

**18LX60V2** LOW FREQUENCY TRANSDUCER

#### **LX60 Series**

## **KEY FEATURES**

- High power handling: 700 W<sub>AES</sub>
- 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 <sup>1</sup>		700	W <sub>AES</sub>
Program power <sup>2</sup>		1.4	400 W
Sensitivity	98 dB	1W / 1m	@ Z <sub>N</sub>
Frequency range		25 - 1.0	00 Hz
Recom. enclosure		V <sub>b</sub> =	= 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 <sub>damage</sub> (peak to peak)		Z	l7 mm



### THIELE-SMALL PARAMETERS<sup>3</sup>

Resonant frequency, f <sub>s</sub>	35 Hz
D.C. Voice coil resistance, R <sub>e</sub>	5,1 Ω
Mechanical Quality Factor, Q <sub>ms</sub>	15,7
Electrical Quality Factor, Q <sub>es</sub>	0,5
Total Quality Factor, Q <sub>ts</sub>	0,48
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	236 I
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>	1,9 %
Effective Surface Area, S <sub>d</sub>	0,132 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> <sup>4</sup>	8 mm
Displacement Volume, V <sub>d</sub>	1056 cm <sup>3</sup>
Voice Coil Inductance, L <sub>e</sub> @ 1 kHz	2,1 mH

<sup>2</sup> Program power is defined as power capacity + 3 dB.

<sup>3</sup> 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).

<sup>4</sup> 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:

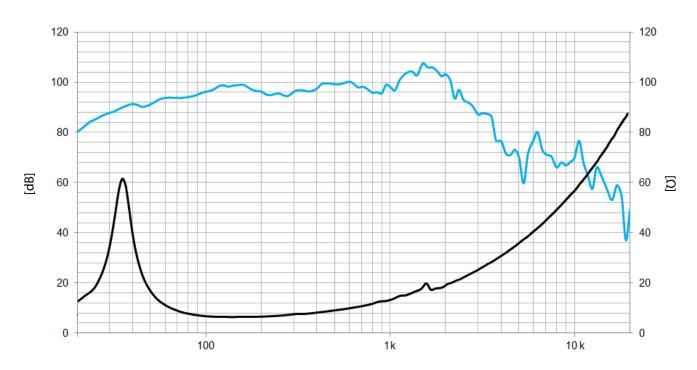
<sup>&</sup>lt;sup>1</sup> The power capaticty is determined according to AES2-1984 (r2003) standard.



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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**

