

COAXIAL

CX15N351

Professional Coaxial Transducer

PART NUMBER **11100032**

The CX15N351 is designed to provide an excellent frequency response linearity with very low distortion. This coaxial use a strongest unique neodymium magnetic structure that guarantee high dynamic and sensitivity for both components. The mid-bass section use a 3,5" voice coil design provides a very high power handling, especially recommended in comparison to a standard 3" voice coil, demodulation ring get a fastest time response and lower distortion .The compression driver use a 2.5" diaphragm with a 1.4" throat featuring several state of the art technologies. The diaphragm and suspension are formed from 0.05mm thick pure titanium.

MID-BASS DRIVER

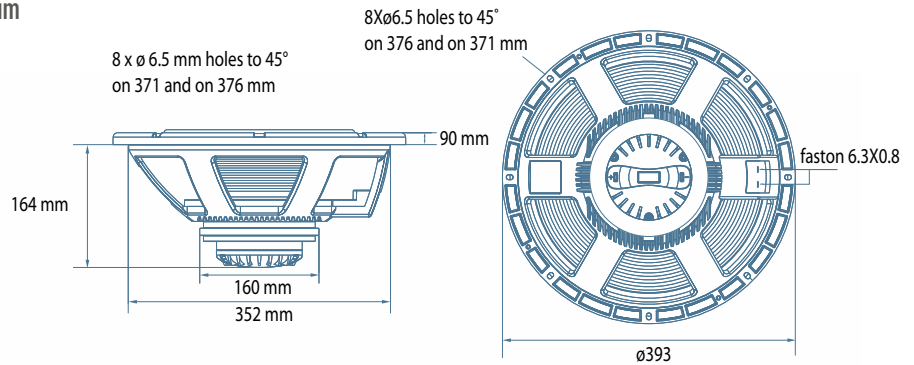
- 3,5 - inch Inside/Outside copper voice coil
- 900 Watt continuous program power LF
- 101 dB Sensitivity
- 40 Hz - 3 kHz Frequency range
- Dual-forced air ventilation for minimum power compression
- Dual spider design with silicon based damping control
- 2.5-inch Diaphragm, 1.4-inch Exit Throat/ Pure Titanium
- Compression Driver

HF DRIVER

- 180 Watt Continuous program power HF
- Frequency range: 700Hz - 20kHz
- Direct Drive™ Voice Coil Assembly
- 3-slot, optimized geometry phase plug
- Aluminum rear cover dissipation design
- Copper inductance ring for extended response
- Vented, damped, low distortion, variable profile suspension System

APPLICATIONS

The CX15N351 transducer is designed for use in compact reflex enclosures and stage monitors. Is a ideal for use in applications where is required a very high efficiency and linearity with high power handling.



40 3000

20

100

1.000

10.000

20.000

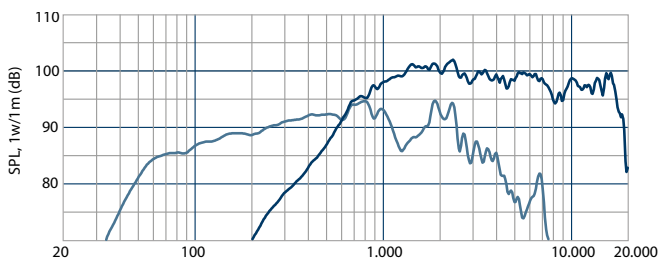


CX15N351 DRIVER

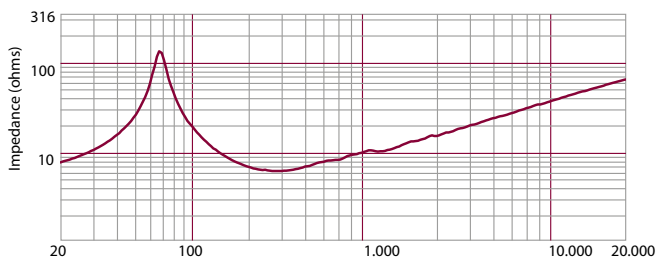
Nominal diameter	35.5/1.4	mm/inch
Rated impedance	8	ohm
Program power	180	Watts
Power handling capacity	90	Watts
Sensitivity 1W, 1m	110	dB
Frequency range	700 - 20000	Hz
Minimum impedance	7.9	ohm
Voice Coil diameter	63.7/2.5	mm/inch
Voice Coil material	Edgewound A1	
Number of layers	1- Outside	
Diaphragm material	Pure Titanium	
Diaphragm design	Dome	
Suspension material	Pure Titanium	
Suspension design	Progressive	
BL factor	10.4	T x m
Flux density	2.0	T
Phase plug design	3 slot	
Phase plug material	Aluminum	
Magnetics	Neodymium	
Voice coil demodulation	Copper ring	

CX15N351 HORN

Throat diameter	36/1.4
Nominal coverage (-6dB)	60°
Cut-off Frequency	800
Material	Structural Polyurethane



Frequency response curve of the loudspeaker taken in a reflex box with an internal volume of 80 litres tuned at 55 Hz



Impedance magnitude curve measured in free air

GENERAL SPECIFICATIONS

Nominal Diameter	380/15	mm/inch
Rated Impedance	8	ohm
Program Power ¹	900	Watts
Power handling capacity ²	450	Watts
Sensitivity ³	101	dB
Frequency Range	40 - 3000	Hz
Effective Piston Diameter	330/13	mm/inch
Max Excursion Before Damage (peak to peak)	39/1.5	mm/inch
Minimum Impedance	6.8	ohm
Voice Coil Diameter	87/3.4	mm/inch
Voice Coil Material	Copper	
Voice Coil Winding Depth	16.5/0.65	mm/inch
Layer	inside/outside	
Top Plate Thickness	11/0.43	mm/inch
Cone Material	No pressed pulp	
Cone Design	Curved	
Surround Material	Polycotton	
Surround Design	M-roll	
Demodulation Ring	Aluminum	
Magnetics	Neodymium	

THIELE - SMALL PARAMETERS ⁴

Resonance frequency	Fs	55	Hz
DC resistance	Re	5.6	ohm
Mechanical factor	Qms	6	
Electrical factor	Qes	0.27	
Total factor	Qts	0.26	
BL Factor	BL	23.5	T · m
Effective Moving Mass	Mms	80	gr
Equivalent Cas air load	Vas	110	liters
Effective piston area	Sd	0.086	m ²
Max. linear excursion (mathematical) ⁵	Xmax	5.5	mm
Voice - coil inductance @ 1KHz	Le1K	1.65	mH
Half-space efficiency	Eff	6.53	%

MOUNTING INFORMATION

Overall Diameter	393/15.5	mm/inch
Bolt Circle Diameter	371-376/14.6-14.8	mm/inch
Bolt Hole Diameter	6.5/0.3	mm/inch
Front Mount Baffle Cut-out	354/13.9	mm/inch
Rear Mount Baffle Cut-out	354/14.2	mm/inch
Depth	164/6.4	mm/inch
Volume occupied by the driver ⁶	3.8/0.13	liters/ft ³

SHIPPING INFORMATION

Net Weight	6.514.3	Kg/Lbs
Shipping Weight	7.3/16	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.

The data are not binding; RCF reserves the right to modify the data at any time and without previous notice.