

18PWB1000Fe

LOW FREQUENCY TRANSDUCER

PWB Series

KEY FEATURES

- High power handling: 2.000 W program power
- 4" voice coil
- High sensitivity: 96 dB (1W / 1m)
- FEA optimized magnetic circuit

- Low power compression losses
- Waterproof cone with treatment for both sides of the cone
- Ulta 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	1.000 W _{AES}		
Program power ²	2	2.000 W	
Sensitivity	96 dB 1W / 1ı	m @ Z _N	
Frequency range	30 - 2	.000 Hz	
Recom. enclosure vol.	180 / 250 l 6	,5 / 9 ft³	
Voice coil diameter	101,6 mm	4 in	
BI factor		25 N/A	
Moving mass	C),245 kg	
Voice coil length		30 mm	
Air gap height		12 mm	
X _{damage} (peak to peak)		55 mm	

THIELE-SMALL PARAMETERS³

Resonant frequency, f _s	27 Hz
D.C. Voice coil resistance, R _e	6 Ω
Mechanical Quality Factor, Q _{ms}	8,2
Electrical Quality Factor, Q _{es}	0,40
Total Quality Factor, Q _{ts}	0,38
Equivalent Air Volume to C _{ms} , V _{as}	317 I
Mechanical Compliance, C _{ms}	142 μm / N
Mechanical Resistance, R _{ms}	5,1 kg / s
Efficiency, η ₀	1,5 %
Effective Surface Area, S _d	0,1255 m ²
Maximum Displacement, X _{max} ⁴	12,5 mm
Displacement Volume, V _d	1.560 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).

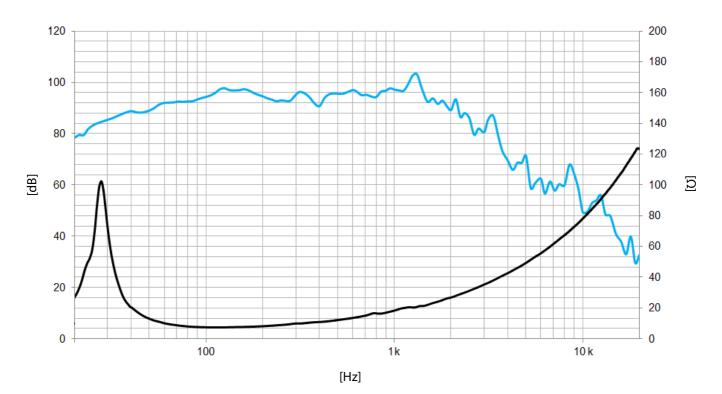
⁴ The X_{max} is calculated as $(L_{vc} - H_{ag})/2 + (H_{ag}/3,5)$, where L_{vc} is the voice coil length and H_{ag} is the air gap height.



18PWB1000Fe

LOW FREQUENCY TRANSDUCER

PWB Series



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

MOUNTING INFORMATION			
462 mm	18,2 in		
438 mm	17,3 in		
415 mm	16,3 in		
215 mm	8,4 in		
13,6 kg	30 lb		
15,1 kg	33,9 lb		
	462 mm 438 mm 415 mm 215 mm 13,6 kg		

DIMENSION DRAWING

