

The Exotic W8 is an 8 inch woofer-midrange driver designed for smooth, wide frequency response, high sensitivity and low distortion.

The special paper cone is embedded with papyrus fibres to optimize stiffness and damping.

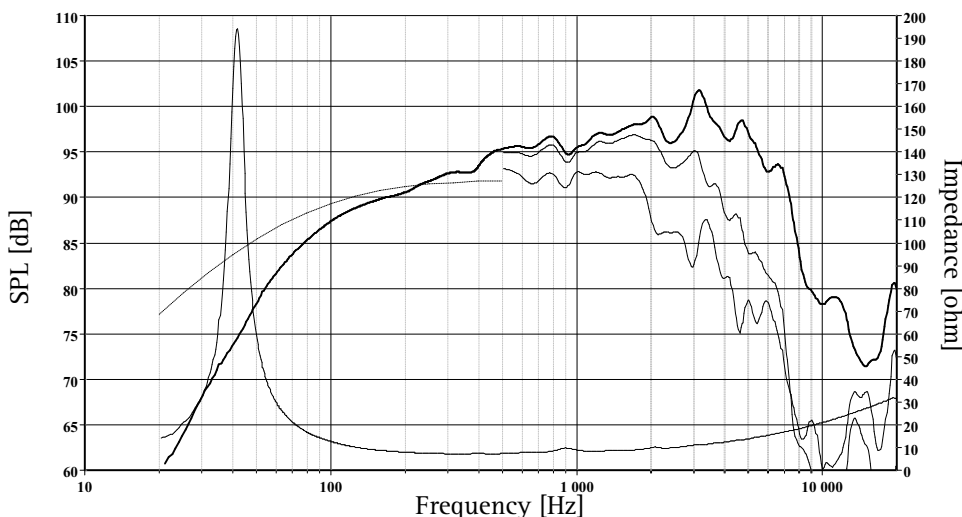
A special foam rubber surround reduces mass by 40% compared to conventional rubber surrounds, resulting in higher sensitivity and excellent damping properties. Unlike most plastic foam materials, this material is stable and will offer decades of trouble-free operation.

A new and proprietary spider design dramatically improves the performance of this critical suspension part. By combining an extremely open weave with a new resin formulation, all noises normally generated by the friction of the threads rubbing together are virtually eliminated. Additionally, the open weave is highly acoustically transparent, minimizing the reflections and resonances associated with conventional spider designs.

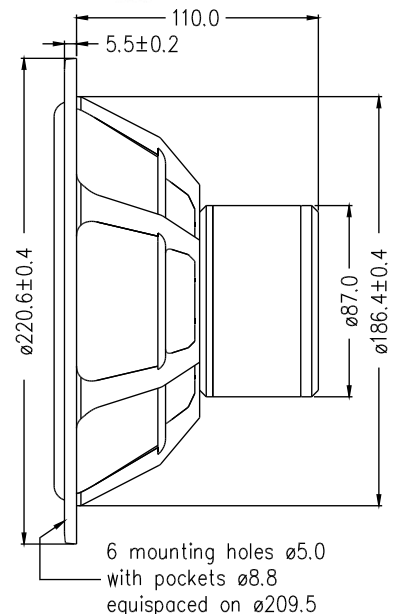
A high temperature copper voice coil is wound on a rigid, non-conductive glass fibre former. High quality H2 lead-out wires eliminate noise due to roping and resonances.

The magnet system uses an Alnico V ring magnet for high sensitivity and excellent stability. Massive copper rings above and below the magnet gap lower distortion due to eddy currents and flux modulation. A hand-turned phase plug made from ash offers optimal radiation conditions for the critical mid frequency band.

A stiff and stable injection moulded zinc basket keeps the critical components in perfect alignment. Generous windows both above and below the spider reduce sound reflection, air flow noise and cavity resonances to a minimum.



The frequency responses above show measured free field sound pressure in 0, 30, and 60 degrees angle using a 60L closed box. Input 2.83 V_{RMS}, microphone distance 0.5m, normalized to SPL 1m. The dotted line is a calculated response in infinite baffle based on the parameters given for this specific driver. The impedance is measured in free air without baffle using a 2V sine signal.



Nominal Impedance	8 Ohms	Voice Coil Resistance	6.0 Ohms
Recommended Frequency Range	30 - 3000 Hz	Voice Coil Inductance	0.43 mH
Short Term Power Handling *	250 W	Force Factor	9.2 N/A
Long Term Power Handling *	100 W	Free Air Resonance	36 Hz
Characteristic Sensitivity (2,83V, 1m)	94 dB	Moving Mass	13.9 g
Voice Coil Diameter	39 mm	Air Load Mass In IEC Baffle	1.8 g
Voice Coil Height	12 mm	Suspension Compliance	1.2 mm/N
Air Gap Height	6 mm	Suspension Mechanical Resistance	0.7 Ns/m
Linear Coil Travel (p-p)	6 mm	Effective Piston Area	212 cm ²
Maximum Coil Travel (p-p)	22 mm	VAS	78 Litres
Magnetic Gap Flux Density	1.25 T	QMS	5.1
Magnet Weight	0.8 kg	QES	0.25
Total Weight	2.5 kg	QTS	0.24