

21LEX1600Nd

LOW FREQUENCY TRANSDUCER

LEX Series



- High power handling and low distortion 21" subwoofer
- Exclusive Malt Cross® Technology Cooling System
- Low power compression losses
- High sensitivity: 98 dB (1W / 1m)
- FEA optimized neodymium magnetic circuit
- Ultra low air noise
- Optimized non-linear behaviour
- Exclusive NCR membrane (Neck Coupling Reinforcement)

- Waterproof cone with treatment for both sides
- Double silicone spider
- 4" QUATTRO in/out copper voice coil
- Aluminium demodulating ring
- Extended controlled displacement: X_{max} ± 14 mm
- 65 mm peak-to-peak excursion before damage
- Optimized for direct radiation and band-pass subwoofer applications





TECHNICAL SPECIFICATIONS

Nominal diameter	540 mm	21 in
Rated impedance		8 Ω
Minimum impedance		7,2 Ω
Power capacity ¹	1.600 W _{AES}	
Program power ²		3.200 W
Sensitivity	98 dB 1W / 1	1m @ Z _N
Frequency range	30 -	1.000 Hz
Recom. enclosure	\	/ _b = 150 I
(Bass-reflex design)	$F_{b} = 40 \text{ Hz}$	
Voice coil diameter	101,6 mm	4 in
BI factor		36,6 N/A
Moving mass		0,393 kg
Voice coil length		34,5 mm
Air gap height		14 mm
X _{damage} (peak to peak)		65 mm

THIELE-SMALL PARAMETERS 3

Resonant frequency, f _s	30 Hz
D.C. Voice coil resistance, R _e	5,4 Ω
Mechanical Quality Factor, Q _{ms}	8,6
Electrical Quality Factor, Qes	0,30
Total Quality Factor, Qts	0,29
Equivalent Air Volume to C _{ms} , V _{as}	305 I
Mechanical Compliance, C _{ms}	72 μm / N
Mechanical Resistance, R _{ms}	8,6 kg/s
Efficiency, η ₀	2,7 %
Effective Surface Area, S _d	0,1734 m ²
Maximum Displacement, X _{max} ⁴	14 mm
Displacement Volume, V _d	2428 cm ³
Voice Coil Inductance, L _e @ 1 kHz	4,7 mH

Notes

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

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

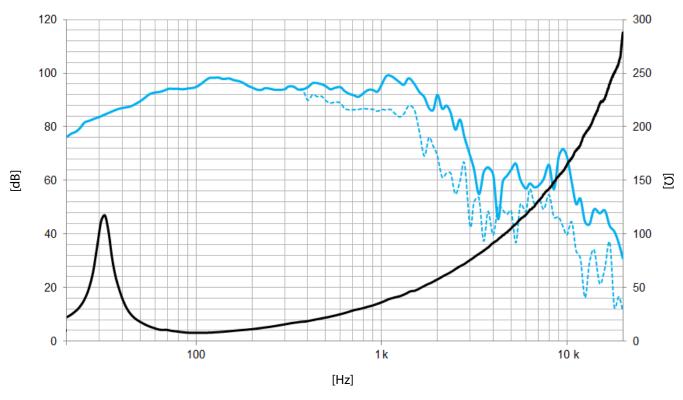
³ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

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



21LEX1600Nd

LOW FREQUENCY TRANSDUCER
LEX Series



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

MOUNTING INFORMATION

Overall diameter	545 mm	21,5 in
Bolt circle diameter	522,5 mm	20,6 in
Baffle cutout diameter:		
- Front mount	492 mm	19,4 in
Depth	268 mm	10,6 in
Volume displaced by driver	11.0 I	0,39 ft ³
Net weight	11,8 kg	26,0 lb
Shipping weight	14,3 kg	31,5 lb

DIMENSION DRAWING

