

MID-BASS MB15X351

Professional Low Frequency Transducer

The MB15X351 is designed to provide an excellent frequency response linearity with very low distortion. A very strong ceramic magnetic structure guarantee dynamic and precision, a new and unique 3,5" voice coil design provides a very high power handling, especially recommended in comparison to a standard 3" voice coil. The new dual forced hyper-venting system guarantee a very efficient voice coil ventilation for minimum power compression and incredible power handling.

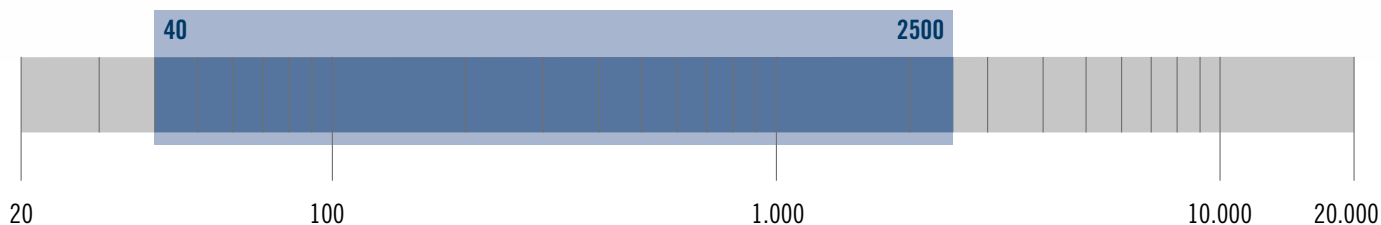
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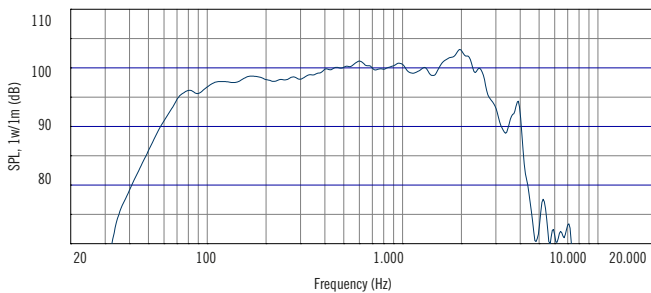
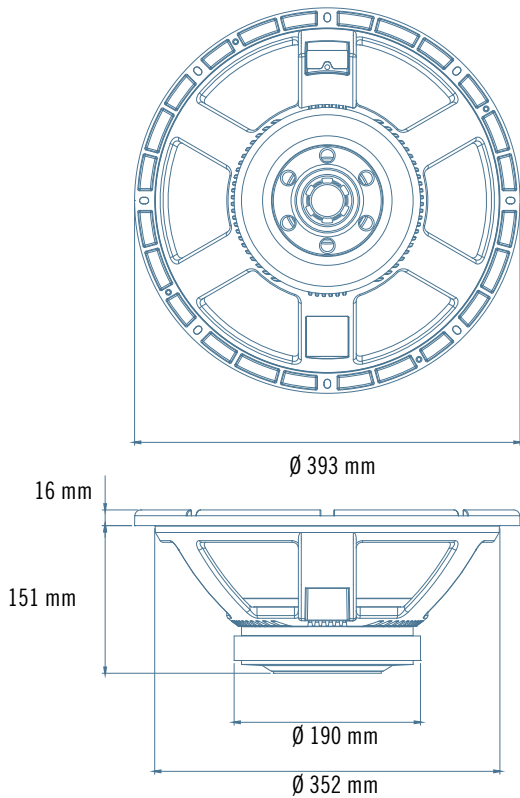
Features

- 3.5 - inch, fibreglass inside-outside copper voice coil
- 1400 Watt continuous program power handling
- 99.0 dB Sensitivity
- 40 Hz – 2.5 kHz Frequency range
- 22.8 T/m BL
- 40 mm peak-to-peak excursion
- Dual-forced hyper-venting and 10mm top plate for minimum power compression
- Dual spider design with silicon based dampening control
- M-roll surround and curved cone geometry

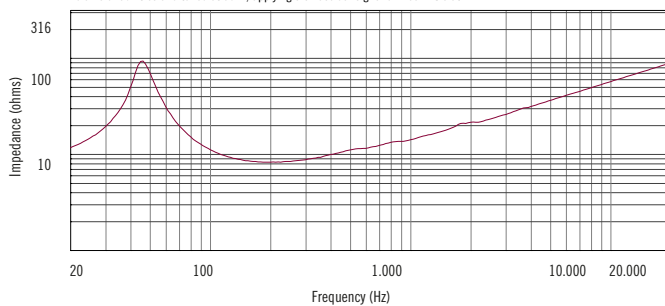
Applications

The MB15X351 is ideal for use in applications where is required a very high efficiency and linearity with high power handling. It's especially recommended for high powered two-way or multi-way system.





Frequency response curve of the loudspeaker made in a hemispherical, free field and mounted in a reflex box with an internal volume of 80 litres and tuned at 50Hz, 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 ¹	1400	Watts
Power handling capacity ²	700	Watts
Sensitivity ³	99	dB
Frequency Range	40-2500	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	87 / 3,4	mm/inch
Voice Coil Material	Copper	
Voice coil former material	fiberglass	
Voice Coil Winding Depth	19 / 0,74	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	M-roll	

Thiele - Small Parameters ⁴

Resonance frequency	Fs	46	Hz
DC resistance	Re	5,4	ohm
Mechanical factor	Qms	6,7	
Electrical factor	Qes	0,33	
Total factor	Qts	0,31	
BL Factor	BL	22,8	T · m
Effective Moving Mass	Mms	106	gr
Equivalent Cas air load	Vas	114	liters
Effettive piston area	Sd	0,086	m ²
Max. linear excursion (mathematical) ⁵	Xmax	5,5	mm
Voice - coil inductance @ 1KHz	Le1K	1,3	mH
Half-space efficiency	Eff	3,20	%

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 ⁶	4,5 / 0,153	liters/ft3

Shipping Information

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