

# 18P1000Fe V2

LOW FREQUENCY TRANSDUCER

#### **P1000 Series**

## **KEY FEATURES**

- High power handling: 2.400 W program power
- 4" copper voice coil
- High sensitivity: 98 dB (1W / 1m)
- FEA optimized magnetic circuit
- Low power compression losses

- Waterproof cone with treatment for both sides of the cone
- CONEX spider
- High excursion capabilities:  $X_{max} \pm 8 \text{ mm}$
- Low frequency extension and high control





### TECHNICAL SPECIFICATIONS

Nominal diameter Rated impedance	460 mm	18 in 8 Ω
Minimum impedance		5,5 Ω
Power capacity <sup>1</sup>	1.200 W <sub>AES</sub>	
Program power <sup>2</sup>	2	.400 W
Sensitivity	98 dB 1W / 1r	n @ Z <sub>N</sub>
Frequency range	30 - 2.000 Hz	
Voice coil diameter	101,6 mm	4 in
BI factor	26,8 N/A	
Moving mass	0,221 kg	
Voice coil length		21 mm
Air gap height		12 mm
X <sub>damage</sub> (peak to peak)		52 mm

## THIELE-SMALL PARAMETERS<sup>3</sup>

Resonant frequency, f <sub>s</sub>	33 Hz
D.C. Voice coil resistance, R <sub>e</sub>	5,2 Ω
Mechanical Quality Factor, Q <sub>ms</sub>	10,5
Electrical Quality Factor, Q <sub>es</sub>	0,33
Total Quality Factor, Q <sub>ts</sub>	0,32
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	230 I
Mechanical Compliance, C <sub>ms</sub>	105 μm / N
Mechanical Resistance, R <sub>ms</sub>	4,4 kg / s
Efficiency, η <sub>0</sub>	2,4 %
Effective Surface Area, S <sub>d</sub>	0,1250 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> <sup>4</sup>	8 mm
Displacement Volume, V <sub>d</sub>	1000 cm <sup>3</sup>
Voice Coil Inductance, L <sub>e</sub>	1,75 mH

<sup>2</sup> Program power is defined as power capacity + 3 dB.

<sup>3</sup> 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).

<sup>4</sup> The X<sub>max</sub> is calculated as (L<sub>vc</sub> - H<sub>aq</sub>)/2 + (H<sub>aq</sub>/3,5), where L<sub>vc</sub> is the voice coil length and H<sub>aq</sub> is the air gap height.

Notes

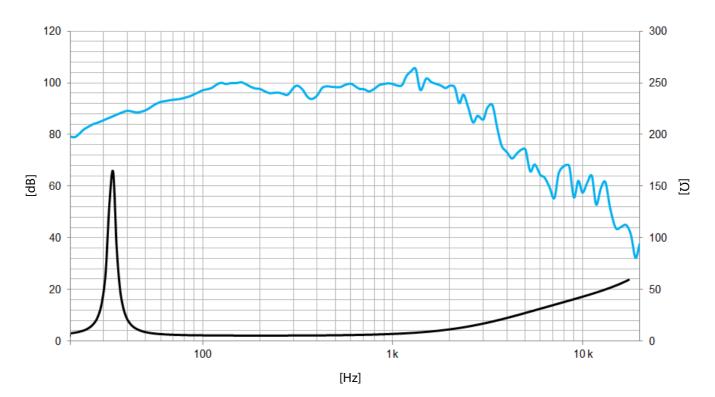
<sup>&</sup>lt;sup>1</sup> The power capaticty is determined according to AES2-1984 (r2003) standard.



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

MOUNTING I	NFORMATION

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	13,8 kg	30,4 lb
Shipping weight	15,3 kg	33,7 lb

### **DIMENSION DRAWING**

