

# MID-BASS MB15X301

Professional Low Frequency Transducer

The MB15X301 is designed to provide an excellent frequency response linearity with very low distortion. A strong magnetic structure guarantee dynamic and precision. The new dual forced hyper-venting system guarantee a very efficient voice coil ventilation for minimum power compression and incredible power handling. Triple roll surround and spider design offer great linearity and precise reproduction.

PART NUMBER **11100106**

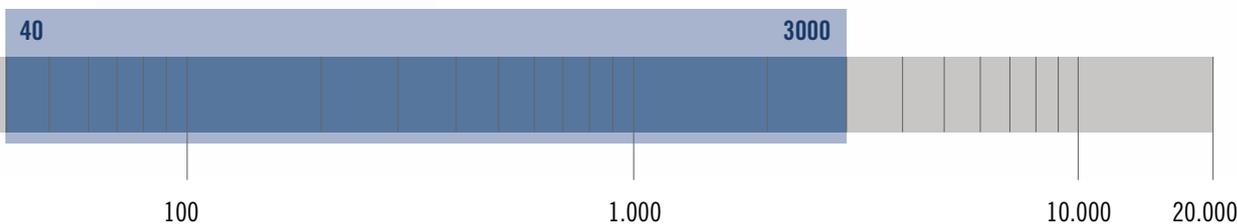
## Features

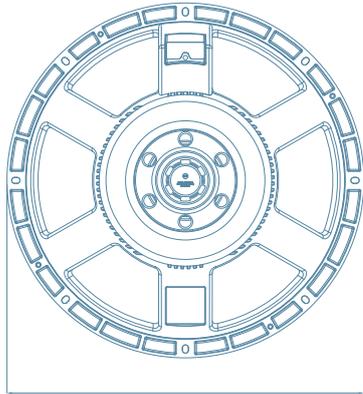
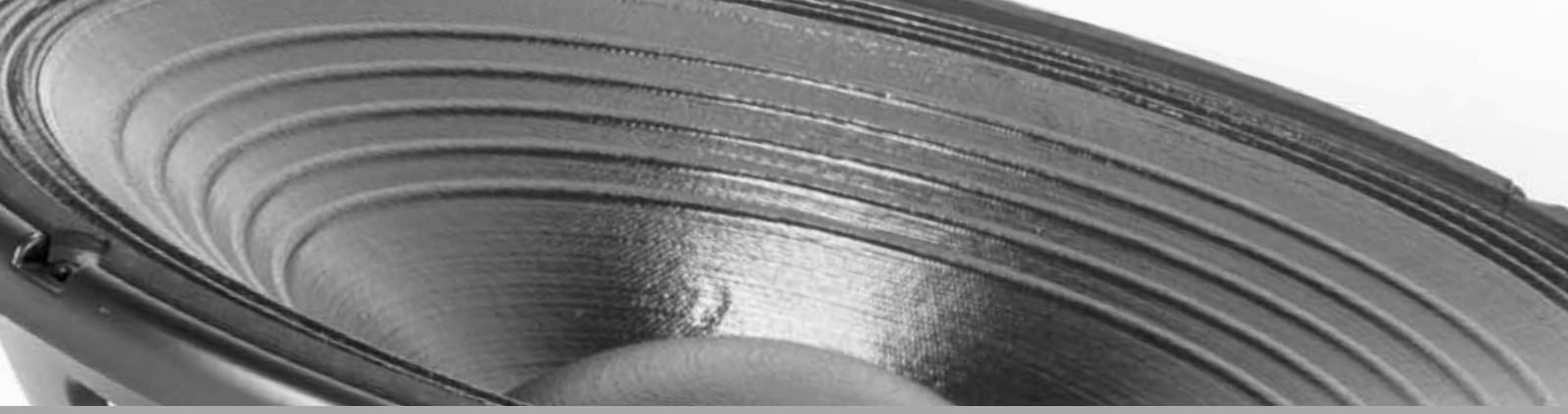
- 3-inch, fibreglass inside/outside aluminium voice coil
- 1000W continuous program power handling
- 98.5 dB Sensitivity
- 40 Hz – 3.0 kHz Frequency range
- Hypervented for minimum power compression
- Triple roll surround and exponential cone geometry

## Applications

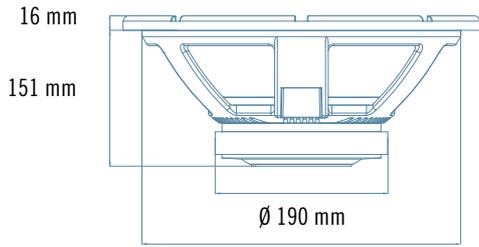
A light moving mass, a curve response linear above 3.0 kHz makes the MB15X301 a very good solution for high quality two way systems.

The 3.0" copper voice coil guarantee a very high power handling and perfect low frequency control.



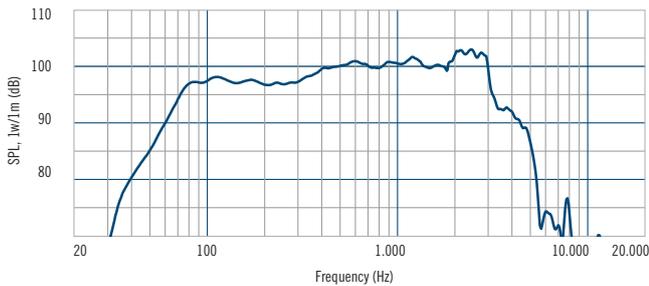


Ø 393 mm

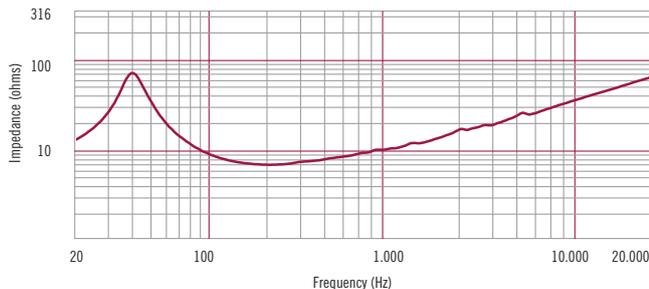


Ø 190 mm

Ø 352 mm



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	380 / 15	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>	98,5	dB
Frequency Range	40-3000	Hz
Effective Piston Diameter	330 / 13	mm/inch
Max Excursion Before Damage (peak to peak)	40 / 1,57	mm/inch
Minimum Impedance	6,5	ohm
Voice Coil Diameter	76 / 3,0	mm/inch
Voice Coil Material	Aluminum	
Voice Coil Winding Depth	17 / 0,66	mm/inch
Number of layers	2	
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	Triple-roll	

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

Resonance frequency	Fs	38	Hz
DC resistance	Re	5,4	ohm
Mechanical factor	Qms	5,0	
Electrical factor	Qes	0,37	
Total factor	Qts	0,34	
BL Factor	BL	18	T · m
Effective Moving Mass	Mms	91,5	gr
Equivalent Cas air load	Vas	195	liters
Effective piston area	Sd	0,086	m <sup>2</sup>
Max. linear excursion (mathematical) <sup>5</sup>	Xmax	6,0	mm
Voice - coil inductance @ 1KHz	Le1K	0,52	mH
Half-space efficiency	Eff	2,80	%

## Mounting Information

Overall Diameter	393 / 15,5	mm/inch
Bolt Circle Diameter	371-376 / 14,6-14,8	mm/inch
Bolt Hole Diameter	6,5 / 0,25	mm/inch
Front Mount Baffle Cut-out	354 / 13,9	mm/inch
Rear Mount Baffle Cut-out	354 / 13,9	mm/inch
Depth	151 / 5,94	mm/inch
Volume occupied by the driver <sup>6</sup>	4,5 / 0,153	liters/ft3

## Shipping Information

Net Weight	8,2 / 18,04	Kg/Lbs
Shipping Weight	9,0 / 19,80	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.