

MID-BASS MB12N251

Professional Low Frequency Transducer

PART NUMBER **11100065**

Features

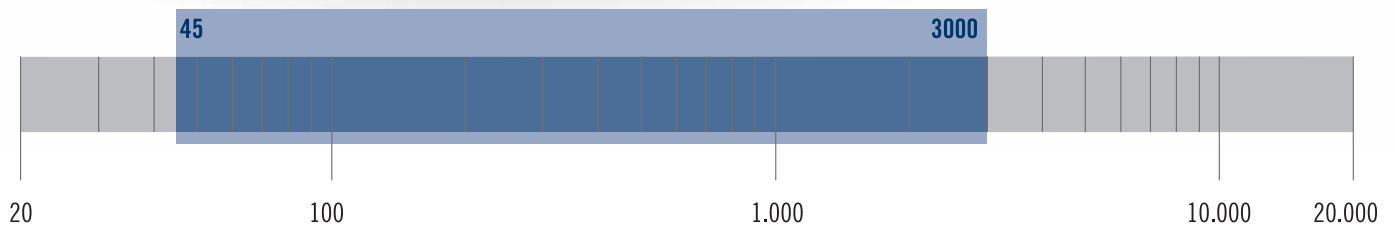
- 2.5-inch , fibreglass outside aluminum voice coil
- 600 Watt continuous program power handling
- 98dB Sensitivity
- 45Hz –3.0KHz Frequency range
- Forced air ventilation in the magnetic structure
- Triple-roll surround and exponential cone geometry

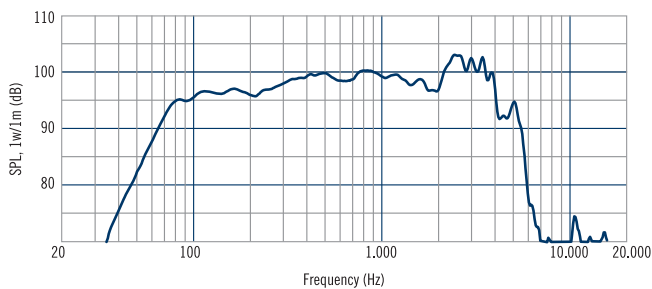
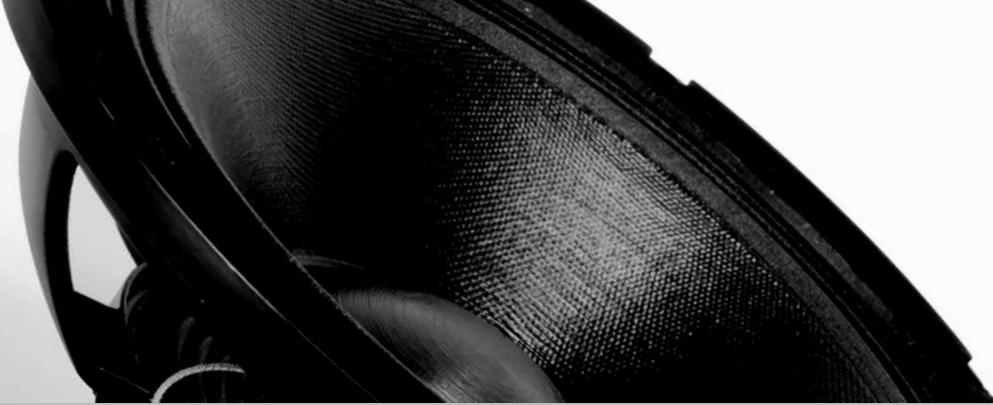
The MB12N251 is a 12" neodymium mid-bass driver with an excellent linearity, good efficiency and high power handling capabilities. The 2,5" aluminium voice coil combined with a high strength fibreglass former allows high efficiency and good frequency response extension. Aluminium basket and magnetic assembly design provide an excellent heat dissipation and very low power compression. The Triple-roll shape combined to spider design offer very low distortion and extended low frequency reproduction.

The waterproof body cone treatment ensures a durable performance in every application.

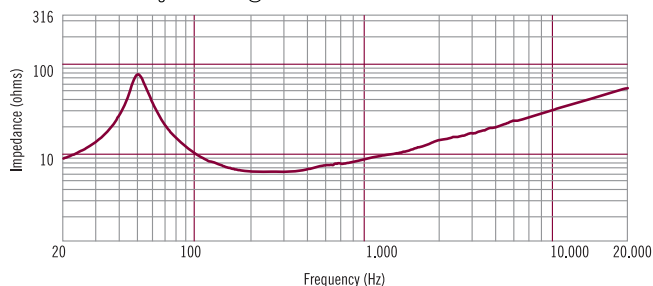
Applications

The MB12N251 finds its application in 2-way bass reflex system, typically combined with 1" and 1,4" throat compression drivers. Ideal for light weight portable applications.





Frequency response curve of the loudspeaker made in a hemispherical, free field and mounted in a reflex box with an internal volume of 50 litres and tuned at 60Hz, applying a sinusoidal signal of 2.83 V@8 at 1m.



Impedance magnitude curve measured in free air.

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	98	dB
Frequency Range	45 - 3000	Hz
Effective Piston Diameter	260/10.2	mm/inch
Max Excursion Before Damage (peak to peak)	38/1.49	mm/inch
Minimum Impedance	6.4	ohm
Voice Coil Diameter	64/2.51	mm/inch
Voice Coil Material	Aluminum	
Voice Coil Winding Depth	14/0.55	mm/inch
Number of layers	1	
Kind of layer	outside	
Top Plate Thickness	9/0.35	mm/inch
Cone Material	No pressed pulp	
Cone Design	Curved	
Surround Material	Polycotton	
Surround Design	Triple-roll	

Thiele - Small Parameters ⁴

Resonance frequency	Fs	50	Hz
DC resistance	Re	5.1	ohm
Mechanical factor	Qms	5.4	
Electrical factor	Qes	0.36	
Total factor	Qts	0.34	
BL Factor	BL	15	T · m
Effective Moving Mass	Mms	49	gr
Equivalent Cas air load	Vas	83	liters
Effettive piston area	Sd	0.053	m ²
Max. linear excursion (mathematical) ⁵	Xmax	4.8	mm
Voice - coil inductance @ 1KHz	Le1K	1.3	mH
Half-space efficiency	Eff	2.7	%

Mounting Information

Overall Diameter	320/12.6	mm/inch
Bolt Circle Diameter	294.5-304/11.6-11.9	mm/inch
Bolt Hole Diameter	5.5/0.21	mm/inch
Front Mount Baffle Cut-out	288/11.3	mm/inch
Rear Mount Baffle Cut-out	288/11.3	mm/inch
Depth	130/5.1	mm/inch
Volume occupied by the driver ⁶	2.2/0.07	liters/ft3

Shipping Information

Net Weight	2.7/5.9	Kg/Lbs
Shipping Weight	3.5/7.7	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.