**XD125**

**HF Compression Driver**

**Key Features**

- 1 inch exit throat
- 108 dB SPL 1W/1m average sensitivity
- 25,4 mm (1 in) edgewound aluminum voice coil
- 50 Watt program power handling
- Low weight, easy mounting and handling structure
- Usable in two way or multiway systems
- 90° x 60° coverage Constant directivity pattern
- Unique Eighteen Sound elliptical shape

**Description**

The XD125 has been designed for 2 way or 3 way systems. It will deliver an unmatched combination of extended linear frequency response and very high efficiency. The major advancement in XD125 compression driver consists in a new innovative diaphragm assembly made in proprietary treated polyethylene material. This design maintains the minimum resonance frequency point value at 1600Hz, extending the frequency response in the mid region when compared to previous compression driver model, the XD120. The design of diaphragm and surround in polyester material allows better control in terms of movement and mechanical stress. Radial ribs increase stiffness avoiding uncontrolled vibration modes in the usable frequency range. An edge-wound aluminum voice coil, wound on proprietary treated Nomex, completes diaphragm assembly. Proprietary treated Nomex former, thanks to its physical properties, shows 30% higher value of tensile elongation at working operative temperature(200°C) when compared to Kapton. This plus is capable to keep properly energy transfer control to the dome in real working conditions. Moreover, Eighteen Sound voice coil proprietary Nomex former is suitable to work also in environments with higher moisture contents. The polypropylene phase plug is the result of a meticulous design exercise. Its shape assures the correct acoustic impedance of the radiating dome, reducing distortion levels across a very wide range of frequency. Final result is a smooth coherent wavefront in the horn entrance, high thermal stability and manufacturing consistency. The compact and lightweight ceramic magnet assembly has been designed to obtain 16KGauss in the gap. The XD125 pressure die-cast polyurethane foam horn maintains constant nominal 90° Horizontal x 60° Vertical pattern control, providing consistent on-axis and off-axis frequency response from 2kHz to 16kHz in the horizontal plane and from 2,5kHz to 16 kHz in the vertical plane. Horn directivity is constant from 2,5kHz. Computer Aided Finite Element Analysis and extensive testing were used to obtain the horn contours. Horn is designed to be free of resonance and vibrations assuring maximum strength.

**Models**

<table>
<thead>
<tr>
<th>Model</th>
<th>Code</th>
<th>Information</th>
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<tbody>
<tr>
<td>0421M8X100</td>
<td>0421M8X100</td>
<td>80Ohm</td>
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<tr>
<td>0421M6X100</td>
<td>0421M6X100</td>
<td>160Ohm</td>
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General Specifications

- Throat Diameter: 25.4 mm (1 in)
- Rated Impedance: 8 Ohm
- DC Resistance: 5.7 Ohm
- Minimum Impedance: 8 Ohm 5000Hz
- AES Power: 25 W above 2.5 kHz
- Program Power: 50 W above 2.5 kHz
- Sensitivity (1W@1m): 109 dB
- Frequency Range: 2 kHz ÷ 18 kHz
- Recom. Xover Frequency: 2500 Hz (12dB/oct slope)
- Diaphragm Material: Polyester
- Voice Coil Diameter: 25.4 mm (1 in)
- Voice Coil Winding Material: Edge-wound aluminum
- Magnet Material: Ferrite
- Flux Density: 1.65 T
- BL Factor: 3.5 N/A
- Polarity: Positive voltage on + terminal gives positive pressure in the throat

Mounting information

- Overall diameter: 87 mm (3,4 in)
- N. of mounting holes and bolt: 2 M5 at 180 degrees
- Bolt circle diameter: 76 mm (3 in)
- Total depth: 46 mm (1,8 in)
- Net weight: 0.8 Kg (1,77 lb)
- Shipping weight: 0.9 Kg (1,99 lb)
- CardBoard Packaging dimensions: 90x90x70 mm (3,5x3,5x2,8 in)

Notes

1) AES power rating is tested with a pink noise input having a 6 dB crest factor for two hours duration within the specified range. Power calculated on minimum impedance.
2) Program power rating is defined as 3 dB greater than AES rating, and is a conservative expression of the transducer ability to handle music program material.