

MID-BASS

# MB15N405

Professional Low Frequency Transducer

PART NUMBER **11100108**

- 4-inch, fibreglass inside/outside aluminium voice coil
- 2200W continuous program power handling
- 100 dB Sensitivity
- 45 Hz – 2.5 kHz Frequency range
- Hypervented for minimum power compression
- Triple roll surround and exponential cone geometry

The MB15N405 is a hypervented neo mid-bass design with a linear frequency response and very high efficiency.

To get this performance the magnetic structure use a high flux neo disc and the cone assembly a fibre loaded exponential shape along with a high excursion triple roll, constant geometry surround.

The fibreglass former and aluminium voice coil provide a very high power handling maintaining a light mass and a proper Q factor for bass alignment.

## APPLICATIONS

The MB15N405 is ideal where is required extremely high power handling, very high efficiency and perfect linearity.

Is the ideal 15" mid-bass woofer for reference high fidelity, high performance mid-bass application in compact 2 way system.



45 2500

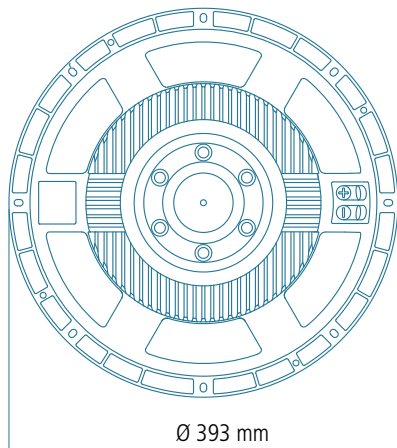
20

100

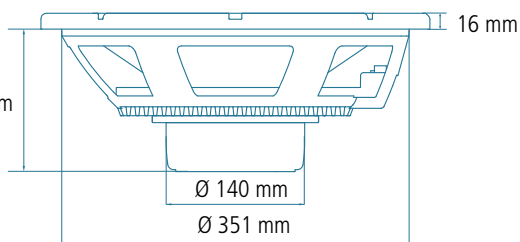
1.000

10.000

20.000



Ø 393 mm

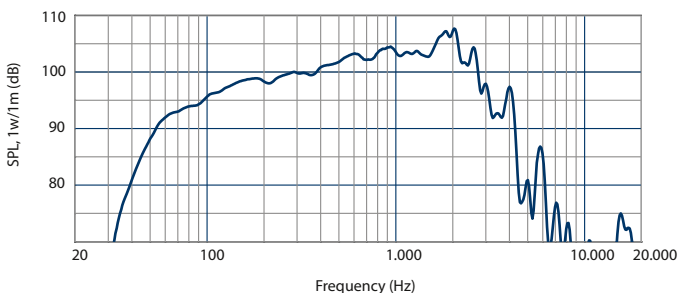


144 mm

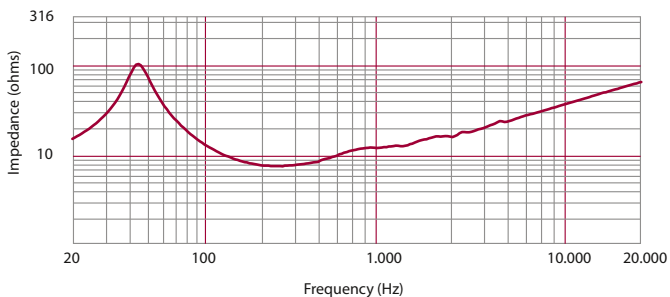
16 mm

Ø 140 mm

Ø 351 mm



Frequency response curve of the loudspeaker made in a hemispherical, free field and mounted in a reflex box with an internal volume of 55 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>	2200	Watts
Power handling capacity <sup>2</sup>	1100	Watts
Sensitivity <sup>3</sup>	100	dB
Frequency Range	45 - 2500	Hz
Effective Piston Diameter	340 / 13,4	mm/inch
Max Excursion Before Damage (peak to peak)	53 / 2,08	mm/inch
Minimum Impedance	5,9	ohm
Voice Coil Diameter	100 / 4	mm/inch
Voice Coil Material	Aluminum	
Voice Coil Winding Depth	20 / 0,78	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 <sup>4</sup>

Resonance frequency	Fs	46	Hz
DC resistance	Re	5,5	ohm
Mechanical factor	Qms	4,8	
Electrical factor	Qes	0,28	
Total factor	Qts	0,27	
BL Factor	BL	23,5	T · m
Effective Moving Mass	Mms	98	gr
Equivalent Cas air load	Vas	124	liters
Effective piston area	Sd	0,091	m <sup>2</sup>
Max. linear excursion (mathematical) <sup>5</sup>	Xmax	7,0	mm
Voice - coil inductance @ 1KHz	Le1K	1,1	mH
Half-space efficiency	Eff	4,10	%

## 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	144 / 5,6	mm/inch
Volume occupied by the driver <sup>6</sup>	3,8 / 0,13	liters/ft3

## SHIPPING INFORMATION

Net Weight	8,6 / 19,1	Kg/Lbs
Shipping Weight	9,3 / 20,7	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.