

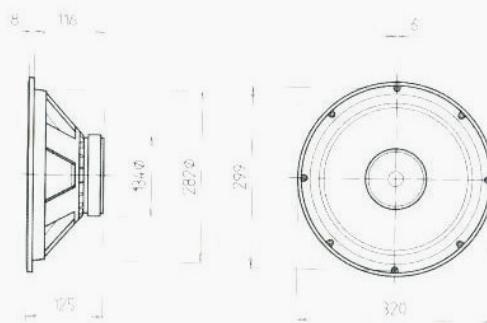
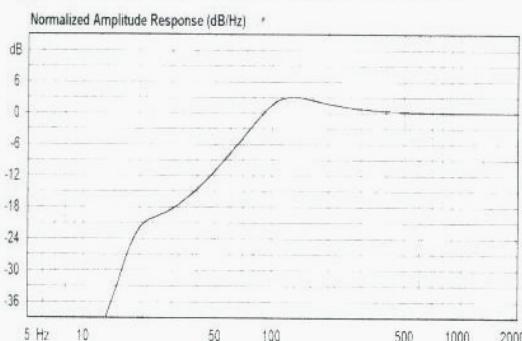
# 12AG100 SPECIAL DUTY



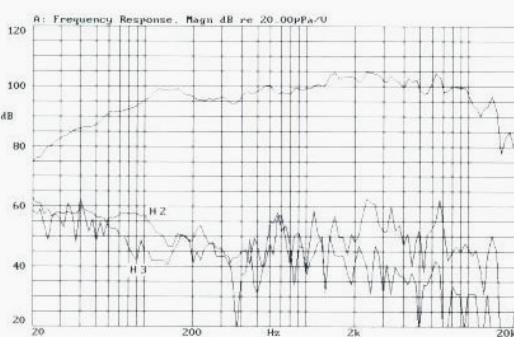
This 12" high efficiency, full range loudspeaker has been designed to cover all the audio frequency range, with a smooth and wide response, low distortion and excellent sensitivity. To achieve these characteristics, it includes a copper ring on the pole piece and a tweeter cone mounted directly on the coil.

Este altavoz de 12" de amplia gama se caracteriza por cubrir todo el rango de frecuencias con una respuesta muy plana, buena sensibilidad y baja distorsión, debido a un cono curvilíneo de gran ligereza, a la inclusión de un casquillo de cobre sobre la pieza polar central y a la sujeción de un cono de agudos directamente sobre la bobina.

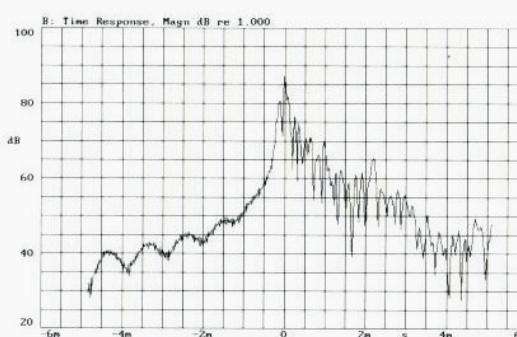
PREDICTED LOW FREQUENCY RESPONSE • Bass-reflex cabinet,  $V_b=40.00$  l,  $f_b=35.0$  Hz



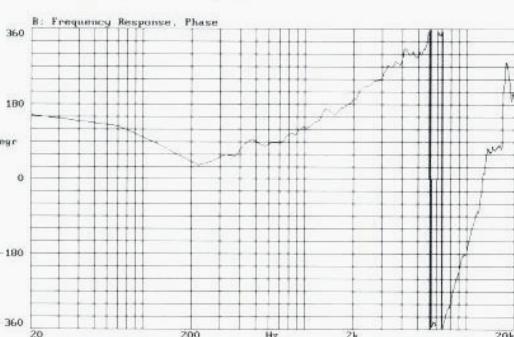
FREQUENCY RESPONSE & DISTORTION CURVES, MAGN. On axis, 1w @ 1m.



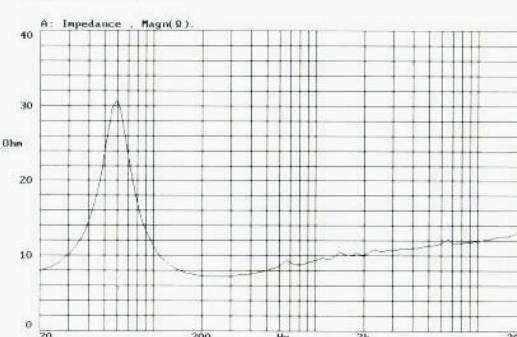
TIME RESPONSE, MAGN.



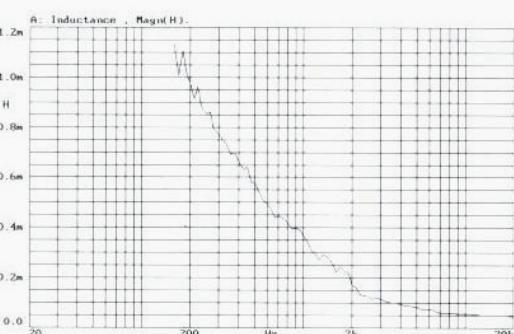
FREQUENCY RESPONSE, PHASE. On axis, 1w @ 1m.



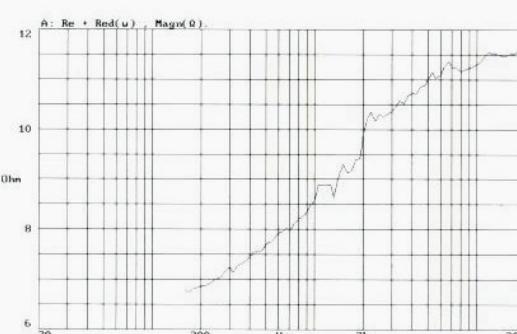
FREE AIR IMPEDANCE CURVE



VOICE COIL INDUCTANCE CURVE



Re + Red(w) CURVE



## SPECIFICATIONS

Nominal diameter	300 mm. 12 in.
Rated impedance	8 ohms.
Power capacity*	80 w RMS
Program Power	160 w RMS
Sensitivity	101 dB, 2.83V @ 1m @ 2π
Frequency range	50-18000 Hz
Recom. enclosure vol.	40/125 l 1.4/4.4 ft. <sup>3</sup>
Voice coil diameter	38.5 mm. 1.5 in.
Magnetic assembly weight	2.75 kg. 6.06 lb.
BL factor	9.3 N/A
Moving mass	0.032 kg.
Voice coil length	9 mm.
Air gap height	7 mm.
X damage (peak to peak)	16 mm.

## MOUNTING INFORMATION

Overall diameter	320 mm. 12.6 in.
Bolt circle diameter	299 mm. 11.77 in.
Baffle cutout diameter:	
-Front mount	286 mm. 11.26 in.
-Rear mount	280 mm. 11.83 in.
Depth	125 mm. 4.88 in.
Volume displaced by driver	4 l 0.14 ft. <sup>3</sup>
Net weight	3.4 kg. 7.5 lb.
Shipping weight	3.95 kg. 8.7 lb.

## MATERIALS

Basket	Die cast aluminium
Cone	Paper
Surround	Plasticised paper
Voice coil	Copper
Magnet	Ferrite

## THIELE-SMALL PARAMETERS\*\*

Resonant Frequency, $f_s$	60 Hz
D.C. Voice Coil Resistance, $R_e$	6.5 ohms.
Mechanical Quality Factor, $Q_m$	3.35
Electrical Quality Factor, $Q_{es}$	0.9
Total Quality Factor, $Q_t$	0.7
Equivalent Air Volume to Cms, $V_{as}$	92 l
Mechanical Compliance, $C_m$	220 μm/N
Mechanical Resistance, $R_m$	3.60 kg/s
Efficiency, $\eta_0$ (%)	2.5
Effective Surface Area, $S_d(m^2)$	0.054 m <sup>2</sup>
Maximum Displacement, $X_{max}$	1.5 mm.
Displacement Volume, $V_d$	80 cm <sup>3</sup>
Voice Coil Inductance, $L_e$ @ 1kHz	0.4 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 programada 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 período de fatiga y estabilización de las suspensiones, mediante transductor láser 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.