



LF21N451

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Description

The LF21N451 is a very high power handling and efficiency transducer specially designed to provide powerful and accurate sub-bass frequencies with low distortion and low power compression. The height of the voice coil has been specifically designed to improve the excursion and linearity at very low frequencies. The LF21N451 uses a special RCF developed carbon fibre + nylon + cellulose composite pulp which reinforces and improves the rigidity of the cone structure.

The new pulp and the large triple roll surround along double silicon spider system ensure excellent control and makes the cone resistant to deformation caused by very large displacements and pressure created by the transducer's high excursion behaviour. A fully optimised T-pole design generate the minimum amount of flux modulation. The dual-forced air venting system provides a very efficient voice coil ventilation to minimize the power compression.

Features

- › 4,5 - inch Inside/Outside copper voice coil
- › 3000 Watt continuous program power handling
- › 98.5 dB Sensitivity
- › 30 Hz - 1 kHz Frequency range
- › Dual-forced air ventilation for minimum power compression
- › Dual spider designed with silicon based damping control
- › BL of 34.5 Txm to provide a faster and accurate low frequency

Part Number

11100043 LF21N451

8ohm



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TECHNICAL SPECIFICATIONS

General specifications

Nominal Diameter	21 inch / 533 mm
Rated Impedance	8 ohm
Program Power (watt)	3000 W
Power handling capacity	1500 W
Sensitivity	98.5 dB
Frequency range	30 - 1000 Hz
Effective piston diameter	470 mm / 18.5 inch
Max. Excursion Before Damage	58 mm / 2.28 inch
Minimum Impedance (ohm)	7.1 ohm
Voice Coil Diameter	4.5 inch / 114 mm
Voice Coil Winding Material	Copper
Voice Coil Length	34 mm / 1.34 inch
Number of layers	2
Kind of layers	inside/outside
Top Plate Thickness	15 mm / 0.59 inch
Cone Design	Curved
Surround Material	Polycotton
Surround Design	Triple roll
Magnets	Neodymium
Dual-force air ventilation	Yes
Spider	Dual with silicon based damping control

Thiele - small parameters

Resonance frequency (Fs)	30 Hz
DC resistance (Re) (ohm)	5.60 ohm
Mechanical factor	6.10 Qms
Electrical factor	0.27 Qes
Total factor	0.26 Qts
Bl factor (Bl) (T x m)	34.50 T x m
Effective moving mass (Mms)	315.0 g
Equivalent Cas air loaded (Vas)	375.0 liters
Effective piston area (Sd)	0.170 m ²
Max. linear excursion (Xmax)	13 mm
Voice coil inductance @ 1kHz (Le1k)	3.00 mH
Half-space efficiency (Eff)	4.00%

Mounting information

Overall diameter	547 mm / 21.54 inches
Bolt circle diameter	527 mm / 20.75 inch
Bolt hole diameter	7 mm / 0.28 inch
Front mount baffle cut-out	512 mm / 20.16 inch
Rear mount baffle cut-out	512 mm / 20.16 inch
Volume occupied by the driver	6.5 liters / 0.26 ft ³

Standard compliance

Safety agency	CE compliant
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Size / Weight	Height	249 mm / 9.8 inches
	Diameter	547 mm / 21.54 inches
	Weight	10.9 kg / 24.03 lbs



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Line Art 2D

