MID-BASS

MB15N401

Professional Low Frequency Transducer

PART NUMBER 11100034

The MB15N401 is a neo midbass with a linear frequency response and very high efficincy. To get this performance the magnetic structure use a double demodulation ring and a fibre loaded exponential cone assembly along with a high excursion triple roll, constant geometry surround. The fibreglass former, inside / outside copper voice coil provides a very good power handling maintaining a light mass maintaining a proper Q factor for bass alignment. The double demodulations ring guarantee a fastest time response and lowest distortion.

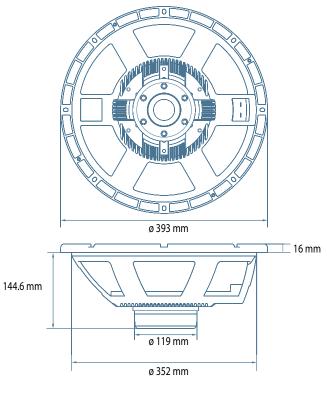
- 4-inch, fibreglass inside-outside copper voice coil
- 1700 Watt continuous program power handling
- 100 dB Sensitivity
- 40 Hz 2 kHz Frequency range
- Dual –forced air ventilation
- Triple-roll surround and exponential cone geometry
- Aluminum demodulation ring

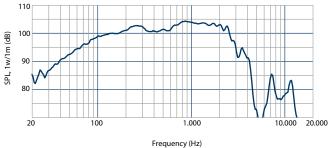
APPLICATIONS

The MB15N401 is ideal for use in applications where is required good power handling, very high efficiency and perfect linearity. Is the ideal 15" woofer for midbass application in the compact 2 way system. The robust mechanical design and optimised weight of the device make it desirable for use in fixed installation or portable professional loudspeaker system.

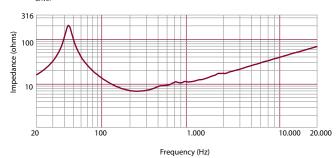








Frequency response curve of the loudspeaker taken in a hemispherical, free field environment and mounted in a closed box with an internal volume of 600 litres (21,2 cu.ft) enclosing the rear of the driver



Impedence magnitude curve measured in free air

GENERAL SPECIFICATIONS

Nominal Diameter	380/15	mm/inch
Rated Impedance	8	ohm
Program Power ¹	1700	Watts
Power handling capacity ²	850	Watts
Sensitivity ³	100	dB
Frequency Range	40 - 2000	Hz
Effective Piston Diameter	340/13.4	mm/inch
Max Excursion Before Damage (peak to peak)	40/1.57	mm/inch
Minimum Impedance	6,4	ohm
Voice Coil Diameter	100/4	mm/inch
Voice Coil Material	Copper	
Voice Coil Winding Depth	18/0.70	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	42	Hz
DC resistance	Re	5.0	ohm
Mechanical factor	Qms	7.7	
Electrical factor	Qes	0.20	
Total factor	Qts	0.19	
BL Factor	BL	26.1	$T \cdot m$
Effective Moving Mass	Mms	100	gr
Equivalent Cas air load	Vas	136	liters
Effettive piston area	Sd	0.091	m ²
Max. linear excursion (mathematical) ⁵	Xmax	5.5	mm
Voice - coil inductance @ 1KHz	Le1K	1.6	mH
Half-space efficiency	Eff	4.86	%

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	354/14.2	mm/inch
Depth	144.6 / 5.69	mm/inch
Volume occupied by the driver 6	3.8/0.13	liters/ft3

SHIPPING INFORMATION

Net Weight	7.5/16.6	Kg/Lbs
Shipping Weight	8.1/18	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 hoard