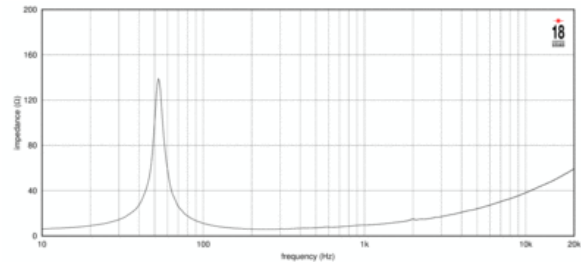
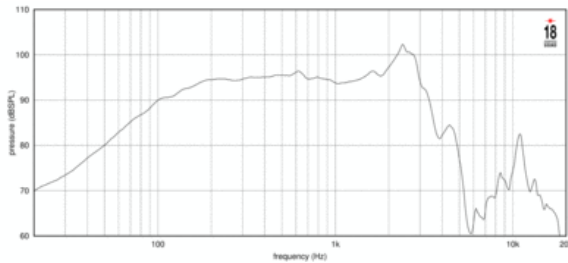


- 98dB SPL 1W/1m average sensitivity
- 88mm ISV voice coil
- 800 WAES power handling
- Extremely balanced BL
- Ideal for two ways and line array high power applications

The 12NW350 meets the specific market requirement for a loudspeaker which combines the excellent linearity, good efficiency and high power handling of the 12NTLW3500 model but in a traditional chassis for use in more compact systems. It is primarily intended for application in multiway systems and high power linearrays. The curvilinear paper cone has been made from a special high strength woodpulp designed to achieve the best possible linearity within its intended frequency range and to control bell-mode resonances around the cone circumference. Triple roll suspension made from a polycotton material which is more resistant to aging and fatigue than traditional cotton-based ones. The 88 mm (3 inch) diameter CCAW voice coil employs the Interleaved Sandwich Voice coil (ISV) technology, in which a high strength fiberglass former carries windings on both the outer and inner surfaces to achieve a mass balanced coil. This results in an extremely linear motor assembly with a reduced tendency for eccentric behavior when driven hard. The magnetic structure has been optimized using FEACAD resource to maximize the flux density in the voice coil gap. Voice coil cooling has been achieved by incorporating airways between the chassis back plate and the top plate of the magnet, allowing heated air from the voice coil and gap to be channeled away and dissipated by the chassis basket. Due to the increasing use of audio systems at outdoor events, the ability to perform in adverse weather conditions or in high-humidity areas is an essential feature of the 12NW350. This has been achieved using an exclusive cone and magnet plate treatment process which increases resistance to corrosion and renders the cone water repellent.



SPECIFICATIONS

Nominal Impedance	8 Ω
Minimum Impedance	5.8 Ω
Nominal Power Handling ¹	800 W
Continuous Power Handling ²	1600 W
Sensitivity ³	98.0 dB
Frequency Range	50 - 3500 Hz
Voice Coil Diameter	88 mm (3.5 in)
Winding Depth	22.0 mm (0.87 in)
Magnetic Gap Depth	11.0 mm (0.43 in)

DESIGN

Surround Shape	Triple roll
Cone Shape	Straight
Magnet Material	Neo
Woofer Cone Treatment	Reinforced, water repellent, treated paper
Recommended Enclosure	30.0 dm ³ (1.06 ft ³)
Recommended Tuning	58 Hz

PARAMETERS⁴

Resonance Frequency	54 Hz
Re	5.0 Ω
Qes	0.35
Qms	12.0
Qts	0.34
Vas	46.0 dm ³ (1.62 ft ³)
Sd	531.0 cm ² (82.31 in ²)
η _o	2.0 %
X _{max}	8.3 mm
X _{var}	7.5 mm
M _{ms}	75.0 g
Bl	19.2 T·xm
Le	0.85 mH
EBP	154 Hz

MOUNTING AND SHIPPING INFO

Overall Diameter	310 mm (12.2 in)
Bolt Circle Diameter	295 mm (11.61 in)
Baffle Cutout Diameter	283.0 mm (11.14 in)
Depth	150 mm (5.91 in)
Flange and Gasket Thickness	13 mm (0.51 in)
Net Weight	5.1 kg (11.24 lb)
Shipping Weight	5.6 kg (12.35 lb)

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.