

12MC500

LOW & MID FREQUENCY TRANSDUCER

MC Series

KEY FEATURES — maltcross

- High power handling: 1.000 W program power
- 2,5" copper wire voice coil
- Malt Cross[®] Cooling System
- Low power compression losses
- High sensitivity: 98 dB (1W / 1m)
- FEA optimized magnetic circuit
- Aluminum demodulating ring

- Waterproof cone treatment for both sides of the cone • Extended controlled displacement: X_{max} ± 8 mm
- 40 mm peak-to-peak excursion before damage
- Weight 5,8 kg
- Optimized for 2 or 3 way PA systems and line array for ultimate professional applications



TECHNICAL SPECIFICATIONS

Nominal diameter	300 n	nm	12 in
Rated impedance			8 Ω
Minimum impedance			7,3 Ω
Power capacity ¹		500	WAES
Program power ²		1.0	W 000
Sensitivity	98 dB 🧉	1W / 1m	@ Z _N
Frequency range	65 - 5.000 Hz		
Voice coil diameter	63,5 n	nm	2,5 in
BI factor		18	,3 N/A
Moving mass		0,0)59 kg
Voice coil length		19	,5 mm
Air gap height		9	,5 mm
X _{damage} (peak to peak)		2	10 mm



THIELE-SMALL PARAMETERS³

Resonant frequency, f _s	57 Hz
D.C. Voice coil resistance, R _e	5,6 Ω
Mechanical Quality Factor, Q _{ms}	7,8
Electrical Quality Factor, Q _{es}	0,35
Total Quality Factor, Q _{ts}	0,34
Equivalent Air Volume to C _{ms} , V _{as}	57 I
Mechanical Compliance, C _{ms}	132 μm / N
Mechanical Resistance, R _{ms}	2,7 kg / s
Efficiency, η ₀	2,8 %
Effective Surface Area, S _d	0,055 m²
Maximum Displacement, X _{max} ⁴	8 mm
Displacement Volume, V _d	440 cm ³
Voice Coil Inductance, L _e	0,7 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).

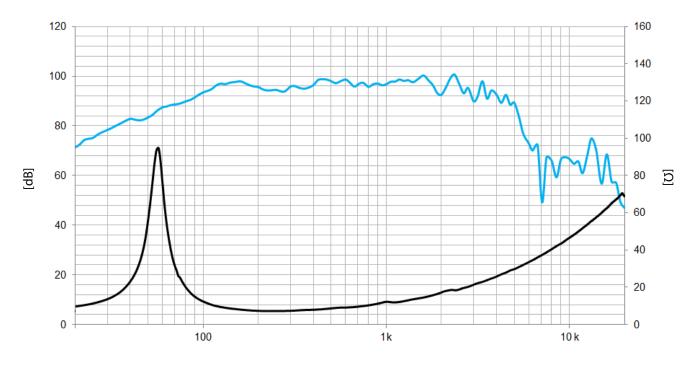
⁴ The X_{max} is calculated as (L_{vc} - H_{ad})/2 + (H_{ad}/3,5), where L_{vc} is the voice coil length and H_{ad} is the air gap height



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[Hz]

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

Overall diameter	312 mm	12,3 in
Bolt circle diameter	294,5 mm	11,6 in
Baffle cutout diameter:		
- Front mount	278 mm	10,9 in
Depth	141 mm	5,5 in
Net weight	5,8 kg	12,8 lb
Shipping weight	6,5 kg	14,3 lb

MOUNTING INFORMATION

DIMENSION DRAWING

