

# SPECIFICATIONS

## WF132TU02 5¼" die cast mid/woofer, 4 ohm, automotive

WF132TU02 is a mid/woofer designed for demanding bass and midrange applications. It works equally well for most applications but was designed especially for automotive high-end sound systems. The very rigid die cast alu chassis follows the common standard dimensions for easy installation in cars.

### FEATURES

- Very rigid die cast alu chassis to withstand challenging car applications
- Built-in alu field-stabilizing ring for reduced high-level distortion
- Vented voice coil former for reduced distortion and compression
- Vented chassis for lower air flow speed reducing audible distortion
- Heavy-duty black fiber glass voice coil bobbin to increase power handling and reduce mechanical losses resulting in better dynamic performance and low-level details
- Large motor system with 1¼" voice coil diameter and large 90 mm magnet for better control, power handling, and efficiency
- Linear suspension with specially designed Conex damper (spider) for long durability under extreme operating conditions
- Gold plated terminals to prevent oxidation for long-term reliable connection - important in a car environment



### NOMINAL SPECIFICATIONS

Notes	Parameter	Before burn-in	After burn-in	Unit
	Nominal size	5¼		[inch.]
	Nominal impedance	4		[ohm]
	Recommended max. upper frequency limit	4		[kHz]
1	Sensitivity, 2.83V/1m (average SPL in range 200 - 1,000 Hz)	89.5		[dB]
2	Power handling, short term, IEC 268-5, no additional filtering			[W]
2	Power handling, long term, IEC 268-5, no additional filtering			[W]
2	Power handling, continuous, IEC 268-5, no additional filtering	55		[W]
	Effective radiating area, S <sub>d</sub>	95		[cm <sup>2</sup> ]
3, 6	Resonance frequency (free air, no baffle), F <sub>s</sub>	62		[Hz]
	Moving mass, incl. air (free air, no baffle), M <sub>ms</sub>	10.0		[g]
3	Force factor, B <sub>xl</sub>	6.2		[N/A]
3, 6	Suspension compliance, C <sub>ms</sub>	0.66		[mm/N]
3, 6	Equivalent air volume, V <sub>as</sub>	9.0		[lit.]
3, 6	Mechanical Q, Q <sub>ms</sub>	8.0		[-]
3, 6	Electrical Q, Q <sub>es</sub>	0.46		[-]
3, 6	Total Q, Q <sub>ts</sub>	0.44		[-]
4	Voice coil resistance, R <sub>DC</sub>		3.2	[ohm]
5	Voice coil inductance, L <sub>e</sub> (measured at 10 kHz)		0.23	[mH]
	Voice coil inside diameter		32	[mm]
	Voice coil winding height		11	[mm]
	Air gap height		5	[mm]
	Magnet weight		400	[g]
	Total unit net weight excl. packaging		1.08	[kg]
3, 5	K <sub>rm</sub>		0.13	[mohm]
3, 5	E <sub>rm</sub>		0.99	[-]
3, 5	K <sub>xm</sub>		4.2	[mH]
3, 5	E <sub>xm</sub>		0.71	[-]

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.

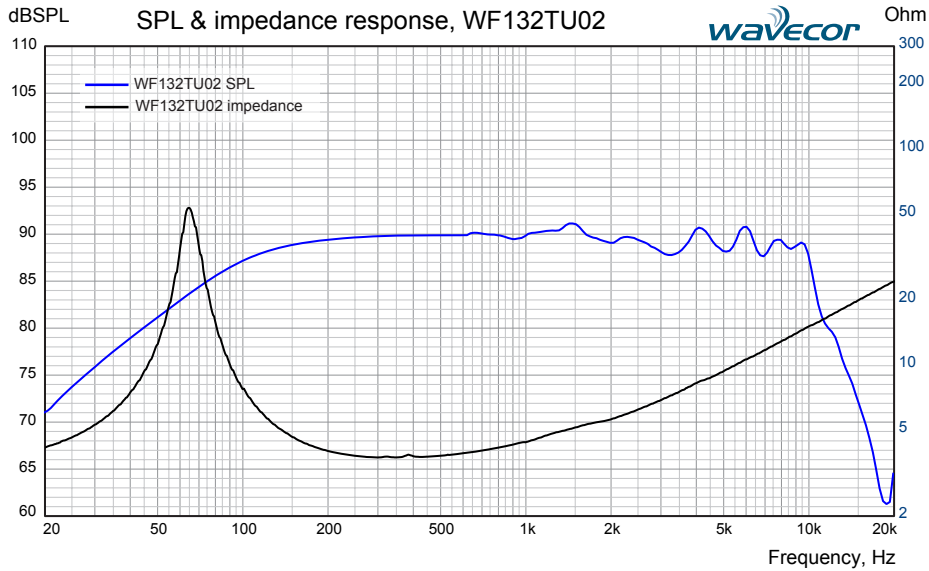
Note 4 Measured at 20 deg. C

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](http://www.linearx.com)), involving parameters K<sub>rm</sub>, E<sub>rm</sub>, K<sub>xm</sub>, and E<sub>xm</sub>. This more accurate transducer model is described in a technical paper [here at our web site](#).

Note 6 After burn-in specifications are measured 12 hours after exiting the transducer by a 20 Hz sine wave for 2 hours at level 10 VRMS. The unit is not burned in before shipping.

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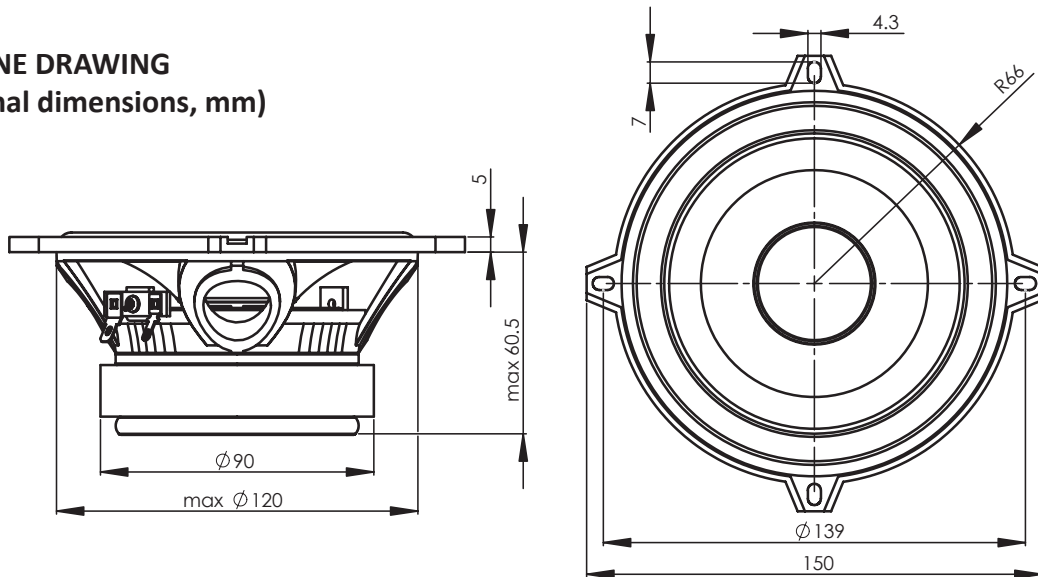
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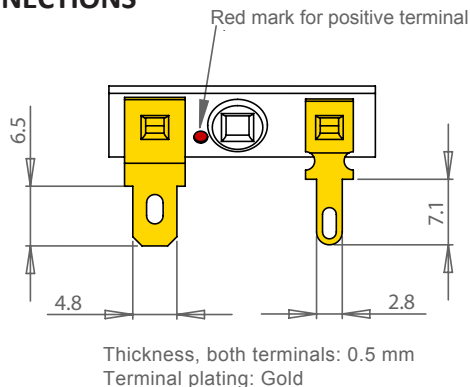
**Measuring conditions, SPL**  
 Driver mounting: Flush in infinite baffle, back side open (no cabinet)  
 Microphone distance: 1.0 m  
 Input level: 2.83 V<sub>RMS</sub>  
 Smoothing: 1/6 oct.

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

### OUTLINE DRAWING (nominal dimensions, mm)



### CONNECTIONS



### PACKAGING AND ORDERING INFORMATION

Part no. WF132TU02-01	Individual packaging (one piece per box)
Part no. WF132TU02-02	Bulk packaging