beyma

PROFESSIONAL LOUDSPEAKERS

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# 6MI90

## MID FREQUENCY TRANSDUCER

## MI100 Series

## KEY FEATURES

- Program power: 250 W
- Sensitivity: 96 dB (1W / 1m)
- 1,5” copper voice coil
- Die cast aluminum basket
- Designed for mid-frequency applications
- Optimal for high quality sound reinforcement systems


## TECHNICAL SPECIFICATIONS

| | | |
|---|---|---|
| **Nominal diameter** | 165 mm | 6,5 in |
| **Rated impedance** | | 8 Ω |
| **Minimum impedance** | | 6,3 Ω |
| **Power capacity*** | | 125 $W_{AES}$ |
| **Program power** | | 250 W |
| **Sensitivity** | 96 dB | 1W / 1m @ $Z_N$ |
| **Frequency range** | | 140 - 8.000 Hz |
| **Voice coil diameter** | 38,1 mm | 1,5 in |
| **Bl factor** | | 11,3 N/A |
| **Moving mass** | | 0,011 kg |
| **Voice coil length** | | 7,5 mm |
| **Air gap height** | | 6 mm |

## THIELE-SMALL PARAMETERS**

| | |
|---|---|
| **Resonant frequency, $f_s$** | 134 Hz |
| **D.C. Voice coil resistance, $R_e$** | 5,7 Ω |
| **Mechanical Quality Factor, $Q_{ms}$** | 8,4 |
| **Electrical Quality Factor, $Q_{es}$** | 0,44 |
| **Total Quality Factor, $Q_{ts}$** | 0,42 |
| **Equivalent Air Volume to $C_{ms}$, $V_{as}$** | 3,3 l |
| **Mechanical Compliance, $C_{ms}$** | 121 μm / N |
| **Mechanical Resistance, $R_{ms}$** | 1,2 kg / s |
| **Efficiency, $\eta_0$** | 1,8 % |
| **Effective Surface Area, $S_d$** | 0,014 $m^2$ |
| **Maximum Displacement, $X_{max}$ *** ** | 2,5 mm |
| **Displacement Volume, $V_d$** | 35 $cm^3$ |
| **Voice Coil Inductance, $L_e$ @ 1 kHz** | 0,4 mH |

**Notes**:

* The power capaticty 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 $X_{max}$ is calculated as $(L_{vc} - H_{ag})/2 + (H_{ag}/3,5)$, where $L_{vc}$ is the voice coil length and $H_{ag}$ is the air gap height.

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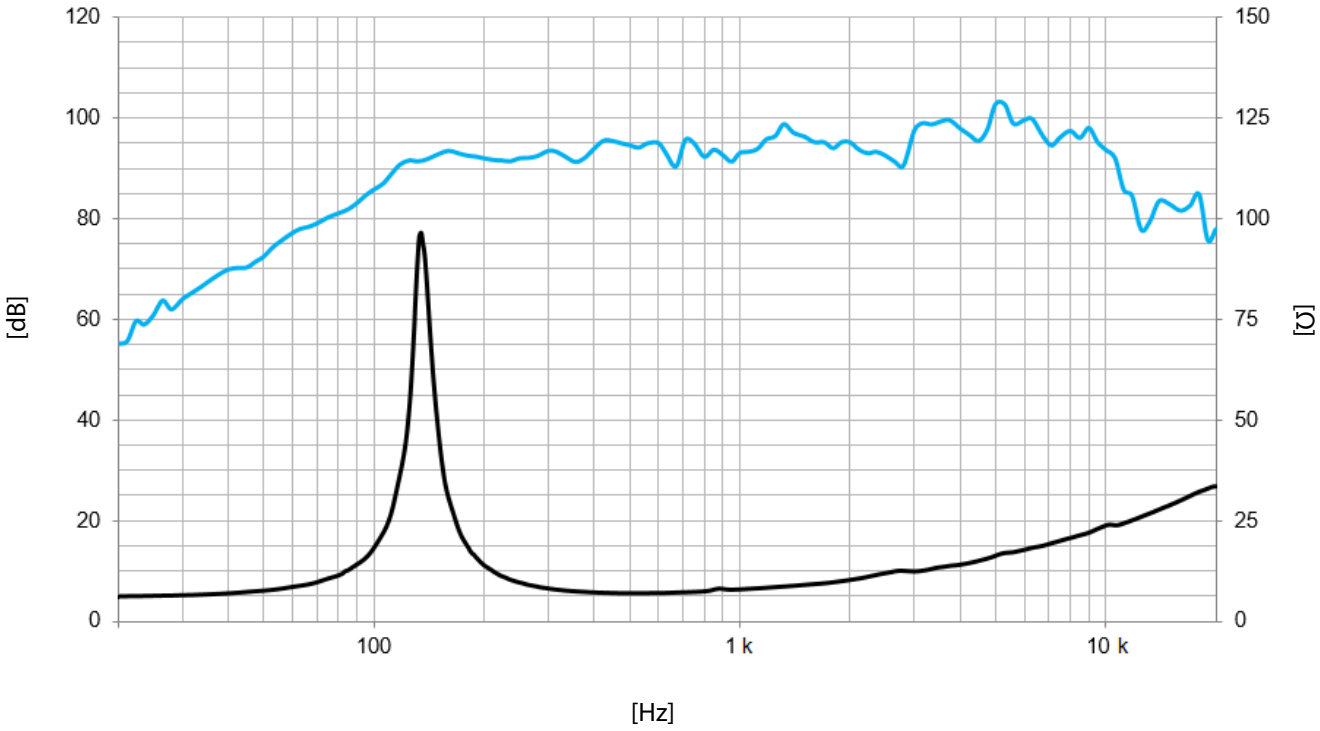


**Note:** On axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

## MOUNTING INFORMATION

| | | |
|---|---|---|
| **Overall diameter** | 174 mm | 6,9 in |
| **Bolt circle diameter** | 158 mm | 6,2 in |
| **Baffle cutout diameter:** | | |
| **- Front mount** | 146 mm | 5,8 in |
| **Depth** | 84 mm | 3,3 in |
| **Volume displaced by driver** | 0,6 l | 0,02 ft³ |
| **Net weight** | 2,4 kg | 5,3 lb |
| **Shipping weight** | 2,5 kg | 5,5 lb |

## DIMENSION DRAWING