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PROFESSIONAL LOUDSPEAKERS

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6NMFW

LOW FREQUENCY TRANSDUCER

Preliminary Data Sheet

KEY FEATURES

maltcross TECHNOLOGY

- High power handling and low distortion 6,5” woofer
- Exclusive Malt Cross® Technology Cooling System
- Low power compression losses
- High force factor design for top performance applications
- FEA optimized ceramic magnetic circuit and suspensions
- Ultra low air noise
- Carbon fiber cone and dustcap
- Enhanced linear behaviour
- Double BIMAX spider and NBR surround
- 2” QUATTRO in/out aluminium voice coil
- Optimized triple aluminum and copper demodulating circuit
- Extended controlled displacement: X_{max} ± 9 mm
- 43 mm peak-to-peak excursion before damage





TECHNICAL SPECIFICATIONS

Nominal diameter	165 mm	6,5 in
Rated impedance		8 Ω
Minimum impedance		7,6 Ω
Power capacity [1]		200 W_{AES}
Program power [2]		400 W
Long term max. power [3]		600 W
Sensitivity	87 dB	1W / 1m @ Z_N
Frequency range		35 - 3.000 Hz
Voice coil diameter	50,8 mm	2 in
Bl factor		14 N/A
Moving mass		0,045 kg
Voice coil length		20 mm
Air gap height		6 mm
X_{damage} (peak to peak)		43 mm

THIELE-SMALL PARAMETERS [4]

Resonant frequency, f_s	40Hz
D.C. Voice coil resistance, R_e	5,8 Ω
Mechanical Quality Factor, Q_{ms}	7,5
Electrical Quality Factor, Q_{es}	0,35
Total Quality Factor, Q_{ts}	0,34
Equivalent Air Volume to C_{ms}, V_{as}	11 l
Mechanical Compliance, C_{ms}	342 µm / N
Mechanical Resistance, R_{ms}	1,52 kg / s
Efficiency, η_0	0,21 %
Effective Surface Area, S_d	0,0154 m^2
Maximum Displacement, X_{max} [5]	9 mm
Displacement Volume, V_d	139 cm^3
Voice Coil Inductance, L_e	0,95 mH

Notes:

[1] The power capaticty is determined according to AES2-1984 (r2003) standard.

[2] Program power is defined as power capacity + 3 dB.

[3] Long term maximum power according to IEC268-5 18.2.

[4] 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).

[5] 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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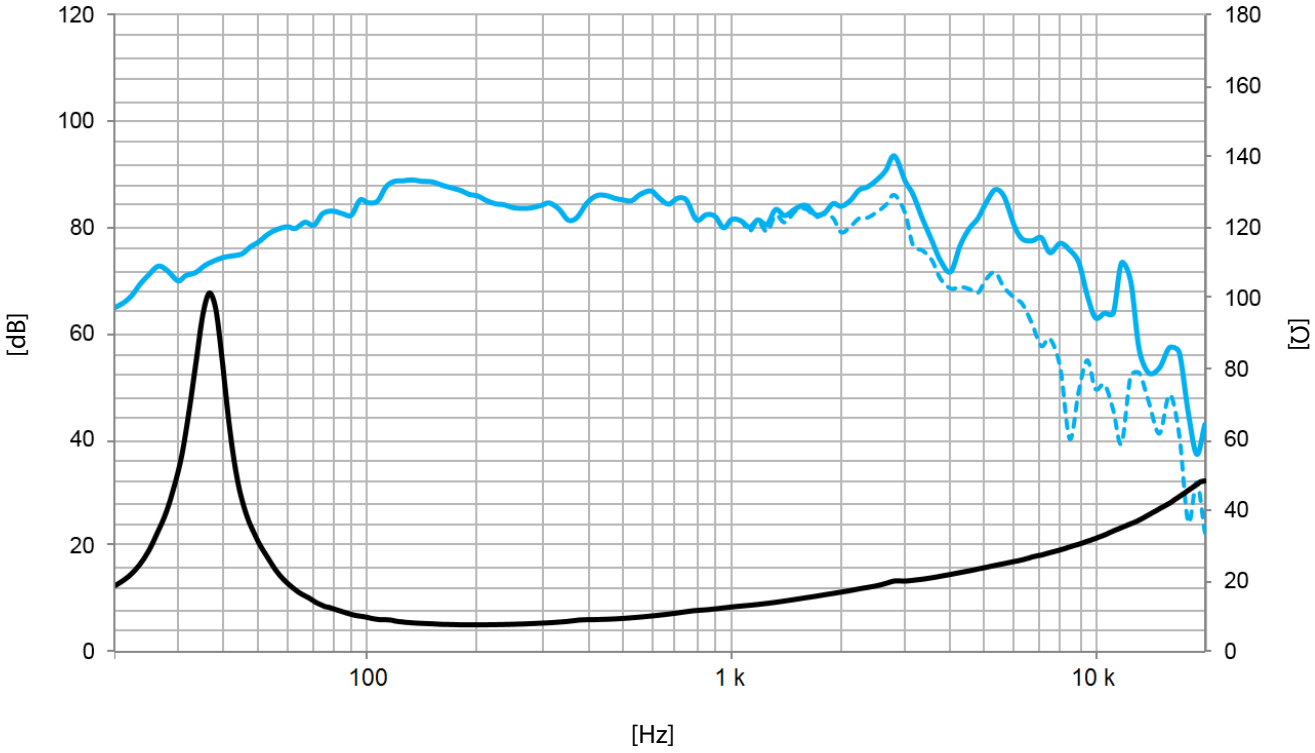
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Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

Frequency response on axis
Frequency response 45º off axis

MOUNTING INFORMATION

Overall diameter	176 mm	6,93 in
Bolt circle diameter	190 mm	7,48 in
Baffle cutout diameter:		
- Front mount	157,6 mm	6,2 in
Depth	120,5 mm	4,75 in
Net weight	3,5 kg	7,72 lb
Shipping weight	4,2 kg	9,26 lb

DIMENSION DRAWING

