

12LX60V2 LOW FREQUENCY TRANSDUCER

LX60 Series

KEY FEATURES

- High power handling: 700 W_{AES}
- High sensitivity: 96 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} ± 9 mm
- 47 mm peak-to-peak excursion before damage





TECHNICAL SPECIFICATIONS

Nominal diameter Rated impedance Minimum impedance	300	mm	12 in 8 Ω 7,1 Ω
Power capacity ¹		70	0 W _{AES}
Program power ²			1.400 W
Sensitivity	96 dB	1W / 1	m @ Z _N
Frequency range		35 - 2	2.000 Hz
Recom. enclosure			V _b = 40 I
(Bass-reflex design)		F _b	= 50 Hz
Voice coil diameter	101,6	mm	4 in
BI factor			20 N/A
Moving mass		(),102 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	49 Hz
D.C. Voice coil resistance, R _e	5,1 Ω
Mechanical Quality Factor, Q _{ms}	15,3
Electrical Quality Factor, Q _{es}	0,40
Total Quality Factor, Q _{ts}	0,38
Equivalent Air Volume to C _{ms} , V _{as}	43 I
Mechanical Compliance, C _{ms}	99 μm / N
Mechanical Resistance, R _{ms}	2,1 kg / s
Efficiency, η ₀	1,2 %
Effective Surface Area, S _d	0,055 m ²
Maximum Displacement, X _{max} ⁴	9 mm
Displacement Volume, V _d	500 cm ³
Voice Coil Inductance, L _e @ 1 kHz	2,1 mH

Notes

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).

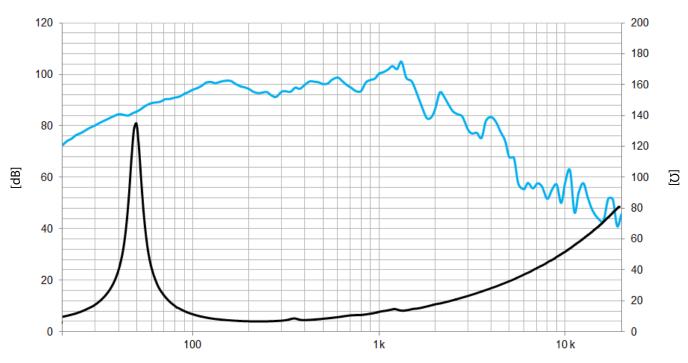
⁴ The X_{max} is calculated as $(L_{vc} - H_{ag})/2 + (H_{ag}/3,5)$, where L_{vc} is the voice coil length and H_{ag} is the air gap height.



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[Hz]

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

MOUNTING INFORMATION				
Overall diameter	312 mm	12,3 in		
Bolt circle diameter	298 mm	11,7 in		
Baffle cutout diameter:				
- Front mount	283 mm	11,1 in		
Depth	122 mm	4,8 in		
Net weight	9,7 kg	21,4 lb		
Shipping weight	10,4 kg	22,9 lb		

MOUNTING INFORMATION

DIMENSION DRAWING

