beyma

PROFESSIONAL LOUDSPEAKERS
www.beyma.com

14MLEX1000Nd

LOW & MID FREQUENCY TRANSDUCER

Preliminary Data Sheet

KEY FEATURES

maltcross TECHNOLOGY

- High power handling and low distortion 14” woofer/ mid-bass
- Exclusive Malt Cross® Technology Cooling System
- Low power compression losses
- High sensitivity: 99 dB (1W / 1m)
- FEA optimized neodymium magnetic circuit
- Ultra low air noise
- Optimized linear behaviour
- Weatherproof cone with reatment for borth sides
- Conex spider
- 4” DUO double layer in/out copper voice coil
- Aluminium demodulating ring
- Extended controlled displacement: Xmax ± 11 mm
- 60 mm peak-to-peak excursion before damage
- Optimized for high performance bass or mid-bass applications





TECHNICAL SPECIFICATIONS

Nominal diameter	350 mm	14 in
Rated impedance		8 Ω
Minimum impedance		7,1 Ω
Power capacity [1]		1.000 W_{AES}
Program power [2]		2.000 W
Sensitivity	99 dB	1W / 1m @ Z_N
Frequency range		50 - 4.500 Hz
Voice coil diameter	101,6 mm	4 in
Bl factor		26,5 N/A
Moving mass		107 g
Voice coil length		28 mm
Air gap height		14 mm
X_{damage} (peak to peak)		60 mm

THIELE-SMALL PARAMETERS [3]

Resonant frequency, f_s	47 Hz
D.C. Voice coil resistance, R_e	5,1 Ω
Mechanical Quality Factor, Q_{ms}	4
Electrical Quality Factor, Q_{es}	0,23
Total Quality Factor, Q_{ts}	0,22
Equivalent Air Volume to C_{ms}, V_{as}	75 l
Mechanical Compliance, C_{ms}	0,106 mm/N
Mechanical Resistance, R_{ms}	8 kg/s
Efficiency, η_0	3,3 %
Effective Surface Area, S_d	707 cm^2
Maximum Displacement, X_{max} [4]	11 mm
Displacement Volume, V_d	0,78 l
Voice Coil Inductance, L_e	1,22 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.

beyma

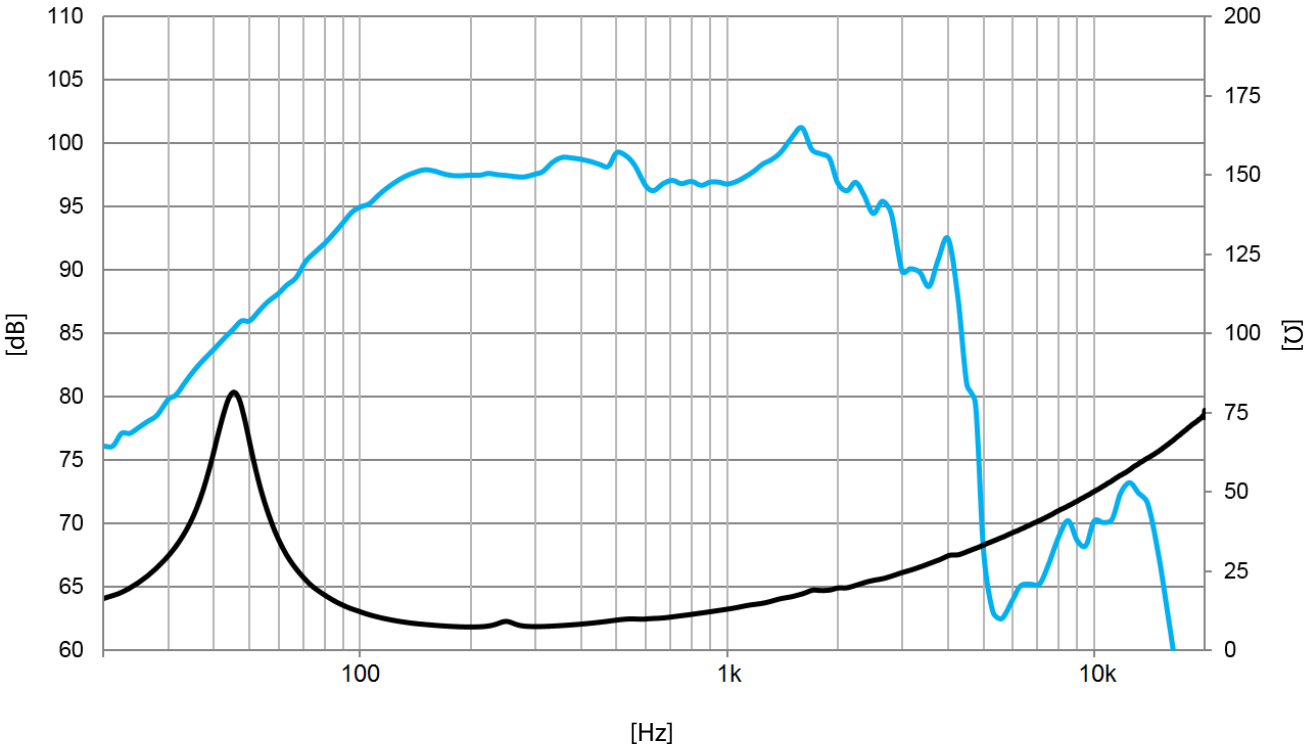
PROFESSIONAL LOUDSPEAKERS

www.beyma.com

14MLEX1000Nd

LOW & MID FREQUENCY TRANSDUCER

Preliminary Data Sheet



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

MOUNTING INFORMATION

Overall diameter	359 mm	14,1 in
Bolt circle diameter	340 mm	13,4 in
Baffle cutout diameter:		
- Front mount	323 mm	12,7 in
Depth	191 mm	7,52 in
Net weight	9,2 kg	20,3 lb
Shipping weight	9,5 kg	20,9 lb

DIMENSION DRAWING

