

MID-BASS

MB12X301

Professional Low Frequency Transducer

The MB12X301 is designed to provide an excellent frequency response linearity with very low distortion. A strong magnetic structure guarantee dynamic and precision. The new dual forced hyper-venting system guarantee a very efficient voice coil ventilation for minimum power compression and incredible power handling. M-roll surround, exponential cone geometry and spider design offer great linearity and precise reproduction.

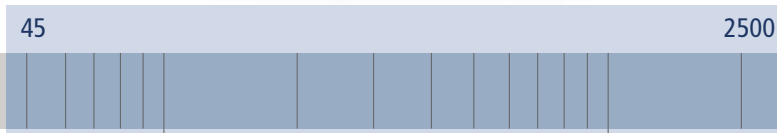
PART NUMBER **11100105**

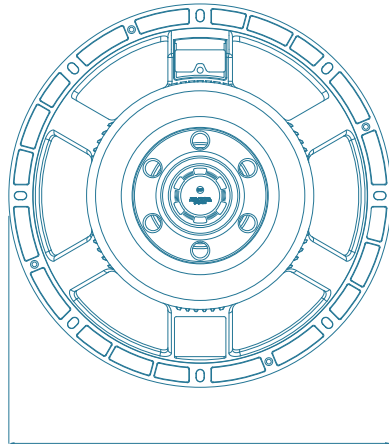
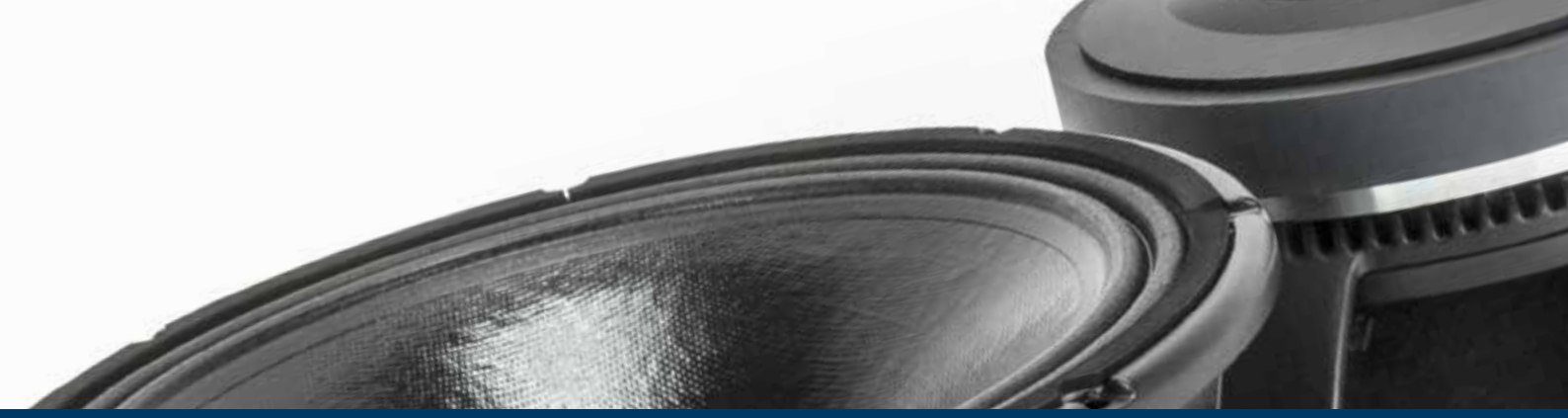
- 3-inch, fibreglass inside/outside copper voice coil
- 1000W continuous program power handling
- 98.0 dB Sensitivity
- 45 Hz – 2.5 kHz Frequency range
- Hypervented for minimum power compression
- M-roll surround and exponential cone geometry

APPLICATIONS

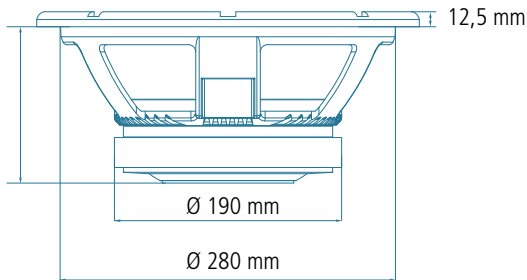
A light moving mass, a curve response linear above 2.5 kHz makes the MB12X301 a very good solution for high quality two way systems.

The 3.0" copper voice coil guarantee a very high power handling and perfect low frequency control.





Ø 320 mm

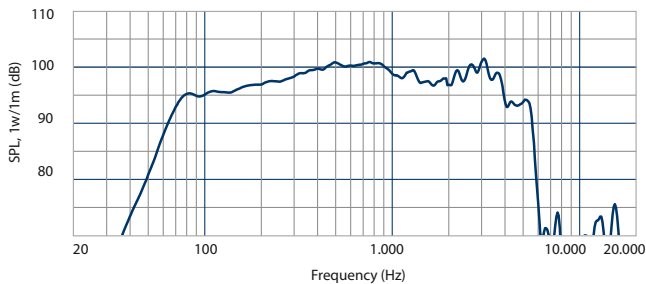


130,5 mm

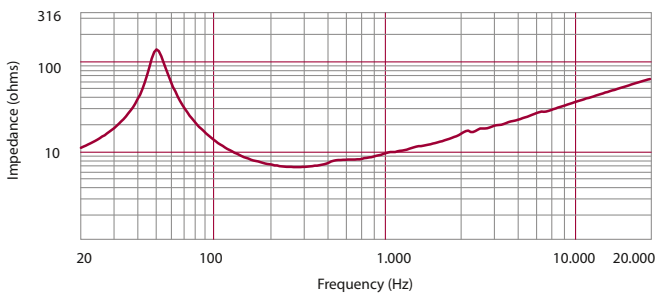
12,5 mm

Ø 190 mm

Ø 280 mm



Frequency response curve of the loudspeaker made in a hemispherical, free field and mounted in a reflex box with an internal volume of 50 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	300 / 12	mm/inch
Rated Impedance	8	ohm
Program Power ¹	1000	Watts
Power handling capacity ²	500	Watts
Sensitivity ³	98	dB
Frequency Range	45-2500	Hz
Effective Piston Diameter	260 / 10,2	mm/inch
Max Excursion Before Damage (peak to peak)	39 / 1,5	mm/inch
Minimum Impedance	6,7	ohm
Voice Coil Diameter	76 / 3,0	mm/inch
Voice Coil Material	Copper	
Voice Coil Winding Depth	17 / 0,66	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	50	Hz
DC resistance	Re	5,4	ohm
Mechanical factor	Qms	9	
Electrical factor	Qes	0,30	
Total factor	Qts	0,29	
BL Factor	BL	18	T · m
Effective Moving Mass	Mms	57	gr
Equivalent Cas air load	Vas	70	liters
Effective piston area	Sd	0,053	m ²
Max. linear excursion (mathematical) ⁵	Xmax	6,0	mm
Voice - coil inductance @ 1KHz	Le	0,6	mH
Half-space efficiency	Eff	2,80	%

MOUNTING INFORMATION

Overall Diameter	320 / 12,6	mm/inch
Bolt Circle Diameter	293-304 / 11,5-12	mm/inch
Bolt Hole Diameter	6,5 / 0,25	mm/inch
Front Mount Baffle Cut-out	282 / 11,1	mm/inch
Rear Mount Baffle Cut-out	284 / 11,4	mm/inch
Depth	130,5 / 5,13	mm/inch
Volume occupied by the driver ⁶	2,2 / 0,077	liters/ft3

SHIPPING INFORMATION

Net Weight	7,6 / 16,7	Kg/Lbs
Shipping Weight	8,4 / 18,4	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 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.