

# 10LW30/N

LOW FREQUENCY TRANSDUCER LW30 Series

### **KEY FEATURES**

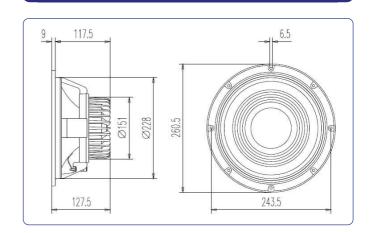
- Low weight: 3,75 kg3" copper voice coil
- Excellent power handling: 450 W<sub>AES</sub>
- High sensitivity: 95 dB
- High performance neodymium magnet system
- Extended controlled displacement: X<sub>MAX</sub> ± 7 mm
- Extra vented magnetic structure
- Designed for compact woofer applications



# **TECHNICAL SPECIFICATIONS**

Nominal diameter Rated impedance		250 mm	10 in 8 Ω
Minimum impedance			6,6 Ω
Power capacity*		450	$W_{AES}$
Program power			900 W
Sensitivity	95 dB	1W / 1m	@ Z <sub>N</sub>
Frequency range		55 - 4.0	000 Hz
Voice coil diameter		77 mm	3 in
BI factor		19	,3 N/A
Moving mass		0,0	052 kg
Voice coil length		17	,5 mm
Air gap height			8 mm
X <sub>damage</sub> (peak to peak)		3	30 mm

# **DIMENSION DRAWINGS**



### THIELE-SMALL PARAMETERS\*\*

Resonant frequency, f <sub>s</sub>	55 Hz
D.C. Voice coil resistance, R <sub>e</sub>	6,2 Ω
Mechanical Quality Factor, Q <sub>ms</sub>	8,5
Electrical Quality Factor, Q <sub>es</sub>	0,30
Total Quality Factor, Qts	0,29
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	28 I
Mechanical Compliance, C <sub>ms</sub>	160 μm / N
Mechanical Resistance, R <sub>ms</sub>	2,1 kg / s
Efficiency, η <sub>0</sub>	1,5 %
Effective Surface Area, S <sub>d</sub>	0,035 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> ***	7 mm
Displacement Volume, V <sub>d</sub>	245 cm <sup>3</sup>
Voice Coil Inductance, L <sub>e</sub> @ 1 kHz	1 mH

#### **MOUNTING INFORMATION**

Overall diameter	260,5 mm	10,25 in
Bolt circle diameter	243,5 mm	9,58 in
Baffle cutout diameter:		
- Front mount	228 mm	9 in
Depth	127,5 mm	5 in
Net weight	3,75 kg	8,25 lb
Shipping weight	4,25 kg	9,35 lb

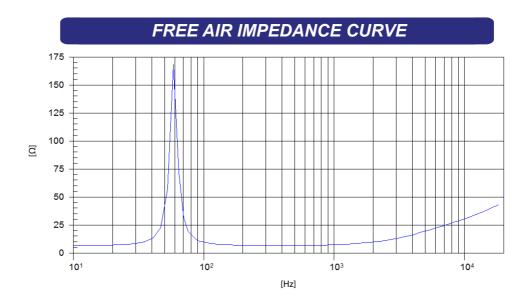
#### Notes

- $^{\star}$  The power capaticty 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  $_{VC}$   $\rm H_{ag})/2$  + (H  $_{ag}/3,5)$  , where L  $_{VC}$  is the voice coil length and H  $_{ag}$  is the air gap height.

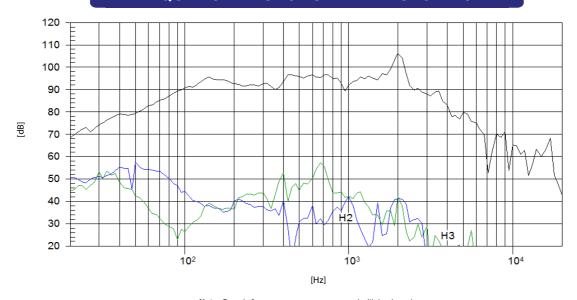


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# FREQUENCY RESPONSE AND DISTORTION



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

# beyma //

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 •