

PROFESSIONAL LOUDSPEAKERS www.beyma.com

15SW1300Nd

LOW FREQUENCY TRANSDUCER SW1600Nd series

KEY FEATURES



- HELICEX® cooling technology
- 1300W AES power handling capacity
- High sensitivity: 97dB@ 2.83v
- Low resonant frequency: 44Hz
- Extended controlled displacement: Xmax ± 10 mm
- Massive mechanical displacement capability: Xpp 60mm
- Exclusive NCR membrane (Neck Coupling Reinforcement)
- Designed with MMSS technology
- 4" DUO double inner/outer voice coil winding
- CONEX Spider with Die Cast Aluminum Ring



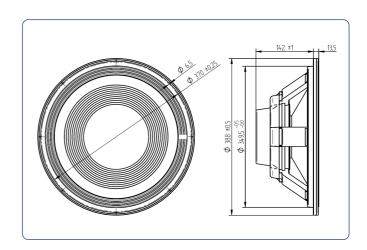
Nominal diameter	380mm. 15 in.
Rated impedance	8 ohms
Minimum impedance	5.8 ohms
Power capacity*	1300 w AES
Program power	2600 w
Sensitivity	97 dB $2.83v @ 1m @ 2\pi$
Frequency range	25 - 1800 Hz
Maximum Recom. Frequency	200 Hz
Recom. enclosure vol.	40 / 150 l 1.4 / 5.3 ft. ³
Voice coil diameter	100 mm. 4 in.
Magnetic assembly weight	6 kg. 13.2 lb.
BL factor	25.1 N / A
Moving mass	0.160 kg.
Voice coil length	25mm
Air gap height	14mm
X damage (peak to peak)	60 mm

THIELE-SMALL PARAMETERS**

Resonant frequency, fs	44Hz
D.C. Voice coil resistance, Re	5.2 ohms
Mechanical Quality Factor, Qms	14.7
Electrical Quality Factor, Qes	0.37
Total Quality Factor, Qts	0.36
Equivalent Air Volume to Cms, Vas	89.61
Mechanical Compliance, Cms	81.5 µ m / N
Mechanical Resistance, Rms	3.02 kg / s
Efficiency, ηο (%)	1.99
Effective Surface Area, Sd (m²)	0.088 m ²
Maximum Displacement, Xmax***	10 mm
Displacement Volume, Vd	836cm ³
Voice Coil Inductance, Le @ 1 kHz	3.45 mH



DIMENSION DRAWINGS



MOUNTING INFORMATION

Overall diameter Bolt circle diameter	388 mm. 15.28 in. 370 mm. 14.57 in.
Baffle cutout diameter:	
- Front mount	350 mm. 13.78 in.
- Rear mount	355 mm. 13.98 in.
Depth	155 mm. 6.10 in.
Volume displaced by driver	7 I 0.25 ft. ³
Net weight	7.7 kg. 16.94 lb.
Shipping weight	8.7 kg. 19.14 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).

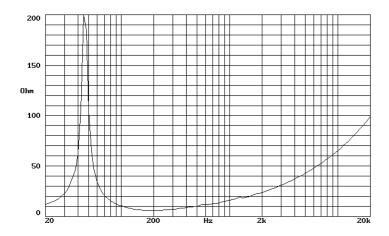
***The Xmax is calculated as (Lvc - Hag)/2 + Hag/3.5, where Lvc is the voice coil length and Hag is the air gap height.



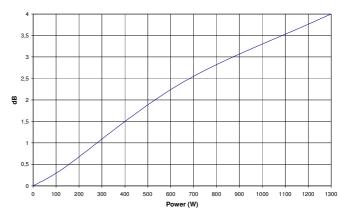
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FREE AIR IMPEDANCE CURVE

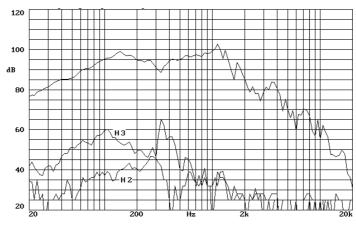


POWER COMPRESSION LOSSES



Note: Power Compression Losses were calculated after 5 minutes period applying a pink noise signal filtered between 25 and 200 Hz.

FREQUENCY RESPONSE AND DISTORTION



Note: on axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, $1 \text{w} \otimes 1 \text{m}$.