

8WRS300

LOW FREQUENCY TRANSDUCER WRS Series

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

- Weatherproof 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 ¹	300 W _{AES}
Program power ²	600 W
Sensitivity	95 dB 1W / 1m @ Z _N
Frequency range	70 - 4.000 Hz
Recom. enclosure	V _b = 75 I
(Bass-reflex design)	$F_b = 50 \text{ Hz}$
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 PARAMETERS³

Resonant frequency, f _s	69 Hz
D.C. Voice coil resistance, R _e	5,9 Ω
Mechanical Quality Factor, Q _{ms}	2,7
Electrical Quality Factor, Q _{es}	0,34
Total Quality Factor, Q _{ts}	0,30
Equivalent Air Volume to C _{ms} , V _{as}	13,1 I
Mechanical Compliance, C _{ms}	192 μm / N
Mechanical Resistance, R _{ms}	4,5 kg / s
Efficiency, η_0	1,4 %
Effective Surface Area, S _d	$0,022 \text{ m}^2$
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.

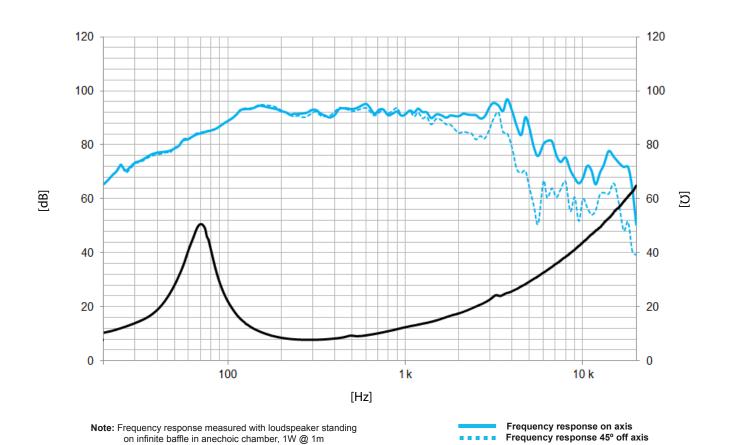
³ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $^{^4}$ 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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MOUNTING INFORMATION

Overall diameter	210 mm	8,27 in
Bolt circle diameter	196 mm	7,7 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

