

# CX12N351

## COAXIAL

### DESCRIPTION

The CX12N351 is a top class coaxial design that provides an excellent frequency response linearity with very low distortion. The CX12N351 is powered from an integrated high power neodymium magnetic structure that guarantee high dynamic and sensitivity for both components. The mid-bass section features a 3,5" inside-outside voice coil design that provides a very high power handling, especially in comparison to a standard 3" voice coil.

Thanks to an integrated demodulation ring the mid-bass section gets 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 0.05 mm thick pure titanium



### FEATURES

- 3.5-inch , fibreglass outside aluminum voice coil
- 900 Watt continuous program power handling
- 98.5 dB Sensitivity
- 50 Hz - 3.0 kHz Frequency range
- Dual-forced air ventilation for minimum power compression
- M-roll surround and exponential cone geometry
- Demodulation ring
- 2.5-inch Diaphragm, 1.4-inch Exit Throat/pure titanium compression driver
- 180 Watt Continuous program power handling
- Frequency range: 700Hz - 20kHz

**TECHNICAL SPECIFICATIONS****General specifications**

Nominal Diameter:	12 inch / 305 mm
Related Impedance:	8.00 ohm
Program Power (watt):	180 W
Power handling capacity (watt):	90 W
Sensitivity:	110 dB
Frequency range:	700 - 20000 Hz
Effective piston diameter:	260 mm / 10.24 inch
Max. Excursion Before Damage:	39 mm / 1.54 inch
Minimum Impedance (ohm):	6.80 ohm
Voice Coil Diameter:	3.5 inch / 89 mm
Voice Coil Material:	Copper
Voice Coil Winding Material:	3.5 inch / 89 mm
Number of layers:	2
Kind of layers:	inside/outside
Top Plate Thickness:	11 mm / 0.43 inch
Cone Design:	Curved
Surround Material:	Polycotton
Surround Design:	M-roll
Magnets:	Neodymium
Dual-force air ventilation:	Yes
Spider:	Single

**Thiele - small parameters**

Resonance frequency (Fs):	58 Hz
DC resistance (Re) (ohm):	5.80 ohm
Mechanical factor:	5.40 Qms
Electrical factor:	0.21 Qes
Total factor:	0.20 Qts
Bl factor (Bl) (T x m):	25.00 T x m
Effective moving mass (Mms):	62 gr
Equivalent Cas air loaded (Vas):	47.00 liters
Effective piston area (Sd):	0.05 m <sup>2</sup>
Max. linear excursion (Xmax):	6 mm
Voice coil inductance @ 1kHz (Le1k):	1.50 mH
Half-space efficiency (Eff):	4.40%

**General specifications driver**

Exit Throat Diameter:	1.4 inch / 36 mm
Related Impedance:	8.00 ohm
Program Power (watt):	180 W
Power handling capacity (watt):	90 W
Sensitivity:	110 dB
Frequency range driver:	700 - 20000 Hz
Diaphragm Material:	Pure Titanium
Suspension Material:	Pure Titanium
Suspension Design:	Progressive
Minimum Impedance (ohm):	7.90 ohm
Voice Coil Diameter driver:	2.5 inch / 63 mm
Voice Coil Material:	Aluminium
Number of layers:	1.00
Kind of layers:	outside
Flux Density:	2.00 T
Phase Plug Design:	3 slot
Phase Plug Material:	Aluminium
Magnetics:	Neodymium
Voice Coil Demodulation Ring:	Copper

**General specifications horn**

Throat Diameter:	36 mm / 1.4 inch
Horizontal coverage angle:	60°
Vertical coverage angle:	60°
Cut-off Frequency:	900 Hz
Material:	Structural Polyurethane

**Mounting informations**

Overall diameter:	320 mm / 12.6 inches
Bolt circle diameter:	293-304 mm / 11.54-11.97 inch
Bolt hole diameter:	7 mm / 0.28 inch
Front mount baffle cut-out:	284 mm / 11.18 inch
Rear mount baffle cut-out:	284 mm / 11.18 inch
Volume occupied by the driver:	2.2 liters / 0.09 ft <sup>3</sup>

**Standard compliance**

CE marking:	Yes
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**Size**

Height:	157 mm / 6.18 inches
Diameter:	320 mm / 12.6 inches
Weight:	6.29 kg / 13.87 lbs

**Shipping informations**

Package Height:	240 mm / 9.45 inches
Package Width:	360 mm / 14.17 inches
Package Depth:	360 mm / 14.17 inches
Package Weight:	7.47 kg / 16.47 lbs



**PART NUMBER**

- **11100058**

CX12N351

8ohm



