

CX12N251

COAXIAL

DESCRIPTION

The CX12N251 is a lightweight coaxial driver with excellent linearity and high efficiency. The CX12N251 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.



FEATURES

- 600 Watt continuous program power handling
- 2.5-inch , fibreglass outside, aluminum voice coil
- 99.5 dB Sensitivity
- 50 Hz - 3.5 kHz Frequency range
- Dual-forced air ventilation for minimum power compression
- M-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

TECHNICAL SPECIFICATIONS

General specifications

Nominal Diameter:	12 inch / 305 mm
Related Impedance:	8.00 ohm
Program Power (watt):	600 W
Power handling capacity (watt):	300 W
Sensitivity:	100.0 dB
Frequency range:	50 - 3500 Hz
Effective piston diameter:	260 mm / 10.24 inch
Max. Excursion Before Damage:	30 mm / 1.18 inch
Minimum Impedance (ohm):	6.4 ohm
Voice Coil Diameter:	2.5 inch / 63 mm
Voice Coil Material:	Aluminium
Voice Coil Winding Depth:	0.55 inch / 14 mm
Number of layers:	1
Kind of layers:	outside
Top Plate Thickness:	8 mm / 0.31 inch
Cone Design:	Curved
Surround Material:	Polycotton
Surround Design:	Triple roll
Magnets:	Neodymium
Dual-force air ventilation:	Yes
Spider:	Single

Thiele - small parameters

Resonance frequency (Fs):	60 Hz
DC resistance (Re) (ohm):	5.20 ohm
Mechanical factor:	5.40 Qms
Electrical factor:	0.28 Qes
Total factor:	0.26 Qts
Bl factor (Bl) (T x m):	17.50 T x m
Effective moving mass (Mms):	41.0 g
Equivalent Cas air loaded (Vas):	62.0 liters
Effettive piston area (Sd):	0.050 m ²
Max. linear excursion (Xmax):	5.0 mm
Voice coil inductance @ 1kHz (Le1k):	1.20 mH
Half-space efficiency (Eff):	5.20%

General specifications driver	Exit Throat Diameter:	1.0 inch / 25 mm
	Related Impedance:	8.00 ohm
	Program Power (watt):	100 W
	Power handling capacity (watt):	50 W
	Sensitivity:	109 dB
	Frequency range driver:	1200 - 20000 Hz
	Diaphragm Material:	Polymide
	Suspension Material:	Polymide
	Suspension Design:	Flat
	Minimum Impedance (ohm):	6.50 ohm
	Voice Coil Diameter driver:	1.75 inch / 44 mm
	Voice Coil Material:	Edgewound Aluminium
	Number of layers:	1.00
	Kind of layers:	outside
	Flux Density:	1.9 T
	Phase Plug Design:	2 slot
	Phase Plug Material:	PP Composite
Magnetics:	Neodymium	
General specifications horn	Throat Diameter:	25 mm / 1 inch
	Horizontal coverage angle:	60°
	Vertical coverage angle:	60°
	Cut-off Frequency:	1800 Hz
	Material:	Structural Polyurethane
Mounting informations	Overall diameter:	320 mm / 12.6 inches
	Bolt circle diameter:	295-304 mm / 11.61-11.97 inch
	Bolt hole diameter:	6 mm / 0.24 inch
	Front mount baffle cut-out:	288 mm / 11.34 inch
	Rear mount baffle cut-out:	288 mm / 11.34 inch
	Volume occupied by the driver:	2.4 liters / 0.09 ft ³
Standard compliance	CE marking:	Yes
Size	Height:	165 mm / 6.5 inches
	Diameter:	320 mm / 12.6 inches
	Weight:	3.6 kg / 7.94 lbs
Shipping informations	Package Height:	214 mm / 8.43 inches
	Package Width:	339 mm / 13.35 inches
	Package Depth:	354 mm / 13.94 inches
	Package Weight:	4.1 kg / 9.04 lbs



PART NUMBER

- **11100069**
CX12N251
8ohm



