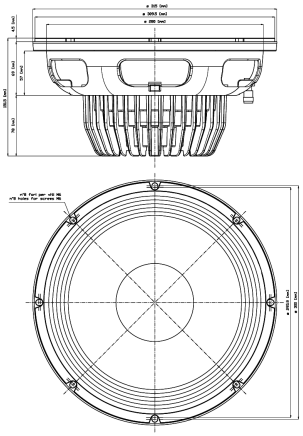
12NLW9300 8Ω

LF drivers - 12.0 Inches





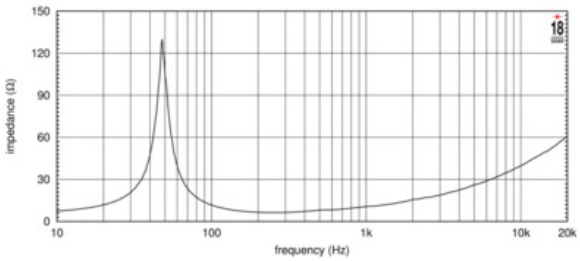
- 97 dB SPL 1W / 1m average sensitivity
- 100 mm (4in) Interleaved Sandwich ISV aluminum voice coil
- 800 W AES power handling
- Carbon fiber reinforced cone
- Double Demodulating Rings (DDR) for lower distortion
- External neodymium magnet assembly
- Weather protected cone and plates for outdoor usage
- Improved dissipation via onboard aluminum heatsink and multi-cell air diffractor
- Recommended for two way and multiway systems

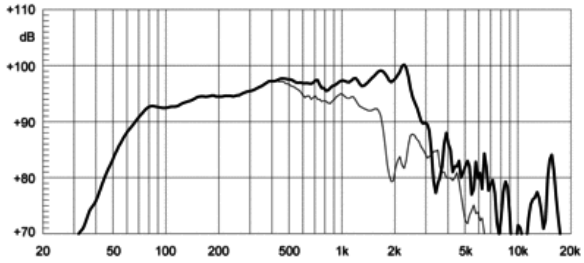
The 12NLW9300 is a high performance low frequency neodymium loudspeaker. It is intended mainly as woofer for two way systems and works extremely well in compact vented enclosures (30 - 70 lit). The neo magnet external assembly assures high flux concentration, low power compression and excellent heat exchange. The external magnet configuration is considerably more efficient than the traditional under-pole magnet topology. This allows to obtain high levels of force factor and power handling with a power to weight ratio at the upper level. The aluminum heatsink has been studied according to F.E.A. simulators, improving the voice coil heat transfer. The direct contact between the heatsink the basket and the magnetic structure is a fundamental improvement in heat dissipation, increasing power handling capabilities and lowering power compression figure. A special low density multi-cell material air diffractor has been also placed into the backplate venting hole, acting as a cooling system, furtherly increasing power handling capability and lowering the power compression figure. A state-of-the-art Interleaved Sandwich Voice coil (ISV) provides high levels of thermal stability and durability. The ISV technology is based on a high strength fiberglass former with half the coil wound on the outside and half on the inside ensuring uniform thermal dissipation on both sides, bonded together using unique high- temperature resin adhesives achieving a balanced and solid linear motor unit. The 12NLW9300 performances are further improved by the use of Double Demodulation Rings (DDR), designed to reduce dramatically the intermodulation and harmonic distortion whilst improving the transient response. The 12NLW9300 design features a dedicated exclusive Carbon fibre reinforced straight ribbed cone

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LF drivers - 12.0 Inches





SPECIFICATIONS

Nominal Diameter	300 mm (in)
Nominal Impedance	8 Ω
Minimum Impedance	5.7 Ω
Nominal Power Handling[1]	800 W
Continuous Power Handling[2]	1200 W
Sensitivity[3]	97.0 dB
Frequency Range	45 - 3200 Hz
Voice Coil Diameter	100 mm (4.0 in)
Winding Material	aluminum

DESIGN

Surround Shape	Triple roll
Cone Shape	Straight
Magnet Material	Neo
Woofer Cone Treatment	Water,UV repellent
Recommended Enclosure	50.0 dm^3 (1.77 ft^3)
Recommended Tuning	42 Hz

PARAMETERS[4]

Resonance Frequency	47 Hz
Re	4.7 Ω
Qes	0.45
Qms	5.5
Qts	0.42
Vas	56.0 dm^3 (1.98 ft^3)
Sd	531.0 cm^2 (82.31 in^2)
Xmax	8.0 mm
Mms	82.0 g
Bl	17.0 Txm
Le	0.53 mH
EBP	104 Hz

MOUNTING AND SHIPPING INFO

Overall Diameter	315 mm (12.4 in)
Bolt Circle Diameter	296 mm (11.65 in)
Baffle Cutout Diameter	282.0 mm (11.1 in)
Depth	153 mm (6.02 in)
Flange and Gasket Thickness	17 mm (0.67 in)
Net Weight	6.2 kg (13.67 lb)
Shipping Weight	7.0 kg (lb)
Shipping Box	332 x 332 x 184 mm (13.07x13.07x7.24 in)

1. 2 hours test made with continuous pink noise signal within the range Fs-10Fs. Power calculated on rated minimum impedance. Loudspeaker in free air.
2. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
3. Applied RMS Voltage is set to 2.83 V for 8 ohms Nominal Impedance.
4. Thiele-Small parameters are measured after a high level 20 Hz sine wave preconditioning test.

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