

8WR300

LOW FREQUENCY TRANSDUCER

KEY FEATURES

- High power handling: 600 W program power
- 2" copper wire voice coil
- High sensitivity: 95 dB (1W / 1m)
- FEA optimized ceramic magnetic circuit
- Low harmonic distortion and linear response

- Waterproof cone with treatment on both sides of the cone
- Aluminium frame
- Extended controlled displacement: Xmax ± 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	7,8 Ω
Power capacity ¹	300 W _{AES}
Program power ²	600 W
Sensitivity	95 dB 1W / 1m @ Z _N
Frequency range	65 - 4.000 Hz
Recom. enclosure	V _b = 12 I
(Bass-reflex design)	F _b = 70 Hz
Voice coil diameter	50,8 mm 2 in
BI factor	15,5 N/A
Moving mass	0,028 kg
Voice coil length	15 mm
Air gap height	8 mm
X _{damage} (peak to peak)	32 mm



THIELE-SMALL PARAMETERS ³

Resonant frequency, f _s	65 Hz
D.C. Voice coil resistance, R _e	6 Ω
Mechanical Quality Factor, Q _{ms}	5,4
Electrical Quality Factor, Q _{es}	0,29
Total Quality Factor, Q _{ts}	0,27
Equivalent Air Volume to C _{ms} , V _{as}	15 I
Mechanical Compliance, C _{ms}	215 μm / N
Mechanical Resistance, R _{ms}	2,1 kg / s
Efficiency, η ₀	1,4 %
Effective Surface Area, S _d	0,022 m ²
Maximum Displacement, X _{max} ⁴	6 mm
Displacement Volume, V _d	132 cm ³
Voice Coil Inductance, L _e @ 1 kHz	0,9 mH

Notes:

¹ The power capaticty is determined according to AES2-1984 (r2003) standard.

² Program power is defined as power capacity + 3 dB.

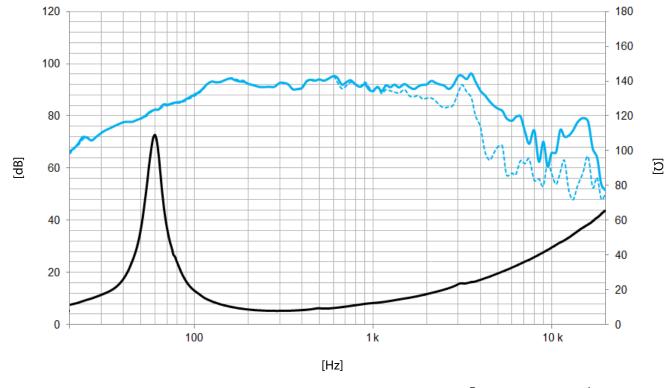
³ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

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.



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Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m Frequency response on axis
Frequency response 45° off axis

MOUNTING INFORMATION

Overall diameter	212 mm	8,3 in
Bolt circle diameter	195 mm	7,7 in
Baffle cutout diameter:		
- Front mount	182 mm	7,2 in
Depth	95 mm	3,7 in
Net weight	3,3 kg	7,3 lb
Shipping weight	3,6 kg	7,9 lb

DIMENSION DRAWING

