

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

- Waterproof 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 I	0,7 / 2,2 ft ³
Voice coil diameter	101,6 mm	4 in
BI 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 PARAMETERS³

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, Qts	0,26
Equivalent Air Volume to C _{ms} , V _{as}	49 I
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, Le	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.

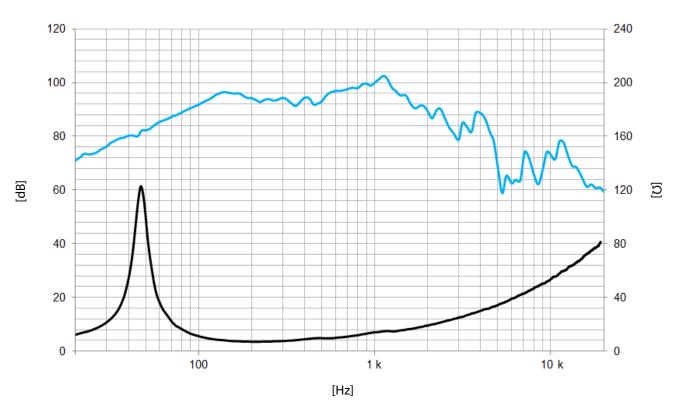
³ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $^{^4}$ 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.



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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	132 mm	5,2 in
Net weight	5,4 kg	11,9 lb
Shipping weight	6,1 kg	13,4 lb

DIMENSION DRAWING

