

12LX60

LOW FREQUENCY



This 12" long excursion bass loudspeaker has been specifically designed to deliver high impact bass response, with exceptional high power handling capacity (600w RMS). It incorporates an edgewound ribbon voice coil (4" diameter) and vented magnetic structure. An optimum cooling system allows a fast heat exchange and contributes to the reduction of thermal power compression.

Modelo de 12" de gran desplazamiento para aplicaciones fundamentalmente de baja y muy baja frecuencia (subgraves). Este altavoz se caracteriza por una bobina de gran tamaño (4") con una potencia excepcionalmente alta (600 W RMS) debido a una estudiada refrigeración del bobinado, un excelente rendimiento y una reducida distorsión armónica.

SPECIFICATIONS

| | |
|--------------------------|-----------------------------------|
| Nominal diameter | 300 mm. 12 in. |
| Rated impedance | 8 ohms. |
| Power capacity* | 600 w RMS |
| Program Power | 1200 Watts. |
| Sensitivity | 96 dB, 2.83v @ 1m @ 2π |
| Frequency range | 35-2000 Hz |
| Recom. enclosure vol. | 20-60 l 0.7/2.24 ft. ³ |
| Voice coil diameter | 100 mm. 4 in. |
| Magnetic assembly weight | 9 kg. 19.84 lb. |
| BL factor | 20.3 N/A |
| Moving mass | 0.090 kg. |
| Voice coil length | 23 mm. |
| Air gap height | 8 mm. |
| X damage (peak to peak) | 40 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 | 130 mm. 5.1 in. |
| Volume displaced by driver | 5.5 l 0.19 ft. ³ |
| Net weight | 9.7 kg. 4.4 lb. |
| Shipping weight | 10.4 kg. 22.92 lb. |

MATERIALS

| | |
|------------|-----------------------|
| Basket | Cast aluminium |
| Cone | Paper |
| Surround | Treated cloth |
| Voice coil | Edgewound copper wire |
| Magnet | Ferrite |

THIELE-SMALL PARAMETERS**

| | |
|---|----------------------|
| Resonant Frequency, fs | 42 Hz |
| D.C. Voice Coil Resistance, Re | 5.5 ohms. |
| Mechanical Quality Factor, Qms | 9.8 |
| Electrical Quality Factor, Qes | 0.31 |
| Total Quality Factor, Qts | 0.30 |
| Equivalent Air Volume to Cms, Vas | 66 l |
| Mechanical Compliance, Cms | 156 μm/N |
| Mechanical Resistance, Rms | 2.45 kg/s |
| Efficiency, ηo (%) | 1.5 |
| Effective Surface Area, Sd(m ²) | 0.055 m ² |
| Maximum Displacement, Xmax | 9 mm. |
| Displacement Volume, Vd | 500 cm. ³ |
| Voice Coil Inductance, Le @ 1kHz | 1,2 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.

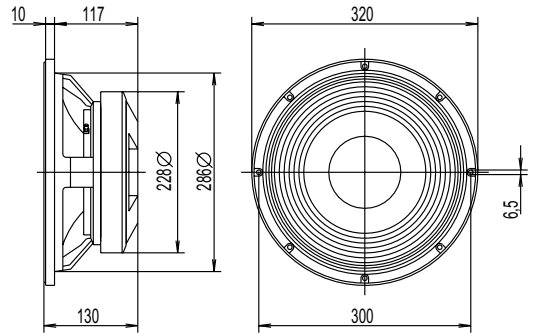
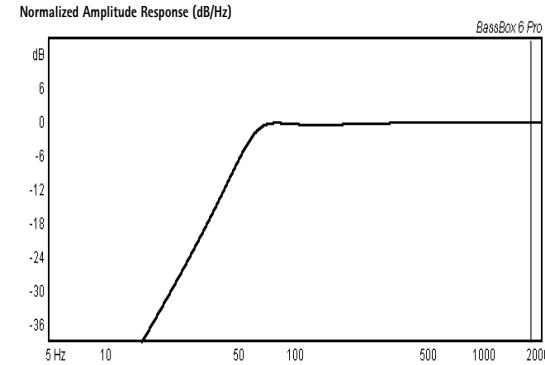
NOTAS

*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.

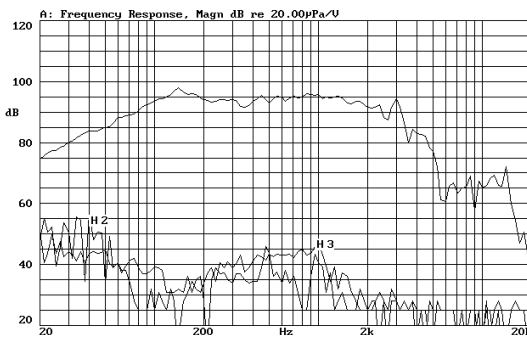
Por potencia programa se entiende la capacidad del altavoz en el manejo de señales transitorias, como sería el proporcionado por el contenido de un pasaje musical normal.

* 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.

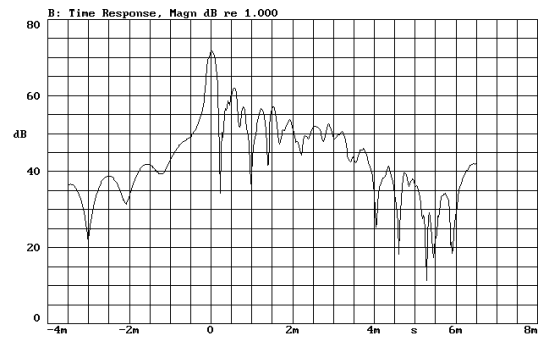
PREDICTED LOW FREQUENCY RESPONSE • Bass-reflex cabinet, Vb=40 l, fb=60 Hz



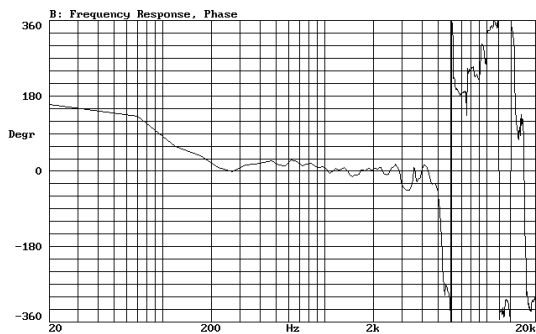
FREQUENCY RESPONSE & DISTORTION CURVES, MAGN. On axis, 1w @ 1m.



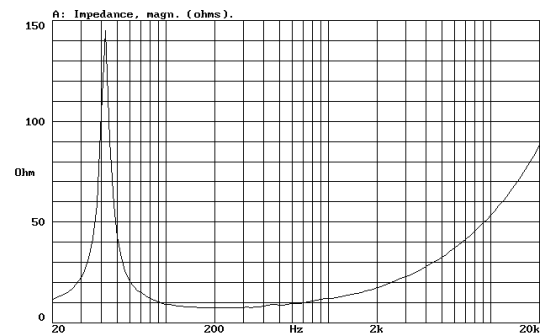
TIME RESPONSE, MAGN.



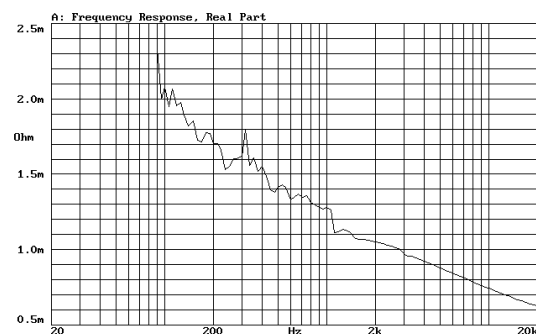
FREQUENCY RESPONSE, PHASE. On axis, 1w @ 1m.



FREE AIR IMPEDANCE CURVE



VOICE COIL INDUCTANCE CURVE



Re + Red(w) CURVE

