

15LEX1000Fe

LOW FREQUENCY TRANSDUCER

Lex Series



- High power handling and low distortion 15" subwoofer
- Exclusive Malt Cross® Technology Cooling System
- Low power compression losses
- High sensitivity: 97 dB (1W / 1m)
- · FEA optimized ceramic magnetic circuit
- Ultra low air noise
- · Optimized linear behaviour

- Weatherproof cone with treatment for both sides
- 3,5" DUO in/out copper voice coil
- Extended controlled displacement: X_{max} ± 11 mm
- 51 mm peak-to-peak excursion before damage
- · Optimized for direct radiation and band-pass subwoofer applications





TECHNICAL SPECIFICATIONS

Nominal diameter	380 mm	15 in
Rated impedance		8 Ω
Minimum impedance		7,4 Ω
Power capacity 1	1.0	000 W _{AES}
Program power ²		2.000 W
Sensitivity	97 dB 1W /	1m @ Z _N
Frequency range	40 -	1.000 Hz
Recom. enclosure	,	V _b = 115 I
(Bass-reflex design)	F	_b = 42 Hz
Voice coil diameter	88,9 mm	3,5 in
BI factor		23,2 N/A
Moving mass		0,142 kg
Voice coil length		27 mm
Air gap height		12 mm
X _{damage} (peak to peak)		51 mm

THIELE-SMALL PARAMETERS3

Resonant frequency, f _s	41 Hz
D.C. Voice coil resistance, R _e	5,4 Ω
Mechanical Quality Factor, Q _{ms}	5,1
Electrical Quality Factor, Q _{es}	0,37
Total Quality Factor, Qts	0,34
Equivalent Air Volume to C _{ms} , V _{as}	116 I
Mechanical Compliance, C _{ms}	106 μm / N
Mechanical Resistance, R _{ms}	7,2 kg / s
Efficiency, η ₀	2,1 %
Effective Surface Area, S _d	$0,088 \text{ m}^2$
Maximum Displacement, X _{max} ⁴	11 mm
Displacement Volume, V _d	968 cm ³
Voice Coil Inductance, Le	1,7 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).

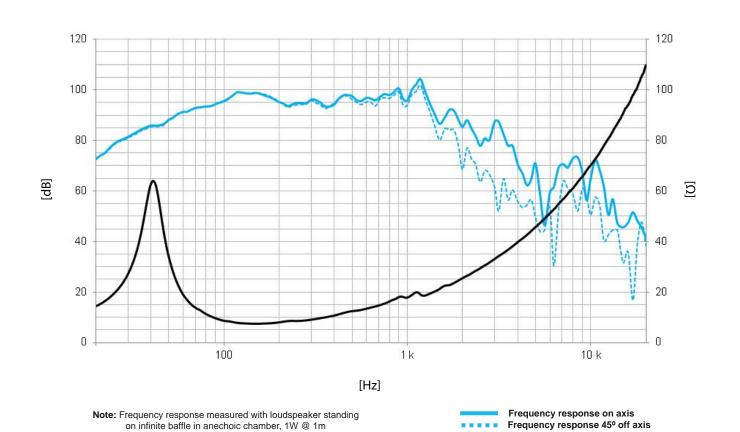
⁴ The X_{max} is calculated as (L_{vc} - H_{ag})/2 + (H_{ag}/3,5), where L_{vc} is the voice coil length and H_{ag} is the air gap height.



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MOUNTING INFORMATION

Overall diameter 393 mm 15,5 in **Bolt circle diameter** 373 mm 14,7 in Baffle cutout diameter: - Front mount 352 mm 13,9 in 7,2 in **Depth** 182 mm Volume displaced by driver 5,01 0,18 ft³ **Net weight** 11,0 kg 24,2 lb 12,0 kg 26,4 lb **Shipping weight**

DIMENSION DRAWING

