The Vifa NE product line has leading-edge transducer technology packed in a cutting edge, stylistic design. The tweeters in this product line finite element analysis designed Neodymium-Iron-Boron magnet (NdFeB) motors, with copper caps for extended frequency response and reduced distortion. The aluminium rear chambers offer extended low frequency performance, while doubling as heat sinking. The butterfly supporting the tweeter diaphragm is made of a high temperature plastic, consistent with the product’s high temperature performance rating, and features supporting terminals. The dome material in this design is silk, and the design has been optimized for sound quality and clarity. Rounding out the design is an aluminium face plate and plastic grille, which offers protection for the tweeter diaphragm.

Specifications:

- DC Resistance: $R_{dc} \Omega = 2.8$
- Minimum Impedance: $Z_{min} \Omega = 3.2$
- Voice Coil Inductance: $L_v mH = 0.01$
- Resonant Frequency: $f_s Hz = 816$
- Mechanical Q Factor: $Q_m = 1.48$
- Total Q Factor: $Q_t = 1.12$
- Ratio $f_s / Q_t$ = 730

Energy Bandwidth Product: $EBP (1/Q_m) L = 553$
Moving Mass: $M_{mm} g = 0.21$
Suspension Compliance: $C_{s} \mu m/N = 184.6$
Effective Core Diameter: $D cm = 2.5$
Effective Piston Area: $S_p cm^2 = 4.9$
Equivalent Volume: $V_e L = 0.01$
Motor Force Factor: $B_L T/m = 1.42$
Motor Efficiency Factor: $\beta (T\cdot m^2)/\Omega = 0.72$
Voice Coil Former Material: $VC_f m = ASV$
Rated Noise Power (IEC 268-5-18.1): $P W = 100$
Test Spectrum Bandwidth: 2500Hz - 20000Hz 12 dB/Oct

Half Space Sensitivity @ 2.83V dB@2.83V/1m dB = 90.0

Frequency and Impedance Response:

<table>
<thead>
<tr>
<th>Frequency [Hz]</th>
<th>Impedance [Ohms] @ 1.415Vrms</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>12</td>
</tr>
<tr>
<td>1000</td>
<td>20</td>
</tr>
<tr>
<td>10000</td>
<td>30</td>
</tr>
<tr>
<td>100000</td>
<td>40</td>
</tr>
</tbody>
</table>

**Technical Specifications:**

- Model Number: NE19VTS-04
- Description: Vifa RM 19mm tweeter silk dome
- Revision: rev 1_1
- Date: 31-Aug-09