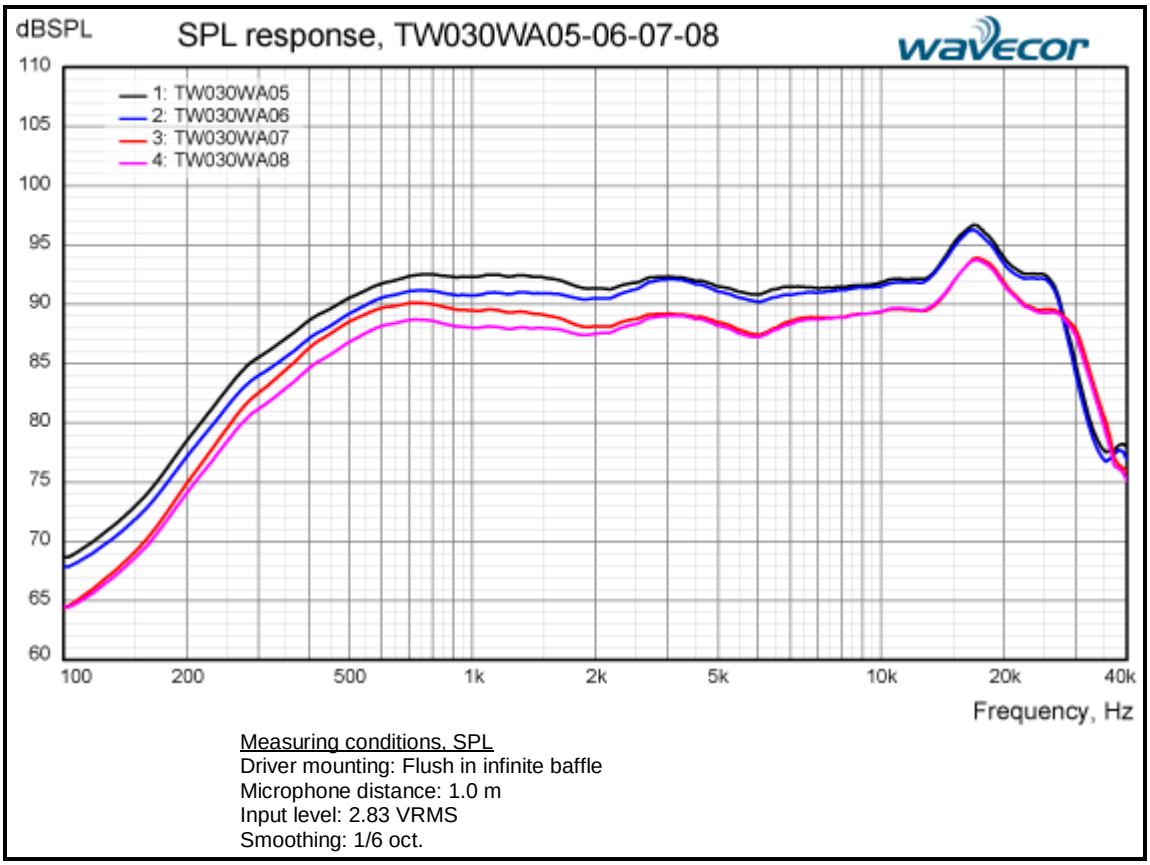
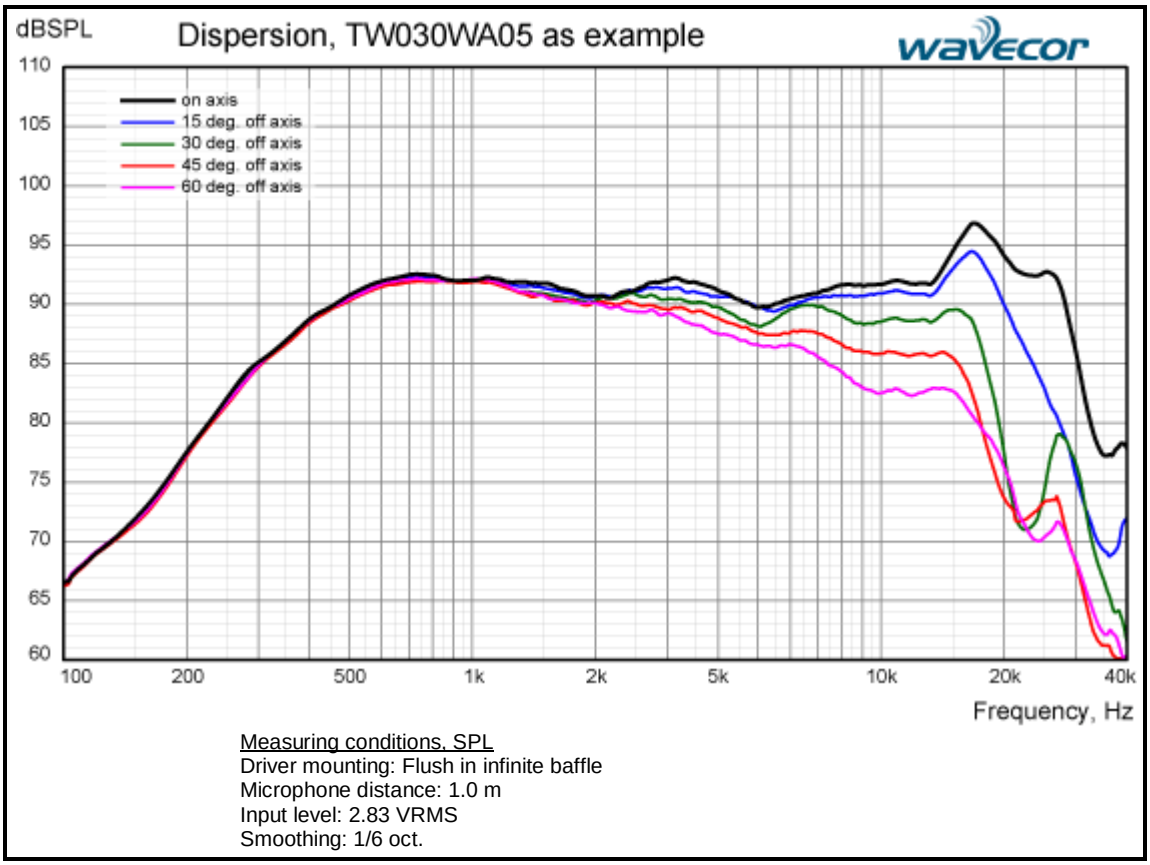
- Precision-coated textile diaphragm for improved consistency and high-frequency extension
- Extreme internal venting through pole, voice coil former, and top plate to 3 internal chambers
- Copper-clad aluminium voice coil wire offering lower moving mass for improved efficiency and transient response
- Reflection-free rear chamber design with solid reinforcement ribs
- Large ferrite magnet for improved efficiency and transient response
- With or without high-stability light ferro fluid
- Flexible lead wires for higher power handling and larger excursion
- Black anodized magnet structure for increased power handling and reduced power compression
- Gold plated terminals to prevent oxidation for long-term reliable connection
- Delivered with EVA gasket attached for hassle-free mounting and secure cabinet sealing

FREQUENCY RESPONSE

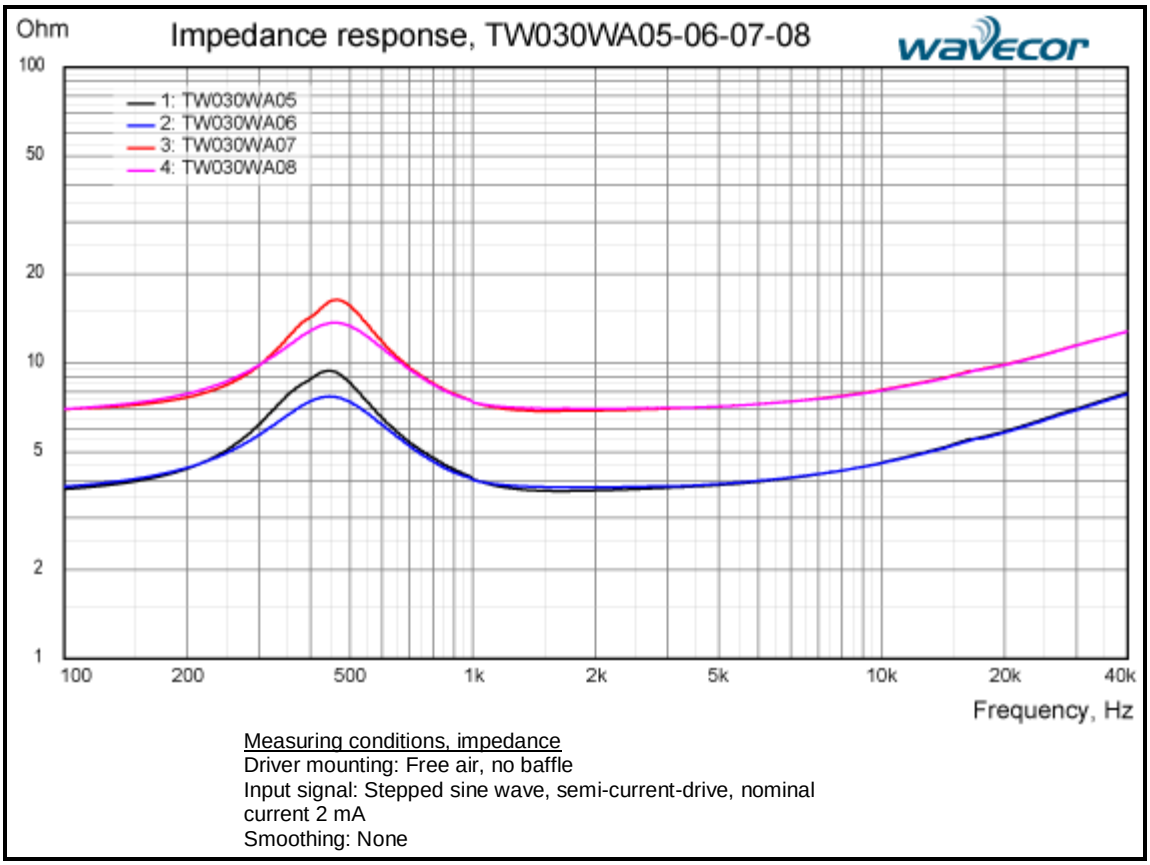


Measuring conditions, SPL
Driver mounting: Flush in infinite baffle
Microphone distance: 1.0 m
Input level: 2.83 VRMS
Smoothing: 1/6 oct.



Measuring conditions, SPL
Driver mounting: Flush in infinite baffle
Microphone distance: 1.0 m
Input level: 2.83 VRMS
Smoothing: 1/6 oct.

IMPEDANCE RESPONSE



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

NOMINAL SPECIFICATIONS

Parameter	TW030WA05	TW030WA06	TW030WA07	TW030WA08	Unit
Nominal size	30				[mm]
Nominal impedance	4		8		[ohm]
Recommended freq. range	1.5-25				[kHz]
Sensitivity, 2.83V/1m, (average 1-20kHz)	91½	91	89	88½	[dB]
Voice coil diameter	30.4				[mm]
Voice coil height	1.7				[mm]
Air gap height	2.5				[mm]
Voice coil resistance, RDC	3.4		6.3		[ohm]
Voice coil inductance	20		28		[µH]
Magnet weight	260				[g]
Effective radiating area, Sd	11.5				[sq.cm]
Power handling, continuous, IEC 268-5, 2.0kHz@12dB/oct.	50	60	50	60	[W]
Resonance freq., Fs	450	450	470	470	[Hz]
Moving mass, incl. air (free air, no baffle)	0.40	0.42	0.37	0.39	[g]
Force factor, Bxl	2.0	2.0	2.4	2.4	[Tm]
Mechanical Q, Qm	1.5	1.2	1.6	1.3	-
Electrical Q, Qe	0.96	1.01	1.19	1.25	-
Total Q, Qt	0.59	0.55	0.68	0.64	-
Suspension compliance, Cms	0.31	0.30	0.31	0.30	[mm/N]
Equiv. air volume, Vas	0.059	0.056	0.059	0.056	[lit.]
Total unit net weight	0.59				[kg]
Krm *(note 1)*	100	152	67	64	[µohm]
Erm *(note 1)*	0.85	0.82	0.91	0.92	-
Kxm *(note 1)*	3.3	2.8	5.1	4.3	[mH]
Exm *(note 1)*	0.56	0.56	0.56	0.56	-

Note 1. *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.*

Specifications are before burn-in