

KEY FEATURES

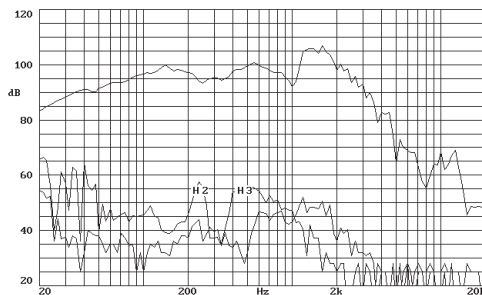
- High power handling: 700 w AES
- 4" (100 mm) edgewound copper ribbon voice coil
- High sensitivity: 98 dB
- Magnet system design for improved heat dissipation
- Spider of improved temperature behaviour: retain its mechanical properties at high power
- Large Xmax: 9 mm
- Low harmonic distortion
- Designed for subwoofer applications



GENERAL DESCRIPTION

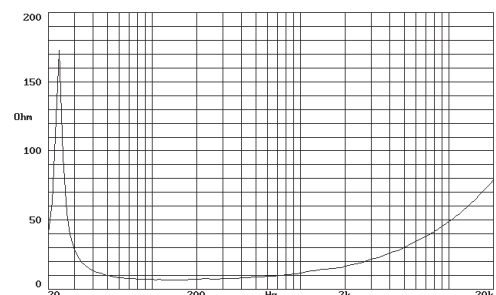
This 18" long excursion bass loudspeaker has been specifically designed to deliver high impact bass response, with exceptional high power handling capacity (700 w AES). It incorporates an edgewound copper ribbon voice coil (4" diameter) and a vented magnetic structure. An optimum cooling system allows a fast heat exchange and contributes to the reduction of thermal power compression.

FREQUENCY RESPONSE AND DISTORTION CURVES

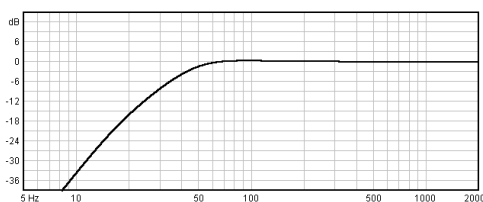


Note: on axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1w @ 1m.

FREE AIR IMPEDANCE CURVE

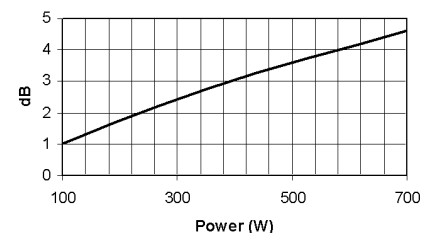


PREDICTED LOW FREQUENCY RESPONSE



Note: Bass-reflex cabinet, Vb=150 l, fb=30 Hz

POWER COMPRESSION LOSSES



Note: These losses are calculated from a five minutes AES power test applying band limited pink noise (25-1200 Hz). The loudspeaker is free-air standing.

TECHNICAL SPECIFICATIONS

Nominal diameter	460 mm. 18 in.
Rated impedance	8 ohms.
Minimum impedance	7.1 ohms.
Power capacity*	700 w AES
Program Power	1400 w
Sensitivity	98 dB 2.83v @ 1m @ 2π
Frequency range	25-1000 Hz
Recom. enclosure vol.	80 / 250 l 2.8 / 8.8 ft. ³
Voice coil diameter	100 mm. 4 in.
Magnetic assembly weight	9 kg. 19.84 lb.
BL factor	20.5 N/A
Moving mass	0.172 kg.
Voice coil length	23 mm.
Air gap height	9.5 mm.
X damage (peak to peak)	40 mm.

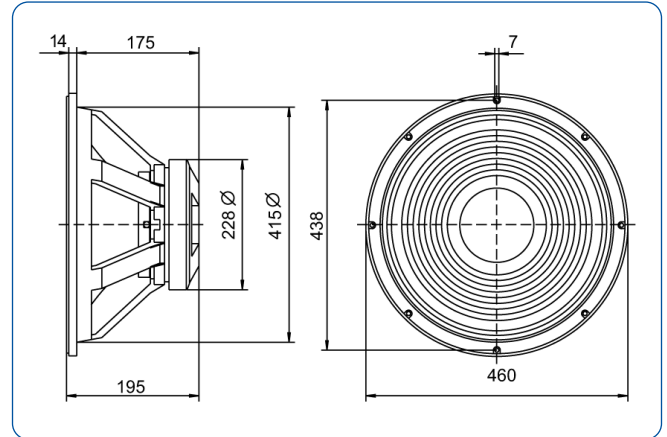
MOUNTING INFORMATION

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	195 mm. 7.67 in.
Volume displaced by driver	13 l 0.46 ft. ³
Net weight	11.5 kg. 25.3 lb.
Shipping weight	13 kg. 28.6 lb.

THIELE-SMALL PARAMETERS**

Resonant Frequency, fs	27 Hz
D.C. Voice Coil Resistance, Re	5.5 ohms.
Mechanical Quality Factor, Qms	11.45
Electrical Quality Factor, Qes	0.38
Total Quality Factor, Qts	0.37
Equivalent Air Volume to Cms, Vas	500 l
Mechanical Compliance, Cms	248 μm/N
Mechanical Resistance, Rms	2.2 kg/s
Efficiency, ηo (%)	2.5
Effective Surface Area, Sd(m ²)	0.1320 m ²
Maximum Displacement, Xmax	9 mm.
Displacement Volume, Vd	1200 cm. ³
Voice Coil Inductance, Le @ 1kHz	1.2 mH

DIMENSION DRAWINGS



MATERIALS

- **Basket:** Cast aluminium
- **Cone:** Paper
- **Surround:** Treated cloth
- **Voice coil:** Edgewound copper 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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