

## 8P300/Fe

LOW FREQUENCY TRANSDUCER P200 Series

## **KEY FEATURES**

- 600 W program power
- Sensitivity: 95,4 dB @ 2,83 V @ 1 m
- Extended controlled displacement: X<sub>max</sub> ± 6 mm
- Extended mechanical displacement capability:
  X<sub>damage</sub> ± 24 mm
- Designed with MMSS technology for high control, symmetry and linearity
- Demodulating ring for low harmonic distortion
- CONEX spider for higher resistance and consistency
- Waterproof carbon fiber loaded paper cone with Santoprene™ surround
- Ferrite magnet

### **TECHNICAL SPECIFICATIONS**

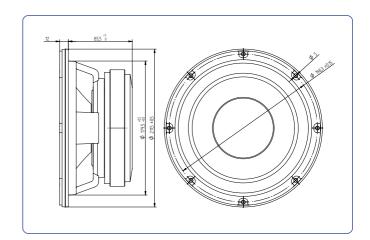
Nominal diameter		200 mi	m 8 in 8 Ω
Rated impedance			
Minimum impedance			6,7 Ω
Power capacity*		30	0 W <sub>AES</sub>
Program power			600 W
Sensitivity	95,4 dB	2.83v @ 1	m @ 2π
Frequency range		50 - 8	3000 Hz
Recom. enclosure vol.	10 / 3	0 0,35 /	1,06 ft <sup>3</sup>
Voice coil diameter		63,5 mm	2,5 in
Magnetic assembly weight		3 kg	6,61 lb
BL factor			11 N/A
Moving mass		0	.022 kg
Voice coil length			15 mm
Air gap height			7 mm
X <sub>damage</sub> (peak to peak)			24 mm

## THIELE-SMALL PARAMETERS\*\*

Resonant frequency, f <sub>s</sub>	61 Hz
D.C. Voice coil resistance, R <sub>e</sub>	5,2 Ω
Mechanical Quality Factor, Q <sub>ms</sub>	9,54
Electrical Quality Factor, Q <sub>es</sub>	0,34
Total Quality Factor, Q <sub>ts</sub>	0,33
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	21,49 l
Mechanical Compliance, C <sub>ms</sub>	318 μm / N
Mechanical Resistance, R <sub>ms</sub>	0,85 kg / s
Efficiency, η <sub>0</sub>	1,39 %
Effective Surface Area, S <sub>d</sub>	0.022 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> ***	6 mm
Displacement Volume, V <sub>d</sub>	100 cm <sup>3</sup>
Voice Coil Inductance, L <sub>e</sub> @ 1 kHz	0,8 mH



## **DIMENSION DRAWINGS**



## **MOUNTING INFORMATION**

Overall diameter	211,5 mm	8,33 in
Bolt circle diameter	198,3 mm	7,81 in
Baffle cutout diameter:		
- Front mount	179,5 mm	7,07 in
- Rear mount	182,5 mm	7,19 in
Depth	97,5 mm	3,84 in
Volume displaced by driver	1,5 I	0,056 ft <sup>3</sup>
Net weight	4,03 kg	8,88 lb
Shipping weight	4,23 kg	9,32 lb

#### Notes:

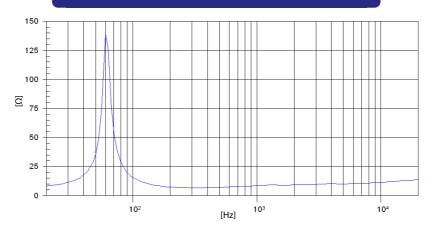
- \* The power capaticty is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.
- \*\* T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out 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.



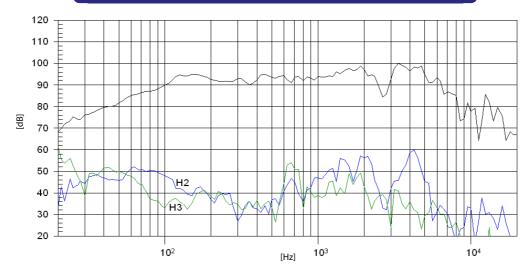
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### FREE AIR IMPEDANCE CURVE



## 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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