

## 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<sub>max</sub> ± 6 mm
- X<sub>damage</sub> ± 30 mm
- Low harmonic distortion and linear response
- Wide range of applications of low and mid-low frequencies



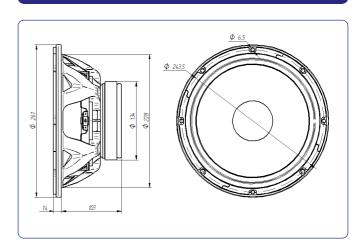
## **TECHNICAL SPECIFICATIONS**

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

## THIELE-SMALL PARAMETERS\*\*

Resonant frequency, f <sub>s</sub>	47 Hz
D.C. Voice coil resistance, R <sub>e</sub>	6,1 Ω
Mechanical Quality Factor, Q <sub>ms</sub>	3,9
Electrical Quality Factor, Q <sub>es</sub>	0,35
Total Quality Factor, Qts	0,32
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	50,9 I
Mechanical Compliance, C <sub>ms</sub>	294 μm / N
Mechanical Resistance, R <sub>ms</sub>	2,9 kg / s
Efficiency, η <sub>0</sub>	1,5 %
Effective Surface Area, S <sub>d</sub>	$0,035 \text{ m}^2$
Maximum Displacement, X <sub>max</sub> ***	6 mm
Displacement Volume, V <sub>d</sub>	210 cm <sup>3</sup>
Voice Coil Inductance, L <sub>e</sub> @ 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	228 mm	8,98 in
Depth	117 mm	4,60 in
Net weight	3,5 kg	7,71 lb
Shipping weight	3,9 kg	8,60 lb

#### Notes

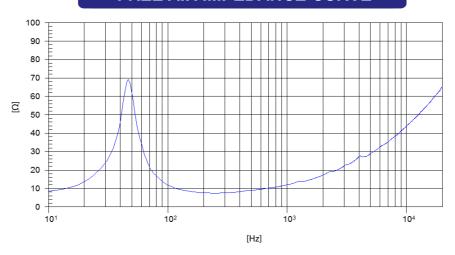
- \* The power capacity is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.
- \*\* T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out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



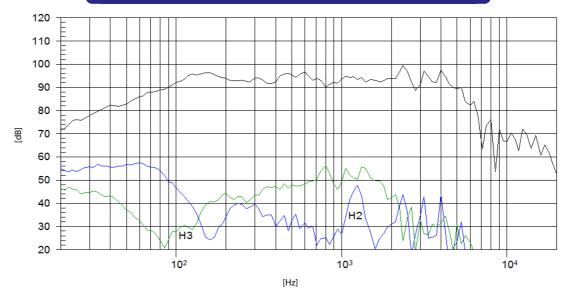
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## FREE AIR IMPEDANCE CURVE



## 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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Polígono Industrial Moncada II • C/. Pont Sec, 1c • 46113 MONCADA - Valencia (Spain)
• Tel.: (34) 96 130 13 75 • Fax: (34) 96 130 15 07 • http://www.beyma.com • E-mail: beyma@beyma.com •