

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

- Waterproof cone with treatment on both sides of the cone
- Optimized pressed steel 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		7,6 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	,2 N/A
Moving mass	0,0)28 kg
Voice coil length	1	l5 mm
Air gap height		8 mm
X _{damage} (peak to peak)	3	32 mm



THIELE-SMALL PARAMETERS³

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}	0,30
Total Quality Factor, Q _{ts}	0,28
Equivalent Air Volume to C _{ms} , V _{as}	15 I
Mechanical Compliance, C _{ms}	214 μm / N
Mechanical Resistance, R _{ms}	2,1 kg / s
Efficiency, η ₀	1,3 %
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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120 180 160 100 140 80 120 100 [dB] G 60 80 40 60 40 20 20 0 0 100 10 k 1 k [Hz]

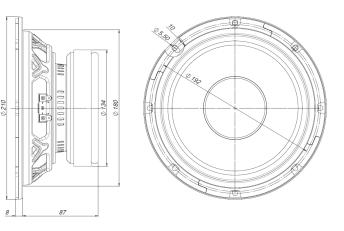
Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m $\,$

Frequency response on axis Frequency response 45° off axis

MOUNTING INFORMATION

Overall diameter	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



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