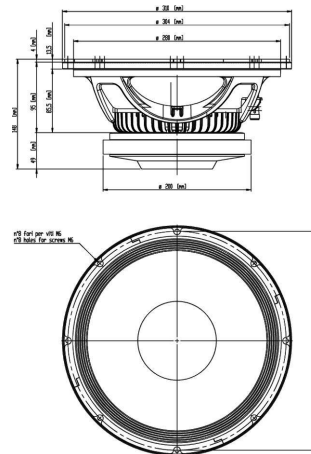
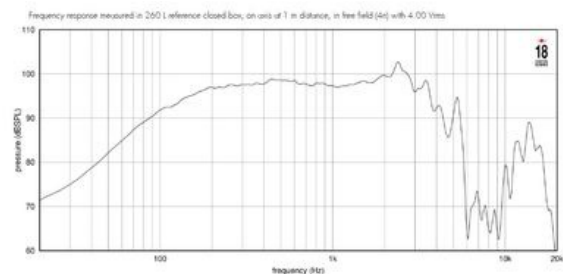
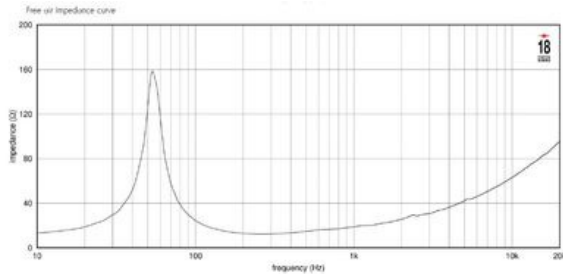




- 98 dB SPL 1W / 1m average sensitivity
- 75 mm (3 in) Interleaved Sandwich Voice coil (ISV)
- 1200 W program power handling
- Long excursion, linear travel suspension design
- Weather protected cone and plates for outdoor use
- Generous low frequency output make it suitable for 2-way systems and subwoofer applications

The 12W750 meets the specific market requirement for a loudspeaker which combines the excellent linearity, good efficiency and high power handling of the 15W750 model but in a 12 inch (300mm) chassis for use in more compact systems. It is primarily intended for application in compact reflex and band-pass enclosures but can also be used for horn loaded configurations. 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. The cone is carried by an unusually deep profile, triple roll suspension made from a polycotton material which is more resistant to aging and fatigue than traditional cotton-based ones. The 75 mm (3 inch) diameter aluminum 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 12W750. 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 Diameter                       | 300 mm ( in)      |
| Nominal Impedance                      | 16 Ω              |
| Minimum Impedance                      | 12.5 Ω            |
| Nominal Power Handling <sup>1</sup>    | 600 W             |
| Continuous Power Handling <sup>2</sup> | 1200 W            |
| Sensitivity <sup>3</sup>               | 98.0 dB           |
| Frequency Range                        | 50 - 4600 Hz      |
| Voice Coil Diameter                    | 75 mm (3.0 in)    |
| Winding Material                       | aluminum          |
| Winding Depth                          | 21.0 mm (0.83 in) |
| Magnetic Gap Depth                     | 10.0 mm (0.39 in) |

### DESIGN

|                        |                                              |
|------------------------|----------------------------------------------|
| Surround Shape         | Triple roll                                  |
| Cone Shape             | Curvilinear                                  |
| Magnet Material        | Ferrite                                      |
| Woofers Cone Treatment | Weather protected                            |
| Recommended Enclosure  | 60.0 dm <sup>3</sup> (2.12 ft <sup>3</sup> ) |
| Recommended Tuning     | 65 Hz                                        |

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

|                     |                                                |
|---------------------|------------------------------------------------|
| Resonance Frequency | 55 Hz                                          |
| Re                  | 10.4 Ω                                         |
| Qes                 | 0.35                                           |
| Qms                 | 5.8                                            |
| Qts                 | 0.33                                           |
| Vas                 | 61.0 dm <sup>3</sup> (2.15 ft <sup>3</sup> )   |
| Sd                  | 531.0 cm <sup>2</sup> (82.31 in <sup>2</sup> ) |
| η <sub>o</sub>      | 2.8 %                                          |
| X <sub>max</sub>    | 8.0 mm                                         |
| X <sub>var</sub>    | 7.0 mm                                         |
| M <sub>ms</sub>     | 55.0 g                                         |
| Bl                  | 23.5 Txm                                       |
| Le                  | 1.2 mH                                         |
| EBP                 | 157 Hz                                         |

### MOUNTING AND SHIPPING INFO

|                             |                                          |
|-----------------------------|------------------------------------------|
| Overall Diameter            | 310 mm (12.2 in)                         |
| Bolt Circle Diameter        | 295 mm (11.61 in)                        |
| Baffle Cutout Diameter      | 280.0 mm (11.02 in)                      |
| Depth                       | 148 mm (5.83 in)                         |
| Flange and Gasket Thickness | 11 mm (0.43 in)                          |
| Net Weight                  | 7.5 kg (16.53 lb)                        |
| Shipping Weight             | 8.3 kg (18.3 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.