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PROFESSIONAL LOUDSPEAKERS
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18P1000Nd
LOW FREQUENCY TRANSDUCER
P1000 Series

KEY FEATURES

- Power handling: 1.000 W_{AES}
- Sensitivity: 98 dB (1W / 1m)
- 4" duo technology voice coil
- Forced air convection circuit for low power compression
- Extended controlled displacement: X_{max} ± 8 mm
- Massive mechanical displacement capability: X_{damage} ± 52 mm


TECHNICAL SPECIFICATIONS

Nominal diameter	460 mm	18 in
Rated impedance		8 Ω
Minimum impedance		6,7 Ω
Power capacity*		1.000 W_{AES}
Program power		2.000 W
Sensitivity	98 dB	1W / 1m @ Z_N
Frequency range		40 - 2.000 Hz
Recom. enclosure vol.	80 / 200 l	2,8 / 7 ft³
Voice coil diameter	101,6 mm	4 in
Bl factor		25,2 N/A
Moving mass		0,220 kg
Voice coil length		21 mm
Air gap height		12 mm
X_{damage} (peak to peak)		52 mm

DIMENSION DRAWINGS

THIELE-SMALL PARAMETERS**

Resonant frequency, f_s	39 Hz
D.C. Voice coil resistance, R_e	5,2 Ω
Mechanical Quality Factor, Q_{ms}	7
Electrical Quality Factor, Q_{es}	0,44
Total Quality Factor, Q_{ts}	0,42
Equivalent Air Volume to C_{ms}, V_{as}	170 l
Mechanical Compliance, C_{ms}	77 μm / N
Mechanical Resistance, R_{ms}	7,6 kg / s
Efficiency, η_0	2,1 %
Effective Surface Area, S_d	0,1250 m²
Maximum Displacement, X_{max} ***	8 mm
Displacement Volume, V_d	1000 cm³
Voice Coil Inductance, L_e @ 1 kHz	1,5 mH
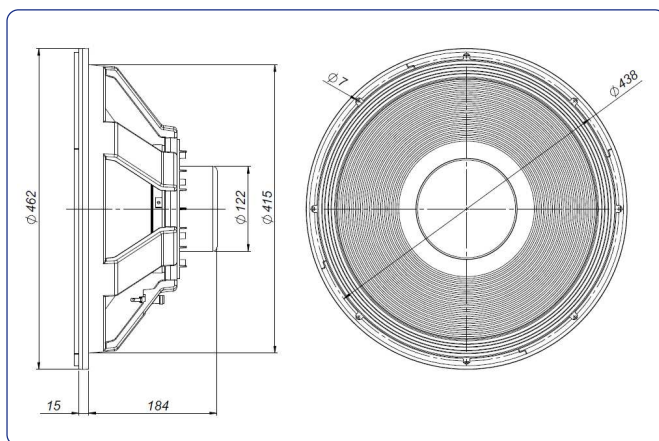
MOUNTING INFORMATION

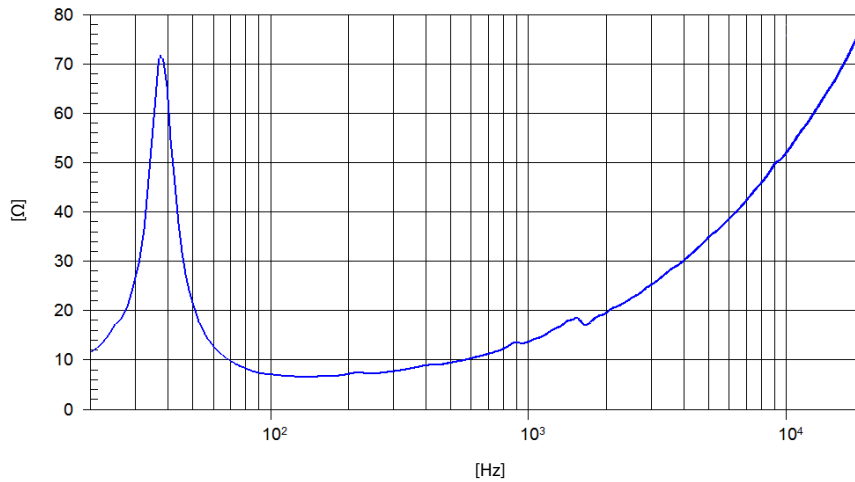|		
Overall diameter	462 mm	18,19 in
Bolt circle diameter	438 mm	17,24 in
Baffle cutout diameter:		
- Front mount	415 mm	16,34 in
Depth	199 mm	7,83 in
Net weight	7 kg	15,4 lb
Shipping weight	8,5 kg	18,7 lb

Notes:

* The power capacity is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.
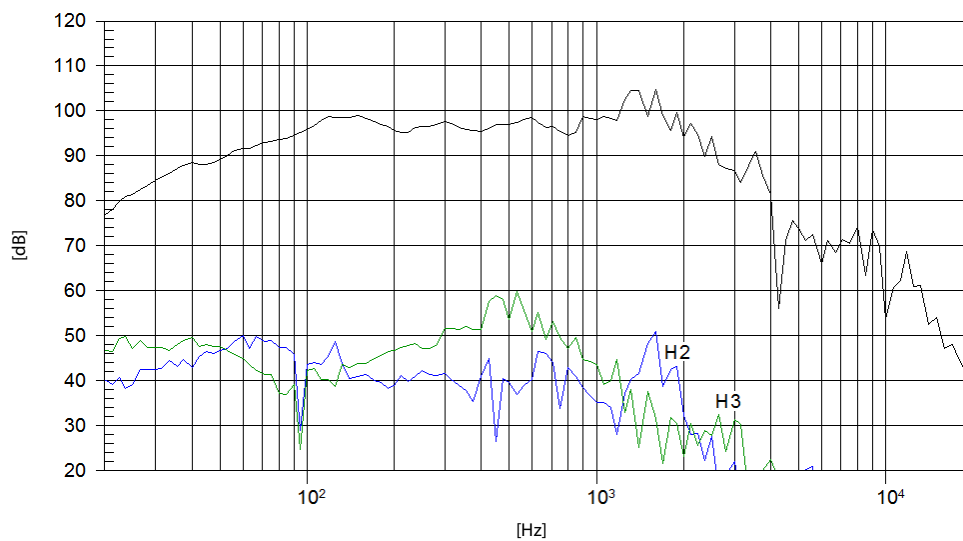
** T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

*** 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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FREE AIR IMPEDANCE CURVE

FREQUENCY RESPONSE AND DISTORTION

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