12G350
SOUND REINFORCEMENT

This 12" cone transducer is designed for professional high level, high performance sound reinforcement systems. It features a 3" voices coil diameter, copper wire material. The magnetic structure is vented, in order to maximise heat dissipation, increasing power handling while reducing power compression. The result is a loudspeaker that combines high efficiency, extended frequency response and thermal and mechanical durability.

Este transductor de 12" ha sido diseñado para aplicaciones profesionales de alto nivel. Utiliza una bobina de 3" de diámetro y un circuito magnético ventilado centralmente, lo que unido a un chasis rígido de aluminio fundido a presión, garantiza una disipación térmica excelente con una reducida compresión de potencia por efecto térmico. El resultado es un altavoz caracterizado por su alta eficiencia, extensa respuesta en frecuencia y gran resistencia tanto mécanica como térmica.

SPECIFICATIONS

Nominal diameter	300 mm. 12 in.
Rated impedance	8 ohms.
Power capacity*	250 w RMS
Program Power	500 Watts.
Sensitivity	99 dB, 2.83v @ 1m @ 2π
Frequency range	40-5000 Hz
Recom. enclosure vol.	20/80 l 0.7/2.85 ft.^{3}
Voice coil diameter	77 mm. 3 in.
Magnetic assembly weight	6.5 kg. 14.3 lb.
BL factor	18.2 N/A
Moving mass	0.053 kg.
Voice coil length	16 mm.
Air gap height	7 mm.
X damage (peak to peak)	32 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	137 mm. 5.4 in.
Volume displaced by driver	5.5 l 0.19 ft.^{3}
Net weight	7.5 kg. 16.5 lb.
Shipping weight	8.2 kg. 18.04 lb.

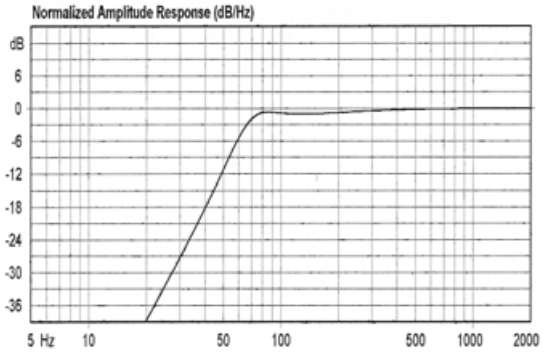
MATERIALS

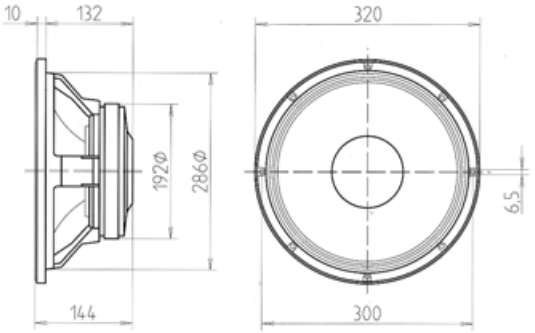
Basket	Die Cast aluminium
Cone	Paper
Surround	Plasticised cloth
Voice coil	Copper
Magnet	Ferrite

THIELE-SMALL PARAMETERS**

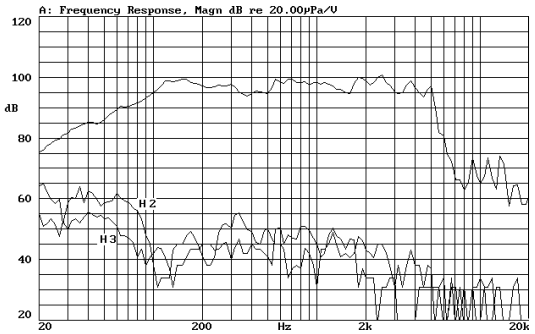
Resonant Frequency, fs	50 Hz
D.C. Voice Coil Resistance, Re	6 ohms.
Mechanical Quality Factor, Qms	11.9
Electrical Quality Factor, Qes	0.30
Total Quality Factor, Qts	0.29
Equivalent Air Volume to Cms, Vas	80 l
Mechanical Compliance, Cms	190 μm/N
Mechanical Resistance, Rms	1.4 kg/s
Efficiency, ηo (%)	3.2
Effective Surface Area, Sd(m^2)	0.055 m^2
Maximum Displacement, Xmax	4.5 mm.
Displacement Volume, Vd	230 cm.^{3}
Voice Coil Inductance, Le @ 1kHz	1.2 mH

PREDICTED LOW FREQUENCY RESPONSE • Bass-reflex cabinet, Vb=40.00 l, fb=65.0 Hz

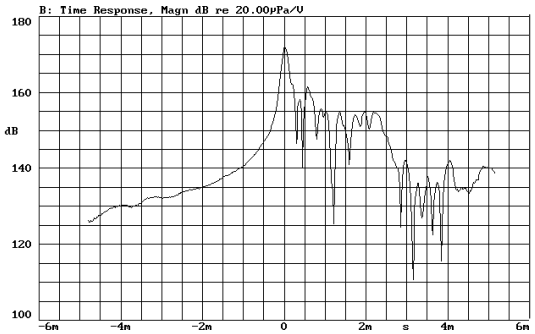




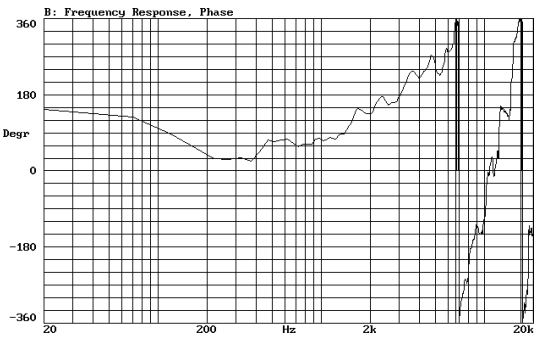
FREQUENCY RESPONSE & DISTORTION CURVES, MAGN. On axis, 1w @ 1m.



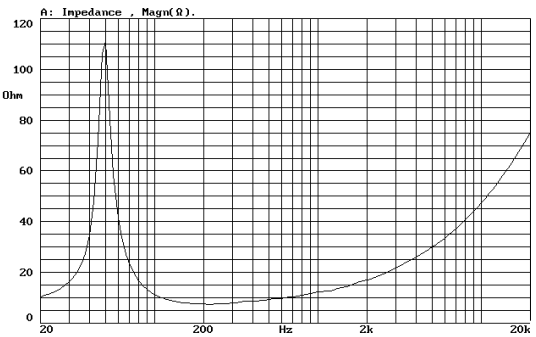
TIME RESPONSE, MAGN.



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

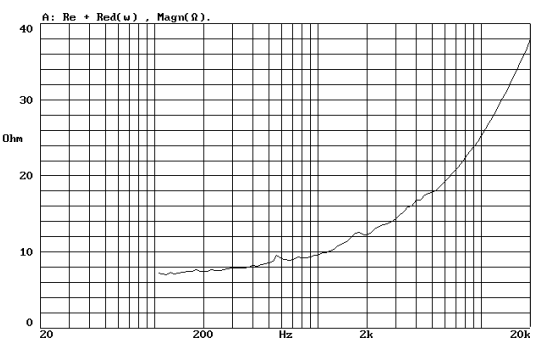


FREE AIR IMPEDANCE CURVE



VOICE COIL INDUCTANCE CURVE

Re + Red(w) CURVE



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.