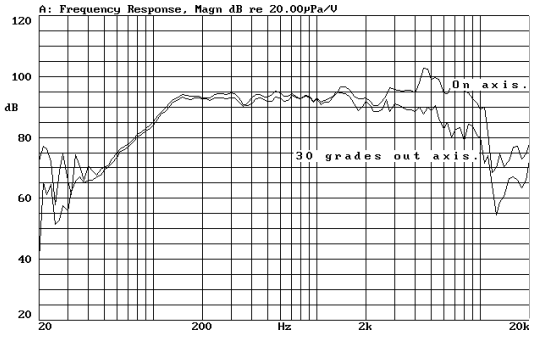
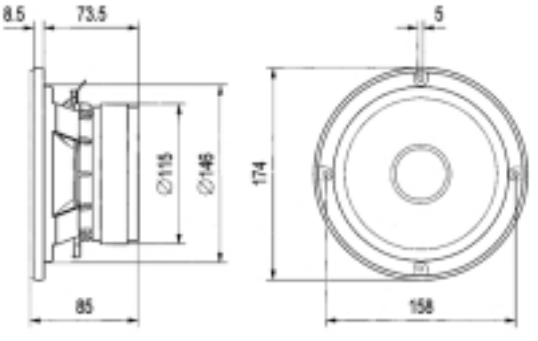
6MI90
SOUND REINFORCEMENT

This 6"1/2 is an improved version of the former 6 MI80. It is mounted with a cast aluminium basket that reduces mechanical vibrations and increases thermal dissipation. It has been especially designed for high quality sound reinforcement systems, mid and mid bass applications.

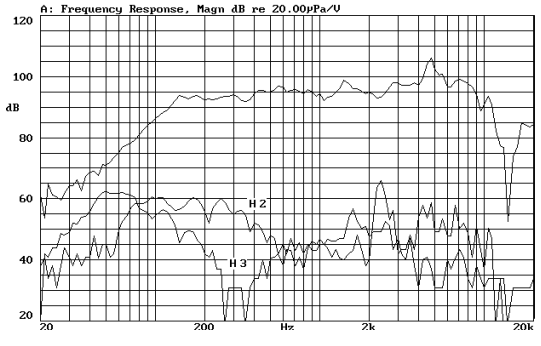
Este altavoz de 6"1/2 es una versión mejorada del anterior 6"MI80. Incorpora una carcasa de aluminio que reduce las vibraciones mecánicas e incrementa la disipación térmica. Se ha diseñado especialmente para sistemas de refuerzo sonoro de gran calidad y aplicaciones de medios y medios-graves.

FREQUENCY RESPONSE MAGN. On axis, 1w @ 1m.
Response Out Axis

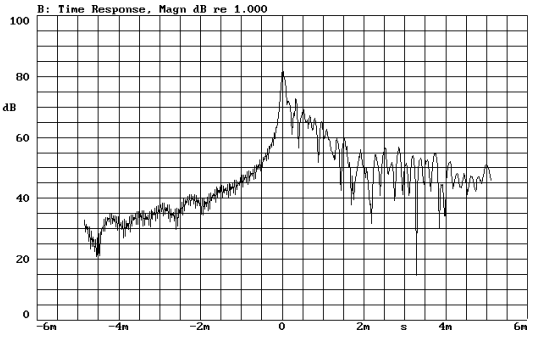




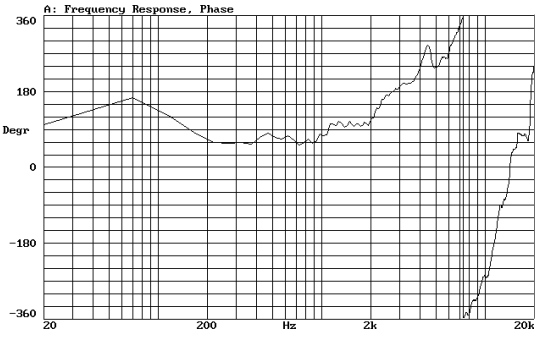
FREQUENCY RESPONSE & DISTORTION CURVES, MAGN. On axis, 1w @ 1m.



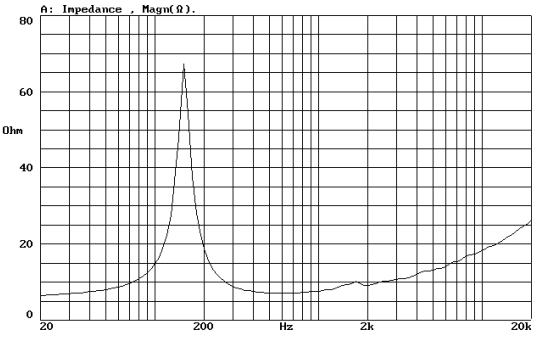
TIME RESPONSE, MAGN.



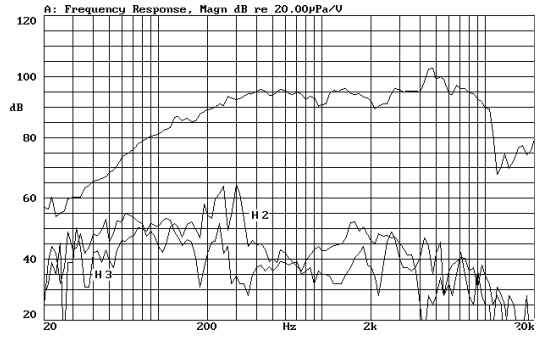
FREQUENCY RESPONSE, PHASE. On axis, 1w @ 1m.



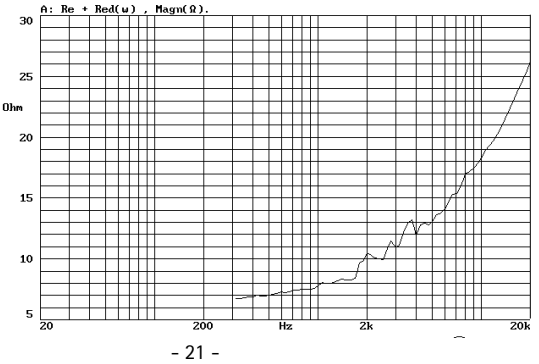
FREE AIR IMPEDANCE CURVE



FREQUENCY RESPONSE & DISTORTION CURVES, MAGN. On axis, 1w @ 1m.
Measured with VM100 back cover



Re + Red(w) CURVE



SPECIFICATIONS

Nominal diameter		165 mm. 6.5 in.
Rated impedance		8 ohms
Power capacity *		100 w RMS
Program Power		200 w RMS
Sensitivity	98 dB	2.83v @ 1m @ 2þ
Frequency range		150 - 8000 Hz
Voice coil diameter		38.5 mm. 1.5 in.
Magnetic assembly weigth		2 kg. 4.4 lb.
BL factor		9.6 N / A
Moving mass		0.009 kg.
Voice coil length		7 mm
Air gap height		6 mm

MOUNTING INFORMATION

Overall diameter	174 mm. 6.85 in.
Bolt circle diameter	158 mm. 6.22 in.
Baffle cutout diameter:	
-Front mount	146 mm. 5.75 in.
-Rear mount	142 mm. 5.59 in.
Depth	85 mm. 3.35 in.
Volume displaced by driver	0.75 l 0.026 ft.^{3}
Net weight	2.2 kg 4.84 lb.
Shipping weight	2.25 kg. 4.95 lb.

MATERIALS

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

THIELE-SMALL PARAMETERS**

Resonant Frequency, fs	120 Hz
D.C. Voice Coil Resistance, Re	6 ohms.
Mechanical Quality Factor, Qms	6.8
Electrical Quality Factor, Qes	0.47
Total Quality Factor, Qts	0.44
Equivalent Air Volume to Cms, Vas	7 l
Mechanical Compliance, Cms	195 µm/N
Mechanical Resistance, Rms	1 kg/s
Efficiency, ho (%)	1.7
Effective Surface Area, Sd(m^2)	0.0140 m^2
Maximum Displacement, Xmax	1 mm
Displacement Volume, Vd	14 cm.^{3}
Voice Coil Inductance, Le @ 1kHz	0.5 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.