

# 15MC500

LOW & MID FREQUENCY TRANSDUCER Preliminary Data Sheet

# **KEY FEATURES**

- High power handling: 1000 W program power
- 2,5" copper wire voice coil
- Beyma's Malt Cross<sup>®</sup> ultimate Cooling System
- Low power compression losses
- High sensitivity: 98,5 dB
- FEA optimized magnetic circuit
- Designed with MMSS technology for high control, linearity and low harmonic distortion. LSI optimized parameters
- Waterproof cone with treatment for both sides of the cone
- Extended controlled displacement: Xmax ± 8 mm
- Massive mechanical displacement capability:
- Xdamage ± 40 mm
- Optimized for 2 or 3 way PA systems and line arrays for ultimate professional applications

# TECHNICAL SPECIFICATIONS

Nominal diameter	380 mm	15 in
Rated impedance		8 Ω
Minimum impedance		5,5 Ω
Power capacity*	500	WAES
Program power	1(	W 000
Sensitivity	98,5 dB @ 1W @ 1m	@ Z <sub>N</sub>
Frequency range	50 - 5.0	00 Hz
Voice coil diameter	63,5 mm	2,5 in
BI factor	18	,2 N/A
Moving mass	0,0	)96 kg
Voice coil length	19	,5 mm
Air gap height	9	,5 mm
X <sub>damage</sub> (peak to peak)	4	10 mm

### THIELE-SMALL PARAMETERS\*\*

50 Hz 5,4 Ω 5 0,49 0,45 116 I 06 μm / N
6 kg / s 2,78 % 0,088 m <sup>2</sup> 8 mm 704 cm <sup>3</sup> 1,1 mH

#### Notes:

\* The power capaticty is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.

\*\* 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).

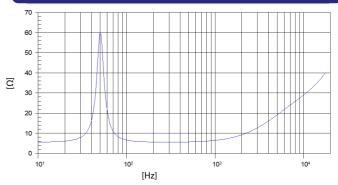
\*\*\* The  $X_{max}$  is calculated as (L<sub>vc</sub> - H<sub>ag</sub>)/2 + (H<sub>ag</sub>/3,5), where L<sub>vc</sub> is the voice coil length and H<sub>ag</sub> is the air gap height.



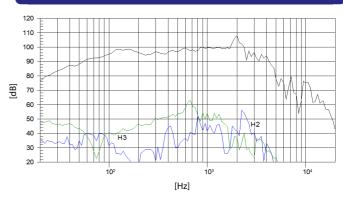
### MOUNTING INFORMATION

Overall diameter	388 mm	15,28 in
Bolt circle diameter	370 mm	14,57 in
Baffle cutout diameter: - Front mount	349,5 mm	13,76 in
Depth	170 mm	6,7 in
Net weight	6,2 kg	13,67 lb
Shipping weight	7,2 kg	15,87 lb

### FREE AIR IMPEDANCE CURVE



# FREQUENCY RESPONSE



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

