

MID-BASS MB12N251

Professional Low Frequency Transducer

PART NUMBER **11100065**

Features

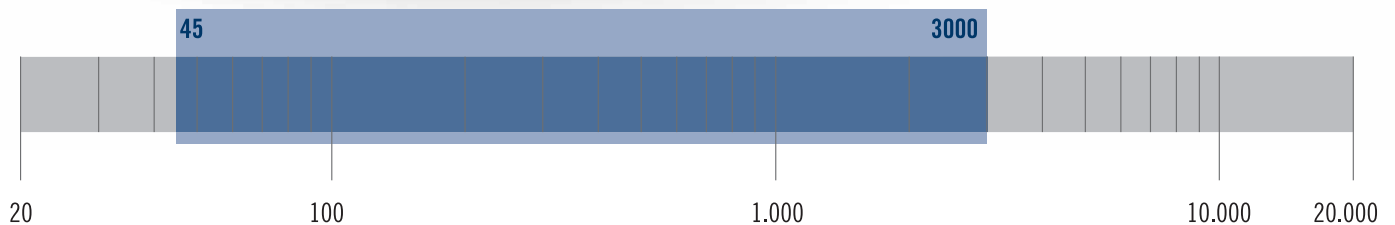
- 2.5-inch , fibreglass outside aluminum voice coil
- 600 Watt continuous program power handling
- 98dB Sensitivity
- 45Hz –3.0KHz Frequency range
- Forced air ventilation in the magnetic structure
- Triple-roll surround and exponential cone geometry

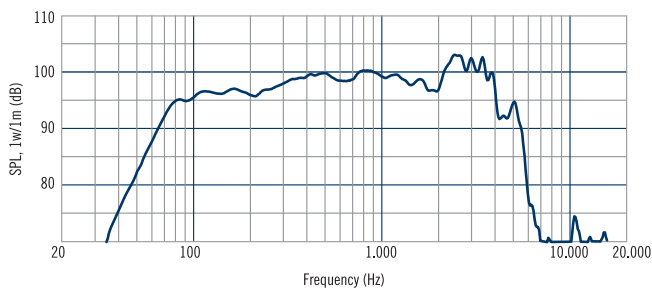
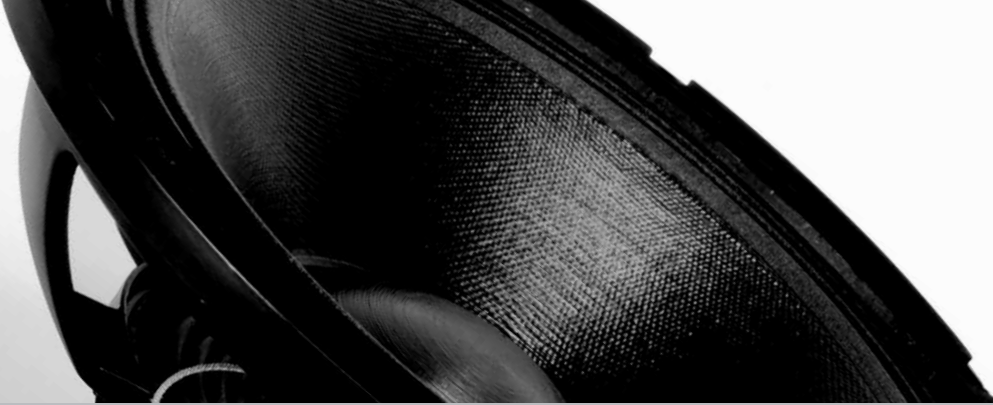
The MB12N251 is a 12" neodymium mid-bass driver with an excellent linearity, good efficiency and high power handling capabilities. The 2,5" aluminium voice coil combined with a high strength fibreglass former allows high efficiency and good frequency response extension. Aluminium basket and magnetic 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.

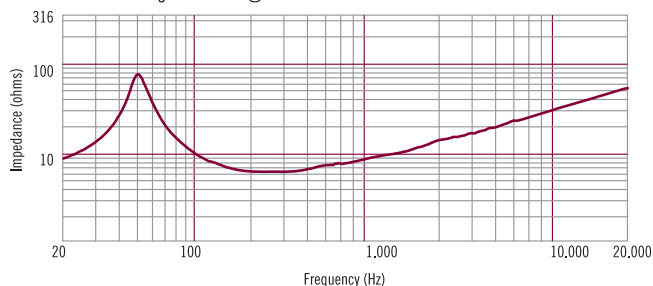
Applications

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.