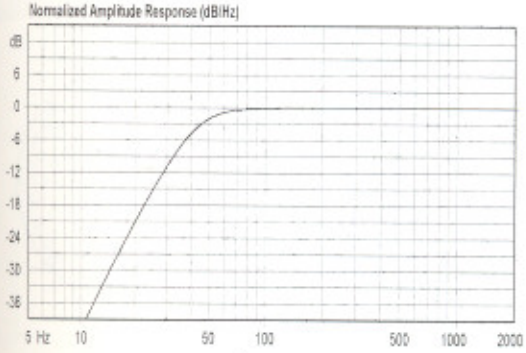
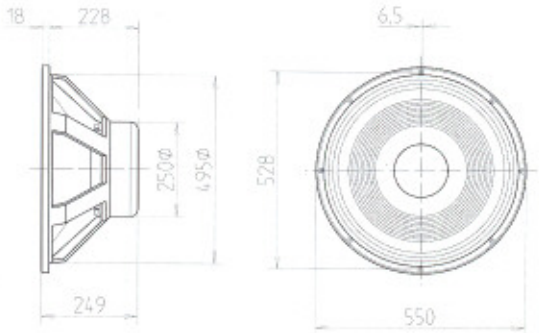
21L45
LOW FREQUENCY

This 21" low frequency transducer has been especially designed to supply incredibly high sound pressure in the low frequency region, with exceptional high power capacity and minimum harmonic distortion. This superb driver features a 4"1/2 (114 mm) voice coil, edgewound aluminium ribbon wire, a moving mass at least half the weight of pure copper, a powerful, vented, double magnet geometry construction, that avoids external flux leakage and maximises flux induction in the air gap, with double spider assembly construction. The result is an incredible highly efficient transducer for subwoofer applications, the ability to handle high elongation, extremely low coloration and reduced thermal power compression.

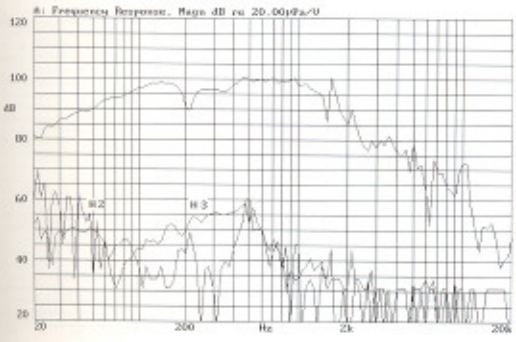
Este altavoz de 21" ha sido diseñado para suministrar una elevada presión acústica en baja frecuencia, con una potencia admisible excepcional y reducida distorsión armónica. Este soberbio altavoz incluye una bobina de 4"1/2 (114 mm.) de diámetro realizada en hilo plano de aluminio, un sofisticado sistema magnético con ventilación central, doble imán con blindaje magnético que reduce las pérdidas externas y maximiza la inducción en el entrehierro, y suspensión de doble centrador que controla el desplazamiento del equipaje móvil en las grandes elongaciones. El resultado es un transductor de elevada eficiencia para aplicaciones en subwoofers, capaz de proporcionar unos bajos nitidos y profundos.

PREDICTED LOW FREQUENCY RESPONSE • Bass-reflex cabinet, Vb=170,00 l, fb=35,0 Hz

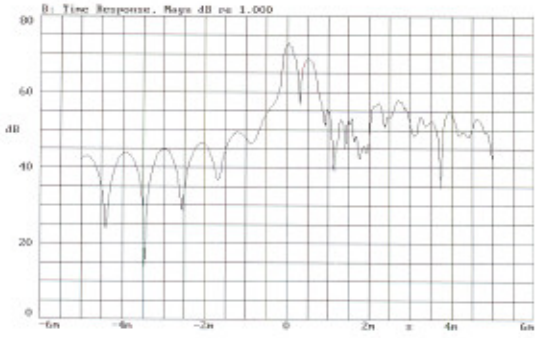




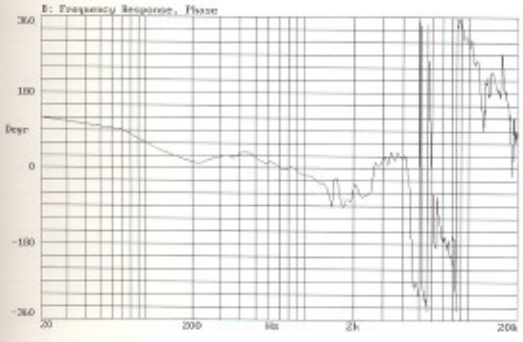
FREQUENCY RESPONSE & DISTORTION CURVES, MAGN. On axis, 1w @ 1m.



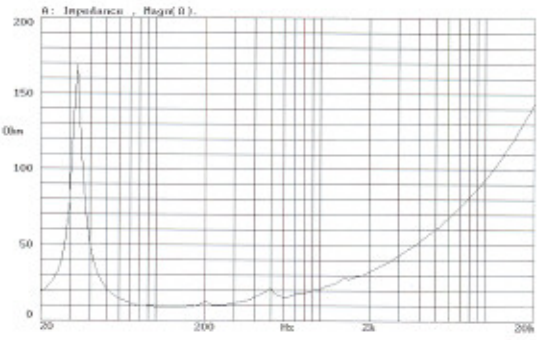
TIME RESPONSE, MAGN.



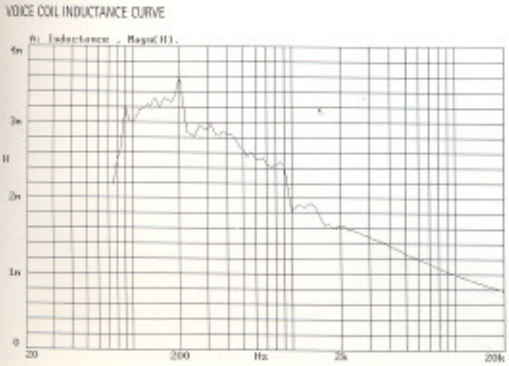
FREQUENCY RESPONSE, PHASE. On axis, 1w @ 1m.



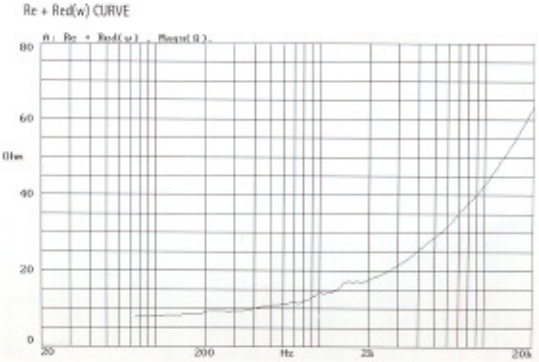
FREE AIR IMPEDANCE CURVE



VOICE COIL INDUCTANCE CURVE



Re + Red(w) CURVE



SPECIFICATIONS

Nominal diameter	540 mm. 21 in.
Rated impedance	8 ohms.
Power capacity*	800 w RMS
Program Power	1600 w RMS
Sensitivity	99 dB 2.83V @ 1m @ 2π
Frequency range	20-1200 Hz
Recom. enclosure vol.	100-250 l 3.5/8.75 ft.³
Voice coil diameter	114 mm. 4.5 in.
Magnetic assembly weight	16 kg. 35.2 lb.
BL factor	30.5 N/A
Moving mass	0.250 kg.
Voice coil length	25 mm.
Air gap height	11 mm.
X damage (peak to peak)	35 mm.

MOUNTING INFORMATION

Overall diameter	550 mm. 21.65 in.
Bolt circle diameter	528 mm. 20.68 in.
Baffle cutout diameter:	
-Front mount	495 mm. 19.48 in.
-Rear mount	510 mm. 20.07 in.
Depth	249 mm. 9.80 in.
Volume displaced by driver	20 l 0.7 ft.³
Net weight	19 kg. 41.8 lb.
Shipping weight	22 kg. 48.4 lb.

MATERIALS

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

THIELE-SMALL PARAMETERS**

Resonant Frequency, fs	30 Hz
D.C. Voice Coil Resistance, Re	6.5 ohms.
Mechanical Quality Factor, Qms	9.91
Electrical Quality Factor, Qes	0.33
Total Quality Factor, Qts	0.32
Equivalent Air Volume to Cms, Vas	500 l
Mechanical Compliance, Cms	112 µm/N
Mechanical Resistance, Rms	4.7 kg/s
Efficiency, ηo (%)	3.9
Effective Surface Area, Sd(m²)	0.1764 m²
Maximum Displacement, Xmax	9 mm
Displacement Volume, Vd	1600 cm.³
Voice Coil Inductance, Le @ 1kHz	1.8 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.