



- 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.

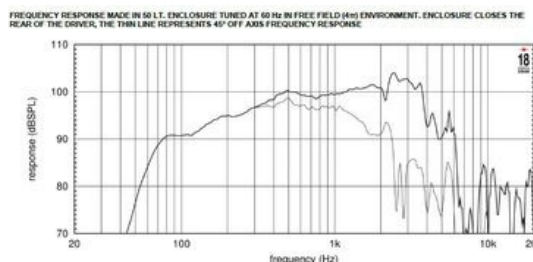
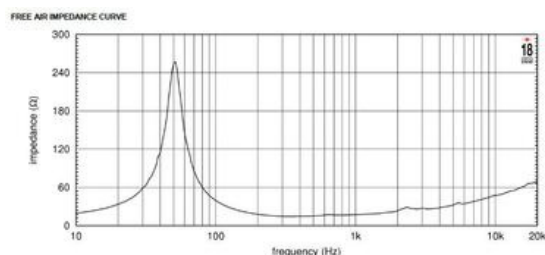
Consequently, high levels of force factor and power handling with an optimum power to weight ratio have been achieved.

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 <sup>1</sup>    | 450 W          |
| Continuous Power Handling <sup>2</sup> | 700 W          |
| Sensitivity <sup>3</sup>               | 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  |
| Woofers Cone Treatment | Weather protected                            |
| Recommended Enclosure  | 40.0 dm <sup>3</sup> (1.41 ft <sup>3</sup> ) |
| Recommended Tuning     | 65 Hz  |

### PARAMETERS<sup>4</sup>

|                     |  |
|---------------------|--|
| Resonance Frequency | 50 Hz  |
| Re                  | 11.9 Ω   |
| Qes                 | 0.22   |
| Qms                 | 4.56   |
| Qts                 | 0.21   |
| Vas                 | 85.0 dm <sup>3</sup> (3.0 ft <sup>3</sup> )    |
| Sd                  | 530.0 cm <sup>2</sup> (82.15 in <sup>2</sup> ) |
| 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 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.