SPECIFICATIONS

TW022TU01 22 mm textile automotive tweeter, neo, alu housing, 4 ohm

22 mm design for optimal compromise between on- and off-axis frequency response, resonance frequency, and power handling.
Black anodized machined alu housing.
Low resonance.
Precision-coated textile diaphragm.

FEATURES

- Machined alu housing
- Dual neodymium magnets
- Vented through to a damped rear chamber
- Optimized light-weight dome
- Vented voice coil former
- Copper-clad aluminium voice coil wire
- Built-in cavities under dome/edge
- Flexible voice coil lead wires
- 200 mm wires attached

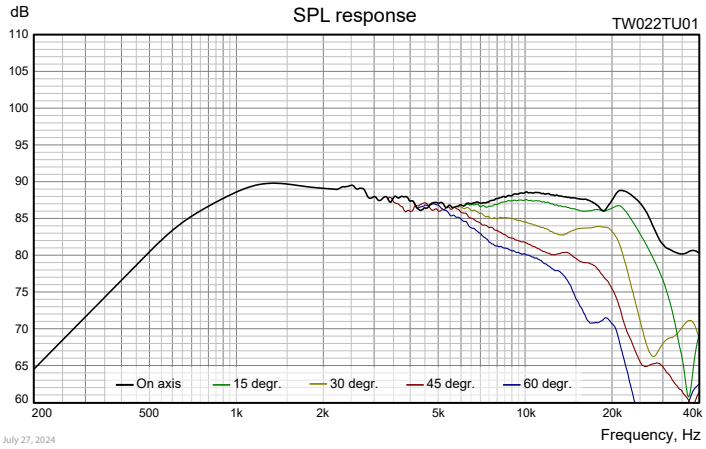
NOMINAL SPECIFICATIONS

Notes	Parameter	Value	Unit
	Nominal size	22	[mm]
	Nominal impedance	4	[ohm]
	Recommended frequency range	2 - 30	[kHz]
1, 4	Sensitivity, 2.83V/1m (average SPL in range 5 - 20 kHz)	88	[dB]
2	Power handling, short term, IEC 268-5, 2.5 kHz@12dB/oct.	500	[W]
2	Power handling, long term, IEC 268-5, 2.5 kHz@12dB/oct.	65	[W]
2	Power handling, continuous, IEC 268-5, 2.5 kHz@12dB/oct.	20	[W]
	Effective radiating area, S_d	6.1	[cm²]
3, 4, 6	Resonance frequency (free air, no baffle), F_S	825	[Hz]
	Moving mass, incl. air (free air, no baffle), M_{MS}	0.26	[g]
3	Force factor, Bxl	1.6	[N/A]
3, 4, 6	Suspension compliance, C_{MS}	0.143	[mm/N]
3, 4, 6	Equivalent air volume, V_{AS}	7.5	[ml]
3, 4, 6	Mechanical resistance, R_{MS}	0.93	[Ns/m]
3, 4, 6	Mechanical Q, Q_{MS}	1.43	[-]
3, 4, 6	Electrical Q, Q_{ES}	1.88	[-]
3, 4, 6	Total Q, Q_{TS}	0.81	[-]
4	Voice coil resistance, R_{DC}	3.6	[ohm]
5	Voice coil inductance, L_e (measured at 1 kHz)		[µH]
	Voice coil inside diameter	22	[mm]
	Voice coil winding height	1.8	[mm]
	Air gap height	2.5	[mm]
	Theoretical linear motor stroke, Xmax	±0.35	[mm]
	Magnet weight	10.5	[g]
	Total unit net weight excl. packaging	70	[g]
3, 4, 5	K_{rm}		[mohm]
3, 4, 5	E_{rm}		[-]
3, 4, 5	K_{xm}		[mH]
3, 4, 5	E_{xm}		[-]

Note 1 *Measured in infinite baffle.*
Note 2 *Tested in free air (no cabinet, no baffle).*
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 K_{rm}, E_{rm}, K_{xm}, and E_{xm}.* This more accurate transducer model is described in a technical paper **here at our web site.**
Note 6 Measured before burn in. The unit is not burned in before shipping.

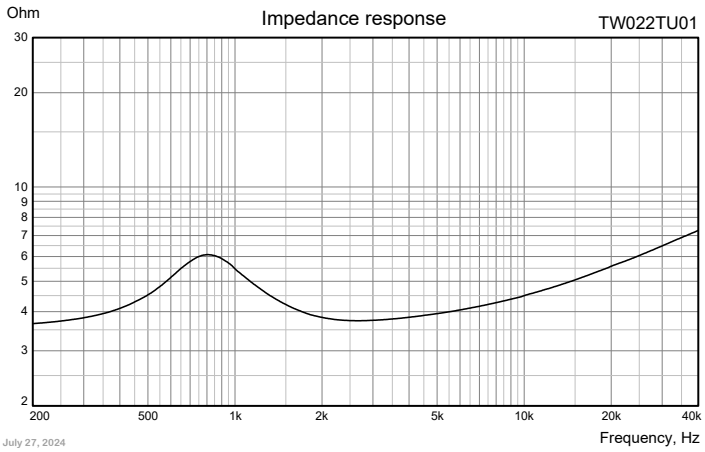
SPECIFICATIONS

TW022TU01 22 mm textile automotive tweeter, neo, alu housing, 4 ohm



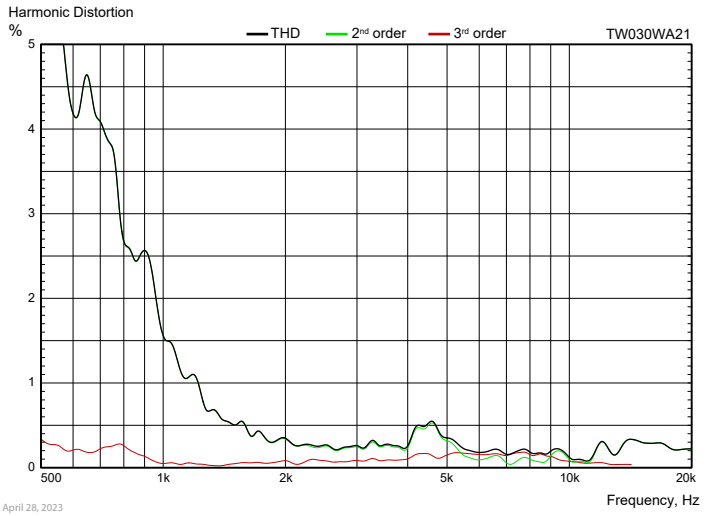
Download TW022TU01 on-axis SPL response as .txt file

Measuring conditions, SPL
Driver mounting: Flush in infinite baffle, back side open (no cabinet)
Microphone distance: 1.0 m
IInput signal: 2.83 VRMS LogChirp, 64k, Hanning/2
Smoothing: 1/6 oct.



Download TW022TU01 Impedance response as .txt file

Measuring conditions, impedance
Driver mounting: Free air, no baffle, back side open (no cabinet)
Input signal: Stepped sine wave, semi-current-drive, nominal current 2 mA
Smoothing: None



Measuring conditions, Harmonic Distortion
Driver mounting: Infinite baffle
Microphone distance: 0.5 m
Input signal: Stepped sine wave, 2.0 VRMS
Smoothing: 1/12 oct.

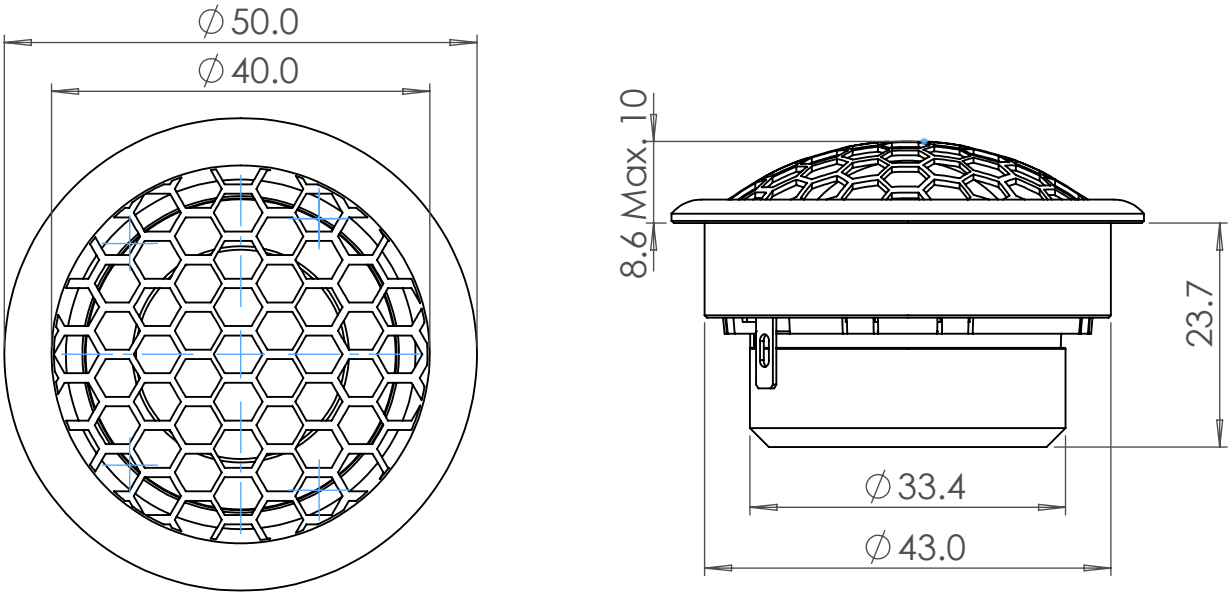
For more information please visit www.Wavecor.com

SPECIFICATIONS

TW022TU01 22 mm textile automotive tweeter, neo, alu housing, 4 ohm

OUTLINE DRAWING (nominal dimensions)

Dimension in mm



PACKAGING AND ORDERING INFORMATION

Part no. TW022TU01-01:	One piece, including grille and wires, retail packaging (packaged one pair per box)

Latest update: Oct. 11, 2024