

KEY FEATURES

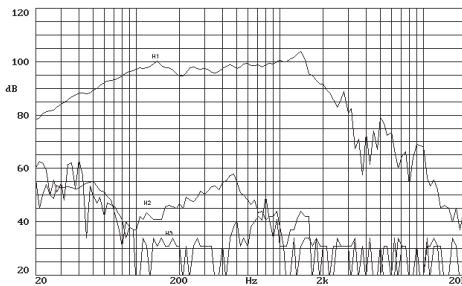
- High power handling: 750 w AES
- 4.5" (114 mm) edgewound aluminium ribbon voice coil
- Dual spider system
- High efficiency: 4% (98 dB 1w @ 1 m)
- Large Xmax: 9 mm
- Additional heat dissipation due to the use of a metal intercooler
- Designed for high demanding subwoofer and woofer applications



GENERAL DESCRIPTION

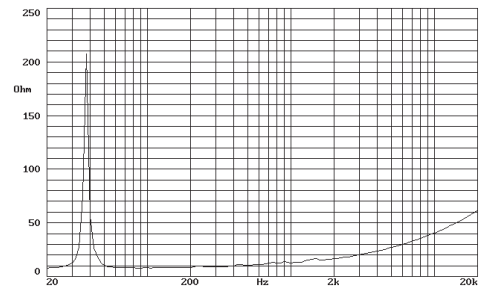
This 18" low frequency transducer has been specially designed to supply incredibly high sound pressure in the low frequency region, with exceptional high power capacity and minimum harmonic distortion. This model features a 4.5" (114 mm) voice coil, edgewound aluminium ribbon wire, a moving mass at least half the weight of pure copper, a powerful, vented magnetic circuit, optimum cooling system which provides fast heat exchange, reduced thermal power compression and double spider assembly. The result is an incredible highly efficient transducer for subwoofer applications, the ability to handle high elongation, extremely low distortion and reduced thermal power compression.

FREQUENCY RESPONSE AND DISTORTION CURVES

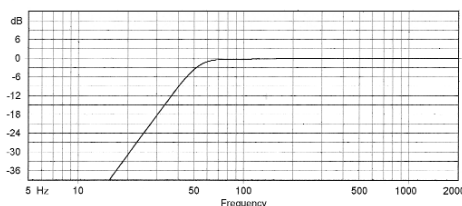


Note: on axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1w @ 1m.

FREE AIR IMPEDANCE CURVE



PREDICTED LOW FREQUENCY RESPONSE



Note: Bass-reflex cabinet, Vb=120 l, fb=50 Hz

TECHNICAL SPECIFICATIONS

Nominal diameter	460 mm. 18 in.
Rated impedance	8 ohms.
Minimum impedance	7.4 ohms.
Power capacity*	750 w AES
Program Power	1500 w
Sensitivity	98 dB 2.83v @ 1m @ 2 π
Frequency range	25-1500 Hz
Recom. enclosure vol.	80 / 200 l 2.8 / 7 ft. ³
Voice coil diameter	114 mm. 4.5 in.
Magnetic assembly weight	10 kg. 22 lb.
BL factor	28.8 N/A
Moving mass	0.170 kg.
Voice coil length	25 mm.
Air gap height	11 mm.
X damage (peak to peak)	40 mm.

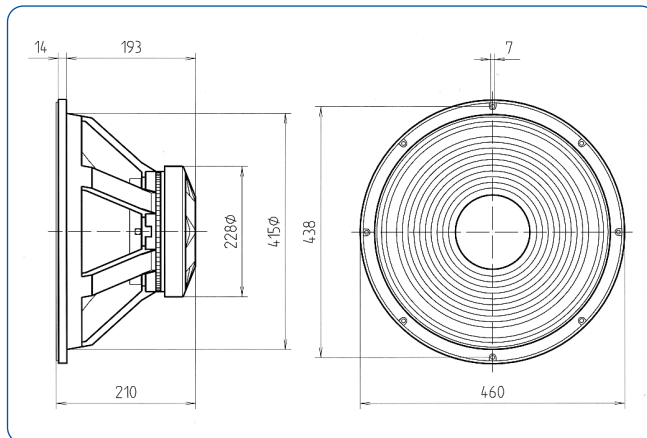
MOUNTING INFORMATION

Overall diameter	460 mm. 18.11 in.
Bolt circle diameter	438 mm. 17.24 in.
Baffle cutout diameter:	
-Front mount	415 mm. 16.34 in.
-Rear mount	425 mm. 16.73 in.
Depth	210 mm. 8.27 in.
Volume displaced by driver	13 l 0.46 ft. ³
Net weight	12.60 kg. 27.78 lb.
Shipping weight	14.50 kg. 31.97 lb.

THIELE-SMALL PARAMETERS**

Resonant Frequency, fs	40 Hz
D.C. Voice Coil Resistance, Re	6.1 ohms.
Mechanical Quality Factor, Qms	12.05
Electrical Quality Factor, Qes	0.334
Total Quality Factor, Qts	0.325
Equivalent Air Volume to Cms, Vas	212 l
Mechanical Compliance, Cms	93 μ m/N
Mechanical Resistance, Rms	3.54 kg/s
Efficiency, η_0 (%)	4
Effective Surface Area, Sd (m ²)	0.1320 m ²
Maximum Displacement, Xmax	9 mm.
Displacement Volume, Vd	1180 cm. ³
Voice Coil Inductance, Le @ 1kHz	2 mH

DIMENSION DRAWINGS



MATERIALS

- **Basket:** Die Cast aluminium
- **Cone:** Paper
- **Surround:** Plasticised cloth
- **Voice coil:** Edgewound aluminium flat wire
- **Magnet:** Ferrite

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.

** 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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