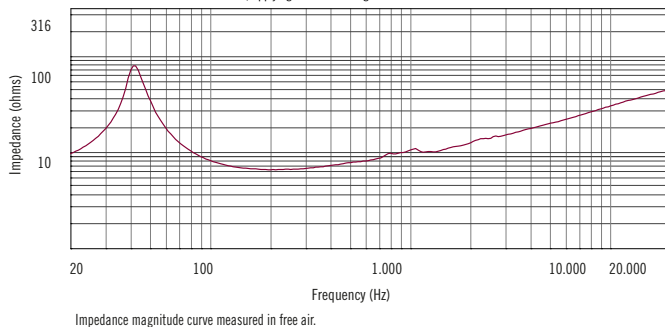
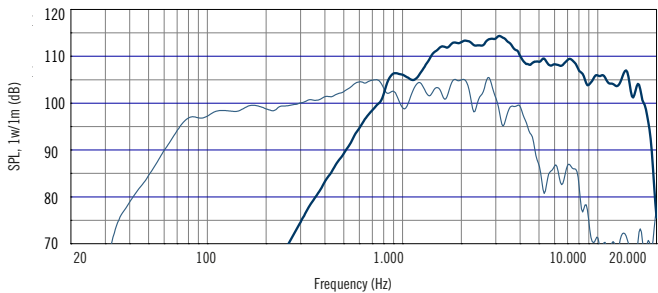


CX15G251 DRIVER

| | | |
|-------------------------|--------------------|-----------|
| Nominal diameter | 25,4/1,00 | mm / inch |
| Rated impedance | 8 | ohm |
| Program power | 100 | Watts |
| Power handling capacity | 50 | Watts |
| Sensitivity 1W, 1m | 105 | 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 | Kapton | |
| Diaphragm design | Dome | |
| Suspension material | Kapton | |
| Suspension design | Flat | |
| BL factor | 7,5 | T x m |
| Flux density | 1,6 | T |
| Phase plug design | 2 slot | |
| Phase plug material | Composite | |
| Magnetics | Ferrite | |

CX15G251 HORN

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



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 | 100 | dB |
| Frequency Range | 50 - 3500 | Hz |
| Effective Piston Diameter | 330/15 | 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 | mm/inch |
| Cone Material | No pressed pulp | |
| Cone Design | Curved | |
| Surround Material | Polycotton | |
| Surround Design | Triple - roll | |

Thiele - Small Parameters⁴

| | | |
|---|-------|----------------|
| Resonance frequency | 41 | Hz |
| DC resistance | 5,2 | W |
| Mechanical factor | 7,6 | |
| Electrical factor | 0,41 | |
| Total factor | 0,39 | |
| BL Factor | 14,9 | T x m |
| Effective Moving Mass | 70 | gr |
| Equivalent Cas air load | 219 | liters |
| Effective piston area | 0,086 | m ² |
| Max. linear excursion (mathematical) ⁵ | 4,8 | mm |
| Voice - coil inductance @ 1KHz | 0,5 | mH |
| Half-space efficiency | 3,50 | % |

Mounting Information

| | | |
|--|-------------------------|------------------------|
| Overall Diameter | 388/15,3 | mm/inch |
| Bolt Circle Diameter | 369 - 373,5/14,5 - 14,7 | mm/inch |
| Bolt Hole Diameter | 5,5/0,22 | mm/inch |
| Front Mount Baffle Cut-out | 355/13,98 | mm/inch |
| Rear Mount Baffle Cut-out | 358/14,09 | mm/inch |
| Depth | 161/6,34 | mm/inch |
| Volume occupied by the driver ⁶ | 3,5/0,12 | liters/ft ³ |

Shipping Information

| | | |
|-----------------|-----------|--------|
| Net Weight | 7,0/15,43 | Kg/Lbs |
| Shipping Weight | 7,3/16,09 | 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.