

LF21N451

WOOFER

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

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
Effettive piston area (Sd):	0.170 m ²
Max. linear excursion (Xmax):	13.0 mm
Voice coil inductance @ 1kHz (Le1k):	3.00 mH
Half-space efficiency (Eff):	4.00%

Mounting informations

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

CE marking:	Yes
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Size	Height:	249 mm / 9.8 inches
	Diameter:	547 mm / 21.54 inches
	Weight:	10.9 kg / 24.03 lbs

Shipping informations	Package Height:	284 mm / 11.18 inches
	Package Width:	584 mm / 22.99 inches
	Package Depth:	604 mm / 23.78 inches
	Package Weight:	13.5 kg / 29.76 lbs

PART NUMBER

- **11100043**
LF21N451
8ohm



