

10MC500

LOW & MID FREQUENCY TRANSDUCER MC Series



- High power handling: 1.000 W program power
- 2,5" copper wire voice coil
- Malt Cross[®] Cooling System
- Low power compression losses
- High sensitivity: 97 dB
- FEA optimized magnetic circuit

- Aluminum demodulating ring
- Weatherproof cone with treatment for both sides of the cone
- Extended controlled displacement: X_{max} ± 8 mm
- 40 mm peak-to-peak excursion before damage
- Optimized for 2 or 3 way PA systems and line arrays for ultimate professional applications





TECHNICAL SPECIFICATIONS

Nominal diameter	250 m	m 10 in
Rated impedance		8 Ω
Minimum impedance		7,1 Ω
Power capacity 1		500 W _{AES}
Program power ²		1.000 W
Sensitivity	97 dB	1W / 1m @ Z _N
Frequency range		70 - 5.000 Hz
Voice coil diameter	63,5 m	m 2,5 in
BI factor		18,3 N/A
Moving mass		0,044 kg
Voice coil length		19,5 mm
Air gap height		9,5 mm
X _{damage} (peak to peak)		40 mm

THIELE-SMALL PARAMETERS 3

Resonant frequency, f _s	65 Hz
Resoliant frequency, is	05112
D.C. Voice coil resistance, R _e	5,6 Ω
Mechanical Quality Factor, Q _{ms}	7,5
Electrical Quality Factor, Qes	0,30
Total Quality Factor, Q _{ts}	0,29
Equivalent Air Volume to C _{ms} , V _{as}	24 I
Mechanical Compliance, C _{ms}	136 μ m / N
Mechanical Resistance, R _{ms}	2,4 kg / s
Efficiency, η ₀	2,1 %
Effective Surface Area, S _d	$0,035 \text{ m}^2$
Maximum Displacement, X _{max} ⁴	8 mm
Displacement Volume, V _d	280 cm ³
Voice Coil Inductance, Le	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).

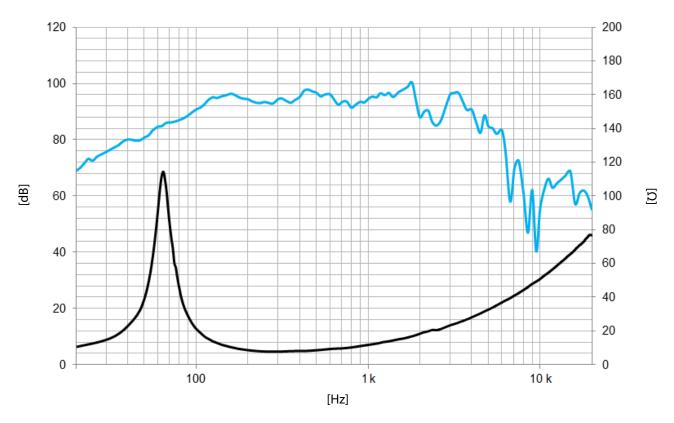
 $^{^4}$ The X_{max} is calculated as (L_{vc} - H_{ag})/2 + (H_{ag}/3,5), where L_{vc} is the voice coil length and H_{ag} is the air gap height.



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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	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	124 mm	4,9 in
Net weight	5,7 kg	12,5 lb
Shipping weight	6,1 kg	13,4 lb

DIMENSION DRAWING

