

# 102Nd

SOUND REINFORCEMENT

-Pro-



This 10" 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%), low distortion and excellent linearity, with extended response.

Este transductor de 10" diseñado para aplicación en media-bajas frecuencias se caracteriza por su sistema magnético de neodimio, compacto y potente. Suministra un nivel excepcional de energía además de reducir la masa total del altavoz. El resultado es una muy elevada eficiencia (8%), baja distorsión y excelente linealidad, con una amplia respuesta en frecuencia.

## SPECIFICATIONS

Nominal diameter	250 mm - 10 in.
Rated impedance	8 ohms
Power capacity*	200 w RMS
Program Power	400 w
Sensitivity	103 dB 2.83v @ 1m @ 2π
Frequency range	80 - 6000 Hz
Recom. enclosure vol.	20 - 50 l 0.7 - 1.75 ft³
Voice coil diameter	77 mm - 3 in.
Magnetic assembly weight	3 kg 6.6 lb
BL factor	25.4 N/A
Moving mass	0.033 kg
Voice coil length	12 mm.
Air gap height	11 mm.
X damage (peak to peak)	16 mm.

## MOUNTING INFORMATION

Overall diameter	260 mm 10.2 in
Bolt circle diameter	245 mm 9.6 in
Baffle cutout diameter:	
-Front mount	230 mm 9 in
-Rear mount	235 mm 9.2 in
Depth	100 mm 3.9 in
Volume displaced by driver	2 l 0.07 ft³
Net weight	3.7 kg 8.1 lb
Shipping weight	4 kg 8.8 lb

## MATERIALS

Basket	Cast aluminium
Cone	Paper
Surround	Treated cloth
Voice coil	Edgewound aluminium ribbon
Magnet	Neodymium

## THIELE-SMALL PARAMETERS\*\*

Resonant Frequency, fs	53 Hz
D.C. Voice Coil Resistance, Re	5.5 ohms
Mechanical Quality Factor, Qms	10.1
Electrical Quality Factor, Qes	0.09
Total Quality Factor, Qts	0.09
Equivalent Air Volume to Cms, Vas	56 l
Mechanical Compliance, Cms	273 μm/N
Mechanical Resistance, Rms	1.1 kg/s
Efficiency, ho (%)	8.8 %
Effective Surface Area, Sd(m²)	0.038 cm²
Maximum Displacement, Xmax	2 mm
Displacement Volume, Vd	106 cm³
Voice Coil Inductance, Le @ 1kHz	1.5 mH

## NOTES

\*The power capacity corresponds to the RMS maximum value that can dissipate the loudspeaker when a sinus signal is applied for a period of at least two hours.  
Program power is defined as the transducer's ability to handle normal music program material.

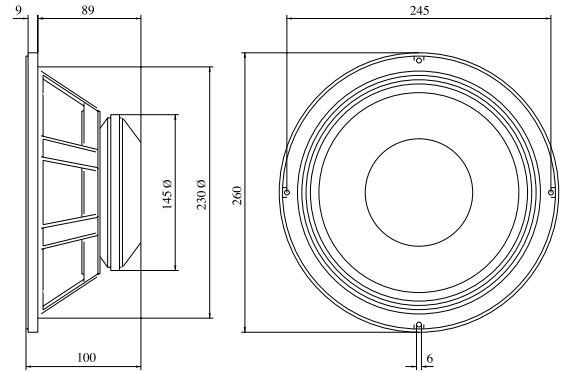
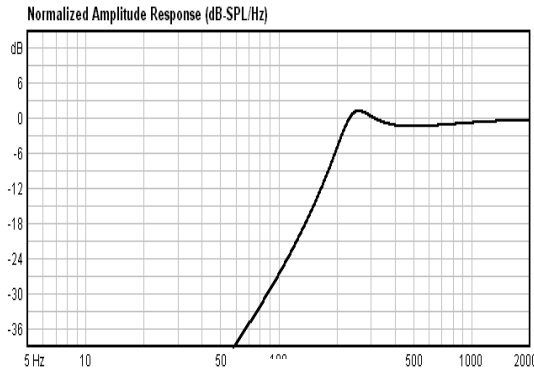
\*\* T-S parameters are measured after an exercise period using a preconditioning power test, using a velocity-current laser transducer, and will reflect the long term parameters, once the loudspeaker has been working for a short period of time.

## NOTAS

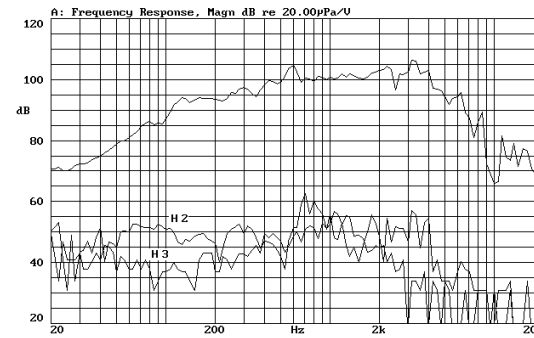
\*La potencia admisible corresponde a la máxima potencia RMS que puede disipar el altavoz durante al menos dos horas, cuando se le aplica una señal sinusoidal determinada.  
Por potencia programa se entiende la capacidad del altavoz en el manejo de señales transitorias, como sería el proporcionado por el contenido de un pasaje musical normal.

\* Los parámetros T-S han sido medidos después de un periodo de fatiga y estabilización de las suspensiones, mediante transductor laser de velocidad-corriente, y son el reflejo de los parámetros a largo plazo del altavoz, una vez éste haya sido instalado y haya trabajado en un corto espacio de tiempo.

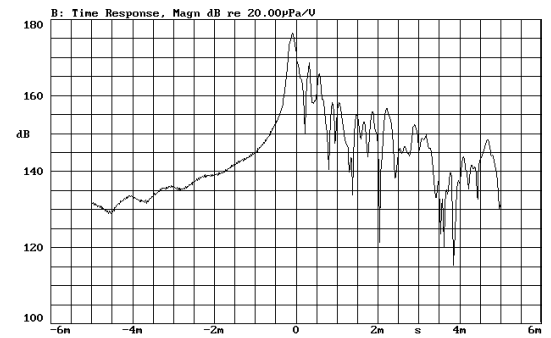
PREDICTED LOW FREQUENCY RESPONSE • Bass-reflex cabinet, Vb=20 l, fb=240 Hz



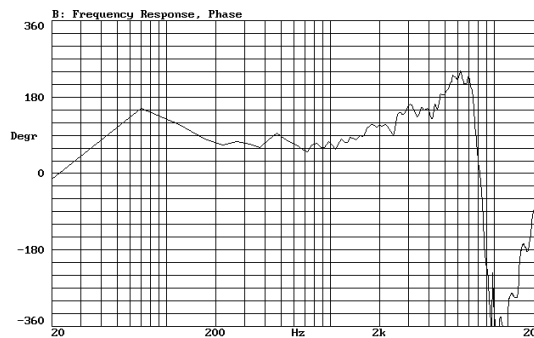
FREQUENCY RESPONSE & DISTORTION CURVES, MAGN. On axis, 1w @ 1m.



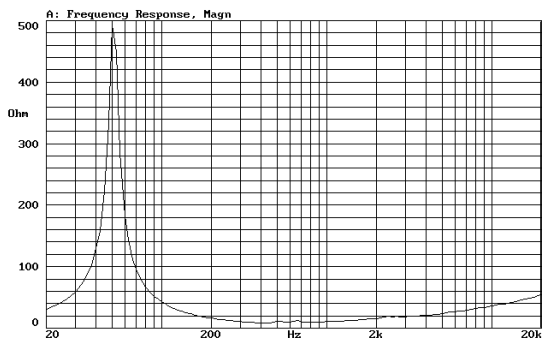
TIME RESPONSE, MAGN.



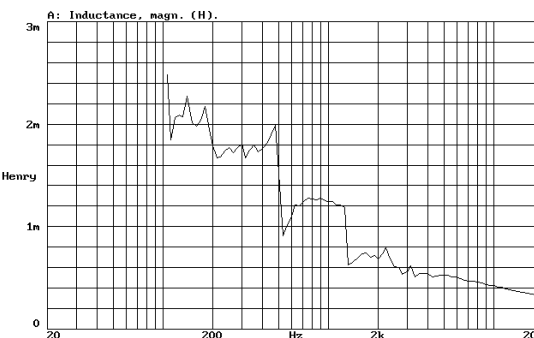
FREQUENCY RESPONSE, PHASE. On axis, 1w @ 1m.



FREE AIR IMPEDANCE CURVE



VOICE COIL INDUCTANCE CURVE



Re + Red(w) CURVE

