

10WRS300

LOW FREQUENCY TRANSDUCER
WRS Series

KEY FEATURES

- High power handling: 600 W program power
- 2" copper voice coil
- High sensitivity: 94,5 dB (1W / 1m)
- · Optimized pressed steel frame

- FEA optimized ceramic magnetic circuit
- Waterproof cone treatment for both sides of the cone
- · Low harmonic distortion and linear response
- Wide range of applications of low and mid-low frequencies





TECHNICAL SPECIFICATIONS

Nominal diameter	250	mm	10 in
Rated impedance			8 Ω
Minimum impedance			7,5 Ω
Power capacity ¹		;	300 W _{AES}
Program power ²			600 W
Sensitivity	94,5 dB	1W /	1m @ Z _N
Frequency range		55 -	5.000 Hz
Recom. enclosure vol.	15 / 50 I	0,5	3 / 1,77 ft ³
Voice coil diameter	50,8	mm	2 in
BI factor			14,3 N/A
Moving mass			0,041 kg
Voice coil length			15 mm
Air gap height			8 mm
X _{damage} (peak to peak)			30 mm

THIELE-SMALL PARAMETERS 3

Resonant frequency, f _s	52 Hz
D.C. Voice coil resistance, R _e	6,1 Ω
Mechanical Quality Factor, Q _{ms}	5,5
Electrical Quality Factor, Q _{es}	0,40
Total Quality Factor, Qts	0,38
Equivalent Air Volume to C _{ms} , V _{as}	39,3 l
Mechanical Compliance, C _{ms}	$227~\mu m$ / N
Mechanical Resistance, R _{ms}	2,5 kg / s
Efficiency, η ₀	1,3 %
Effective Surface Area, S _d	$0,035 \text{ m}^2$
Maximum Displacement, X _{max} ⁴	6 mm
Displacement Volume, V _d	210 cm ³
Voice Coil Inductance, L _e @ 1 kHz	1 mH

Notes

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

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

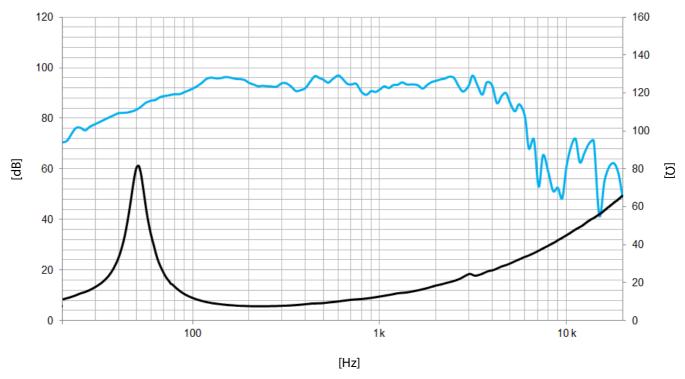
³ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $^{^4}$ 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: On axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

MOUNTING INFORMATION

Overall diameter	258 mm	10,2 in
Bolt circle diameter	241 mm	9,5 in
Baffle cutout diameter:		
- Front mount	230 mm	9,0 in
Depth	117 mm	4,6 in
Net weight	3,5 kg	7,7 lb
Shipping weight	3,9 kg	8,6 lb

DIMENSION DRAWING

