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PROFESSIONAL LOUDSPEAKERS
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18P1000/Fe V2

LOW FREQUENCY TRANSDUCER
P1000 Series

KEY FEATURES

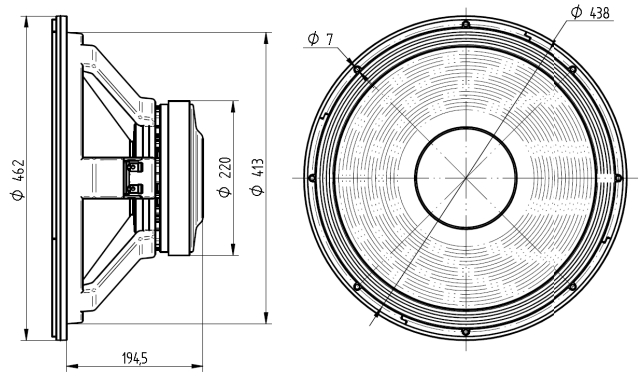
- High power handling: 2.400 W program power
- 4” voice coil
- High sensitivity: 98 dB
- FEA optimized magnetic circuit
- Designed with MMSS technology for high control, linearity and low harmonic distortion
- Low power compression losses
- Waterproof cone with treatment for both sides of the cone
- CONEX spider
- High excursion capabilities (X_{max} 8 mm)
- Low frequency extension and high control



TECHNICAL SPECIFICATIONS

Nominal diameter	460 mm	18 in
Rated impedance		8 Ω
Minimum impedance		5,5 Ω
Power capacity*		1.200 W_{AES}
Program power		2.400 W
Sensitivity	98 dB	@ 1W @ Z_N
Frequency range		30 - 2.000 Hz
Recom. enclosure vol.	90 / 200 l	3,2 / 7 ft^3
Voice coil diameter	100 mm	4 in
Magnetic assembly weight	11,4 kg	25,1 lb
Bl factor		26,8 N/A
Moving mass		0,221 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	33 Hz
D.C. Voice coil resistance, R_e	5,2 Ω
Mechanical Quality Factor, Q_{ms}	10,5
Electrical Quality Factor, Q_{es}	0,33
Total Quality Factor, Q_{ts}	0,32
Equivalent Air Volume to C_{ms}, V_{as}	230 l
Mechanical Compliance, C_{ms}	105 μm / N
Mechanical Resistance, R_{ms}	4,4 kg / s
Efficiency, η_0	2,4 %
Effective Surface Area, S_d	0,1250 m^2
Maximum Displacement, X_{max} * **	8 mm
Displacement Volume, V_d	1000 cm^3
Voice Coil Inductance, L_e	1,75 mH

MOUNTING INFORMATION

Overall diameter	462 mm	18,2 in
Bolt circle diameter	438 mm	17,3 in
Baffle cutout diameter:		
- Front mount	413 mm	16,3 in
Depth	215 mm	8,4 in
Net weight	13,8 kg	30,4 lb
Shipping weight	15,3 kg	33,7 lb

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.

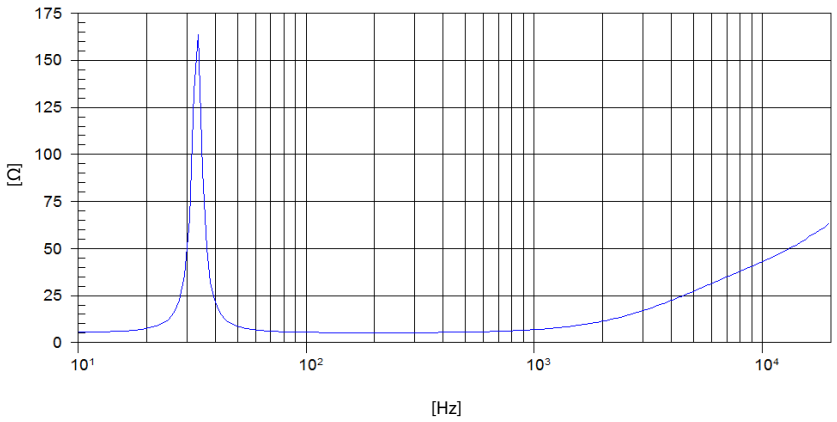
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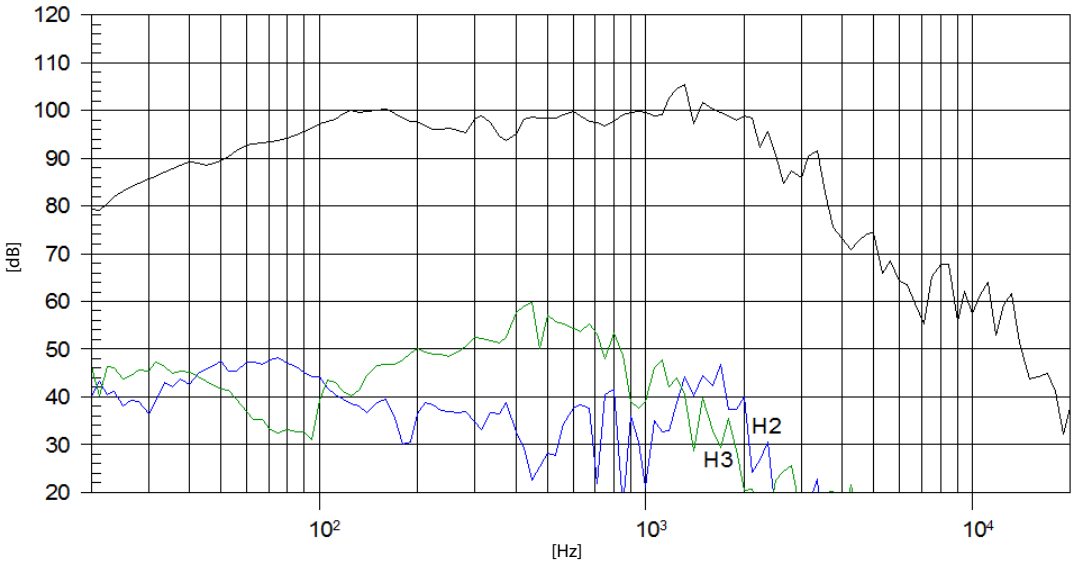
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FREE AIR IMPEDANCE CURVE



FREQUENCY RESPONSE AND DISTORTION



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

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