



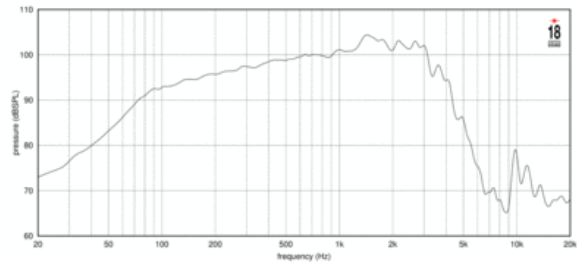
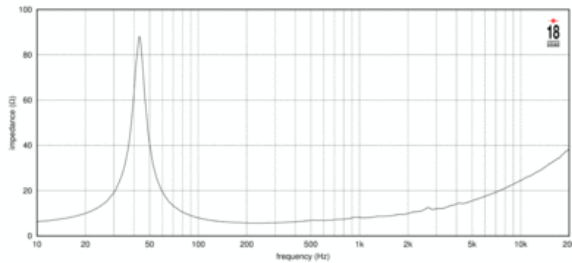
- 99 dB SPL 1W / 1m average sensitivity
- 75 mm (3 in) Aluminum voice coil
- 600W AES power handling
- Optimized and improved neodymium magnet assembly
- Demodulating Ring (SDR) for lower distortion
- Humidity resistant cone
- Ideal for two way systems and for high loading compact subwoofer applications
- External neodymium magnet assembly
- Weather protected cone and plates for outdoor usage
- Recommended for multiway systems and studio monitoring applications

The 15ND840 is a high power, high output, extended low frequency neodymium transducer which meets the most stringent requirements in high quality professional transducers and represents the updated version of the 18sound flagship (15ND830) to which is a direct replacement with improved construction.

The high level of performance and sound quality have been achieved by exploiting the most advanced technologies available today. Thanks to its versatility, the 15ND840 can be used in 2-way compact reflex enclosures, in multiway systems and in high loading sub woofers as small as 70 lt (compact reflex, bandpass and horn loaded configurations).

The neodymium magnet assembly assures high flux concentration, low power compression and excellent heat exchange. This results in high levels of force factor and power handling with an optimum power to weight ratio.

The deep profile curvilinear cone, created from a special high strength wood pulp, has been designed to achieve the best possible linearity within its frequency range. The cone surround, made is highly resistant to aging and fatigue. The in-house developed cone treatment is a humidity repellent and significantly dampens bell mode resonances. The 75mm (3in) aluminum voice coil assembly is wound on a strong fibreglas former to improve force transmission and power handling. The already low distortion and sound quality are further improved by Demodulating Ring (SDR) that flatten impedance and phase with a constant power transfer.



### SPECIFICATIONS

|                                     |                   |
|-------------------------------------|-------------------|
| Nominal Impedance                   | 8 Ω               |
| Minimum Impedance                   | 5.7 Ω             |
| Nominal Power Handling <sup>1</sup> | 600 W             |
| Sensitivity <sup>2</sup>            | 99.0 dB           |
| Frequency Range                     | 38 - 4000 Hz      |
| Voice Coil Diameter                 | 75 mm (2.95 in)   |
| Winding Material                    | aluminum          |
| Winding Depth                       | 23.5 mm (0.93 in) |
| Magnetic Gap Depth                  | 9.0 mm (0.35 in)  |

### DESIGN

|                       |                                               |
|-----------------------|-----------------------------------------------|
| Surround Shape        | M-roll                                        |
| Magnet Material       | Neo                                           |
| Woofer Cone Treatment | Weather protected                             |
| Recommended Enclosure | 100.0 dm <sup>3</sup> (3.53 ft <sup>3</sup> ) |
| Recommended Tuning    | 45 Hz                                         |

### PARAMETERS<sup>3</sup>

|                     |                                                 |
|---------------------|-------------------------------------------------|
| Resonance Frequency | 43 Hz                                           |
| Re                  | 5.0 Ω                                           |
| Qes                 | 0.39                                            |
| Qms                 | 6.6                                             |
| Qts                 | 0.37                                            |
| Vas                 | 163.0 dm <sup>3</sup> (5.76 ft <sup>3</sup> )   |
| Sd                  | 881.4 cm <sup>2</sup> (136.62 in <sup>2</sup> ) |
| η <sub>o</sub>      | 3.1 %                                           |
| X <sub>max</sub>    | 9.5 mm                                          |
| X <sub>var</sub>    | 10.0 mm                                         |
| M <sub>ms</sub>     | 94.0 g                                          |
| Bl                  | 17.9 T·xm                                       |
| Le                  | 0.43 mH                                         |
| EBP                 | 110 Hz                                          |

### MOUNTING AND SHIPPING INFO

|                             |                                           |
|-----------------------------|-------------------------------------------|
| Overall Diameter            | 393 mm (15.47 in)                         |
| Bolt Circle Diameter        | 371 mm (14.61 in)                         |
| Baffle Cutout Diameter      | 354.0 mm (13.94 in)                       |
| Depth                       | 184 mm (7.24 in)                          |
| Flange and Gasket Thickness | 13 mm (0.53 in)                           |
| Net Weight                  | 4.7 kg (10.36 lb)                         |
| Shipping Weight             | 5.6 kg (12.35 lb)                         |
| Shipping Box                | 405 x 405 x 260 mm (15.94x15.94x10.24 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. Applied RMS Voltage is set to 2.83 V for 8 ohms Nominal Impedance.
3. Thiele-Small parameters are measured after a high level 20 Hz sine wave preconditioning test.