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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

- Waterproof cone with treatment on both sides of the cone
- Optimized pressed steel frame
- Extended controlled displacement: $X_{max} \pm 6$ 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]

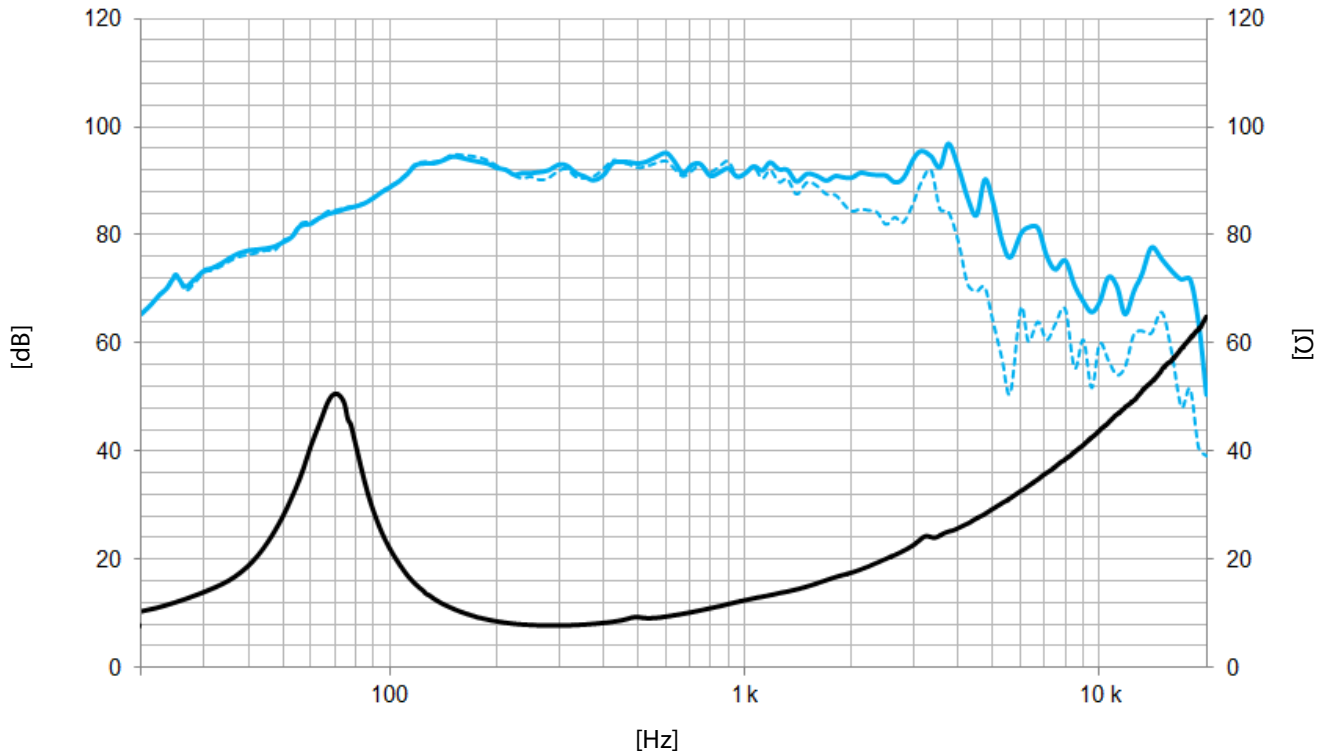|	
Resonant frequency, f$_s$	69 Hz
D.C. Voice coil resistance, R$_e$	5,9 Ω
Mechanical Quality Factor, Q$_{ms}$	2,7
Electrical Quality Factor, Q$_{es}$	0,34
Total Quality Factor, Q$_{ts}$	0,30
Equivalent Air Volume to C$_{ms}$, V$_{as}$	13,1 l
Mechanical Compliance, C$_{ms}$	192 μm / N
Mechanical Resistance, 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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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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