



- 101 dB SPL 1W / 1m average sensitivity
- 75 mm (3 in) Interleaved Sandwich Voice coil (ISV)
- 450 WAES power handling
- Neodymium magnet assembly
- Humidity resistant cone
- Suitable for midbass frequency reproduction

The 12ND610 has been specifically designed for use either as a midbass driver in compact 2-way reflex enclosures or as a direct radiating or horn loaded, dedicated midrange driver, in multi-way touring and fixed installation concert and arena systems.

The neodymium magnet assembly assures high flux concentration, low power compression and excellent heat exchange because the external magnet configuration is considerably more efficient than traditional under-pole magnet topology.

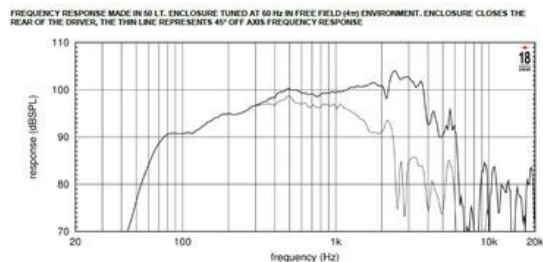
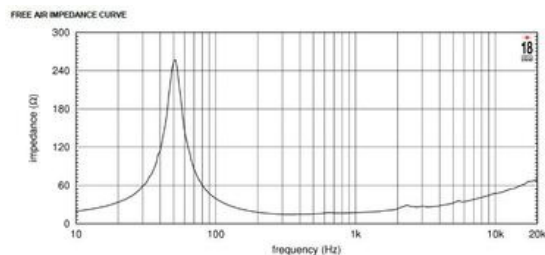
Consequently, high levels of force factor and power handling with an optimum power to weight ratio have been achieved.

Direct coupling of the special design basket and magnetic assembly with the large heat sink facilitates thermal flux through the ambient air, increasing the power handling capabilities and lowering the power compression.

The curvilinear paper cone has been created with a special high strength wood pulp designed to achieve the best possible linearity within its intended frequency range and to control bell-mode resonances around the cone circumference. The cone is carried by a multiroll suspension formed from a linen-like material which is more resistant to aging and fatigue than traditional materials.

The 12ND610 implements Interleaved Sandwich Voice coil technology (ISV), in which an aluminum coil is wound inside and outside a high strength fiberglass former, providing a better thermal and mechanical performance than conventional coils.

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 oxidization.



SPECIFICATIONS

Nominal Diameter	300 mm (in)
Nominal Impedance	16 Ω
Minimum Impedance	14.5 Ω
Nominal Power Handling ¹	450 W
Continuous Power Handling ²	700 W
Sensitivity ³	101.0 dB
Frequency Range	80 - 5000 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	40.0 dm ³ (1.41 ft ³)
Recommended Tuning	65 Hz

PARAMETERS⁴

Resonance Frequency	50 Hz
Re	11.9 Ω
Qes	0.22
Qms	4.56
Qts	0.21
Vas	85.0 dm ³ (3.0 ft ³)
Sd	530.0 cm ² (82.15 in ²)
Xmax	3.5 mm
Mms	45.0 g
Bl	27.9 Txm
Le	0.76 mH
EBP	227 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	141 mm (5.55 in)
Flange and Gasket Thickness	11 mm (0.43 in)
Net Weight	4.7 kg (10.36 lb)
Shipping Weight	5.1 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 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.