

12WR400

LOW FREQUENCY TRANSDUCER
WR Series

KEY FEATURES

- High power handling: 800 W program power
- 3" copper wire voice coil
- High sensitivity: 97 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} ± 6,3 mm
- X_{damage} ± 30 mm
- Low harmonic distortion and linear response
- Wide range of applications of low and mid-low frequencies



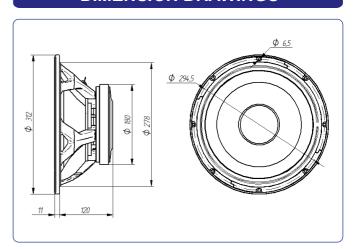
TECHNICAL SPECIFICATIONS

	300 mm	12 in
		8 Ω
		6,5 Ω
	400) W _{AES}
		W 008
97 dB	1W / 1m	n @ Z _N
	45 - 5.0	000 Hz
30 / 100 I	1,06 / 3	3,53 ft ³
	77 mm	3 in
		18 N/A
	0,	062 kg
		16 mm
		8 mm
		30 mm
		400 97 dB 1W / 1m 45 - 5.0 30 / 100 I 1,06 / 3 77 mm

THIELE-SMALL PARAMETERS**

Resonant frequency, f _s	42 Hz
D.C. Voice coil resistance, R _e	5,8 Ω
Mechanical Quality Factor, Q _{ms}	5,6
Electrical Quality Factor, Qes	0,30
Total Quality Factor, Qts	0,28
Equivalent Air Volume to C _{ms} , V _{as}	91,1
Mechanical Compliance, C _{ms}	$229 \mu m / N$
Mechanical Resistance, R _{ms}	2,9 kg / s
Efficiency, η ₀	2,2 %
Effective Surface Area, S _d	$0,053 \text{ m}^2$
Maximum Displacement, X _{max} ***	6,3 mm
Displacement Volume, V _d	334 cm ³
Voice Coil Inductance, L _e @ 1 kHz	1 mH

DIMENSION DRAWINGS



MOUNTING INFORMATION

Overall diameter	312 mm	12,28 in
Bolt circle diameter	294,5 mm	11,59 in
Baffle cutout diameter:		
- Front mount	278 mm	10,94 in
Depth	131 mm	5,16 in
Net weight	5,5 kg	12,12 lb
Shipping weight	6 kg	13,23 lb

Notes

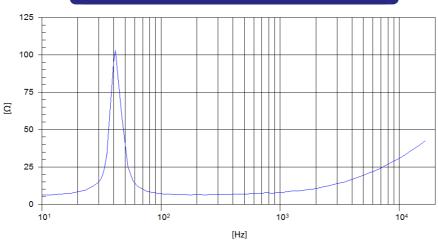
- * The power capacity is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.
- ** T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with 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.



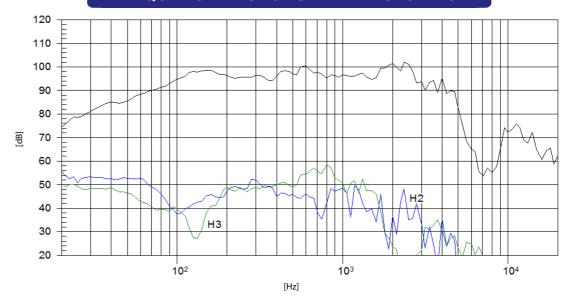
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FREE AIR IMPEDANCE CURVE



FREQUENCY RESPONSE AND DISTORTION



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

beyma //

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