

# MID-BASS MB8N251

Professional Low Frequency Transducer

PART NUMBER **11100061**

The MB8N251 is a 8" 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 M-roll surround shape combined to spider design offer good linear displacement and precise low frequency reproduction.

## Features

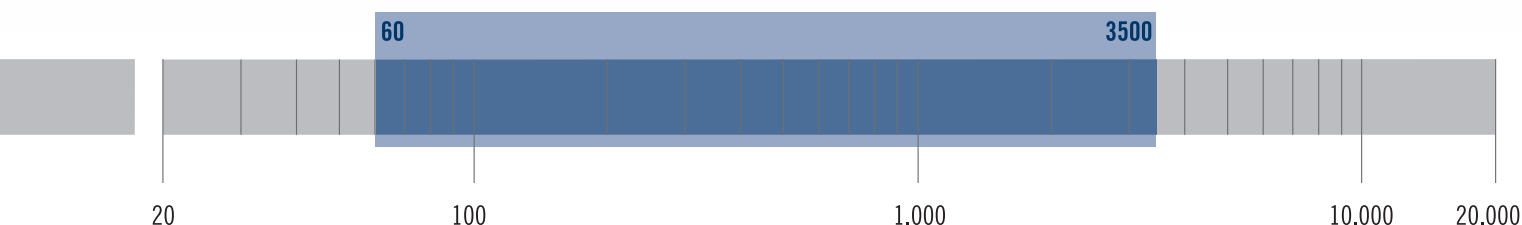
- 2.5-inch , fibreglass former, aluminum voice coil
- 600 Watt continuous program power handling
- 96 dB Sensitivity
- 60 Hz - 3.5kHz Frequency range
- Forced air ventilation
- M-roll surround and exponential cone geometry

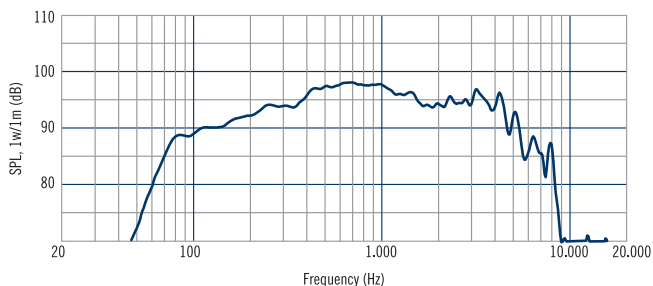
The waterproof body cone treatment ensures a durable performance in every application.

## Applications

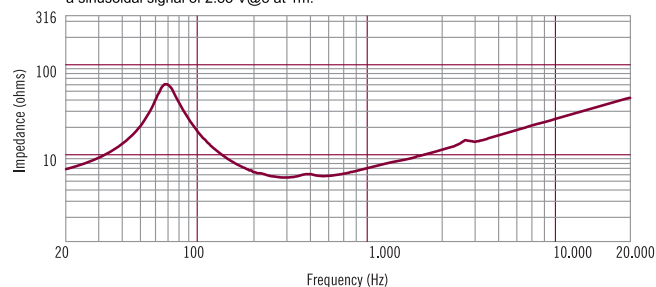
The MB8N251 finds its application in compact 2-way bass reflex system where very high dynamic and power handling are required.

Perfect for multi-way reflex enclosures such as line arrays.





Frequency response curve of the loudspeaker made in a hemispherical, free field and mounted in a reflex box with an internal volume of 19 litres and tuned at 65Hz, applying a sinusoidal signal of 2.83 V@8 at 1m.



Impedance magnitude curve measured in free air.

## General Specifications

Nominal Diameter	200/8	mm/inch
Rated Impedance	8	ohm
Program Power <sup>1</sup>	600	Watts
Power handling capacity <sup>2</sup>	300	Watts
Sensitivity <sup>3</sup>	96	dB
Frequency Range	60 - 3500	Hz
Effective Piston Diameter	165/6.5	mm/inch
Max Excursion Before Damage (peak to peak)	40/1.57	mm/inch
Minimum Impedance	6.0	ohm
Voice Coil Diameter	64/2.50	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	M-roll	

## Thiele - Small Parameters <sup>4</sup>

Resonance frequency	Fs	68	Hz
DC resistance	Re	5.1	ohm
Mechanical factor	Qms	4.6	
Electrical factor	Qes	0.26	
Total factor	Qts	0.25	
BL Factor	BL	15.2	T · m
Effective Moving Mass	Mms	27.2	gr
Equivalent Cas air load	Vas	12.8	liters
Effective piston area	Sd	0.021	m <sup>2</sup>
Max. linear excursion (mathematical) <sup>5</sup>	Xmax	4.8	mm
Voice - coil inductance @ 1KHz	Le1K	1.3	mH
Half-space efficiency	Eff	1.70	%

## Mounting Information

Overall Diameter	239/9.41	mm/inch
Bolt Circle Diameter	221-227/8.70-8.93	mm/inch
Bolt Hole Diameter	6.5/0.26	mm/inch
Front Mount Baffle Cut-out	185/7.28	mm/inch
Rear Mount Baffle Cut-out	185/7.28	mm/inch
Depth	92.5/3.64	mm/inch
Volume occupied by the driver <sup>6</sup>	0.6/0.02	liters/ft3

## Shipping Information

Net Weight	2.0/4.41	Kg/Lbs
Shipping Weight	2.2/4.85	Kg/Lbs

## Notes to Specifications

<sup>1</sup> Program Power is defined as 3 dB greater than AES power. - <sup>2</sup> AES standard. - <sup>3</sup> Sensitivity measurement is based on a 500-2,5 kHz pink noise signal with input power of 2.83V @ 8 Ohms. - <sup>4</sup> Thiele-Small parameters are measured after a 2 hour warm up period running the loudspeaker at full power handling capacity. - <sup>5</sup> The maximum linear excursion is calculated as:  $(Hvc - Hg)/2 + Hg/4$  where Hvc is the voice coil depth and Hg the gap depth. - <sup>6</sup> Calculated for front mounting on 18 mm thick board.