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PROFESSIONAL LOUDSPEAKERS
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5P200/Nd

Low & Mid Frequency Transducer
Preliminary Data Sheet

TECHNICAL SPECIFICATIONS

Nominal diameter	127 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
Frequency range	70 - 10.000 Hz
Voice coil diameter	38 mm 1,5 in
Air gap height	6 mm
Voice coil length	14 mm
Bl factor	9,9 N/A
Moving mass	0,011 kg
Winding material	Aluminium alloy
Spider material	Polycotton
Magnet material	Neodimium
Cone material	Paper
Frame material	Cast aluminium

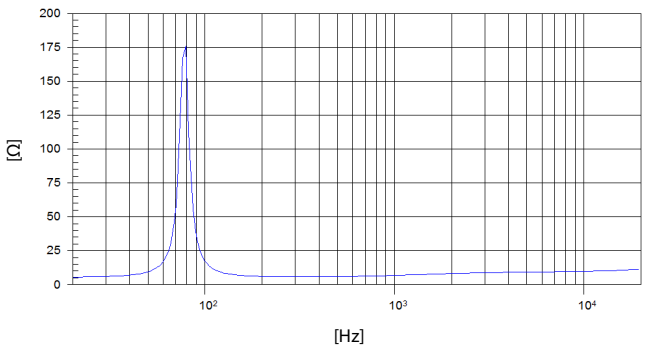
MOUNTING INFORMATION

Overall diameter	155 mm	6,1 in
Bolt circle diameter	141,5 mm	5,57 in
Baffle cutout diameter	119 mm	4,69 in
Depth	71 mm	2,8 in
Net weight	1,24 kg	2,73 lb

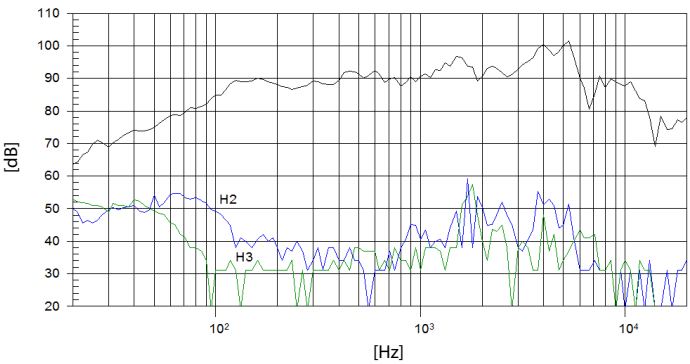
THIELE-SMALL PARAMETERS**

Resonant frequency, f_s	78 Hz
D.C. Voice coil resistance, R_e	5,3 Ω
Mechanical Quality Factor, Q_{ms}	10,7
Electrical Quality Factor, Q_{es}	0,31
Total Quality Factor, Q_{ts}	0,30
Equivalent Air Volume to C_{ms}, V_{as}	4,5 l
Mechanical Compliance, C_{ms}	355 µm / N
Mechanical Resistance, R_{ms}	0,5 kg / s
Efficiency, η_0	0,68 %
Effective Surface Area, S_d	0,0095 m^2
Maximum Displacement, X_{max} * **	5,7 mm
Displacement Volume, V_d	54,15 cm^3
Voice Coil Inductance, L_e	0,25 mH

FREE AIR IMPEDANCE CURVE



FREQUENCY RESPONSE



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

Notes:

This datasheet is done with the measurements of a laboratory prototype. Small differences may appear once the driver is transferred to the production line and manufactured in big quantities. Please refer to the serial datasheet for the definitive information of the average production.

* 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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