

- 102 dB SPL 1W / 1m average sensitivity
- 75 mm (3 in) Interleaved Sandwich Voice coil (ISV)
- 450 WAES power handling
- Neodymium magnet assembly
- Very shallow profile, 124 mm (4,9 in)
- Water resistant cone
- Suitable for midrange and mid-bass loaded applications

The 12ND610 is an extremely high output neodymium mid-bass transducer perfect for high quality professional systems. It has been designed for midrange and midbass frequency reproduction in horn-loaded, as well as bass-reflex compact enclosures.

The transducer's extremely powerful neodymium magnet assembly assures high flux concentration, low power compression and excellent heat exchange. The levels of force factor and power handling result in the best power to weight ratio on the market today.

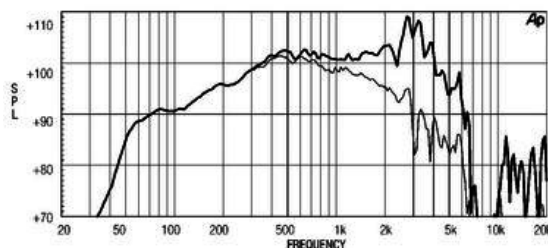
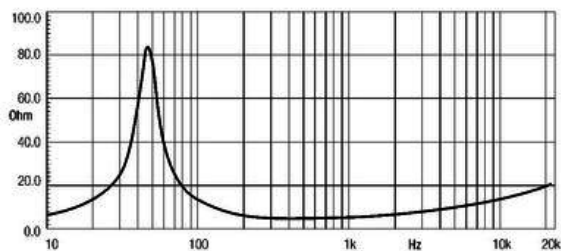
12ND610 curvilinear paper cone has been designed by 18 Sound engineers with a special high-strength wood pulp to achieve the best possible linearity within its intended frequency range and to control bell-mode resonances around the cone circumference.

Its cone is capable of carrying significant loadings thanks to a dedicated reinforcing treatment. The cone is carried by a multiroll suspension built from a linen-like material, which is more resistant to aging and fatigue than traditional materials.

The 75 mm (3 in) state-of-the-art inside outside voice coil is similar to the one fitted to our top-of-the-range 18" and 15" models but it's wound with aluminum wire. It 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.

The final result is an extremely linear motor assembly with a reduced tendency for eccentric behavior when driven hard.

A proprietary humidity-block cone treatment makes the transducer suitable for outdoor use in adverse weather conditions. In addition, a special coating applied to both the top and back plates makes the 12ND610 far more resistant to the corrosive effects of salts and oxidation.



SPECIFICATIONS

Nominal Diameter	300 mm (in)
Nominal Impedance	8 Ω
Minimum Impedance	4.2 Ω
Nominal Power Handling ¹	450 W
Continuous Power Handling ²	700 W
Sensitivity ³	102.0 dB
Frequency Range	80 - 5500 Hz
Voice Coil Diameter	75 mm (3.0 in)
Winding Material	aluminum

DESIGN

Surround Shape	Triple roll
Cone Shape	Curvilinear
Magnet Material	Neo
Woofer Cone Treatment	Weather protected
Recommended Enclosure	25.0 dm ³ (0.88 ft ³)
Recommended Tuning	50 Hz

PARAMETERS⁴

Resonance Frequency	46 Hz
Re	5.9 Ω
Qes	0.15
Qms	4.3
Qts	0.14
Vas	94.4 dm ³ (3.33 ft ³)
Sd	531.0 cm ² (82.31 in ²)
Xmax	3.5 mm
Mms	49.0 g
Bl	24.0 Txm
Le	1.17 mH
EBP	306 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	124 mm (4.88 in)
Flange and Gasket Thickness	11 mm (0.43 in)
Net Weight	3.9 kg (8.6 lb)
Shipping Weight	4.6 kg (10.14 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 F_s -10 F_s . 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.