

PROFESSIONAL LOUDSPEAKERS www.beyma.com

# 18LX60V2

LOW FREQUENCY TRANSDUCER LX60V2 series

## **KEY FEATURES**

- High power handling: 700 w AES
- High sensitivity: 98 dB
- FEA optimized magnetic circuit
- Designed with MMSS technology for high control, linearity and low harmonic distortion
- CONEX spider for higher resistance and consistency
- Waterproof treatment for both sides of the cone
- 4" DUO double layer inner/outer voice coil
- Extended controlled displacement: Xmax ± 9 mm
- Massive mechanical displacement capability: Xdamage ± 58mm



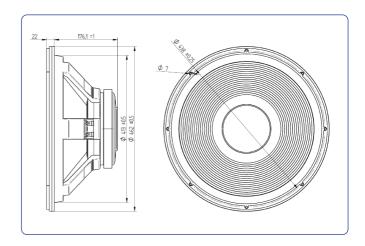
# **TECHNICAL SPECIFICATIONS**

Nominal diameter	460mm. 18 in.
Rated impedance	8 ohms
Minimum impedance	6.4 ohms
Power capacity*	700 w AES
Program power	1400 w
Sensitivity	98 dB 2.83v @ 1m @ 2π
Frequency range	25 - 1000 Hz
Recom. enclosure vol.	80 / 250 I 2.8 / 8.8 ft. <sup>3</sup>
Voice coil diameter	100 mm. 4 in.
Magnetic assembly weight	9 kg. 19.84 lb.
BL factor	21,8 N / A
Moving mass	0.215 kg.
Voice coil length	20 mm
Air gap height	10 mm
X damage (peak to peak)	58 mm

## THIELE-SMALL PARAMETERS\*\*

Resonant frequency, fs	35 Hz
D.C. Voice coil resistance, Re	5.1 ohms
Mechanical Quality Factor, Qms	15.72
Electrical Quality Factor, Qes	0.5
Total Quality Factor, Qts	0.48
Equivalent Air Volume to Cms, Vas	236.521
Mechanical Compliance, Cms	94.5 <b>μ</b> m / N
Mechanical Resistance, Rms	3.04 kg/s
Efficiency, ηο (%)	1.91
Effective Surface Area, Sd (m²)	0.1320 m <sup>2</sup>
Maximum Displacement, Xmax***	9 mm
Displacement Volume, Vd	1178 cm <sup>3</sup>
Voice Coil Inductance, Le @ Zmin	2.1 mH

# **DIMENSION DRAWINGS**



## **MOUNTING INFORMATION**

Overall diameter	460 mm.	18.11 in.
Bolt circle diameter	438 mm.	17.24 in.
Baffle cutout diameter:		
- Front mount	413 mm.	16.26 in.
- Rear mount	418 mm.	16.46 in.
Depth	200 mm.	7.87 in.
Volume displaced by driver	13 l.	0.46 ft. <sup>3</sup>
Net weight	11.7 kg.	25.7 lb.
Shipping weight	13.2 kg.	29.04 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).

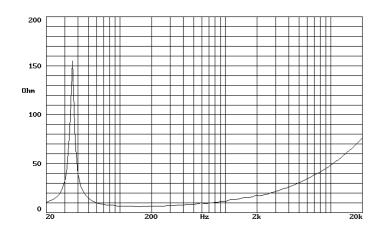
\*\*\*The Xmax is calculated as (Lvc - Hag)/2 + Hag/3.5, where Lvc is the voice coil length and Hag is the air gap height.



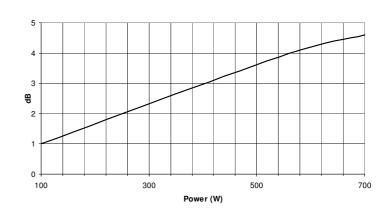
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## FREE AIR IMPEDANCE CURVE

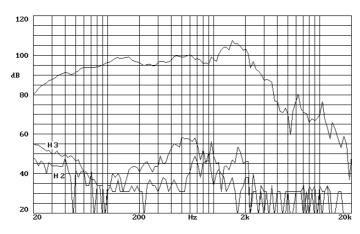


## **POWER COMPRESSION LOSSES**



Note: Power Compression Losses were calculated after 5 minutes period applying a pink noise signal filtered between 50 and 500 Hz.

# FREQUENCY RESPONSE AND DISTORTION



Note: on axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 2.83V @ 1m.

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