

18LX60V2/S

LOW FREQUENCY TRANSDUCER

LX60 Series

KEY FEATURES

- High power handling: 700 W_{AES}
- High sensitivity: 98 dB (1W / 1m)
- FEA optimized magnetic circuit
- CONEX spider for higher resistance and consistency
- Weatherproof cone with treatment for both sides of the cone
- 4" DUO double layer in/out voice coil
- Extended controlled displacement: $X_{max} \pm 9 \text{ mm}$
- 47 mm peak-to-peak excursion before damage





TECHNICAL SPECIFICATIONS

| Nominal diameter | 460 mm | 18 in |
|------------------------------------|----------|------------------------|
| Rated impedance | | 8 Ω |
| Minimum impedance | | 6,4 Ω |
| Power capacity ¹ | | 700 W_{AES} |
| Program power ² | | 1.400 W |
| Sensitivity | 98 dB 1W | / 1m @ Z _N |
| Frequency range | 25 | 5 - 1.000 Hz |
| Recom. enclosure | | V _b = 250 I |
| (Bass-reflex design) | | F _b = 35 Hz |
| Voice coil diameter | 101,6 mm | 4 in |
| BI 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) | | 47 mm |

THIELE-SMALL PARAMETERS³

| Resonant frequency, f _s | 35 Hz |
|--|----------------------|
| D.C. Voice coil resistance, R _e | 5,1 Ω |
| Mechanical Quality Factor, Q _{ms} | 15,7 |
| Electrical Quality Factor, Q _{es} | 0,5 |
| Total Quality Factor, Q _{ts} | 0,48 |
| Equivalent Air Volume to C _{ms} , V _{as} | 236 I |
| Mechanical Compliance, C _{ms} | 94,5 μm / N |
| Mechanical Resistance, R _{ms} | 3,1 kg / s |
| Efficiency, η ₀ | 1,9 % |
| Effective Surface Area, S _d | 0,132 m ² |
| Maximum Displacement, X _{max} ⁴ | 8 mm |
| Displacement Volume, V _d | 1056 cm ³ |
| Voice Coil Inductance, L _e @ 1 kHz | 2,1 mH |

¹ The power capaticty is determined according to AES2-1984 (r2003) standard.

² Program power is defined as power capacity + 3 dB.

³ 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).

⁴ 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.

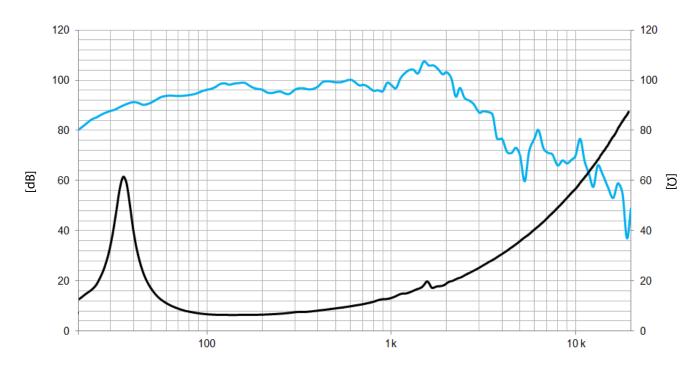
Notes



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[Hz]

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

| Overall diameter | 461 mm | 18,2 in |
|-------------------------|---------|---------|
| Bolt circle diameter | 438 mm | 17,2 in |
| Baffle cutout diameter: | | |
| - Front mount | 415 mm | 16,4 in |
| Depth | 193 mm | 7,6in |
| Net weight | 11,2 kg | 25,8 lb |
| Shipping weight | 12,5 kg | 27,5 lb |
| | | |

MOUNTING INFORMATION

DIMENSION DRAWING

