The Vifa NE product line has leading-edge transducer technology packaged in a cutting edge, stylistic design. The full-range drivers in this product line feature an innovative cast aluminium basket design which minimizes acoustic reflections inside the driver, through large basket windows and sculpted basket spokes. The basket also is designed to act as a highly coupled heat sink to the Neodymium-Iron-Boron magnet (NdFeB) motor, so as to improve power handling capacity. The cone is aluminium, with a butyl rubber surround designed through finite element analysis for linearity of performance. The voice coil bobbin is titanium, for improved performance. The FEA-designed motor features copper caps to minimize inductance and extend performance to high frequencies. Rounding out the design is a 4-way terminal block connector, for ease of electrical connection.

Specifications:

- DC Resistance: \( R_{dc} \) Ω 3.8
- Minimum Impedance: \( Z_{min} \) Ω 4.0
- Voice Coil Inductance: \( L_{vdc} \) mH 0.04
- Resonant Frequency: \( f_{r} \) Hz 97
- Mechanical Q Factor: \( Q_{m} \) - 10.7
- Electrical Q Factor: \( Q_{e} \) - 0.75
- Total Q Factor: \( Q_{t} \) - 0.70
- Ratio \( f_{r}/Q_{e} \) 139

- Energy Bandwidth Product: \( EBP = (1/Q_m) f_r \) 130
- Moving Mass: \( M_m \) g 2.55
- Suspension Compliance: \( C_{cm} \) um/N 1056.0
- Effective Core Diameter: \( D \) cm 6.0
- Effective Piston Area: \( S_p \) cm² 28.6
- Equivalent Volume: \( V_e \) L 1.22
- Motor Force Factor: \( B_L \) T/m 2.80
- Motor Efficiency Factor: \( \beta \) (T·m²)/Ω² 2.09

- Half Space Sensitivity @ 2.83V: dB@2.83V/1m 86.3
- Rated Noise Power (IEC 2685-18.1): dB 86.3
- Test Spectrum Bandwidth: 150Hz - 20000Hz 12 dB/Oct

- Voice Coil Former Material: VCfm - TiSV
- Voice Coil Inner Diameter: VCd mm 25.7
- Maximum Linear Excursion: \( X_{max} \) mm 1.65

- Transducer Mass: - kg 0.138

Frequency and Impedance Response: