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PROFESSIONAL LOUDSPEAKERS
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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 l
(Bass-reflex design)		F_b = 50 Hz
Voice coil diameter	50,8 mm	2 in
Bl 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	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 l
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 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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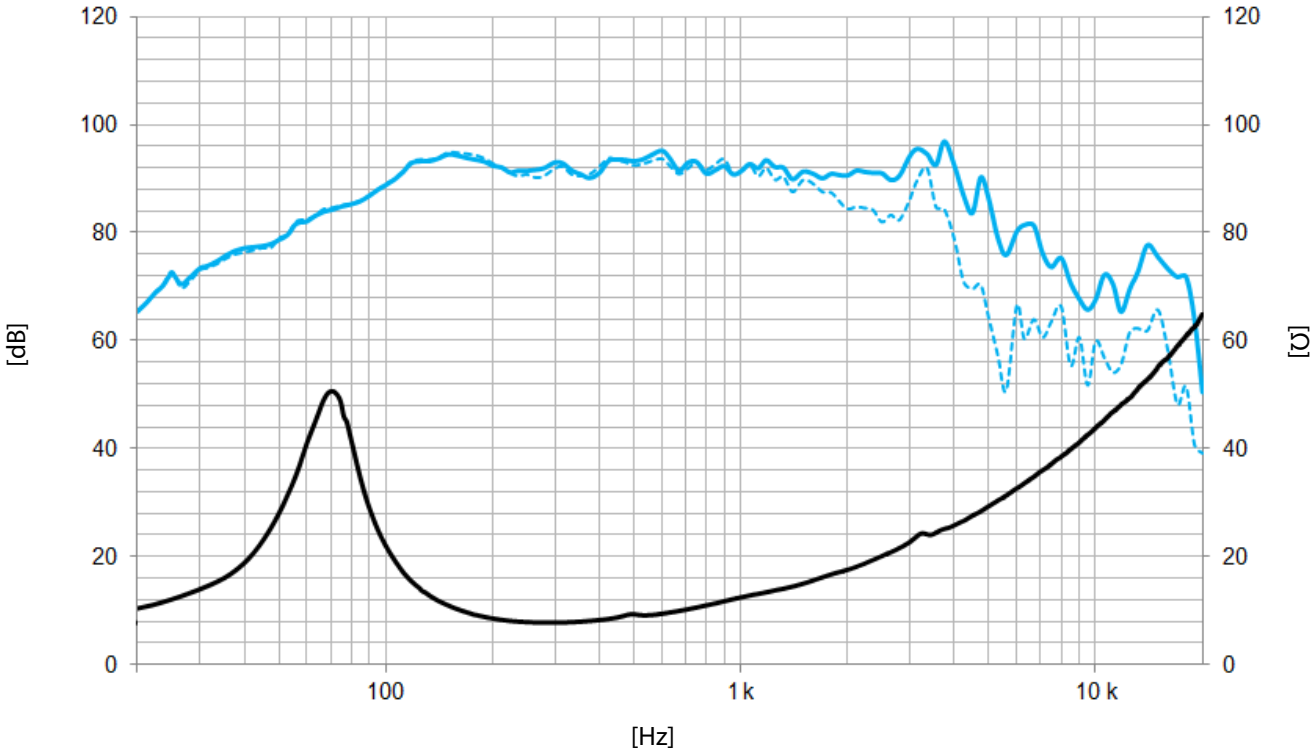
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Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

Frequency response on axis
Frequency response 45º off axis

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

