

10MCS500

LOW & MID FREQUENCY TRANSDUCER

MCS Series

KEY FEATURES and maltcross

- High power handling: 1000 W program power
- 2,5" copper wire voice coil
- Malt Cross[®] Cooling System
- Low power compression losses
- High sensitivity: 96 dB (1W / 1m)

- Optimized pressed steel frame
- FEA optimized magnetic circuit
- Waterproof cone with treatment for both sides of the cone
- Optimized for 2 or 3 way PA systems and line arrays for ultimate professional applications





TECHNICAL SPECIFICATIONS

Nominal diameter	250	mm	10 in
Rated impedance			Ω 8
Minimum impedance			7,2 Ω
Power capacity ¹			500 W _{AES}
Program power ²			1.000 W
Sensitivity	96 dB	1W /	1m @ Z _N
Frequency range		70 - 5.000 Hz	
Voice coil diameter	63,5	mm	2,5 in
BI factor			17,6 N/A
Moving mass			0,047 kg
Voice coil length			19,5 mm
Air gap height			9,5 mm
X _{damage} (peak to peak)			40 mm

THIELE-SMALL PARAMETERS³

Resonant frequency, f _s	70 Hz
D.C. Voice coil resistance, Re	5,7 Ω
Mechanical Quality Factor, Q _{ms}	10,1
Electrical Quality Factor, Q _{es}	0,38
Total Quality Factor, Q _{ts}	0,37
Equivalent Air Volume to C _{ms} , V _{as}	18,8 l
Mechanical Compliance, C _{ms}	109 µm / N
Mechanical Resistance, R _{ms}	2,1 kg / s
Efficiency, η ₀	1,7 %
Effective Surface Area, S _d	0,035 m ²
Maximum Displacement, X _{max} ⁴	8 mm
Displacement Volume, V _d	280 cm ³
Voice Coil Inductance, L _e @ 1 kHz	1,1 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).

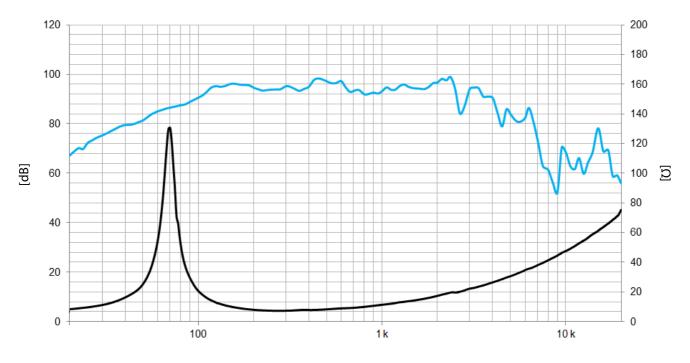
⁴ The X_{max} is calculated as $(L_{vc} - H_{ag})/2 + (H_{ag}/3,5)$, where L_{vc} is the voice coil length and H_{ag} is the air gap height.



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[Hz]

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

MOUNTING INFORMATION				
Overall diameter	258 mm	10,2 in		
Bolt circle diameter	241 mm	241 mm 9,5 in		
Baffle cutout diameter:				
- Front mount	230 mm	9,1 in		
Depth	125 mm	4,9 in		
Net weight	5,7 kg	12,6 lb		
Shipping weight	6,1 kg	13,5 lb		

DIMENSION DRAWING

