

# 12CX CO AXIAL



This dual loudspeaker includes, in a single unit, a 12" bass driver and a concentrically mounted compression tweeter. This provides a single point source and reduces phasing problems in the crossover region. The bass driver features a 2" (52 mm) voice coil diameter, attached to a lightweight curvilinear cone, and shows a smoothly extended frequency response up to 7 kHz. The tweeter has excellent efficiency and fast response to transient attacks.

Modelo de 12" que incluye 2 unidades, una de graves para la reproducción de media y baja frecuencia y otra de compresión para alta frecuencia que van montadas concéntricamente y radian de forma puntual, lo que evita problemas de rotación de fase en la zona de transición entre ambos reproductores garantizando una respuesta coherente y de gran calidad.

## SPECIFICATIONS

<b>L.F. UNIT</b>	
Nominal diameter	300 mm. 12 in.
Rated impedance	8 ohms.
Power capacity*	100 w RMS
Program Power	200 Watts.
Sensitivity	98 dB 2.83v @ 1m @ 2π
Frequency range	45-7000 Hz
Recom. enclosure vol.	30/100 l 1.06/3.53 ft. <sup>3</sup>
Voice coil diameter	52 mm. 2 in.
Magnetic assembly weight	3.85 kg. 8.5 lb.
BL factor	13 N/A
Moving mass	0.039 kg.
Voice coil length	11 mm.
Air gap height	7 mm.
X damage	16 mm.
Voice Coil Inductance, Le @ 1kHz	0.7 mH
<b>H.F. UNIT</b>	
Rated impedance	8 ohms.
Minimum impedance	8.2 ohm @ 7kHz
Power capacity	15 w
Frequency range	3.5 - 20 kHz
Sensitivity 1w @ 1m	104 dB
Voice coil diameter	25.8 mm. 1 in.
Flux density	1.45 T
BL factor	4 N/A
Dispersion	90°

## 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. 11.02 in.
Depth	157 mm. 6.18 in.
Volume displaced by driver	5.5 l 0.16 ft. <sup>3</sup>
Net weight	5.26 kg. 11.57 lb.
Shipping weight	5.9 kg. 13 lb.

## MATERIALS

<b>L.F. UNIT</b>	
Basket	Die cast aluminium
Cone	Paper
Surround	Plasticised cloth
Voice coil	Copper
Magnet	Ferrite
<b>H.F. UNIT</b>	
Diaphragm	Aluminium
Voice coil	Copper
Voice coil former	Kapton

## THIELE-SMALL PARAMETERS\*\*

Resonant Frequency, fs	42 Hz
D.C. Voice Coil Resistance, Re	6.22 ohms.
Mechanical Quality Factor, Qms	3.5
Electrical Quality Factor, Qes	0.38
Total Quality Factor, Qts	0.34
Equivalent Air Volume to Cms, Vas	146.4 l
Mechanical Compliance, Cms	373 μm/N
Mechanical Resistance, Rms	2.91 kg/s
Efficiency, ηo (%)	2.65
Effective Surface Area, Sd(m <sup>2</sup> )	0.053 m <sup>2</sup>
Maximum Displacement, Xmax	2 mm.
Displacement Volume, Vd	106 cm. <sup>3</sup>

## 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.

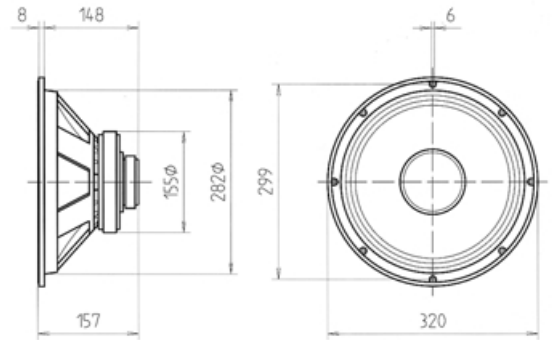
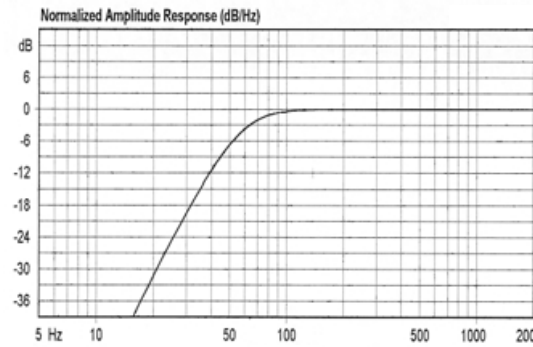
## NOTAS

\*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.

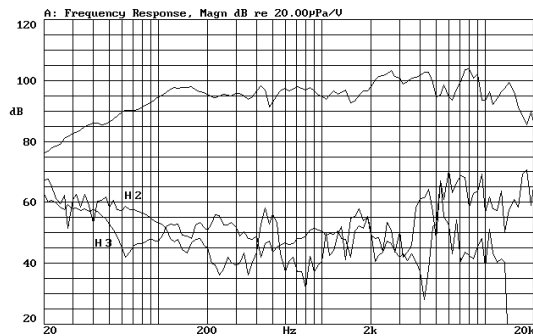
Por potencia programa se entiende la capacidad del altavoz en el manejo de señales transitorias, como sería el proporcionado por el contenido de un pasaje musical normal.

\*\* 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.

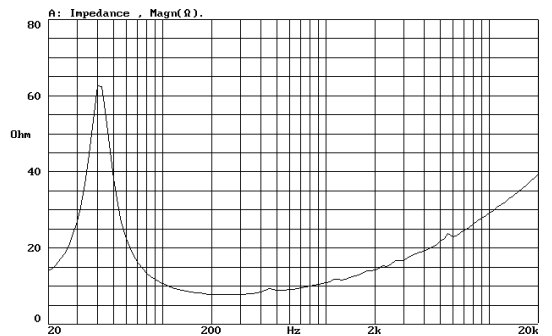
PREDICTED LOW FREQUENCY RESPONSE • Bass-reflex cabinet, Vb=50.00 l, fb=50.0 Hz



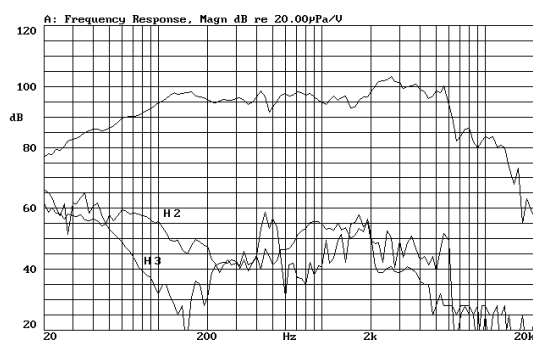
FREQUENCY RESPONSE & DISTORTION CURVES, MAGN. On axis, 1w @ 1m. Measured with FD 100, with EQ & -3 dB ATT.



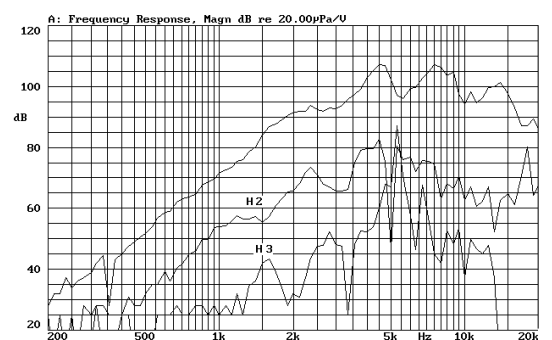
FREE AIR IMPEDANCE CURVE, L.F. UNIT



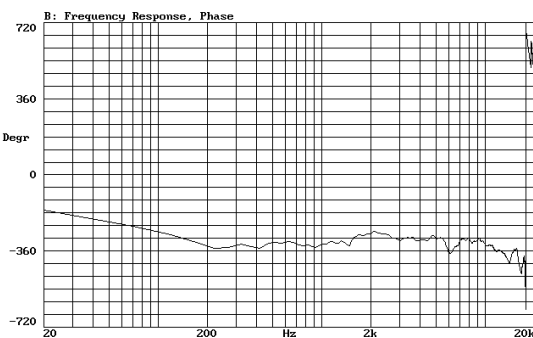
FREQUENCY RESPONSE & DISTORTION CURVES, MAGN. On axis, 1w @ 1m. L.F. UNIT



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



FREQUENCY RESPONSE, PHASE, On axis, 1w @ 1m. L.F. UNIT



FREQUENCY RESPONSE, PHASE On axis, 1w @ 1m. H.F. UNIT

