

18LX60V2 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
- Waterproof cone with treatment for both sides of the cone
- 4" DUO double layer in/out voice coil
- Extended controlled displacement: $X_{max} \pm 8 \text{ mm}$
- 47 mm peak-to-peak excursion before damage



TECHNICAL SPECIFICATIONS

Nominal diameter	460 m	nm	18 in
Rated impedance			8 Ω
Minimum impedance			6,4 Ω
Power capacity ¹		700	W _{AES}
Program power ²		1.4	400 W
Sensitivity	98 dB	1W / 1m	@ Z _N
Frequency range		25 - 1.0	00 Hz
Recom. enclosure		V _b =	= 250 I
(Bass-reflex design)		F, =	35 Hz
Voice coil diameter	101,6 r	nm	4 in
BI factor		21	,8 N/A
Moving mass		0,2	215 kg
Voice coil length		2	20 mm
Air gap height		1	l0 mm
X _{damage} (peak to peak)		Z	l7 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

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:

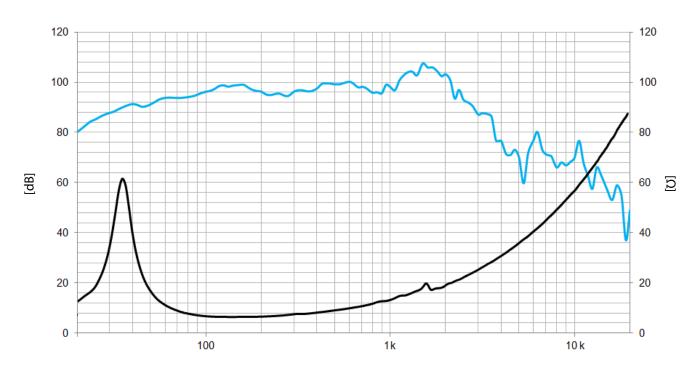
¹ The power capaticty is determined according to AES2-1984 (r2003) standard.



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[Hz]

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

MOU	NTIN	G INF	ORM.	ATION	

Overall diameter	462 mm	18,2 in
Bolt circle diameter	438 mm	17,2 in
Baffle cutout diameter:		
- Front mount	415 mm	16,3 in
Depth	198 mm	7,8 in
Net weight	11,7 kg	25,7 lb
Shipping weight	13,2 kg	29,0 lb

DIMENSION DRAWING

