

# MID-BASS MB15H401

Professional Low Frequency Transducer

The MB15H401 is a 15-inch midbass with linear frequency response characteristics and very high efficiency. The MB15H401 uses a fibre loaded exponential cone assembly along with a high excursion triple roll, constant geometry surround. The fibreglass former, inside/outside aluminum voice coil provides a very good power handling maintaining light moving mass and proper Q for bass alignment. Demodulation ring for fastest time response and lowest distortion.

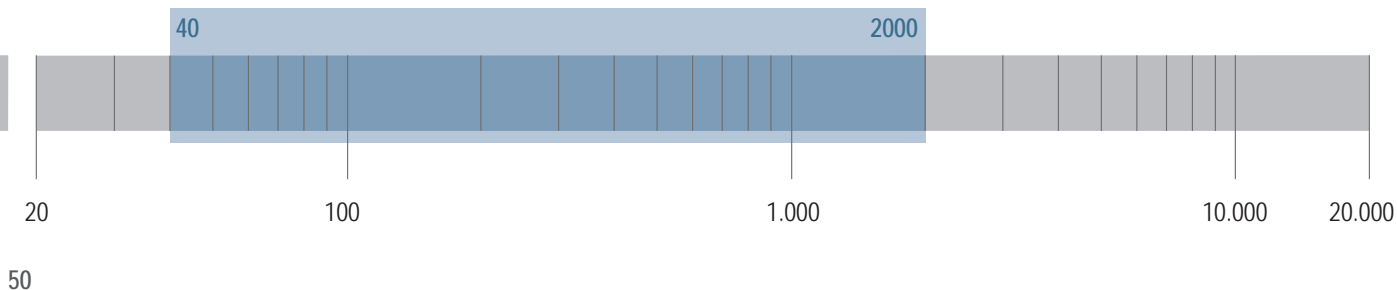
PART NUMBER 11100015

## Features

- 4-inch, fibreglass inside-outside aluminum voice coil
- 1400 Watt continuous program power handling
- 100 dB Sensitivity
- 40 Hz - 2 kHz Frequency range
- Dual spider design with silicon based dampening control
- Triple-roll surround and corrugated exponential cone geometry
- Aluminum demodulation ring

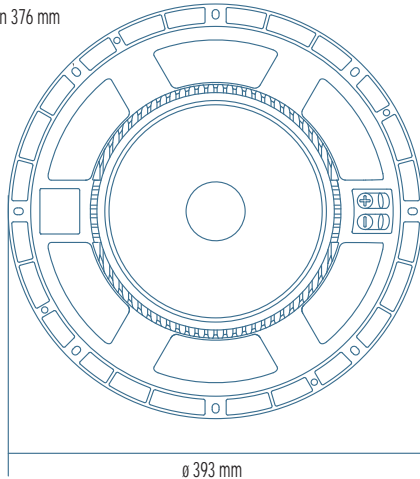
## Applications

The MB15H401 is ideal for use in applications where is required good power handling, very high efficiency and perfect linearity. Is the ideal 15" woofer for mid-bass application in high power, compact 2 way systems. Thanks to his linearity, very easy to crossover compared to competitors 4" voice coil 15". The robust mechanical design and optimised weight of the device make it desirable for use in fixed installation or portable professional loudspeaker systems.

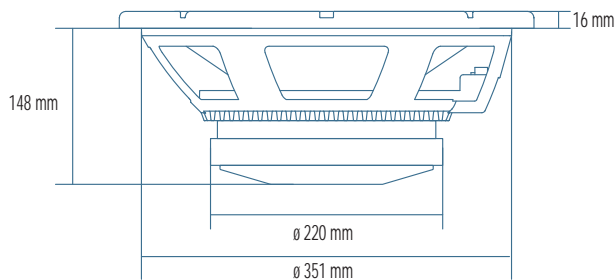




8 x  $\phi$  6.5 mm holes to 45°  
on 371 mm and on 376 mm



$\phi$  393 mm

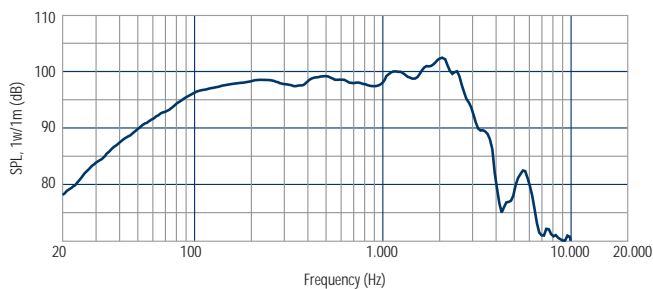


148 mm

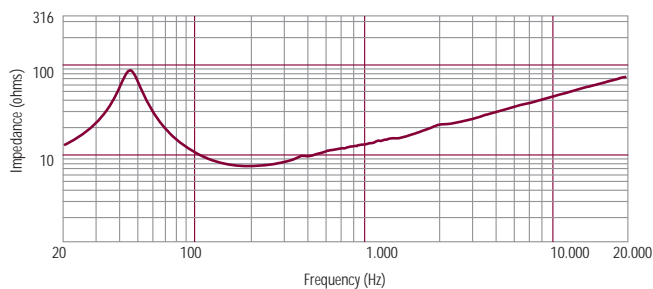
16 mm

$\phi$  220 mm

$\phi$  351 mm



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.



Impedance magnitude curve measured in free air.

## General Specifications

Nominal Diameter	380/15	mm/inch
Rated Impedance	8	ohm
Program Power <sup>1</sup>	1400	Watts
Power handling capacity <sup>2</sup>	700	Watts
Sensitivity <sup>3</sup>	100	dB
Frequency Range	40 - 2000	Hz
Effective Piston Diameter	340/13.4	mm/inch
Max Excursion Before Damage (peak to peak)	50/2.0	mm/inch
Minimum Impedance	7.0	ohm
Voice Coil Diameter	100/4	mm/inch
Voice Coil Material	aluminum	
Voice Coil Winding Depth	21/0.8	mm/inch
Number of layers	2	
Kind of layer	inside/outside	
Top Plate Thickness	12/0.5	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	44	Hz
DC resistance	Re	5.4	ohm
Mechanical factor	Oms	4.8	
Electrical factor	Oes	0.32	
Total factor	Ots	0.30	
BL Factor	BL	22.1	T · m
Effective Moving Mass	Mms	107	gr
Equivalent Cas air load	Vas	121	liters
Effettive piston area	Sd	0.091	m <sup>2</sup>
Max. linear excursion (mathematical) <sup>5</sup>	Xmax	7.5	mm
Voice - coil inductance @ 1KHz	Le1K	1.9	mH
Half-space efficiency	Eff	3.11	%

## Mounting Information

Overall Diameter	393/15.5	mm/inch
Bolt Circle Diameter	371-376/14.6-14.8	mm/inch
Bolt Hole Diameter	6.5/0.3	mm/inch
Front Mount Baffle Cut-out	352/13.9	mm/inch
Rear Mount Baffle Cut-out	360/14.2	mm/inch
Depth	158/6.2	mm/inch
Volume occupied by the driver <sup>6</sup>	4.3/0.15	liters/ft3

## Shipping Information

Net Weight	12.2/26.8	Kg/Lbs
Shipping Weight	12.8/28.4	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 200-2 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.