beyma

PROFESSIONAL LOUDSPEAKERS

www.beyma.com

12P1000Nd

LOW FREQUENCY TRANSDUCER

P1000 Series

KEY FEATURES

- Power handling: 900 W_{AES}
- High sensitivity: 96 dB (1W / 1m)
- FEA optimized neodymium magnetic circuit
- Forced air convection circuit for low power compression
- 4" DUO technology voice coil
- Weatherproof treatment for both sides of the cone
- Double Conex spider technology
- Extended controlled displacement: X_{max} ± 8 mm
- 52 mm peak-to-peak excursion before damage

TECHNICAL SPECIFICATIONS

Nominal diameter	300 mm	12 in
Rated impedance		8 Ω
Minimum impedance		6,5 Ω
Power capacity [1]		900 W_{AES}
Program power [2]		1.800 W
Sensitivity	96 dB	1W / 1m @ Z_N
Frequency range		50 - 2.000 Hz
Recom. enclosure vol.	20 / 60 l	0,7 / 2,2 ft^3
Voice coil diameter	101,6 mm	4 in
Bl factor		23,5 N/A
Moving mass		0,100 kg
Voice coil length		21 mm
Air gap height		12 mm
X_{damage} (peak to peak)		52 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}	7,9
Electrical Quality Factor, Q_{es}	0,27
Total Quality Factor, Q_{ts}	0,26
Equivalent Air Volume to C_{ms}, V_{as}	49 l
Mechanical Compliance, C_{ms}	115 µm / N
Mechanical Resistance, R_{ms}	3,7 kg / s
Efficiency, η_0	1,8 %
Effective Surface Area, S_d	0,055 m^2
Maximum Displacement, X_{max} [4]	8 mm
Displacement Volume, V_d	440 cm^3
Voice Coil Inductance, L_e	2 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.

Acústica Beyma SL - P.I. Moncada II, C/ Pont Sec, 1C - 46113 Moncada, Valencia (Spain) - Tel. +34 96 130 13 75 - beyma@beyma.com

beyma

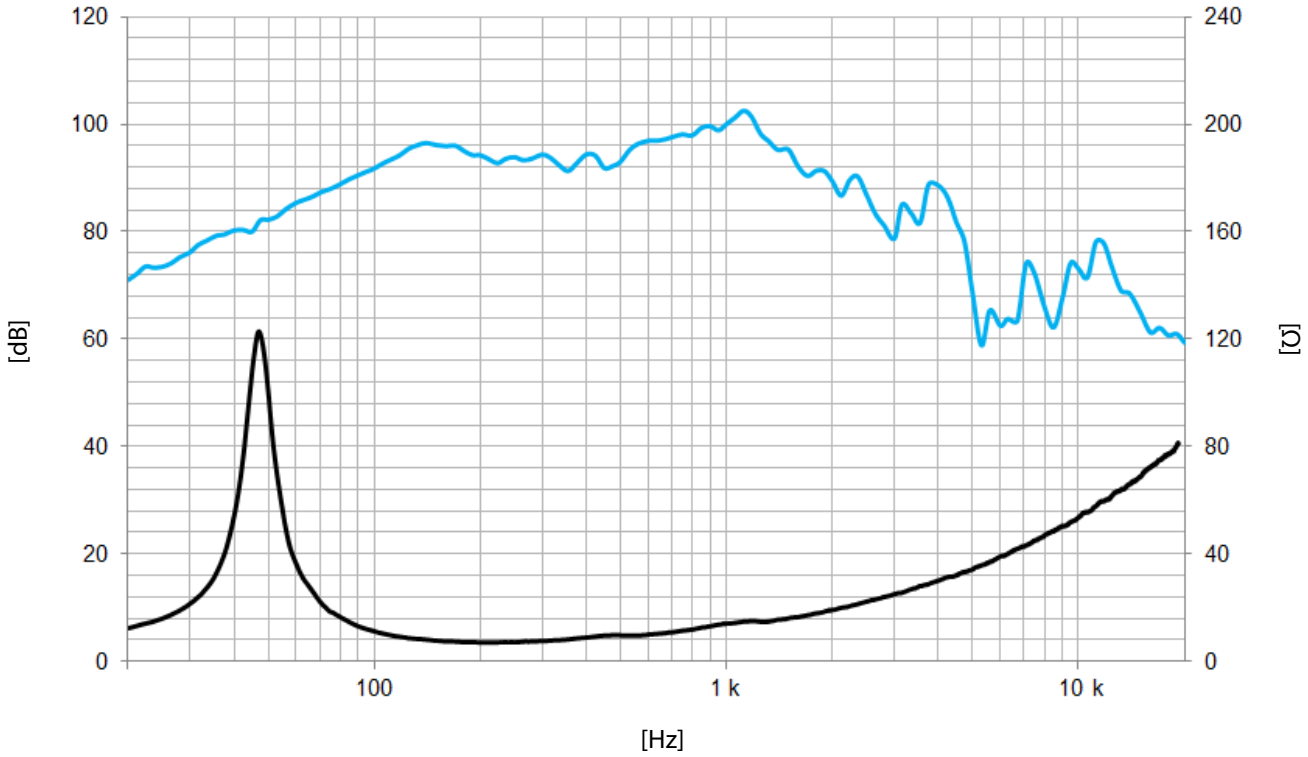
PROFESSIONAL LOUDSPEAKERS

www.beyma.com

12P1000Nd

LOW FREQUENCY TRANSDUCER

P1000 Series



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

MOUNTING INFORMATION

Overall diameter	312 mm	12,3 in
Bolt circle diameter	298 mm	11,7 in
Baffle cutout diameter:		
- Front mount	283 mm	11,1 in
Depth	131 mm	5,2 in
Net weight	5,4 kg	11,9 lb
Shipping weight	6,1 kg	13,4 lb

DIMENSION DRAWING