

# 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
- Ultra high excursion capabilities (X<sub>max</sub> 12,5 mm)
- Low frequency extension, deep sound and high control



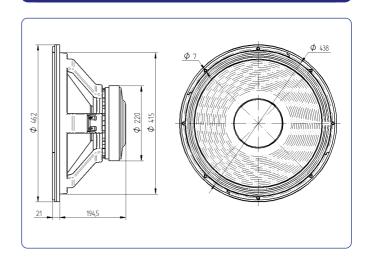
Nominal diameter	460 mm	18 in
Rated impedance		8 Ω
Minimum impedance		6,8 Ω
Power capacity*	1.0	00 W <sub>AES</sub>
Program power		2.000 W
Sensitivity	96 dB @ 1	W @ Z <sub>N</sub>
Frequency range	30 - 2	2.000 Hz
Recom. enclosure vol.	180 / 250 I	6,5 / 9 ft <sup>3</sup>
Voice coil diameter	101,6 mm	4 in
Magnetic assembly weight	11,4 kg	25,1 lb
BI factor		25 N/A
Moving mass		0,245 kg
Voice coil length		30 mm
Air gap height		12 mm
X <sub>damage</sub> (peak to peak)		55 mm

# THIELE-SMALL PARAMETERS\*\*

Resonant frequency, f <sub>s</sub>	27 Hz
D.C. Voice coil resistance, R <sub>e</sub>	6 Ω
Mechanical Quality Factor, Q <sub>ms</sub>	8,2
Electrical Quality Factor, Q <sub>es</sub>	0,40
Total Quality Factor, Q <sub>ts</sub>	0,38
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	317 I
Mechanical Compliance, C <sub>ms</sub>	142 μm / N
Mechanical Resistance, R <sub>ms</sub>	5,1 kg / s
Efficiency, η <sub>0</sub>	1,5 %
Effective Surface Area, S <sub>d</sub>	0,1255 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> ***	12,5 mm
Displacement Volume, V <sub>d</sub>	1.560 cm <sup>3</sup>
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	415 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

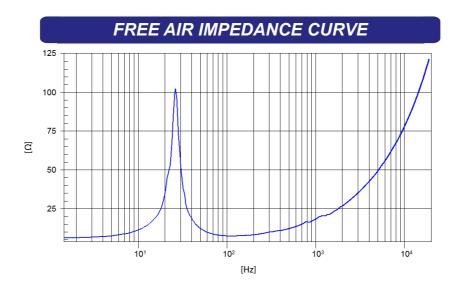
#### Notes:

- \* 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.

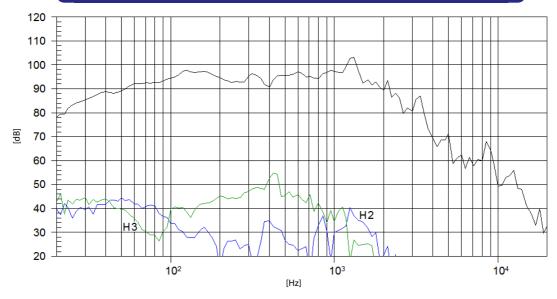


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## FREQUENCY RESPONSE AND DISTORTION



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

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