beyma

PROFESSIONAL LOUDSPEAKERS

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# 5P200Fe

## LOW & MID FREQUENCY TRANSDUCER

### P200 Series

## KEY FEATURES

- Program power: 300 W
- Sensitivity: 92 dB (1W / 1m)
- FEA optimized ferrite magnetic circuit
- Waterproof paper cone and Santoprene™ surround
- Shorting cap for extended response and low harmonic distortion
- Extended controlled displacement: $X_{max}$ ± 5,7 mm
- 16 mm peak-to-peak excursion before damage


## TECHNICAL SPECIFICATIONS

| | | |
|---|---|---|
| **Nominal diameter** | 125 mm | 5 in |
| **Rated impedance** | | 8 Ω |
| **Minimum impedance** | | 6,7 Ω |
| **Power capacity*** | | 150 $W_{AES}$ |
| **Program power** | | 300 W |
| **Sensitivity** | 92 dB | 1W / 1m @ $Z_N$ |
| **Frequency range** | | 70 - 10.000 Hz |
| **Recom. enclosure. vol.** | 4 / 10 l | 0,14 / 0,35 $ft^3$ |
| **Voice coil diameter** | 38,1 mm | 1,5 in |
| **Bl factor** | | 8,5 N/A |
| **Moving mass** | | 0,010 kg |
| **Voice coil length** | | 14 mm |
| **Air gap height** | | 6 mm |
| **$X_{damage}$ (peak to peak)** | | 16 mm |

## THIELE-SMALL PARAMETERS**

| | |
|---|---|
| **Resonant frequency, $f_s$** | 72 Hz |
| **D.C. Voice coil resistance, $R_e$** | 5,2 Ω |
| **Mechanical Quality Factor, $Q_{ms}$** | 7,5 |
| **Electrical Quality Factor, $Q_{es}$** | 0,35 |
| **Total Quality Factor, $Q_{ts}$** | 0,33 |
| **Equivalent Air Volume to $C_{ms}$, $V_{as}$** | 5,7 l |
| **Mechanical Compliance, $C_{ms}$** | 451 µm / N |
| **Mechanical Resistance, $R_{ms}$** | 0,65 kg / s |
| **Efficiency, $\eta_0$** | 0,6 % |
| **Effective Surface Area, $S_d$** | 0,0095 $m^2$ |
| **Maximum Displacement, $X_{max}$ *** ** | 5,7 mm |
| **Displacement Volume, $V_d$** | 49 $cm^3$ |
| **Voice Coil Inductance, $L_e$ @ 1 kHz** | 0,6 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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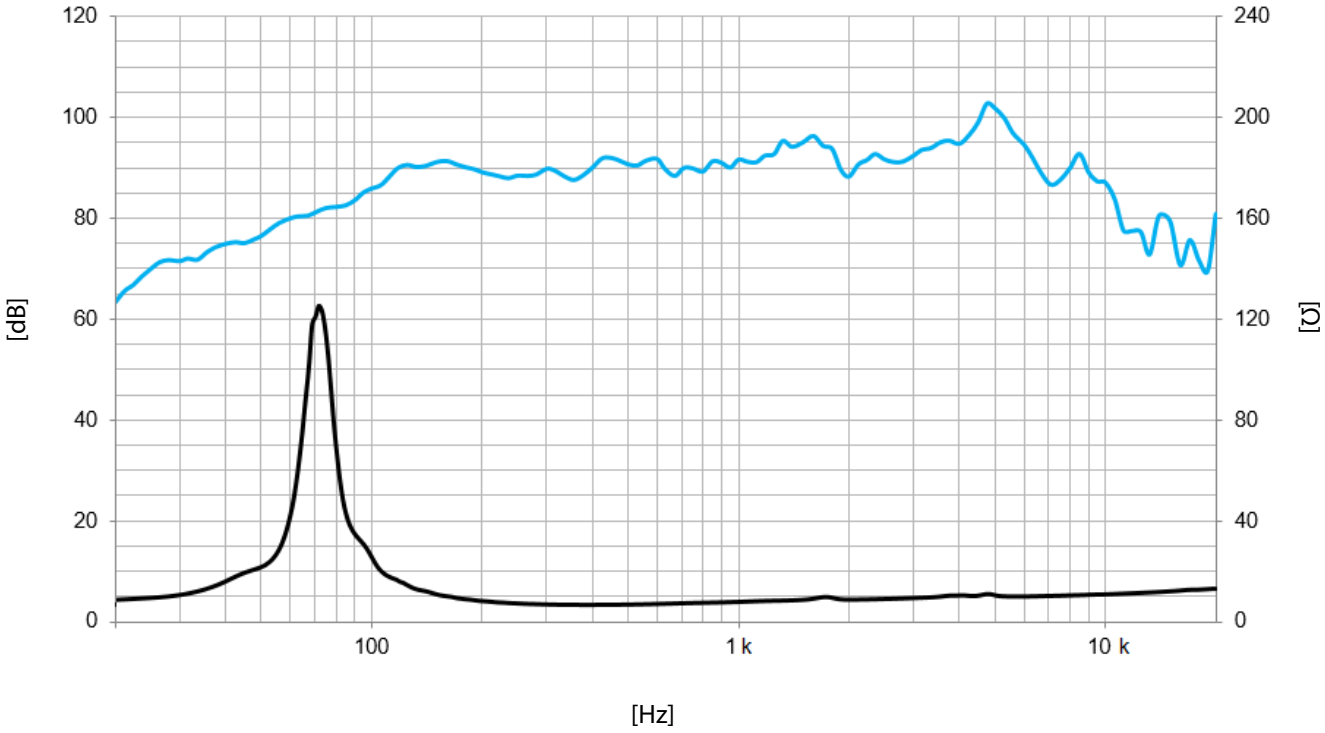


**Note:** On axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

## MOUNTING INFORMATION

| | | |
|---|---|---|
| **Overall diameter** | 155 mm | 6,1 in |
| **Bolt circle diameter** | 141,5 mm | 5,6 in |
| **Baffle cutout diameter:** | | |
| **- Front mount** | 120 mm | 4,7 in |
| **Depth** | 79 mm | 3,1 in |
| **Volume displaced by driver** | 0,5 l | 0,02 ft³ |
| **Net weight** | 2,2 kg | 4,8 lb |
| **Shipping weight** | 2,3 kg | 5,1 lb |

## DIMENSION DRAWING