

## **18LX60V2** LOW FREQUENCY TRANSDUCER

LX60 Series

## **KEY FEATURES**

- High power handling: 700 WAES
- 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: X<sub>max</sub> ± 9 mm
- Massive mechanical displacement capability:

X<sub>damage</sub> ± 47 mm

## TECHNICAL SPECIFICATIONS

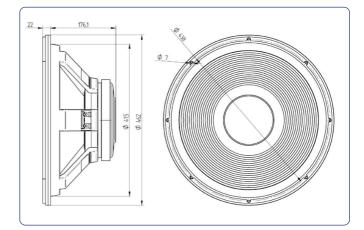
Nominal diameter Rated impedance	460 mm 18 in 8 Ω
Minimum impedance	6,4 Ω
Power capacity*	700 W <sub>AES</sub>
Program power	1400 W
Sensitivity	98 dB 1W @ 1m @ 2π
Frequency range	25 - 1.000 Hz
Recom. enclosure vol.	80 / 250 I 2,8 / 8 ft <sup>3</sup>
Voice coil diameter	100 mm 4 in
Magnetic assembly weight	9 kg 19,84 lb
BI factor	21,8 N/A
Moving mass	0,215 kg
Voice coil length	20 mm
Air gap height	10 mm
X <sub>damage</sub> (peak to peak)	47 mm

### THIELE-SMALL PARAMETERS\*\*

Resonant frequency, f <sub>s</sub> D.C. Voice coil resistance, R <sub>e</sub> Mechanical Quality Factor, Q <sub>ms</sub> Electrical Quality Factor, Q <sub>es</sub> Total Quality Factor, Q <sub>ts</sub> Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	35 Hz 5,1 Ω 15,7 0,5 0,48 236 J
Mechanical Compliance, C <sub>ms</sub>	94,5 μm / N
Mechanical Resistance, R <sub>ms</sub>	3,1 kg / s
Efficiency, η <sub>0</sub>	1,91 %
Effective Surface Area, S <sub>d</sub>	0,132 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> ***	9 mm
Displacement Volume, V <sub>d</sub>	1178 cm <sup>3</sup>
Voice Coil Inductance, L <sub>e</sub> @ 1 kHz	2,1 mH



## **DIMENSION DRAWINGS**



#### **MOUNTING INFORMATION**

Overall diameter Bolt circle diameter	462 mm 438 mm	18,19 in 17,24 in
Baffle cutout diameter:		
- Front mount	415 mm	16,33 in
- Rear mount	418 mm	16,46 in
Depth	200 mm	5,70 in
Volume displaced by driver	13	0,46 ft <sup>3</sup>
Net weight	11,7 kg	25,7 lb
Shipping weight	13,2 kg	29,0 lb

Notes:

\* 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  $_{vc}$  - 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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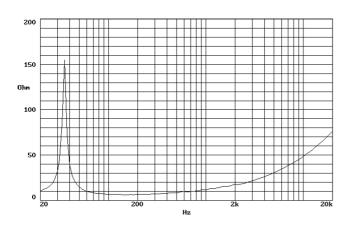
#### **POWER COMPRESSION LOSSES**

LOW FREQUENCY TRANSDUCER

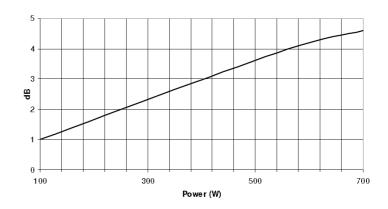
**18LX60V2** 

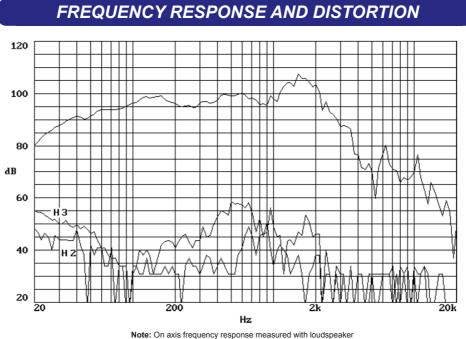
**LX60 Series** 

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FREE AIR IMPEDANCE CURVE





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

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