

18PWB1000/Fe

LOW FREQUENCY TRANSDUCER
PWB Series

KEY FEATURES

- High power handling: 2000 W program power
- 4" voice coil
- High sensitivity: 96 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
- Ultra high excursion capabilities (X_{max} 12,5 mm)
- Low frequency extension, deep sound and high control

TECHNICAL SPECIFICATIONS

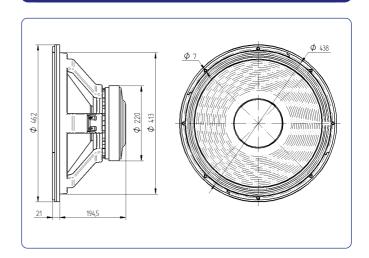
Nominal diameter	460 mm	18 in
Rated impedance		8 Ω
Minimum impedance		6,8 Ω
Power capacity*	1.0	000 W _{AES}
Program power		2.000 W
Sensitivity	96 dB @	1W @ Z _N
Frequency range	30 -	2.000 Hz
Recom. enclosure vol.	180 / 250 I	6,5 / 9 ft ³
Voice coil diameter	100 mm	4 in
Magnetic assembly weight	11,4 kg	25,1 lb
BI factor		25,3 N/A
Moving mass		0,237 kg
Voice coil length		30 mm
Air gap height		12 mm
X _{damage} (peak to peak)		55 mm

THIELE-SMALL PARAMETERS**

Resonant frequency, f _s	30 Hz
D.C. Voice coil resistance, R _e	6 Ω
Mechanical Quality Factor, Q _{ms}	11
Electrical Quality Factor, Q _{es}	0,42
Total Quality Factor, Qts	0,40
Equivalent Air Volume to C _{ms} , V _{as}	265 I
Mechanical Compliance, C _{ms}	119 μm / N
Mechanical Resistance, R _{ms}	4,17 kg / s
Efficiency, η ₀	1,65 %
Effective Surface Area, S _d	0,1255 m ²
Maximum Displacement, X _{max} ***	12,5 mm
Displacement Volume, V _d	1.560 cm ³
Voice Coil Inductance, Le	2 mH



DIMENSION DRAWINGS



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	13,6 kg	30 lb
Shipping weight	15,1 kg	33,9 lb

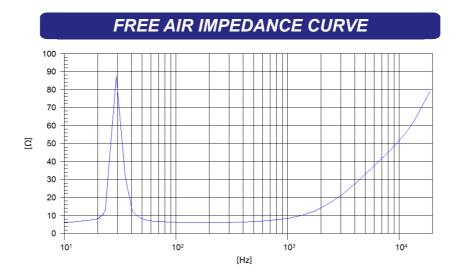
Notes:

- * 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.

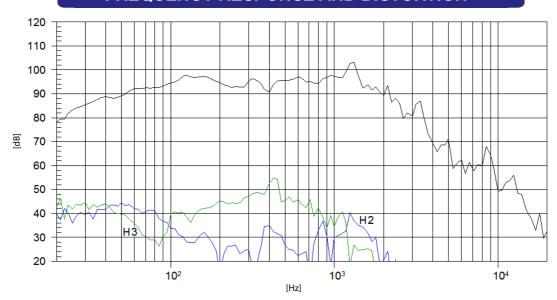


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FREQUENCY RESPONSE AND DISTORTION



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

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