

# 10M250

SOUND REINFORCEMENT



This 10" high efficiency loudspeaker is designed to cover the mid frequencies range with smooth response, low harmonic distortion and excellent power capacity. It features a 2.5" voice coil diameter, edgewound flat aluminium wire, and a massive, powerful magnet system. The motor assembly generates a uniform magnetic field, and provides an efficient thermal path, which contributes to dissipate the heat produced by the voice coil.

Este modelo de 10" de alta eficiencia está diseñado para reproducir el rango de frecuencias medias con una respuesta consistente y extensa, baja distorsión armónica y excelente capacidad de potencia. Está dotado de una bobina de 2"1/2 realizada con hilo plano de aluminio y movida por un potente conjunto magnético generador de un campo simétrico y capaz de disipar eficazmente el calor producido por la bobina.

### SPECIFICATIONS

Nominal diameter	250 mm. 10 in.
Rated impedance	8 ohms.
Power capacity*	250 w RMS
Program Power	500 Watts.
Sensitivity	99 dB, 2.83v @ 1m @ 2π
Frequency range	30-5500 Hz
Recom. enclosure vol.	30/80 l 1.05/2.8 ft. <sup>3</sup>
Voice coil diameter	62.4 mm. 2.5 in.
Magnetic assembly weight	6.4 kg. 14.08 lb.
BL factor	16 N/A
Moving mass	0.032 kg.
Voice coil length	16 mm.
Air gap height	9 mm.
X damage (peak to peak)	30 mm.

### MOUNTING INFORMATION

Overall diameter	270 mm. 10.62 in.
Bolt circle diameter	255 mm. 10.03 in.
Baffle cutout diameter:	
-Front mount	240 mm. 9.45 in.
-Rear mount	230 mm. 9.05 in.
Depth	116 mm. 4.56 in.
Volume displaced by driver	3 l 0.10 ft. <sup>3</sup>
Net weight	7 kg. 15.4 lb.
Shipping weight	7.4 kg. 16.28 lb.

### MATERIALS

Basket	Cast aluminium
Cone	Paper
Surround	Plasticised cloth
Voice coil	Edgewound alum. ribbon
Magnet	Ferrite

### THIELE-SMALL PARAMETERS\*\*

Resonant Frequency, fs	50 Hz
D.C. Voice Coil Resistance, Re	5.8 ohms.
Mechanical Quality Factor, Qms	7.93
Electrical Quality Factor, Qes	0.223
Total Quality Factor, Qts	0.22
Equivalent Air Volume to Cms, Vas	64 l
Mechanical Compliance, Cms	316.6 μm/N
Mechanical Resistance, Rms	1.27 kg/s
Efficiency, ho (%)	3.35
Effective Surface Area, Sd(m <sup>2</sup> )	0.038 m <sup>2</sup>
Maximum Displacement, Xmax	3.5 mm.
Displacement Volume, Vd	130 cm. <sup>3</sup>
Voice Coil Inductance, Le @ 1kHz	1 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.

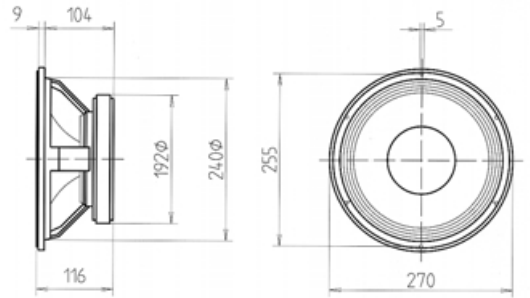
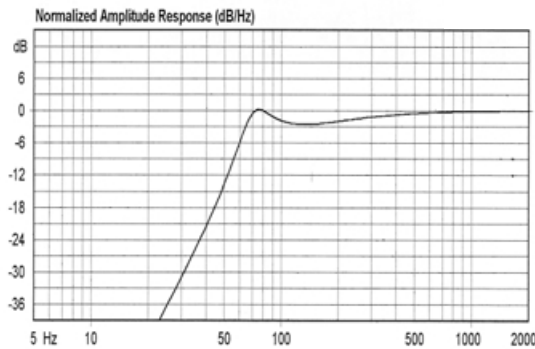
\*\* T-S parameters are measured after an exercise period using a preconditioning power test, using a velocity-current laser transducer, and will reflect the long term parameters, once the loudspeaker has been working for a short period of time.

### NOTAS

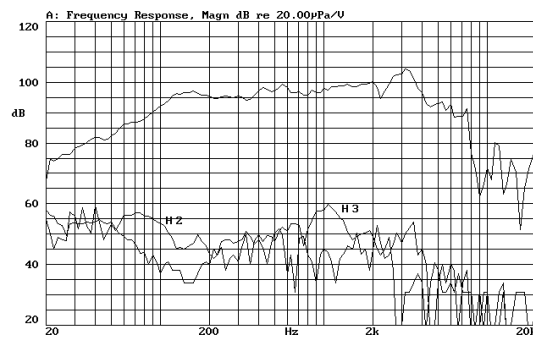
\*La potencia admisible corresponde a la máxima potencia RMS que puede disipar el altavoz durante al menos dos horas, cuando se le aplica una señal senoidal determinada.  
Por potencia programa se entiende la capacidad del altavoz en el manejo de señales transitorias, como sería el proporcionado por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

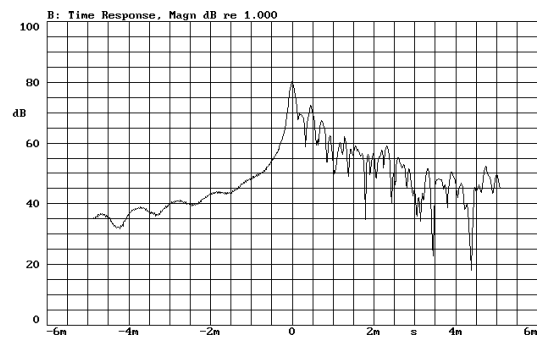
PREDICTED LOW FREQUENCY RESPONSE • Bass-reflex cabinet, Vb=50.00 l, fb=70.0 Hz



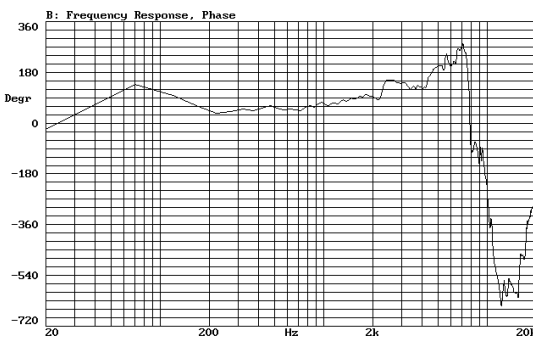
FREQUENCY RESPONSE & DISTORTION CURVES, MAGN. On axis, 1w @ 1m.



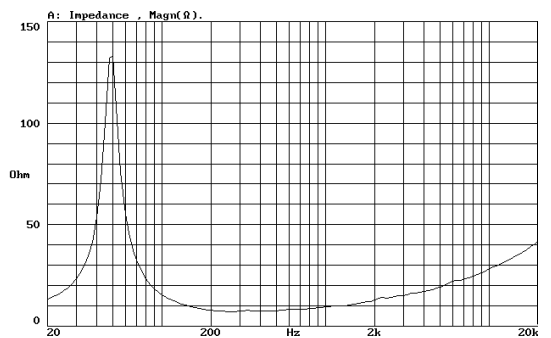
TIME RESPONSE, MAGN.



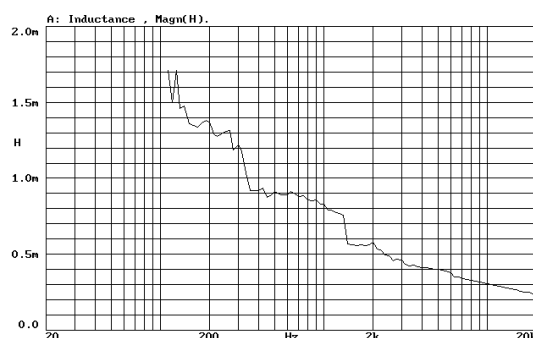
FREQUENCY RESPONSE, PHASE. On axis, 1w @ 1m.



FREE AIR IMPEDANCE CURVE



VOICE COIL INDUCTANCE CURVE



Re + Red(w) CURVE

