

KEY FEATURES

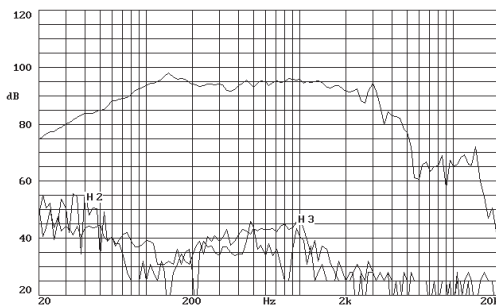
- High power handling: 700 w AES
- 4" (100 mm) edgewound copper ribbon voice coil
- High sensitivity: 96 dB
- Magnet system design for improved heat dissipation
- Spider of improved temperature behaviour: retain its mechanical properties at high power
- Large Xmax: 9 mm
- Low harmonic distortion
- Designed for subwoofer applications



GENERAL DESCRIPTION

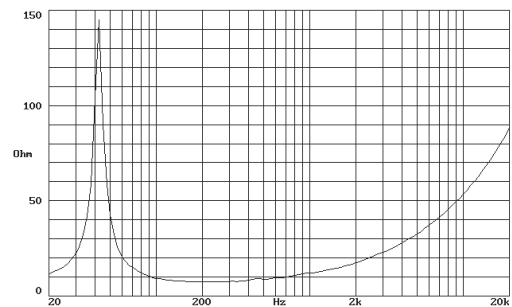
This 12" long excursion bass loudspeaker has been specifically designed to deliver high impact bass response, with exceptional high power handling capacity (700 w AES). It incorporates an edgewound copper ribbon voice coil (4" diameter) and a vented magnetic structure. An optimum cooling system allows a fast heat exchange and contributes to the reduction of thermal power compression.

FREQUENCY RESPONSE AND DISTORTION CURVES

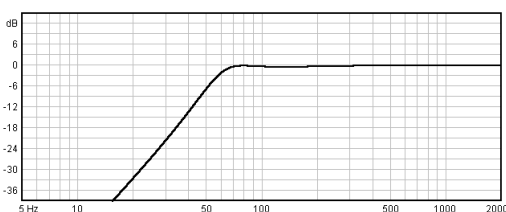


Note: on axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1w @ 1m.

FREE AIR IMPEDANCE CURVE

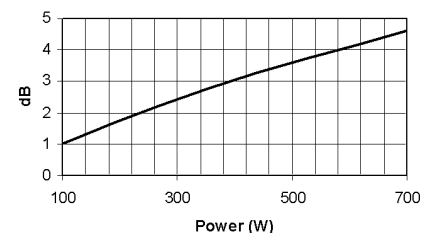


PREDICTED LOW FREQUENCY RESPONSE



Note: Bass-reflex cabinet, Vb=40 l, fb=60 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	300 mm. 12 in.
Rated impedance	8 ohms.
Minimum impedance	7.1 ohms.
Power capacity*	700 w AES
Program Power	1400 w
Sensitivity	96 dB 2.83v @ 1m @ 2π
Frequency range	35-2000 Hz
Recom. enclosure vol.	20 / 60 l 0.7 / 2.24 ft. ³
Voice coil diameter	100 mm. 4 in.
Magnetic assembly weight	9 kg. 19.84 lb.
BL factor	20.3 N/A
Moving mass	0.090 kg.
Voice coil length	23 mm.
Air gap height	9.5 mm.
X damage (peak to peak)	40 mm.

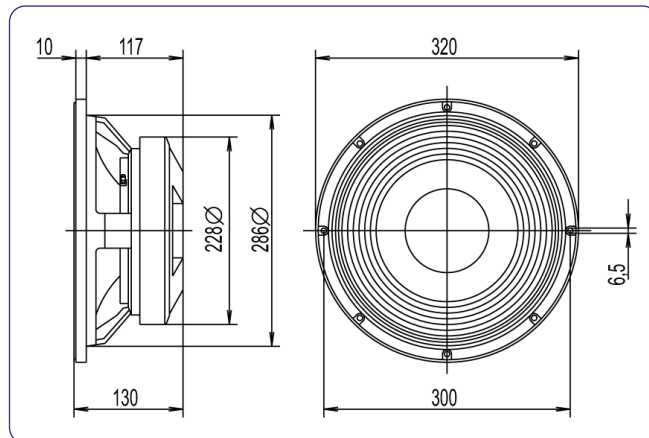
MOUNTING INFORMATION

Overall diameter	320 mm. 12.6 in.
Bolt circle diameter	300 mm. 11.8 in.
Baffle cutout diameter:	
-Front mount	286 mm. 11.26 in.
-Rear mount	280 mm. 11.02 in.
Depth	130 mm. 5.1 in.
Volume displaced by driver	5.5 l 0.19 ft. ³
Net weight	9.7 kg. 21.39 lb.
Shipping weight	10.4 kg. 22.92 lb.

THIELE-SMALL PARAMETERS**

Resonant Frequency, fs	42 Hz
D.C. Voice Coil Resistance, Re	5.5 ohms.
Mechanical Quality Factor, Qms	9.8
Electrical Quality Factor, Qes	0.31
Total Quality Factor, Qts	0.30
Equivalent Air Volume to Cms, Vas	66 l
Mechanical Compliance, Cms	156 μm/N
Mechanical Resistance, Rms	2.45 kg/s
Efficiency, ηo (%)	1.5
Effective Surface Area, Sd (m ²)	0.055 m ²
Maximum Displacement, Xmax	9 mm.
Displacement Volume, Vd	500 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).



acústica beyma, s.a.