

15MC500

LOW & MID FREQUENCY TRANSDUCER

MC Series

KEY FEATURES and 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
- FEA optimized magnetic circuit
- Aluminium 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 6,2 kg
- Optimized for 2 or 3 way PA systems and line array for utlimate professional applications





TECHNICAL SPECIFICATIONS

Nominal diameter	380 mm	15 in
Rated impedance		8 Ω
Minimum impedance		6,9 Ω
Power capacity ¹		500 W_{AES}
Program power ²		1.000 W
Sensitivity	98 dB 1V	V / 1m @ Z _N
Frequency range	5	0 - 4.000 Hz
Recom. enclosure vol.	60 / 150 I	2,1 / 5,2 ft ³
Voice coil diameter	63,5 mm	2,5 in
BI factor		18,3 N/A
Moving mass		0,098 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	46 Hz
D.C. Voice coil resistance, R _e	5,7 Ω
Mechanical Quality Factor, Q _{ms}	8
Electrical Quality Factor, Q _{es}	0,49
Total Quality Factor, Q _{ts}	0,46
Equivalent Air Volume to C _{ms} , V _{as}	131,5
Mechanical Compliance, C _{ms}	120 μm / N
Mechanical Resistance, R _{ms}	3,5 kg / s
Efficiency, η ₀	2,5 %
Effective Surface Area, S _d	0,088 m ²
Maximum Displacement, X _{max} ⁴	8 mm
Displacement Volume, V _d	704 cm ³
Voice Coil Inductance, L _e	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).

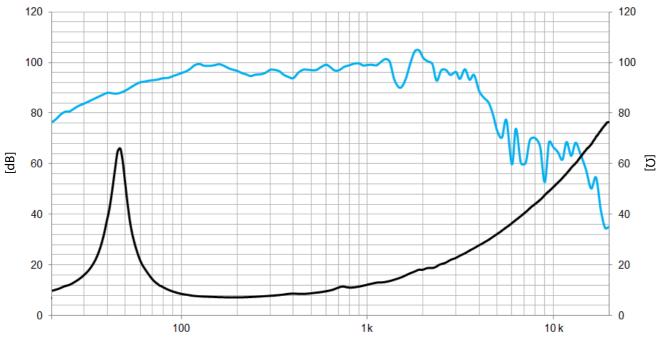
⁴ The X_{max} is calculated as $(L_{vc} - H_{ag})/2 + (H_{ag}/3,5)$, where L_{vc} is the voice coil length and H_{aq} is the air gap height.



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[Hz]

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

Overall diameter	388 mm	15,3 in		
Bolt circle diameter	370 mm	14,6 in		
Baffle cutout diameter:				
- Front mount	349,5 mm	13,8 in		
Depth	170 mm	6,7 in		
Net weight	6,2 kg	13,7 lb		
Shipping weight	7,2 kg	15,9 lb		

MOUNTING INFORMATION

DIMENSION DRAWING

