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|  | TW030WA09 and TW030WA10 are tweeters designed for applications requiring the highest level of performance, with extended and linear high frequency response and best consistency.**Innovation**Tweeters used to feature a separate rear chamber in order to obtain low resonance frequency. Not any longer. By designing the internal parts to accommodate new larger internal volumes, the TW030WA09/10 offer an unusually low  resonance frequency. |
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|  | **FEATURES** |  |

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| http://www.wavecor.com/assets/images/autogen/clearpixel.gif | http://www.wavecor.com/assets/images/autogen/clearpixel.gif | http://www.wavecor.com/assets/images/autogen/clearpixel.gif | http://www.wavecor.com/assets/images/autogen/clearpixel.gif |
|  | Wavecor-TW030WA09_10-tweeter |  |
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|  | [Frequency resp.](http://www.wavecor.com/html/tw022wa05.html%22%20%5Cl%20%22Freq.resp)[Specifications](http://www.wavecor.com/html/tw022wa05.html%22%20%5Cl%20%22Specs)[Dimensions](http://www.wavecor.com/html/tw022wa05.html%22%20%5Cl%20%22Dims)[Ordering info](http://www.wavecor.com/html/tw022wa05.html%22%20%5Cl%20%22Order) |

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| http://www.wavecor.com/assets/images/autogen/clearpixel.gif | http://www.wavecor.com/assets/images/autogen/clearpixel.gif |
|  | * 30 mm design with controlled off-axis and power response, high power handling, and low resonance frequency
* Internal volumes for low resonance frequency and distortion
* Precision-coated textile diaphragm for improved consistency and high-frequency extension
* Optimized dome shape for ultra high frequency cutoff
* Vented voice coil former for reduced distortion and compression
* Copper-clad aluminium voice coil wire offering lower moving mass for improved efficiency and transient response
* Build-in cavities under dome/edge to equalize pressure for lower distortion and lower resonance frequency
* Flexible lead wires for higher power handling and larger excursion
* Gold plated terminals to prevent oxidation and ensure long-term reliable connection
* Delivered with foam gasket attached for hassle-free mounting and secure cabinet sealing
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| http://www.wavecor.com/assets/images/autogen/clearpixel.gif | http://www.wavecor.com/assets/images/autogen/clearpixel.gif | http://www.wavecor.com/assets/images/autogen/clearpixel.gif | http://www.wavecor.com/assets/images/autogen/clearpixel.gif | http://www.wavecor.com/assets/images/autogen/clearpixel.gif | http://www.wavecor.com/assets/images/autogen/clearpixel.gif |
|  | **FREQUENCY RESPONSE** |  |
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| TW030WA09_SPL_&_IMP_respons |

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| http://www.wavecor.com/assets/images/autogen/clearpixel.gif | http://www.wavecor.com/assets/images/autogen/clearpixel.gif |
|  | Measuring conditions, SPLDriver mounting: Flush in infinite     baffle, back side open  (no cabinet)Microphone distance: 1.0 mInput level: 2.83 VRMSSmoothing: 1/6 oct. |

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| http://www.wavecor.com/assets/images/autogen/clearpixel.gif | http://www.wavecor.com/assets/images/autogen/clearpixel.gif |
|  | Measuring conditions, impedanceDriver mounting: Free air, no baffle,     back side open (no cabinet)Input signal: Semi-current-drive,      nominal current 2 mASmoothing: None |

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| TW030WA10_SPL_&_IMP_respons |

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| http://www.wavecor.com/assets/images/autogen/clearpixel.gif | http://www.wavecor.com/assets/images/autogen/clearpixel.gif |
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| http://www.wavecor.com/assets/images/autogen/clearpixel.gif | http://www.wavecor.com/assets/images/autogen/clearpixel.gif |
|  | Measuring conditions, impedanceDriver mounting: Free air, no baffle,     back side open (no cabinet)Input signal: Semi-current-drive,      nominal current 2 mASmoothing: None |

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|  | **NOMINAL SPECIFICATIONS** |  |

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| http://www.wavecor.com/assets/images/autogen/clearpixel.gif |  |
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| **Notes** | **Parameter** | **TW030WA09** | **TW030WA10** | **Unit** |
|   | Nominal size | 30 | 30 | [mm] |
|   | Nominal impedance | 4 | 8 | [ohm] |
|   | Recommended frequency range | 2 - 27 | 2 - 27 | [kHz] |
| *1, 4* | Sensitivity, 2.83V/1m (average SPL in range 2 - 20 kHz) | 92.5 | 90 | [dB] |
| *2* | Power handling, short term, IEC 268-5, 2.5 kHz@12dB/oct. |   |   | [W] |
| *2* | Power handling, long term, IEC 268-5, 2.5 kHz@12dB/oct. |   |   | [W] |
| *2* | Power handling, continuous, IEC 268-5, 2.5 kHz@12dB/oct. |   |   | [W] |
|   | Effective radiating area, Sd | 11.5 | 11.5 | [sq.cm] |
| *3, 4, 6* | Resonance frequency (free air, no baffle), Fs | 725 | 750 | [Hz] |
|   | Moving mass, incl. air (free air, no baffle), Mms | 0.45 | 0.42 | [g] |
| *3* | Force factor, Bxl | 2.0 | 2.4 | [N/A] |
| *3, 4, 6* | Suspension compliance, Cms | 0.11 | 0.11 | [mm/N] |
| *3, 4, 6* | Equivalent air volume, Vas | 0.020 | 0.020 | [lit.] |
| *3, 4, 6* | Mechanical resistance, Rms | 0.25 | 0.25 | [Ns/m] |
| *3, 4, 6* | Mechanical Q, Qms | 8.1 | 7.8 | [-] |
| *3, 4, 6* | Electrical Q, Qes | 1.74 | 2.17 | [-] |
| *3, 4, 6* | Total Q, Qts | 1.43 | 1.70 | [-] |
| *4* | Voice coil resistance, RDC | 3.4 | 6.3 | [ohm] |
| *5* | Voice coil inductance, Le (measured at 20 kHz) |   |   | [μH] |
|   | Voice coil inside diameter | 30.4 | 30.4 | [mm] |
|   | Voice coil winding height | 1.7 | 1.7 | [mm] |
|   | Air gap height | 2.5 | 2.5 | [mm] |
|   | Theoretical linear motor stroke, Xmax | ±0.40 | ±0.40 | [mm] |
|   | Magnet weight |   |   | [g] |
|   | Total unit net weight excl. packaging |   |   | [kg] |
| *3, 4, 5* | Krm |   |   | [mohm] |
| *3, 4, 5* | Erm |   |   | [-] |
| *3, 4, 5* | Kxm |   |   | [mH] |
| *3, 4, 5* | Exm |   |   | [-] |

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| *Note 1* | *Measured in infinite baffle.* |
| *Note 2* | *Tested in free air (no cabinet).* |
| *Note 3* | *Measured using a semi-constant current source, nominal level 2 mA.* |
| *Note 4* | *Measured at 25 deg. C* |
| *Note 5* | *It is generally a rough simplification to assume that loudspeaker transducer voice coils exhibit the characteristics of an inductor. Instead it is a far more accurate approach to use the more advanced model often referred to as the “Wright empirical model”, also used in LEAP-4 as the TSL model (www.linearx.com), involving parameters Krm, Erm, Kxm, and Exm. This more accurate transducer model is described in a technical paper (PDF) [here](http://www.wavecor.com/Transducer_equivalent_circuit.pdf%22%20%5Ct%20%22NewWindow).* |
| *Note 6* | *Measured before burn in* |

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| http://www.wavecor.com/assets/images/autogen/clearpixel.gif | http://www.wavecor.com/assets/images/autogen/clearpixel.gif |
|  | **OUTLINE DRAWING AND NOMINAL DIMENSIONS (mm)** |

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| http://www.wavecor.com/assets/images/autogen/clearpixel.gif |  |
|  | TW030WA09_10 outline drawing |

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| http://www.wavecor.com/assets/images/autogen/clearpixel.gif | TW030WA09-outline |

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|  | **TERMINAL NOMINAL DIMENSIONS (mm)** |  |
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|  | Wavecor-TW030WA09_10-terminals |  |
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|  | **Thickness, both terminals: 0.5 mmTerminal plating: Gold** |  |