MID-BASS

# MB10N305

Professional Low Frequency Transducer

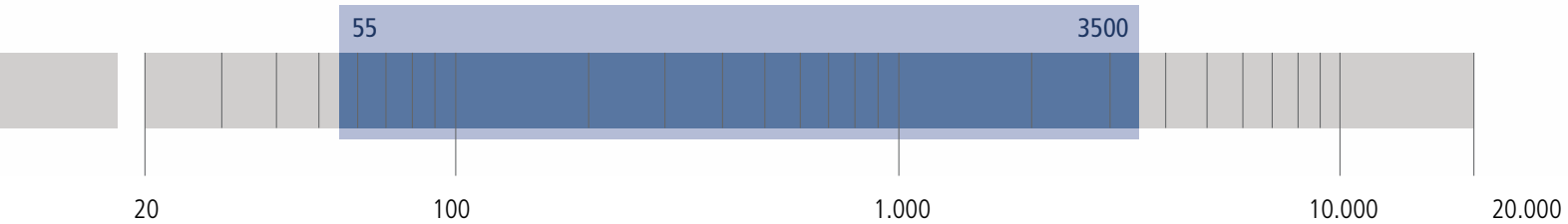
The MB10N305 is a hypervented neo, high linearity mid-bass. The magnetic structure is powered by a large neodymium magnet that provides an extremely high flux density in the gap. The new hyper-vented aluminium basket and magnetic assembly design provide an excellent heat dissipation and lower power compression. 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.

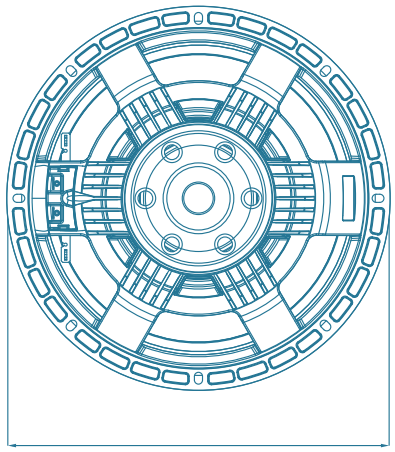
PART NUMBER **11100111**

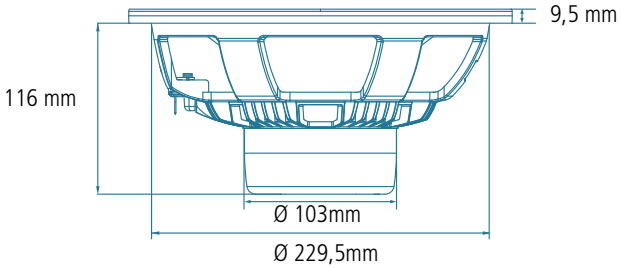
- 3-inch, fibreglass inside/outside aluminium voice coil
- 1000W continuous program power handling
- 97.5 dB Sensitivity
- 55 Hz – 3.5 kHz Frequency range
- Hypervented for minimum power compression
- M-roll surround and exponential cone geometry

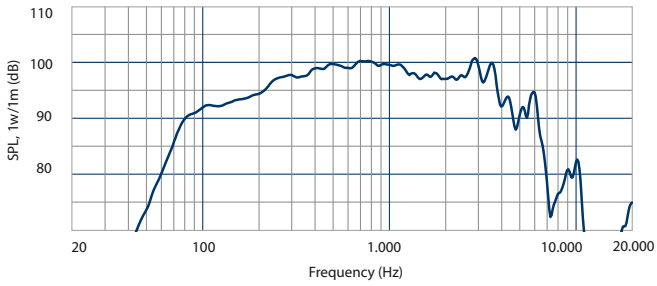
## APPLICATIONS

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.

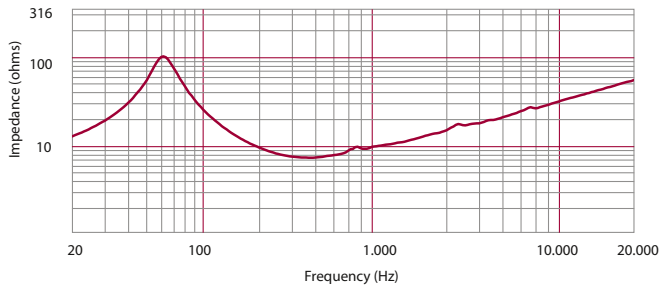





Frequency response curve of the loudspeaker make in a hemispherical, free field and mounted in a reflex box with an internal volume of 50 litres and tuned at 60Hz, applying a sinusoidal signal of 2.83 V @8 at 1m.




Impedence magnitude curve measured in free air

## GENERAL SPECIFICATIONS

| | | |
|---|---|---|
| Nominal Diameter | 260 / 10 | mm/inch |
| Rated Impedance | 8 | ohm |
| Program Power [1] | 1000 | Watts |
| Power handling capacity [2] | 500 | Watts |
| Sensitivity [3] | 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 [4]

| | | | |
|---|---|---|---|
| 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 | $m^2$ |
| Max. linear excursion (mathematical) [5] | 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.

The data are not binding; RCF reserves the right to modify the data at any time and without previous notice.