

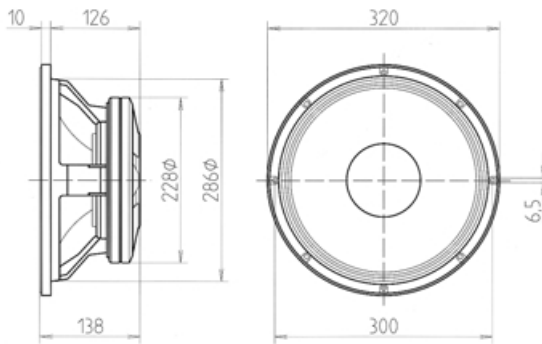
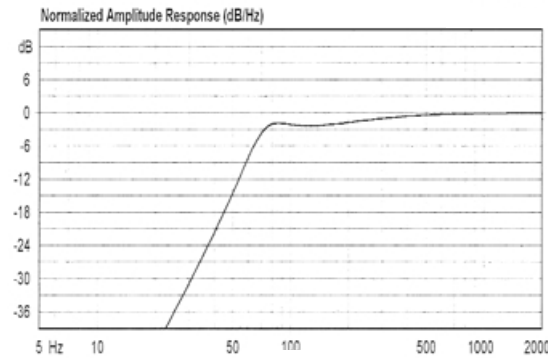
(12M300)
SOUND REINFORCEMENT

This 12" high efficiency bass and mid transducer is designed for professional high performance sound reinforcement systems. It incorporates low mass edgewound aluminium voice coil (3" diameter) and a massive vented magnetic structure. This model covers the bass and mid frequency range with smooth response, low harmonic distortion and excellent power capacity ability. This loudspeaker is well suited for high efficiency sound application, in compact size bass-reflex cabinets designs.

Este modelo de 12" para aplicaciones en baja y media frecuencia se caracteriza por su elevada eficiencia. Dotado de una bobina de 3" de hilo plano de aluminio, y de un circuito magnético sobredimensionado, exhibe una respuesta en frecuencia extensa, con una reducida distorsión armónica y baja compresión de potencia por efecto térmico. Diseñado específicamente para aplicaciones de gran potencia con requerimientos de máxima calidad y fiabilidad.



PREDICTED LOW FREQUENCY RESPONSE • Bass-reflex cabinet, Vb=40.00 l, fb=70.0 Hz



SPECIFICATIONS

Nominal diameter	300 mm. 12 in.
Rated impedance	8 ohms.
Power capacity*	300 w RMS
Program Power	600 Watts.
Sensitivity	100 dB, 2.83v @ 1m @ 2π
Frequency range	30-5000 Hz
Recom. enclosure vol.	30/80 l 1.05/2.85 ft. ³
Voice coil diameter	77 mm. 3 in.
Magnetic assembly weight	8 kg. 17.6 lb.
BL factor	20.3 N/A
Moving mass	0.045 kg.
Voice coil length	17 mm.
Air gap height	9 mm.
X damage (peak to peak)	36 mm.

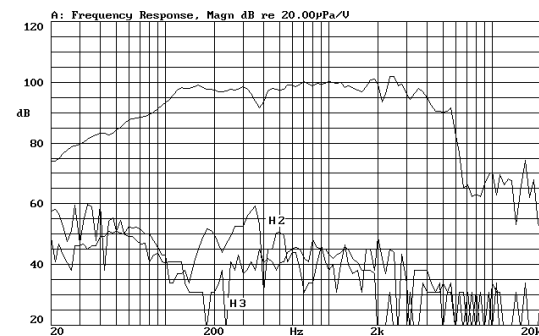
MOUNTING INFORMATION

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	138 mm. 5.43 in.
Volume displaced by driver	5.5 l 0.19 ft. ³
Net weight	9 kg. 19.8 lb.
Shipping weight	9.7 kg. 21.34 lb.

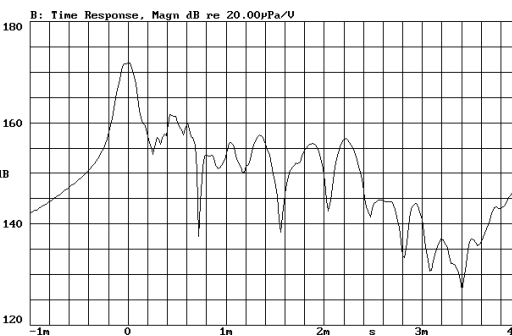
MATERIALS

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

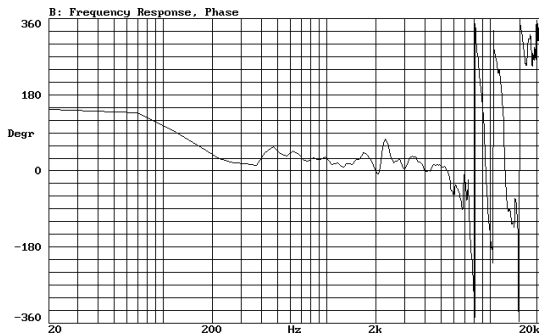
FREQUENCY RESPONSE & DISTORTION CURVES, MAGN. On axis, 1w @ 1m.



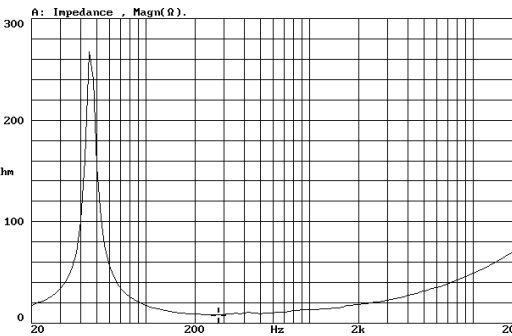
TIME RESPONSE, MAGN.



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



FREE AIR IMPEDANCE CURVE



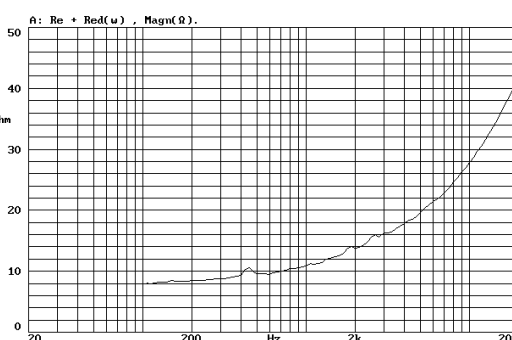
THIELE-SMALL PARAMETERS**

Resonant Frequency, fs	45 Hz
D.C. Voice Coil Resistance, Re	6.3 ohms.
Mechanical Quality Factor, Qms	8.49
Electrical Quality Factor, Qes	0.204
Total Quality Factor, Qts	0.2
Equivalent Air Volume to Cms, Vas	115 l
Mechanical Compliance, Cms	278 μm/N
Mechanical Resistance, Rms	1.5 kg/s
Efficiency, ho (%)	5
Effective Surface Area, Sd(m ²)	0.055 m ²
Maximum Displacement, Xmax	3.5 mm.
Displacement Volume, Vd	192 cm. ³
Voice Coil Inductance, Le @ 1kHz	1.3 mH

VOICE COIL INDUCTANCE CURVE



Re + Red(w) CURVE



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.