

MID-BASS MB12N407

Professional Low Frequency Transducer

PART NUMBER **11100067**

Features

- 1400 Watt continuous program power handling
- 4-inch, fibreglass inside-outside copper voice coil
- 98dB Sensitivity
- 40Hz –2.0KHz Frequency range
- Dual-forced air ventilation for minimum power compression
- Triple-roll surround and exponential cone geometry
- Ultra lightweight 4"

The MB12N407 is an ultra lightweight, shallow design, 12" neodymium mid-bass driver. The vented 4" voice coil design and the minimum weight make the MB12N407 a unique product in his category.

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 large neodymium magnet disc powers the magnetic structure providing an extremely high flux density in the gap.

The Triple-roll surround offers a great displacement linearity and a precise control of the cone.

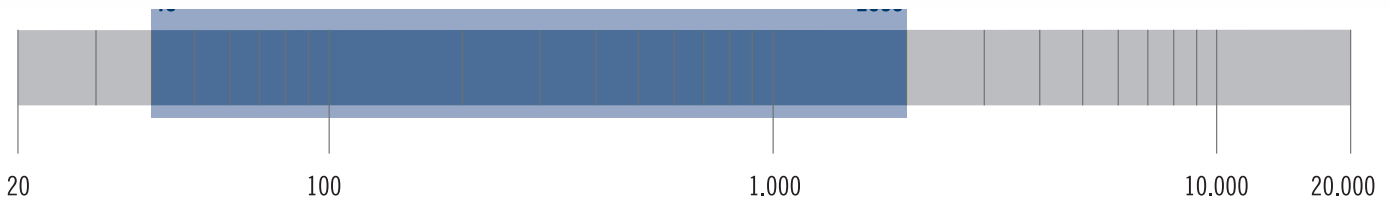
The inside-outside copper voice coil design offers large signal linearity and great reliability.

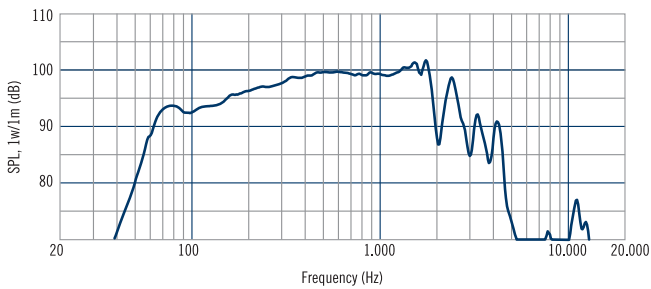
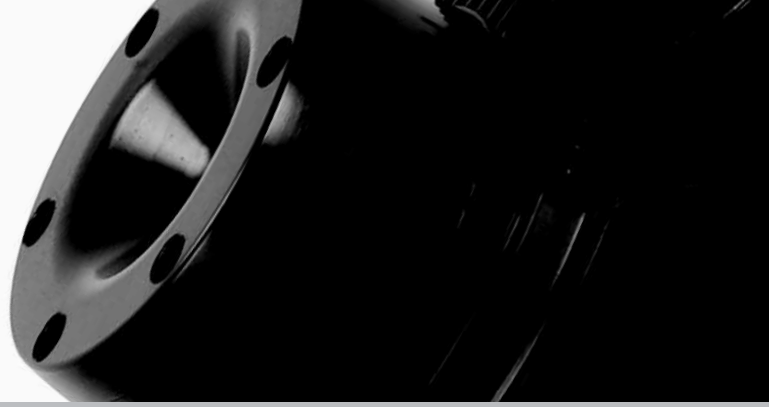
The waterproof body cone treatment and polycotton surround ensure a durable performance in every application.

Applications

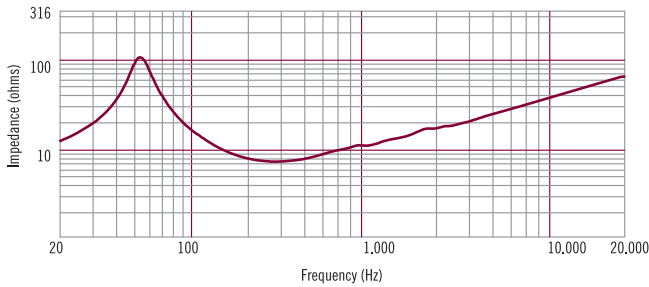
The MB12N407 is ideal in applications where very high power handling, very high efficiency and system portability are required.

Perfect for mid-bass applications in compact two-way or three-way systems.





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	1400	Watts
Power handling capacity ²	700	Watts
Sensitivity ³	98	dB
Frequency Range	40 - 2000	Hz
Effective Piston Diameter	260/10.2	mm/inch
Max Excursion Before Damage (peak to peak)	45/1.77	mm/inch
Minimum Impedance	6.8	ohm
Voice Coil Diameter	100/4	mm/inch
Voice Coil Material	Copper	
Voice Coil Winding Depth	19/0.75	mm/inch
Number of layers	2	
Kind of layer	inside/outside	
Top Plate Thickness	12/0.47	mm/inch
Cone Material	No pressed pulp	
Cone Design	Curved	
Surround Material	Polycotton	
Surround Design	Triple-roll	

Thiele - Small Parameters ⁴

Resonance frequency	Fs	48	Hz
DC resistance	Re	5.1	ohm
Mechanical factor	Qms	6.2	
Electrical factor	Qes	0.20	
Total factor	Qts	0.19	
BL Factor	BL	26.8	T · m
Effective Moving Mass	Mms	88.5	gr
Equivalent Cas air load	Vas	50	liters
Effective piston area	Sd	0.053	m ²
Max. linear excursion (mathematical) ⁵	Xmax	6.5	mm
Voice - coil inductance @ 1KHz	Le1K	0.79	mH
Half-space efficiency	Eff	2.8	%

Mounting Information

Overall Diameter	303/12.0	mm/inch
Bolt Circle Diameter	293.5-294.5/11.5-11.6	mm/inch
Bolt Hole Diameter	5.5/0.21	mm/inch
Front Mount Baffle Cut-out	284/11.18	mm/inch
Rear Mount Baffle Cut-out	286/11.25	mm/inch
Depth	115/4.53	mm/inch
Volume occupied by the driver ⁶	2.6/0.08	liters/ft3

Shipping Information

Net Weight	4.5/9.9	Kg/Lbs
Shipping Weight	5.3/11.6	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.