

10MC700Nd

LOW & MID FREQUENCY TRANSDUCER

Preliminary Data Sheet

KEY FEATURES and maltcross

- High power handling: 1.400 W program power
- Exclusive Malt Cross[®] Technology Cooling System
- Low power compression losses
- High sensitivity: 97 dB (1W / 1m)
- FEA optimized neodymium magnetic circuit
- Optimized non-linear behaviour
- 3" DUO double layer in/out copper voice coil



TECHNICAL SPECIFICATIONS

Nominal diameter	250 mm	10 in
Rated impedance		8 Ω
Minimum impedance		7,3 Ω
Power capacity ¹	70	00 W _{AES}
Program power ²		1.400 W
Sensitivity	97 dB 1W / 1	m @ Z _N
Frequency range	60 - 4	4.000 Hz
Recom. enclosure		V _b = 14 I
(Bass-reflex design)	F _b = 76 Hz	
Voice coil diameter	76,2 mm	3 in
BI factor		21,5 N/A
Moving mass		0,055 kg
Voice coil length		18 mm
Air gap height		10 mm
X _{damage} (peak to peak)		48 mm

- Aluminium demodulating ring
- Waterproof cone with treatment for both sides
- Extended controlled displacement: Xmax ± 7 mm
- 48 mm peak-to-peak excursion before damage
- Weight 3,7 kg
- · Optimized for bass or mid-bass high performance audio systems



THIELE-SMALL PARAMETERS³

Resonant frequency, f _s	56 Hz
D.C. Voice coil resistance, R _e	5,2 Ω
Mechanical Quality Factor, Q _{ms}	3,9
Electrical Quality Factor, Q _{es}	0,22
Total Quality Factor, Q _{ts}	0,21
Equivalent Air Volume to C _{ms} , V _{as}	25,5 I
Mechanical Compliance, C _{ms}	148 μm / N
Mechanical Resistance, R _{ms}	4,9 kg / s
Efficiency, η ₀	2 %
Effective Surface Area, S _d	0,035 m²
Maximum Displacement, X _{max} ⁴	7 mm
Displacement Volume, V _d	245 cm ³
Voice Coil Inductance, L _e @ 1 kHz	1 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 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).

⁴ The X_{max} is calculated as (L_{vc} - H_{aq})/2 + (H_{aq}/3,5), where L_{vc} is the voice coil length and H_{aq} is the air gap height.

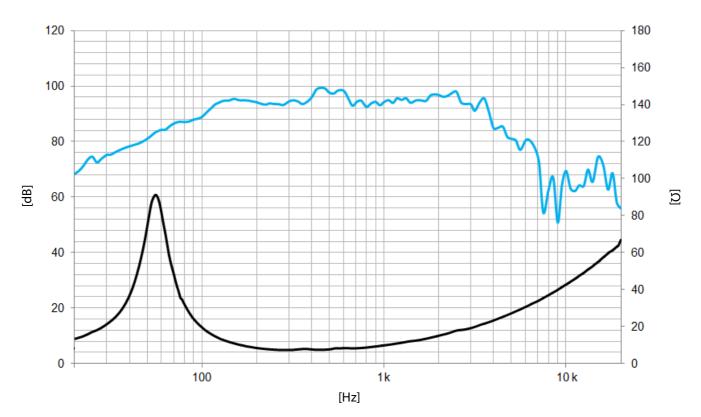


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Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

MOUNTING INFORMATION			
Overall diameter	261 mm	10,3 in	
Bolt circle diameter	243,5 mm	9,6 in	
Baffle cutout diameter:			
- Front mount	228 mm	9,0 in	
Depth	126 mm	5,0 in	
Net weight	3,6 kg	7,9 lb	
Shipping weight	4,1 kg	9,0 lb	

DIMENSION DRAWING

