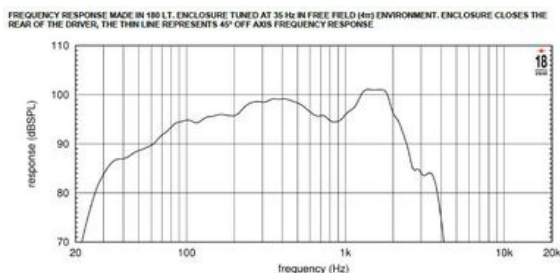
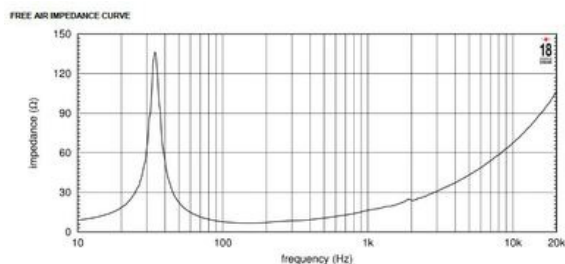




- 135mm (5.3in) ISV
- 3600W program power handling
- Ultra linear dual magnet motor design
- Composite reinforced ribbed cone

The 18NLW900 is a low frequency 18 inch neodymium high performance transducer and has been optimized for direct radiation and bandpass subwoofer cabinet designs. For optimum results recommended amplifier should be able to deliver 3600 Watt program power without clipping. At the heart of the updated design stays the improved double silicon spider based on DSS technology, letting the 18NLW9000 being able to control the moving mass with high linearity, showing an exceptional stability of mechanical parameter values in the long term. The transducer design features include a high performance large displacement suspension system for improved cone control at very high level of SPL matching. Eighteen Sound engineers have obtained the best possible results with today's available materials in terms of clean and undistorted LF reproduction at a ultra high SPL, with the lowest possible power compression figure. The state-of-the-art 5,3" diameter ISV copper voice coil is an inside-outside split winding, four layers design, enabling the 18NLW9000 to handle up to 3600W program power. Bl force factor, as well as all other electro-dynamic parameters, are linear within the working range allowing 60mm of excursion before damage.

The 18NLW9000 has been developed after intense FEA and fluidodynamics simulation and testing, focusing on dissipating the heat generated by the powerful 5.3" coil. Special attention was given to the optimization of air flow into the gap without introducing audible noise. A special low density material air diffractor placed into the backplate acts as a cooling system, increasing the power handling capability and lowering the power compression figure. The low distortion and sound quality are further improved by an aluminum demodulating ring (SDR technology) that flatten impedance and phase with a constant power transfer. The carbon fiber reinforced, straight ribbed cone shows a proprietary resin treatment for extra pulp strength and water repellent properties. A special coating applied to both the top and back plates makes the transducer far more resistant to the corrosive effects of salts and oxidization.



SPECIFICATIONS

Nominal Impedance	8 Ω
Minimum Impedance	6.7 Ω
Nominal Power Handling ¹	1800 W
Continuous Power Handling ²	3600 W
Sensitivity ³	97.0 dB
Frequency Range	32 - 2500 Hz
Voice Coil Diameter	135 mm (5.31 in)

DESIGN

Recommended Enclosure	200.0 dm ³ (7.06 ft ³)
Recommended Tuning	36 Hz

PARAMETERS⁴

Resonance Frequency	34 Hz
Re	5.5 Ω
Qes	0.32
Qms	7.0
Qts	0.31
Vas	206.0 dm ³ (7.27 ft ³)
Sd	1222.0 cm ² (189.41 in ²)
Xmax	14.0 mm
Mms	218.0 g
Bl	28.0 Txm
Le	1.9 mH
EBP	106 Hz

MOUNTING AND SHIPPING INFO

Overall Diameter	462 mm (18.19 in)
Bolt Circle Diameter	440 mm (17.32 in)
Baffle Cutout Diameter	422.0 mm (16.61 in)
Depth	237 mm (9.35 in)
Flange and Gasket Thickness	26 mm (1.02 in)
Net Weight	12.5 kg (27.56 lb)
Shipping Weight	14.0 kg (30.86 lb)
Shipping Box	482 x 482 x 257 mm (18.98x18.98x10.12 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.