beyma
PROFESSIONAL LOUDSPEAKERS

# 10MW/Nd

## LOW FREQUENCY TRANSDUCER

## KEY FEATURES

- Good power handling (350 w AES)
- Excellent sensitivity (96 dB)
- 2.5" copper voice coil
- Neodymium magnets
- Extended frequency response (45 - 7000 Hz )
- Designed for the low-mid frequencies reproduction

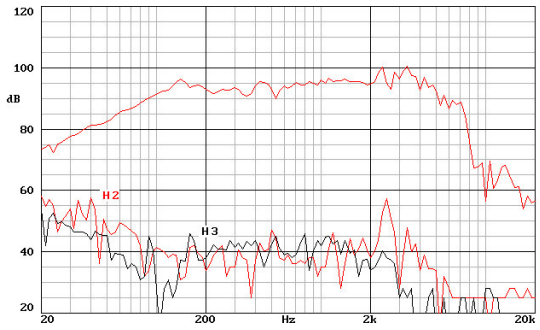
## TECHNICAL SPECIFICATIONS

| | |
|---|---|
| **Nominal diameter** | 250 mm. 10 in. |
| **Rated impedance** | 8 ohms |
| **Minimum impedance** | 7 ohms |
| **Power capacity** | 350 w AES |
| **Program power** | 700 w |
| **Sensitivity** | 96 dB 2.83v @ 1m @ 2π |
| **Frequency range** | 45 - 7000 Hz |
| **Recom. enclosure vol.** | 20 / 50 l 0.71 / 1.77 ft.$^3$ |
| **Voice coil diameter** | 62.4 mm. 2.5 in. |
| **Magnetic assembly weight** | 2.54 kg. 5.59 lb. |
| **BL factor** | 16.4 N / A |
| **Moving mass** | 0.044 kg. |
| **Voice coil length** | 20 mm |
| **Air gap height** | 7 mm |
| **X damage (peak to peak)** | 27 mm |

## THIELE-SMALL PARAMETERS

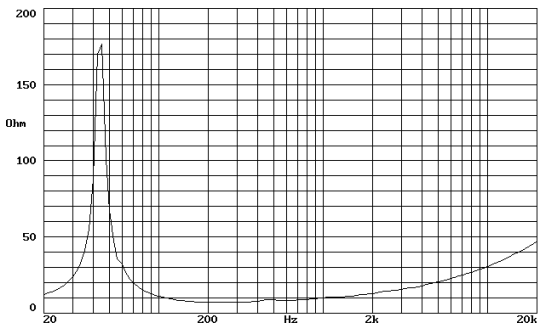
| | |
|---|---|
| **Resonant frequency, fs** | 47 Hz |
| **D.C. Voice coil resistance, Re** | 5.5 ohms. |
| **Mechanical Quality Factor, Qms** | 7.39 |
| **Electrical Quality Factor, Qes** | 0.27 |
| **Total Quality Factor, Qts** | 0.26 |
| **Equivalent Air Volume to Cms, Vas** | 48 l |
| **Mechanical Compliance, Cms** | 273 µm / N |
| **Mechanical Resistance, Rms** | 1.72 kg / s |
| **Efficiency, ηo (%)** | 1.8 |
| **Effective Surface Area, Sd (m²)** | 0.0355 m² |
| **Maximum Displacement, Xmax** | 8 mm |
| **Displacement Volume, Vd** | 281 cm³ |
| **Voice Coil Inductance, Le @ 1 kHz** | 1.7 mH |

## 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




**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).

***The Xmax is calculated as (Lvc - Hag)/2 + Hag/3.5, where Lvc is the voice coil length and Hag is the air gap height.


beyma

Polígono Industrial Moncada II · C/. Pont Sec, 1c · 46113 MONCADA - Valencia (Spain)
· Tel. ( 34 ) 96 130 13 75 · Fax ( 34 ) 96 130 15 07 · http://www.beyma.com · E-mail: beyma@beyma.com ·