beyma

PROFESSIONAL LOUDSPEAKERS

www.beyma.com

8MC300Nd

LOW & MID FREQUENCY TRANSDUCER

Preliminary Data Sheet

KEY FEATURES

maltcross TECHNOLOGY

- High power handling: 600 W program power
- Exclusive Malt Cross® Technology Cooling System
- Low power compression losses
- High sensitivity: 96 dB (1W / 1m)
- FEA optimized neodymium magnetic circuit
- Designed with MMSS technology
- Optimized non-linear behaviour
- Waterproof cone with treatment for both sides
- 2” copper voice coil
- Aluminium demodulating ring
- Extended controlled displacement: X_{max} ± 6 mm
- 35 mm peak-to-peak excursion before damage
- Optimized for 2 or 3 way PA systems and line array for ultimate professional applications

TECHNICAL SPECIFICATIONS

Nominal diameter	200 mm	8 in
Rated impedance		8 Ω
Minimum impedance		7,5 Ω
Power capacity*		300 W_{AES}
Program power		600 W
Sensitivity	96 dB	1W / 1m @ Z_N
Frequency range		80 - 4.000 Hz
Voice coil diameter	50,8 mm	2 in
Bl factor		16 N/A
Moving mass		0,025 kg
Voice coil length		15 mm
Air gap height		7 mm
X_{damage} (peak to peak)		35 mm

THIELE-SMALL PARAMETERS**

Resonant frequency, f_s	76 Hz
D.C. Voice coil resistance, R_e	6,2 Ω
Mechanical Quality Factor, Q_{ms}	6,2
Electrical Quality Factor, Q_{es}	0,29
Total Quality Factor, Q_{ts}	0,28
Equivalent Air Volume to C_{ms}, V_{as}	11,6 l
Mechanical Compliance, C_{ms}	171 μm / N
Mechanical Resistance, R_{ms}	2 kg / s
Efficiency, η_0	1,7 %
Effective Surface Area, S_d	0,022 m^2
Maximum Displacement, X_{max} * **	6 mm
Displacement Volume, V_d	132 cm^3
Voice Coil Inductance, L_e @ 1 kHz	0,5 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 $(L_{vc} - H_{ag})/2 + (H_{ag}/3,5)$, where L_{vc} is the voice coil length and H_{ag} is the air gap height.

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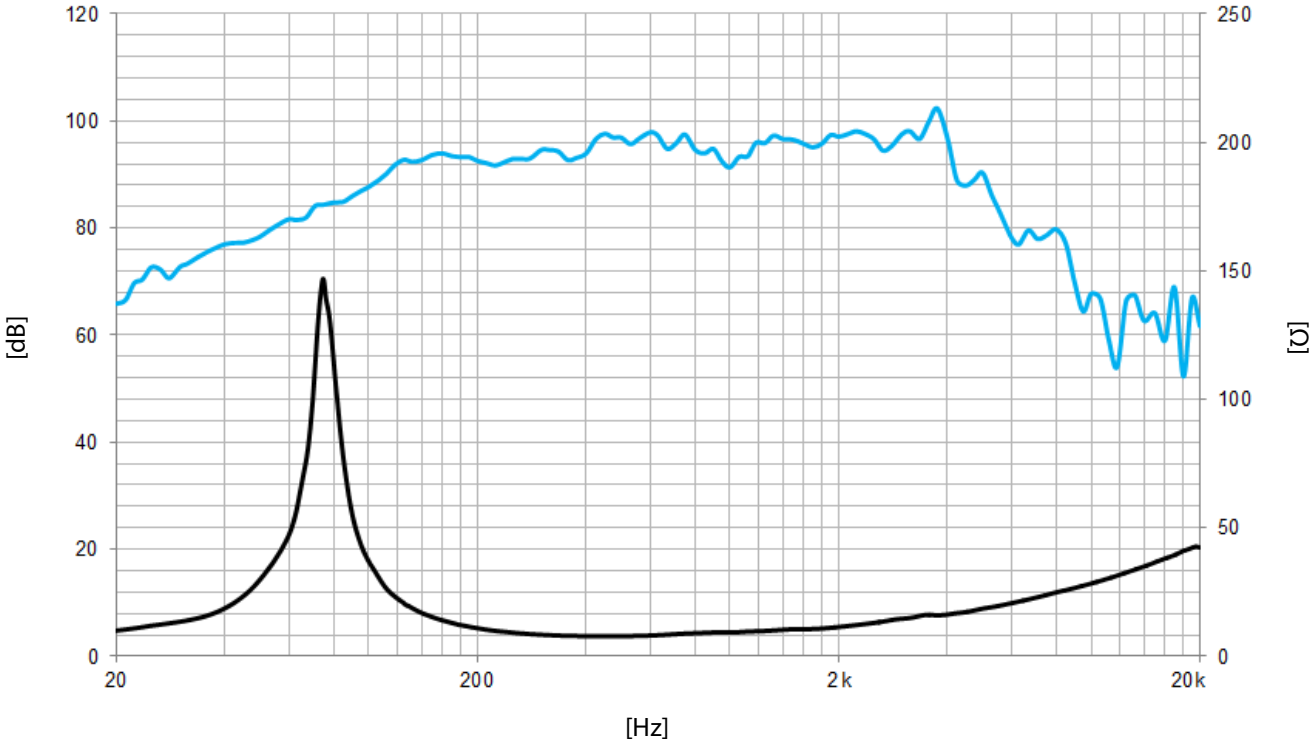

Note: On axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

MOUNTING INFORMATION

Overall diameter	212 mm	8,34 in
Bolt circle diameter	195 mm	7,68 in
Baffle cutout diameter:		
- Front mount	182 mm	7,16 in
Depth	96 mm	3,78 in
Net weight	1,9 kg	4,2 lb
Shipping weight	2,2 kg	4,9 lb

DIMENSION DRAWING