

KEY FEATURES

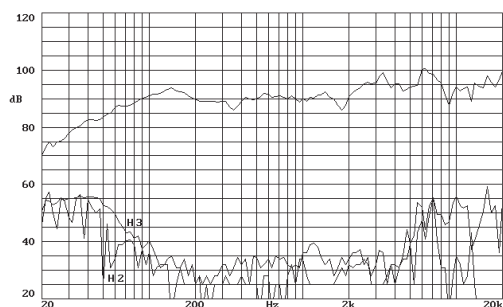
- Considerable power handling: 100 w AES (low frequencies) and 20 w AES (high frequencies)
- Combination of a 8" bass loudspeaker and a compression tweeter
- L.F. unit: 1.5" (38.5 mm) aluminium voice coil
- H.F. unit: 1" (25.8 mm) copper voice coil
- Aluminium diaphragm tweeter
- The concentric mounting reduces phasing problems in the crossover region
- Linear and coherent response



GENERAL DESCRIPTION

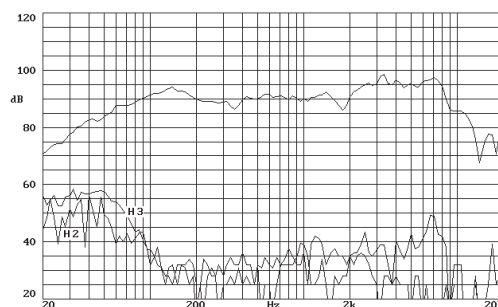
This loudspeaker is a single unit, two-way system, comprising of an 8" bass driver and a concentrically mounted tweeter. This provides a single point source and reduces phasing problems in the crossover region. The bass unit features a 1 3/4" (40mm) voice coil attached to a polypropylene cone and copper ring on the pole piece. This provides a smoothly extended frequency response up to 7 kHz, with reduced harmonic distortion. The compression tweeter shows excellent efficiency and fast response to transient attacks.

FREQUENCY RESPONSE AND DISTORTION CURVES

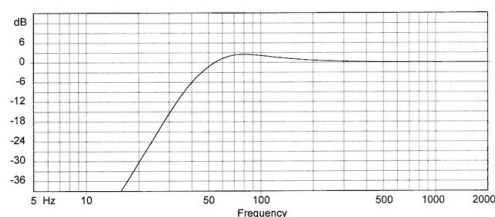


Note: on axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1w @ 1m.

FREQUENCY RESPONSE AND DISTORTION CURVES, L.F. UNIT

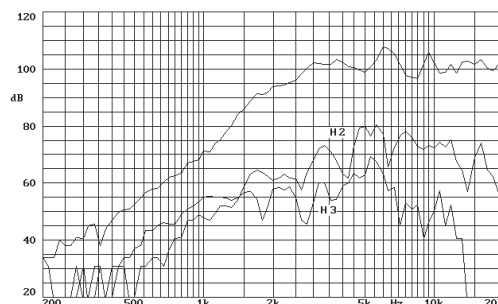


PREDICTED LOW FREQUENCY RESPONSE



Note: Bass-reflex cabinet, Vb=30 l, fb=50 Hz

FREQUENCY RESPONSE AND DISTORTION CURVES, H.F. UNIT



TECHNICAL SPECIFICATIONS

L.F. UNIT

Nominal diameter	200 mm. 8 in.
Rated impedance	8 ohms.
Minimum impedance	6.8 ohms.
Power capacity*	100 w AES
Program Power	200 w
Sensitivity	92 dB 2.83v @ 1m @ 2 π
Frequency range	25-8000 Hz
Recom. enclosure vol.	20/60 l 0.746/2.24 ft. ³
Voice coil diameter	38.5 mm. 1.5 in.
Magnetic assembly weight	2 kg. 4.4 lb.
BL factor	7.3 N/A
Moving mass	0.023 kg.
Voice coil length	14 mm.
Air gap height	6 mm.
X damage	20 mm.

H.F. UNIT

Rated impedance	8 ohms.
Minimum impedance	6 ohms. @ 4kHz
Power capacity	20 w AES
Frequency range	3 - 20 kHz
Sensitivity 1w @ 1m	102 dB
Voice coil diameter	25.8 mm. 1 in.
Flux density	1.4 T
BL factor	4 N/A
Dispersion	90°

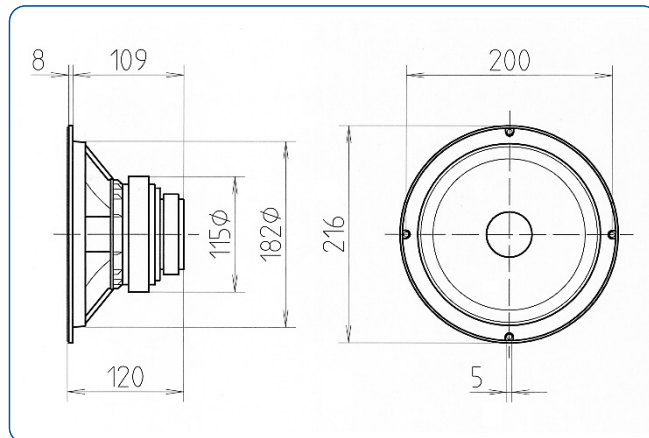
THIELE-SMALL PARAMETERS**

Resonant Frequency, fs	52 Hz
D.C. Voice Coil Resistance, Re	5.5 ohms.
Mechanical Quality Factor, Qms	6.1
Electrical Quality Factor, Qes	0.77
Total Quality Factor, Qts	0.68
Equivalent Air Volume to Cms, Vas	23 l
Mechanical Compliance, Cms	400 μ m/N
Mechanical Resistance, Rms	1.22 kg/s
Efficiency, η_0 (%)	0.53
Effective Surface Area, Sd (m ²)	0.022 m ²
Maximum Displacement, Xmax	5 mm.
Displacement Volume, Vd	110 cm. ³
Voice Coil Inductance, Le@ 1kHz	0.2 mH

Notes:

* The power capacity is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.

DIMENSION DRAWINGS



MATERIALS

L.F. UNIT

- **Basket:** Cast aluminium
- **Cone:** Polypropylene
- **Surround:** Rubber
- **Voice coil:** Aluminium
- **Magnet:** Ferrite

H.F. UNIT

- **Diaphragm:** Aluminium
- **Voice coil:** Edgewound aluminium ribbon
- **Voice coil former:** Kapton

MOUNTING INFORMATION

Overall diameter	216 mm.	8.5 in.
Bolt circle diameter	200 mm.	7.9 in.
Baffle cutout diameter:		
-Front mount	182 mm.	7.16 in.
-Rear mount	185 mm.	7.3 in.
Depth	120 mm.	4.72 in.
Volume displaced by driver	1.5 l	0.056 ft. ³
Net weight	2.9 kg.	6.39 lb.
Shipping weight	3.1 kg.	6.83 lb.

** T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).



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