

8WRS300

LOW FREQUENCY TRANSDUCER
Preliminary Data Sheet

KEY FEATURES

- High power handling: 500 W program power
- 2" copper wire voice coil
- High sensitivity: 95 dB (1W / 1m)
- FEA optimized ceramic magnetic circuit
- Designed with MMSS technology
- Low harmonic distortion and linear response

- Waterproof cone with treatment on both sides of the cone
- Optimized pressed steel frame
- Extended controlled displacement: X_{max} ± 6 mm
- 32 mm peak-to-peak excursion before damage
- Wide range of applications of low and mid-low frequencies





TECHNICAL SPECIFICATIONS

Nominal diameter	200 mm	8 in
Rated impedance		8 Ω
Minimum impedance	7	',6 Ω
Power capacity*	300 V	V _{AES}
Program power	60	00 W
Sensitivity	95 dB 1W / 1m @	2) Z _N
Frequency range	70 - 4.00	0 Hz
Voice coil diameter	50,8 mm	2 in
BI factor	15,5	N/A
Moving mass	0,02	28 kg
Voice coil length	15	mm
Air gap height	8	mm
X _{damage} (peak to peak)	32	mm

THIELE-SMALL PARAMETERS**

Resonant frequency, f _s	68 Hz
D.C. Voice coil resistance, Re	5,9 Ω
Mechanical Quality Factor, Q _{ms}	2,8
Electrical Quality Factor, Q _{es}	0,30
Total Quality Factor, Qts	0,27
Equivalent Air Volume to C _{ms} , V _{as}	12,5 I
Mechanical Compliance, C _{ms}	184 μm / N
Mechanical Resistance, R _{ms}	4,5 kg / s
Efficiency, η ₀	1,3 %
Effective Surface Area, S _d	$0,022 \text{ m}^2$
Maximum Displacement, X _{max} ***	6 mm
Displacement Volume, V _d	132 cm ³
Voice Coil Inductance, L _e @ 1 kHz	0,9 mH

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.

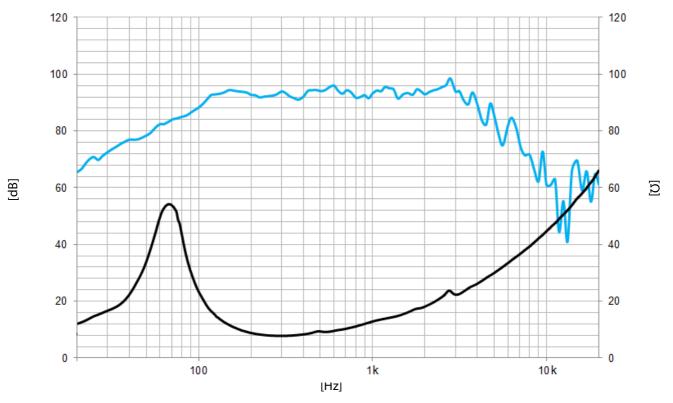
^{**} T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

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

MOUNTING INFORMATION

Overall diameter	210 mm	8,27 in
Bolt circle diameter	192 mm	7,56 in
Baffle cutout diameter:		
- Front mount	180 mm	7,08 in
Depth	95 mm	3,74 in
Net weight	3,25 kg	7,2 lb
Shipping weight	3,55 kg	7,8 lb

DIMENSION DRAWING

