

Nd/M Series

KEY FEATURES

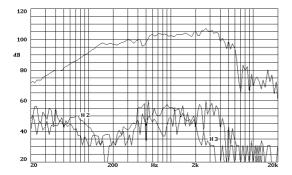
- Exceptional power handling (200 w AES)
- Compact neodymium magnet system
- 3" (77 mm) edgewound aluminium ribbon voice coil
- High efficiency: 8.6 %
- Low weight (4 kg)
- Extended frequency response with low distortion and excellent linearity
- Designed for the mid-frequencies reproduction



GENERAL DESCRIPTION

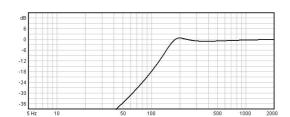
This 12» mid-bass frequency loudspeaker features a compact, powerful neodymium magnet system, providing exceptional energy level and reducing the total loudspeaker mass. This results in exceptional high efficiency (8.6%), low distortion and excellent linearity, with extended response.

FREQUENCY RESPONSE AND DISTORTION CURVES



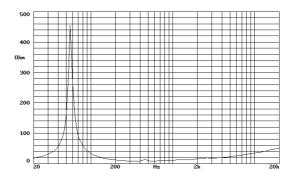
Note: on axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1w @ 1m.

PREDICTED LOW FREQUENCY RESPONSE

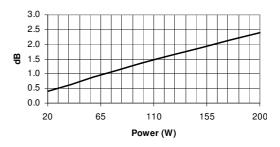


Note: Bass-reflex cabinet, Vb=25 I, fb=175 Hz

FREE AIR IMPEDANCE CURVE



POWER COMPRESSION LOSSES



Note: These losses are calculated from a five minutes AES power test applying band limited pink noise (100-5000 Hz). The loudspeaker is free-air standing.



122_{122Nd}

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TECHNICAL SPECIFICATIONS

Nominal diameter	300 mm. 12 in.		
Rated impedance	8 ohms		
Minimum impedance	8 ohms		
Power capacity	200 w AES		
Program power	400 w		
Sensitivity	103 dB 2.83v @ 1m @ 2π		
Frequency range	80 - 6000 Hz		
Recom. enclosure vol.	20 / 50 I 0.7 / 1.75 ft. ³		
Voice coil diameter	77 mm. 3 in.		
Magnetic assembly weight	3 kg. 6.6 lb.		
BL factor	24.2 N / A		
Moving mass	0.045 kg.		
Voice coil length	12 mm		
Air gap height	11 mm		
X damage (peak to peak)	16 mm		

MOUNTING INFORMATION

Overall diameter	320 mm.	12.6 in
Bolt circle diameter	300 mm.	11.8 in.
Baffle cutout diameter:		

 - Front mount
 286 mm.
 11.26 in.

 - Rear mount
 280 mm.
 11.02 in.

 Depth
 126 mm.
 4.96 in.

 Volume displaced by driver
 5.5 l
 0.19 ft.³

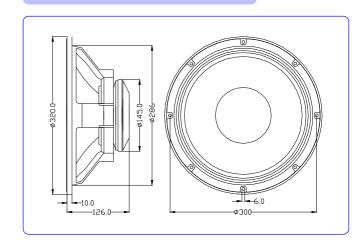
 Net weight
 4 kg.
 8.8 lb.

 Shipping weight
 4.5 kg.
 10 lb.

THIELE-SMALL PARAMETERS

Resonant frequency, fs	56 Hz
D.C. Voice coil resistance, Re	5.2 ohms.
Mechanical Quality Factor, Qms	12
Electrical Quality Factor, Qes	0.14
Total Quality Factor, Qts	0.14
Equivalent Air Volume to Cms, Vas	72 I
Mechanical Compliance, Cms	181 μm/N
Mechanical Resistance, Rms	1.3 kg/s
Efficiency, ηο (%)	8.6
Effective Surface Area, Sd (m²)	0.0530 m ²
Maximum Displacement, Xmax	2 mm
Displacement Volume, Vd	106 cm ³
Voice Coil Inductance, Le @ 1 kHz	1.5 mH

DIMENSION DRAWINGS



MATERIALS

- Voice coil: cast aluminium.
- Cone: paper.
- Surround: treated cloth.
- Voice coil: edgewound aluminium ribbon.
- Magnet: neodymium.

Notes:



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^{*}The power capacity is determined according to AES2-1984 (r2003) standard.

Program power is defined as the transducer's ability to handle normal music program material.

^{**}T-S parameters are measured after an exercise period using a preconditioning power test.

The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).