

10WR300

LOW FREQUENCY TRANSDUCER WR 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
- Designed with MMSS technology for high control, linearity and low harmonic distortion
- Waterproof cone treatment on both sides of the cone
- Extended controlled displacement: X_{max} ± 6 mm
- X_{damage} ± 30 mm
- Low harmonic distortion and linear response
- Wide range of applications of low and mid-low frequencies



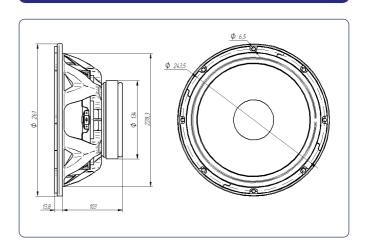
TECHNICAL SPECIFICATIONS

Nominal diameter		250 mm	10 in
Rated impedance			8 Ω
Minimum impedance			6,5 Ω
Power capacity*		300	WAES
Program power			600 W
Sensitivity	95 dB	1W / 1m	@ Z _N
Frequency range		50 - 5.0	000 Hz
Recom. enclosure vol.	15 / 50 I	0,53 / 1	1,77 ft ³
Voice coil diameter	5	0,8 mm	2 in
BI factor		14	,3 N/A
Moving mass		0,	039 kg
Voice coil length			15 mm
Air gap height			8 mm
X _{damage} (peak to peak)		;	30 mm

THIELE-SMALL PARAMETERS**

Resonant frequency, f _s	47 Hz
D.C. Voice coil resistance, R _e	6 Ω
Mechanical Quality Factor, Q _{ms}	3,9
Electrical Quality Factor, Qes	0,31
Total Quality Factor, Qts	0,29
Equivalent Air Volume to C _{ms} , V _{as}	50,5 I
Mechanical Compliance, C _{ms}	292 μm / N
Mechanical Resistance, R _{ms}	2,9 kg / s
Efficiency, η ₀	1,7 %
Effective Surface Area, S _d	$0,035 \text{ m}^2$
Maximum Displacement, X _{max} ***	6 mm
Displacement Volume, V _d	210 cm ³
Voice Coil Inductance, L _e @ 1 kHz	1 mH

DIMENSION DRAWINGS



MOUNTING INFORMATION

Overall diameter	261 mm	10,28 in
Bolt circle diameter	243,5 mm	9,59 in
Baffle cutout diameter:		
- Front mount	230 mm	9,06 in
Depth	115 mm	4,52 in
Net weight	3,5 kg	7,71 lb
Shipping weight	3,9 kg	8,60 lb

Notes

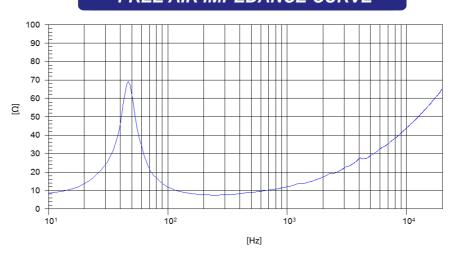
- * The power capacity is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.
- ** T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).
- *** 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.



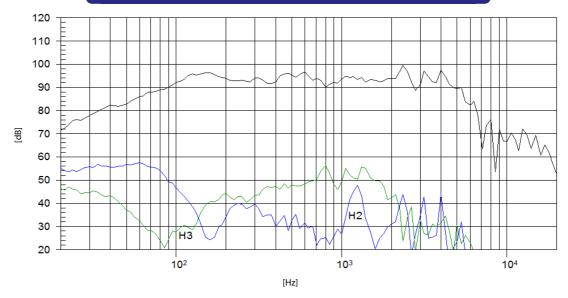
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FREE AIR IMPEDANCE CURVE



FREQUENCY RESPONSE AND DISTORTION



Note: On axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

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