# MID-BASS MB10N305 Professional Low Frequency Transducer

The MB10N305 is a hypervented neo, high linearity mid-bass. The magnetic structure is powered by a large neodymium magnet that provides an extremely high flux density in the gap. 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. M-roll surround and spider design offer great linearity and precise reproduction.

PART NUMBER **11100111** 

## **Features**

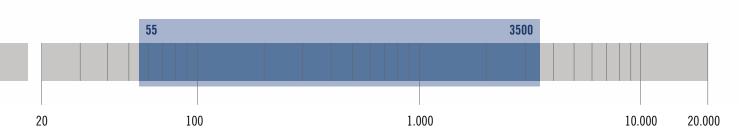
- 3-inch, fibreglass inside/outside aluminium voice coil
- 1000W continuous program power handling
- 97.5 dB Sensitivity
- 55 Hz 3.5 kHz Frequency range
- Hypervented for minimum power compression
- M-roll surround and exponential cone geometry

# **Applications**

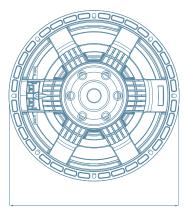
The MB10N305 is ideal where is required high power handling, high efficiency and perfect linearity.

Is the ideal 10" mid-bass woofer for reference high fidelity, high performance mid-bass application in compact 2 way system.

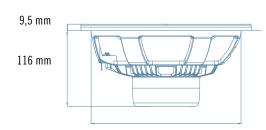




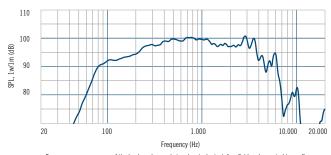




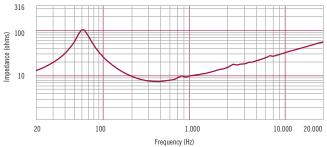
Ø 260 mm



Ø 229,5mm



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  $2.83\,\text{V@8}$  at  $1\,\text{m}$ .



Impedance magnitude curve measured in free air.

### **General Specifications**

Nominal Diameter	260 / 10	mm/inch
Rated Impedance	8	ohm
Program Power <sup>1</sup>	1000	Watts
Power handling capacity <sup>2</sup>	500	Watts
Sensitivity <sup>3</sup>	97,5	dB
Frequency Range	55 - 3500	Hz
Effective Piston Diameter	210 / 8,27	mm/inch
Max Excursion Before Damage (peak to peak)	34/1,34	mm/inch
Minimum Impedance	6,9	ohm
Voice Coil Diameter	76/3,0	mm/inch
Voice Coil Material	Aluminium	
Voice Coil Winding Depth	14/0,55	mm/inch
Number of layers	1	
Kind of layer	inside / outside	
Top Plate Thickness	10 / 0,39	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	60	Hz
DC resistance	Re	5,6	ohm
Mechanical factor	Qms	4,0	
Electrical factor	Qes	0,24	
Total factor	Qts	0,23	
BL Factor	BL	18,5	T · m
Effective Moving Mass	Mms	36,5	gr
Equivalent Cas air load	Vas	31	liters
Effettive piston area	Sd	0,035	m <sup>2</sup>
Max. linear excursion (mathematical) <sup>5</sup>	Xmax	5,0	mm
Voice - coil inductance @ 1KHz	Le1K	0,9	mH
Half-space efficiency	Eff	2,90	%

#### **Mounting Information**

Overall Diameter	260/10,24	mm/inch
Bolt Circle Diameter	241-246/9,5-9,6	mm/inch
Bolt Hole Diameter	5,5/0,21	mm/inch
Front Mount Baffle Cut-out	234/9,21	mm/inch
Rear Mount Baffle Cut-out	234/9,21	mm/inch
Depth	116/4,56	mm/inch
Volume occupied by the driver 6	1 4/0 046	liters/ft3

### **Shipping Information**

Net Weight	3,2/7,05	Kg/Lbs
Shipping Weight	4,0/8,76	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.