MID-BASS

MB12N301

Professional Low Frequency Transducer

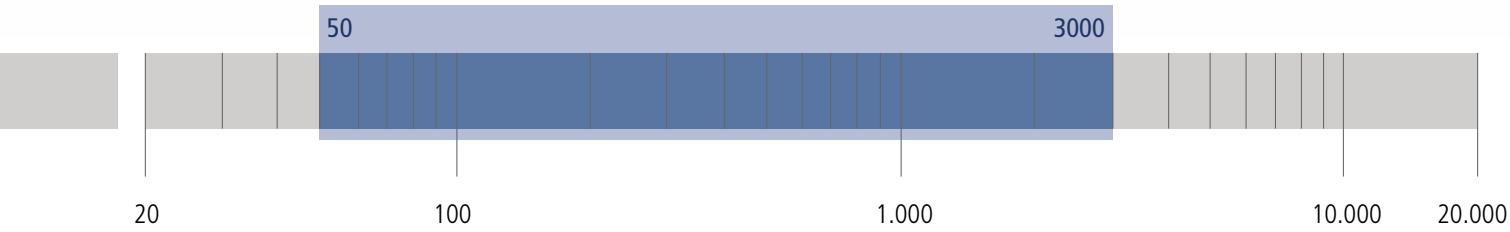
PART NUMBER **11100071**

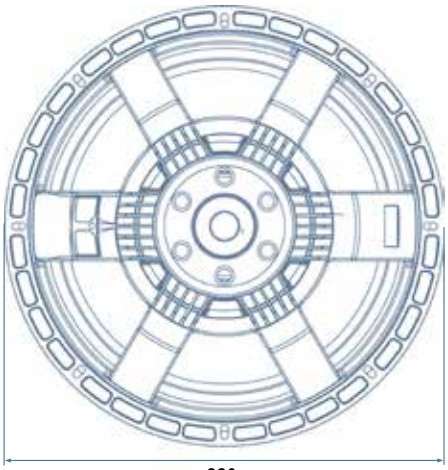
The MB12N301 is a neodymium, high efficiency, 12" mid-bass. High sensitivity, excellent linearity and very high power handling capabilities.
The magnetic structure is powered by a large neodymium magnet that provides an extremely high flux density in the gap. The new hyper-vented aluminium basket and magnetic assembly design provide an excellent heat dissipation and lower power compression. Special air-forced ventilations are provided for voice coil, magnet assembly and basket. M-roll surround and spider design offer great linearity and precise reproduction. The waterproof body cone treatment and polycotton surround ensure a durable performance in every application.

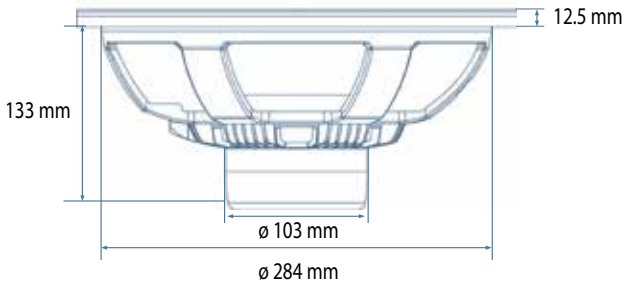
- 3.0-inch, fibreglass inside/outside copper voice coil
- 1000 Watt continuous program power handling
- 98.5dB Sensitivity
- 50Hz –3.0KHz Frequency range
- Dual-forced air ventilation for minimum power compression
- M-roll surround and exponential cone geometry

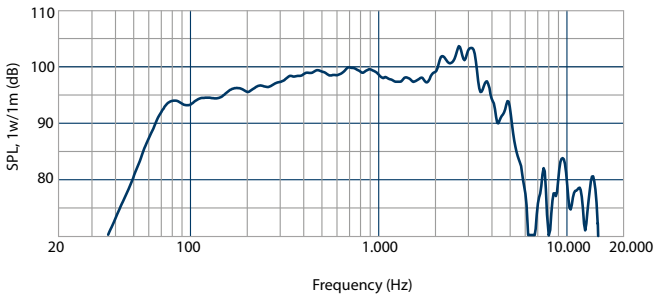
APPLICATIONS

The very light moving mass and linear curve response make the MB12N301 the solution for high quality two or three way system.
The aluminium voice coil guarantee a very high efficiency in conjunction to a proper Q factor for good bass response.

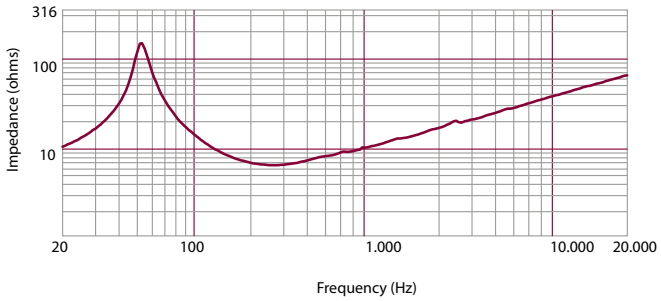








Frequency response curve of the loudspeaker make in a hemispherical, free field and mounted in a reflex box with an internal volume of 55 litres and tuned at 60Hz, applying a sinusoidal signal of 2.83 V @8 at 1m.



Impedence magnitude curve measured in free air

GENERAL SPECIFICATIONS

Nominal Diameter	300/12	mm/inch
Rated Impedance	8	ohm
Program Power [1]	1000	Watts
Power handling capacity [2]	500	Watts
Sensitivity [3]	98.5	dB
Frequency Range	50 - 3000	Hz
Effective Piston Diameter	260/10.2	mm/inch
Max Excursion Before Damage (peak to peak)	34/1.34	mm/inch
Minimum Impedance	6.7	ohm
Voice Coil Diameter	76/3.0	mm/inch
Voice Coil Material	Aluminum	
Voice Coil Winding Depth	17/0.67	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	54	Hz
DC resistance	Re	5.8	ohm
Mechanical factor	Qms	3.1	
Electrical factor	Qes	0.26	
Total factor	Qts	0.24	
BL Factor	BL	19	T · m
Effective Moving Mass	Mms	48	gr
Equivalent Cas air load	Vas	71	liters
Effettive piston area	Sd	0.053	m^2
Max. linear excursion (mathematical) [5]	Xmax	6.0	mm
Voice - coil inductance @ 1KHz	Le1K	1.8	mH
Half-space efficiency	Eff	4.00	%

MOUNTING INFORMATION

Overall Diameter	320/12.6	mm/inch
Bolt Circle Diameter	294.5-304/11.6-11.9	mm/inch
Bolt Hole Diameter	5.5/0.21	mm/inch
Front Mount Baffle Cut-out	288/11.33	mm/inch
Rear Mount Baffle Cut-out	288/11.33	mm/inch
Depth	133/5.24	mm/inch
Volume occupied by the driver [6]	2.2/0.08	liters/ft3

SHIPPING INFORMATION

Net Weight	3.4/7.5	Kg/Lbs
Shipping Weight	4.2/9.2	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.