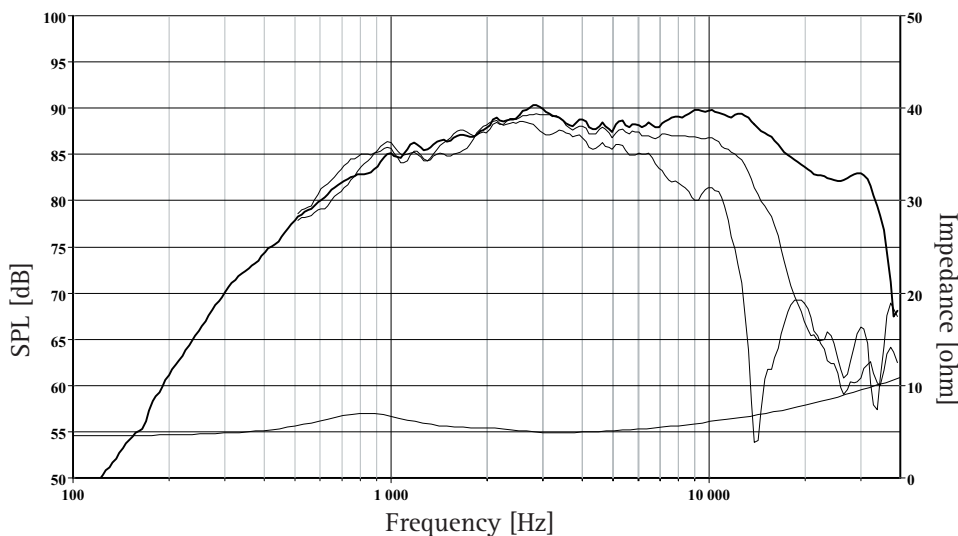


High End automotive tweeter.

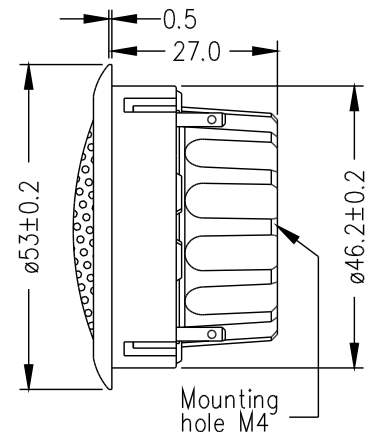
An optimally shaped 27mm diaphragm which gives well-controlled behaviour through the entire high frequency band. This diaphragm is produced from SONOLEX, a proprietary material developed and manufactured only by SEAS. The SONOLEX process pre-coats the fabric 4 times with a damping/sealing material, resulting in excellent acoustic performance and consistency.

An efficient neodymium magnet system in a substantial injection-moulded rear chamber eliminates unwanted chamber resonances and secures an optimal frequency response.

Low viscosity magnetic fluid provides excellent cooling of the voice coil while maintaining a low resonance frequency.



The frequency responses above show measured free field sound pressure in 0, 30, and 60 degrees, mounted in a 0.6m by 0.8m baffle. Input 2.83 Vrms, microphone distance 0.5m, normalized to SPL 1m. The impedance is measured without baffle using a 2V sine signal.



Nominal Impedance	6 Ohms	Voice Coil Resistance	4.9 Ohms
Recommended Frequency Range	2500 - 30000 Hz	Voice Coil Inductance	0.05 mH
Short Term Power Handling *	180 W	Force Factor	1.9 N/A
Long Term Power Handling *	80 W	Free Air Resonance	800 Hz
Characteristic Sensitivity (2.83V, 1m)	90 dB	Moving Mass	0.26 g
Voice Coil Diameter	26 mm	Effective Piston Area	7.5 cm ²
Voice Coil Height	1.5 mm	Magnetic Gap Flux Density	2.0 T
Air Gap Height	2 mm	Magnet Weight	0.01 kg
Linear Coil Travel (p-p)	0.5 mm	Total Weight	0.1 kg

*IEC 268-5, via High Pass Butterworth Filter 2500Hz 12 dB/oct.
SEAS reserves the right to change technical data

High End automotive midrange.

The manually coated paper cone and the mechanically matching natural rubber surround result in an unusually smooth midrange response.

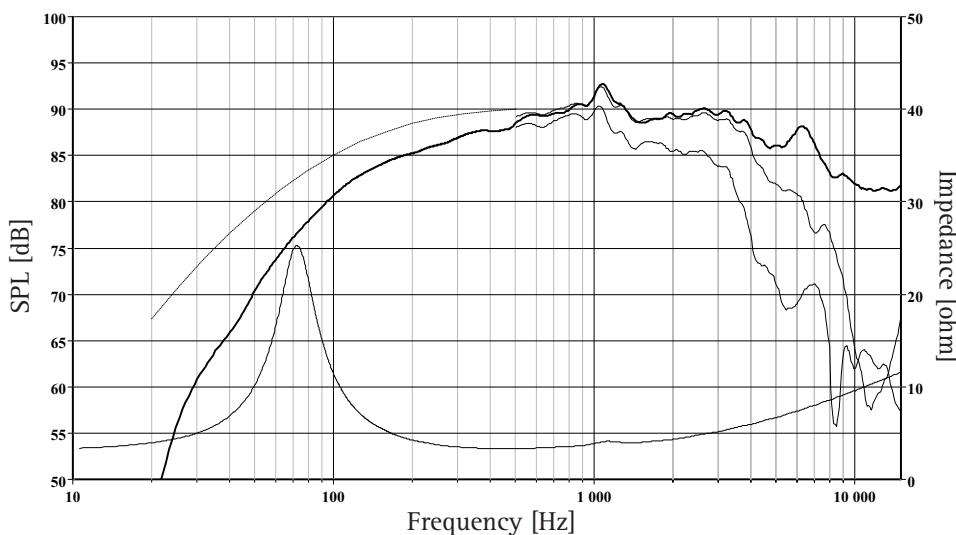
Heavy copper rings mounted above and below the T-shaped pole piece reduce non linear and modulation distortion and increase overload margin.

The large magnet system provides good sensitivity and transient response.

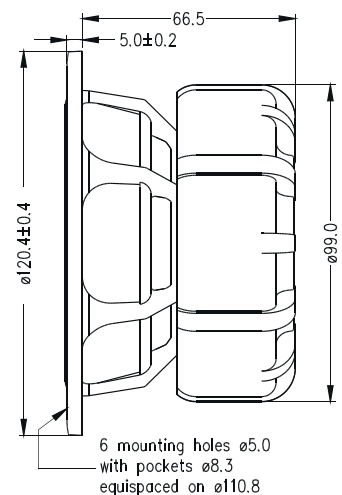
The chrome plated brass phase plug reduces compression due to temperature variations in the voice coil, increases long term power handling capacity and eliminates resonances in the cavity inside the voice coil former.

The extremely stiff and stable injection moulded zinc basket keeps the critical components in perfect alignment. Large windows in the basket both above and below the spider reduce sound reflexion, air flow noise and cavity resonance to a minimum.

Gold plated terminals mounted on a glass fibre reinforced plate reduce contact resistance and improve reliability.



The frequency responses above show measured free field sound pressure in 0, 30, and 60 degrees angle using a 2.5l 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	4 Ohms	Voice Coil Resistance	3.0 Ohms
Recommended Frequency Range	300 - 5000 Hz	Voice Coil Inductance	0.25 mH
Short Term Power Handling *	400 W	Force Factor	4.0 N/A
Long Term Power Handling *	110 W	Free Air Resonance	72 Hz
Characteristic Sensitivity (2.83V, 1m)	90.5 dB	Moving Mass	4.55 g
Voice Coil Diameter	26 mm	Air Load Mass In IEC Baffle	0.2 g
Voice Coil Height	9.4 mm	Suspension Compliance	1.1 mm/N
Air Gap Height	6 mm	Suspension Mechanical Resistance	0.73 Ns/m
Linear Coil Travel (p-p)	3.4 mm	Effective Piston Area	50 cm ²
Maximum Coil Travel (p-p)	-	VAS	4 Litres
Magnetic Gap Flux Density	1.1 T	QMS	2.95
Magnet Weight	0.42 kg	QES	0.40
Total Weight	1.30 kg	QTS	0.35

*IEC 268-5, via high pass butterworth filter 800Hz 6db/oct.
SEAS reserves the right to change technical data

High End automotive woofer.

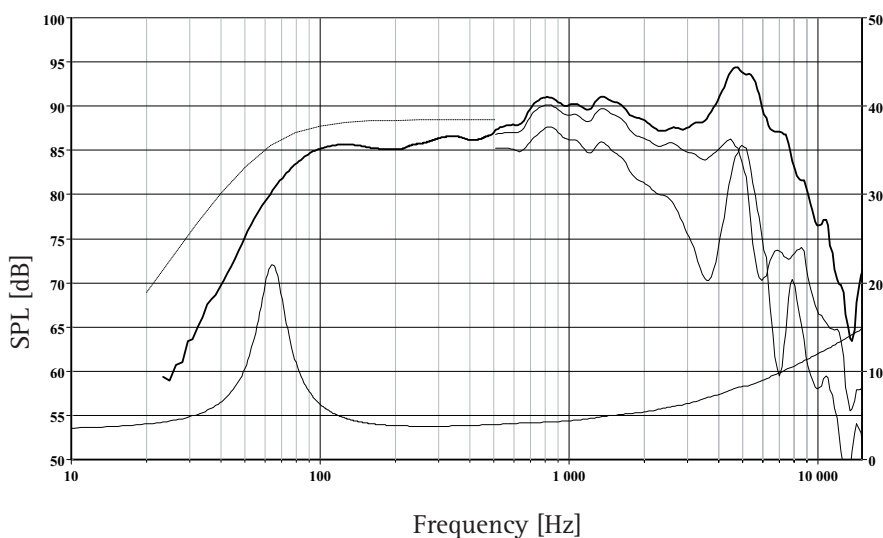
Precision cast and surface treated magnesium cone coupled to a natural rubber surround showing no sign of midrange (edge) resonances.

Large magnet system with bumped back plate makes room for extreme coil excursions.

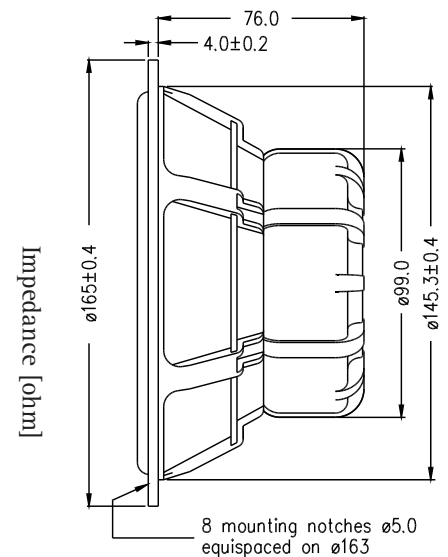
Heavy copper rings mounted above and below the T-shaped pole piece reduce non linear and modulation distortion and increase overload margin.

Extremely stiff and stable injection moulded metal basket keeps the critical components in perfect alignment.

Gold plated terminals mounted on a glass fibre reinforced plate reduce contact resistance and improve reliability.



The frequency responses above show measured free field sound pressure in 0, 30, and 60 degrees angle using a 12l closed box. Input 2.83 VRMS, 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	4 Ohms	Voice Coil Resistance	3.2 Ohms
Recommended Frequency Range	50 - 3000 Hz	Voice Coil Inductance	0.45 mH
Short Term Power Handling *	250 W	Force Factor	6.0 N/A
Long Term Power Handling *	100 W	Free Air Resonance	64 Hz
Characteristic Sensitivity (2.83V, 1m)	88.5 dB	Moving Mass	19.0 g
Voice Coil Diameter	39 mm	Air Load Mass In IEC Baffle	0.82 g
Voice Coil Height	14 mm	Suspension Compliance	0.3 mm/N
Air Gap Height	6 mm	Suspension Mechanical Resistance	1.88 Ns/m
Linear Coil Travel (p-p)	8 mm	Effective Piston Area	126 cm ²
Maximum Coil Travel (p-p)	19 mm	VAS	7 Litres
Magnetic Gap Flux Density	0.88 T	QMS	4.24
Magnet Weight	0.42 kg	QES	0.71
Total Weight	1.70 kg	QTS	0.61

*IEC 268-5

High End automotive subwoofer.

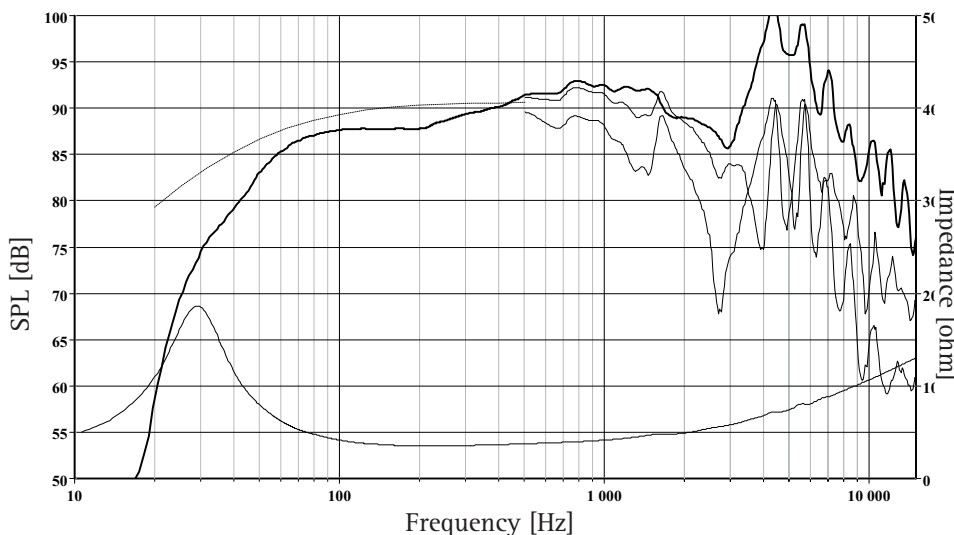
8" cone driver with an extremely stiff and stable injection moulded metal basket to keep the critical components in perfect alignment.

The stiff, yet light aluminum cone gives tremendous bass precision.

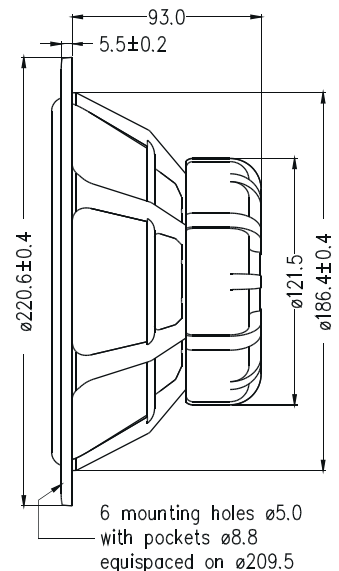
The very long high temperature voice coil wound on an aluminium voice coil former gives a high power handling capacity. The phase plug reduces compression due to temperature variations in the voice coil, eliminates resonances that would occur in the volume between the dust cap and the pole piece and increases the power handling capacity. The magnet system is equipped with a bumped back plate which makes room for extreme coil excursions.

Heavy copper rings mounted above and below the T-shaped pole piece reduce non linear and modulation distortion and increase overload margin.

Gold plated terminals mounted on a glass fibre reinforced plate reduce contact resistance and improve reliability.



The frequency responses above show measured free field sound pressure in 0, 30, and 60 degrees angle using a 211 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	4 Ohms	Voice Coil Resistance	3.2 Ohms
Recommended Frequency Range	30 - 2000 Hz	Voice Coil Inductance	0.38 mH
Short Term Power Handling *	300 W	Force Factor	6.4 N/A
Long Term Power Handling *	110 W	Free Air Resonance	29 Hz
Characteristic Sensitivity (2.83V, 1m)	91.0 dB	Moving Mass	28.2 g
Voice Coil Diameter	39 mm	Air Load Mass In IEC Baffle	1.89 g
Voice Coil Height	16 mm	Suspension Compliance	1.1 mm/N
Air Gap Height	6 mm	Suspension Mechanical Resistance	2.59 Ns/m
Linear Coil Travel (p-p)	10 mm	Effective Piston Area	220 cm ²
Maximum Coil Travel (p-p)	21 mm	VAS	68 Litres
Magnetic Gap Flux Density	1.0 T	QMS	2.11
Magnet Weight	0.64 kg	QES	0.43
Total Weight	2.20 kg	QTS	0.36

*IEC 268-5

↑ 25 cm High End automotive subwoofer.

The SW250/1 is a High End Car Audio Subwoofer with low distortion. This is the choice for those seeking a precise and realistic reproduction of the lowest frequency range in their cars.

Optimally shaped aluminum cone.

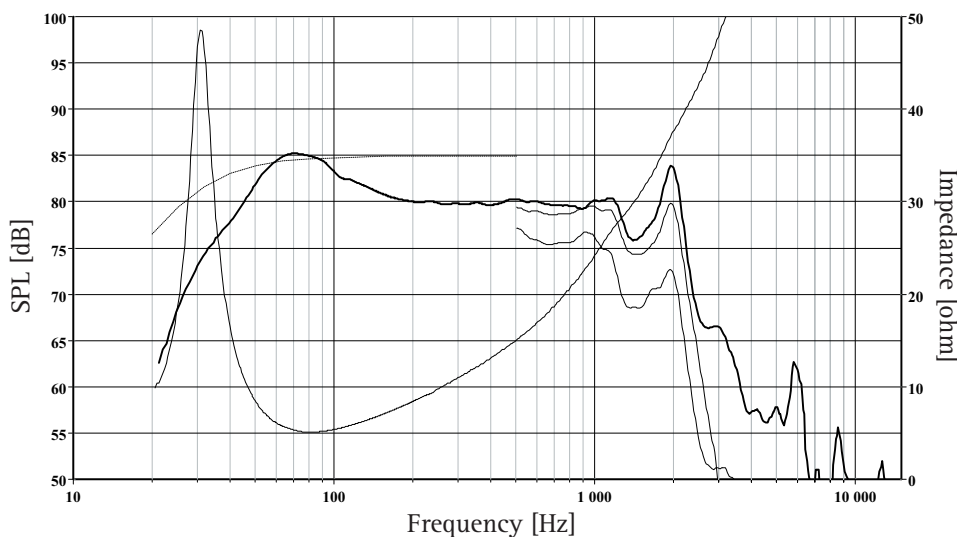
The lead out wires are integrated in the spider for long life and noise free performance at large excursions.

Wide natural rubber surround for optimum performance over a wide temperature range.

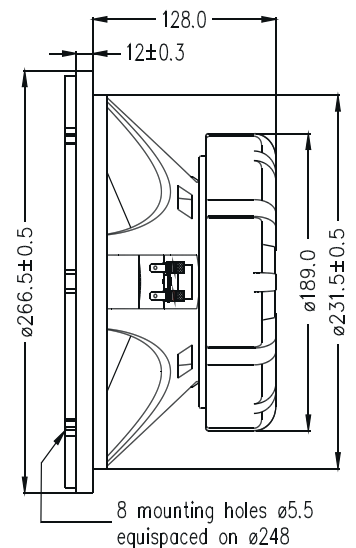
Stiff and stable injection moulded metal basket to keep the moving parts in perfect alignment under normal and extreme conditions.

Extremely high temperature voice coil with kapton former.

Screw terminals ensure excellent long term contact with the speaker cables.



The frequency responses above show measured free field sound pressure in 0, 30, and 60 degrees angle using a 29.5l 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	4 Ohms	Voice Coil Resistance	3.2 Ohms
Recommended Frequency Range	30 - 500 Hz	Voice Coil Inductance	6.39 mH
Short Term Power Handling *	400 W	Force Factor	14.0 N/A
Long Term Power Handling *	150 W	Free Air Resonance	31 Hz
Characteristic Sensitivity (2.83V, 1m)	86.0 dB	Moving Mass	139 g
Voice Coil Diameter	52 mm	Air Load Mass In IEC Baffle	3.73 g
Voice Coil Height	32 mm	Suspension Compliance	0.2 mm/N
Air Gap Height	10 mm	Suspension Mechanical Resistance	4.81 Ns/m
Linear Coil Travel (p-p)	22 mm	Effective Piston Area	346 cm ²
Maximum Coil Travel (p-p)	35 mm	VAS	31 Litres
Magnetic Gap Flux Density	0.66 T	QMS	6.42
Magnet Weight	5.80 kg	QES	0.46
Total Weight	6.70 kg	QTS	0.43

*IEC 268-5

30 cm High End automotive subwoofer

The SW300/1 is a High End Car Audio Subwoofer with low distortion. This is the choice for those seeking a precise and realistic reproduction of the lowest frequency range in their cars.

Optimally shaped aluminum cone.

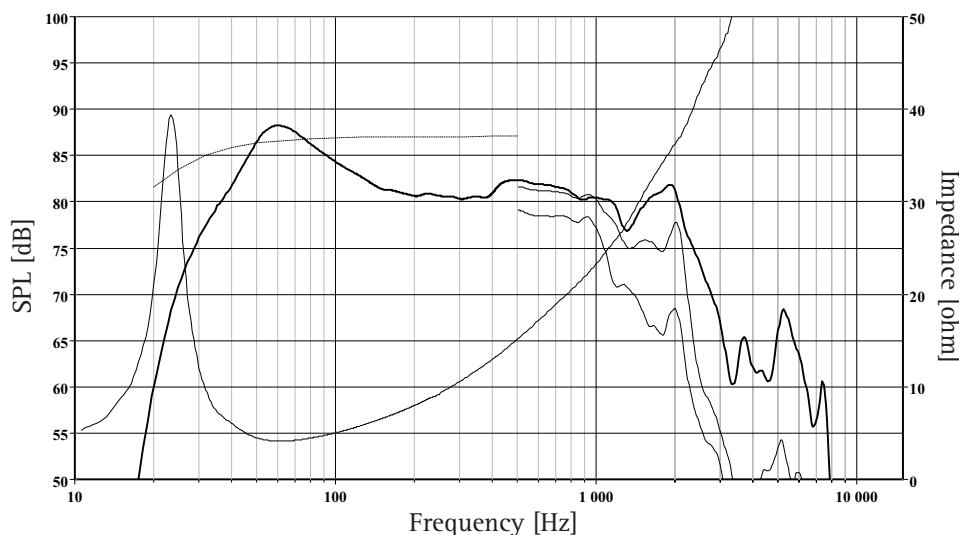
The lead out wires are integrated in the spider for long life and noise free performance at large excursions.

Wide natural rubber surround for optimum performance over a wide temperature range.

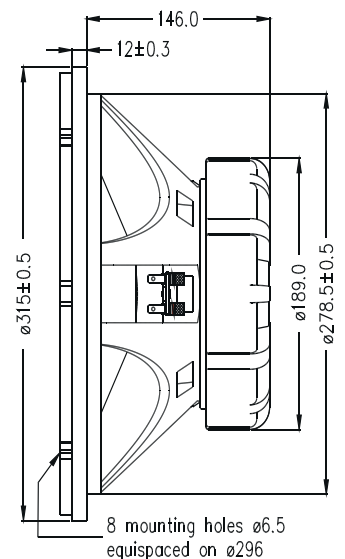
Stiff and stable injection moulded metal basket to keep the moving parts in perfect alignment under normal and extreme conditions.

Extremely high temperature voice coil with Kapton former.

Screw terminals ensure excellent long term contact with the speaker cables.



The frequency responses above show measured free field sound pressure in 0, 30, and 60 degrees angle using a 3 1/1 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	4 Ohms	Voice Coil Resistance	3.4 Ohms
Recommended Frequency Range	30 - 500 Hz	Voice Coil Inductance	5.82 mH
Short Term Power Handling *	500 W	Force Factor	12.1 N/A
Long Term Power Handling *	180 W	Free Air Resonance	23 Hz
Characteristic Sensitivity (2.83V, 1m)	87.0 dB	Moving Mass	158 g
Voice Coil Diameter	52 mm	Air Load Mass In IEC Baffle	6.1 g
Voice Coil Height	32 mm	Suspension Compliance	0.3 mm/N
Air Gap Height	10 mm	Suspension Mechanical Resistance	4.0 Ns/m
Linear Coil Travel (p-p)	22 mm	Effective Piston Area	480 cm ²
Maximum Coil Travel (p-p)	44 mm	VAS	94 Litres
Magnetic Gap Flux Density	0.66 T	QMS	5.92
Magnet Weight	5.80 kg	QES	0.56
Total Weight	7.1kg	QTS	0.51

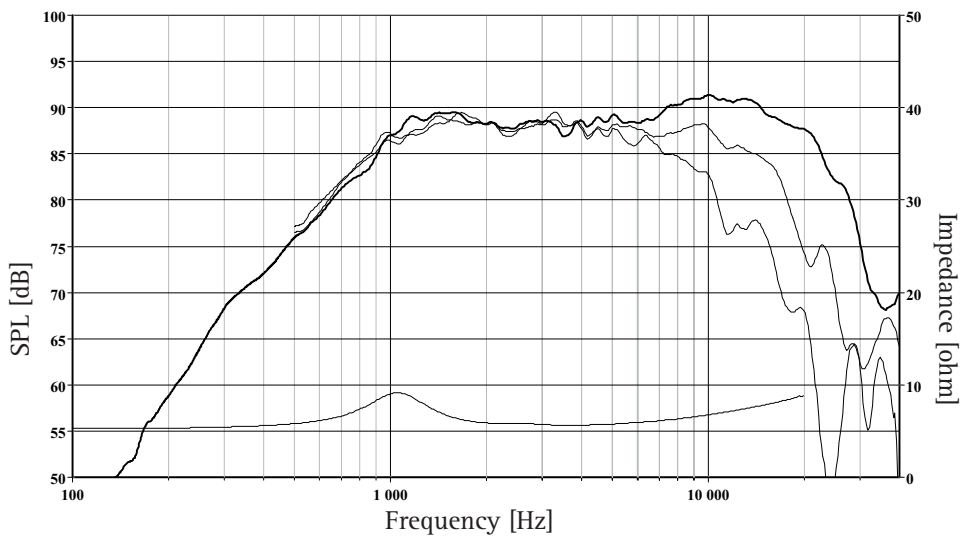
High Quality automotive tweeter.

The diaphragm is formed from a pre coated fabric material. Careful matching of fabric and coating results in a very smooth frequency response throughout the audible frequency range.

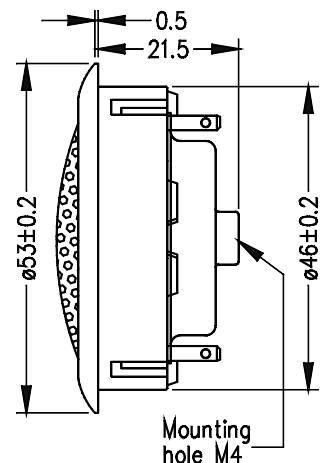
A wide roll surround together with a double chamber magnet system results in a low fundamental frequency.

Compact dual chamber neodymium magnet.

The voice coil is immersed in magnetic fluid, allowing high power handling capacity and simplified crossover design.



The frequency responses above show measured free field sound pressure in 0, 30, and 60 degrees, mounted in a 0.6m by 0.8m baffle. Input 2.83 Vrms, microphone distance 0.5m, normalized to SPL 1m. The impedance is measured without baffle using a 2V sine signal.



Nominal Impedance	6 Ohms	Voice Coil Resistance	4.9 Ohms
Recommended Frequency Range	2500 - 30000 Hz	Voice Coil Inductance	0.05 mH
Short Term Power Handling *	180 W	Force Factor	1.9 N/A
Long Term Power Handling *	80 W	Free Air Resonance	1000 Hz
Characteristic Sensitivity (2.83V, 1m)	90 dB	Moving Mass	0.23 g
Voice Coil Diameter	26 mm	Effective Piston Area	7.5 cm ²
Voice Coil Height	1.5 mm	Magnetic Gap Flux Density	2.0 T
Air Gap Height	2 mm	Magnet Weight	0.01 kg
Linear Coil Travel (p-p)	0.5 mm	Total Weight	0.15 kg

High Quality automotive woofer.

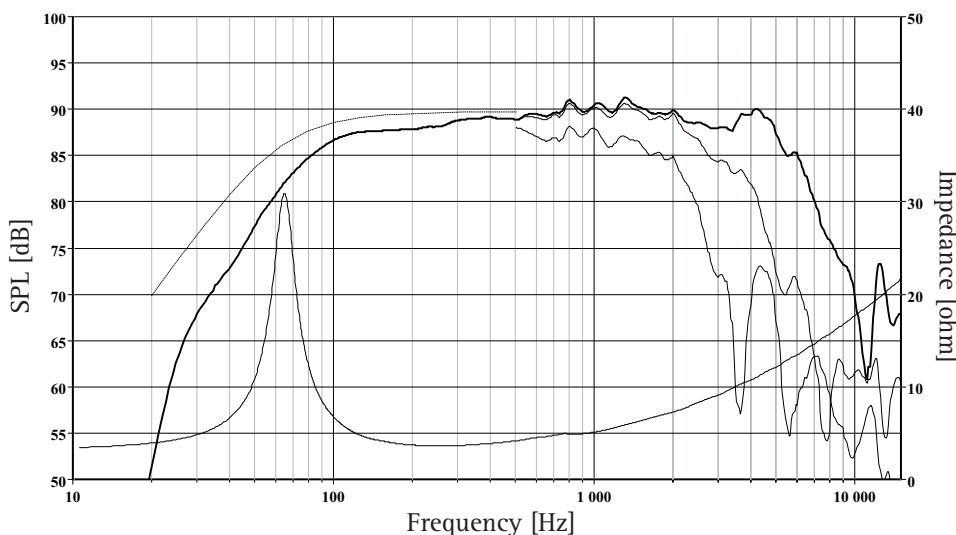
A glass fibre cone, and a stiff low loss rubber surround carefully matched to each other, result in a smooth frequency response, and a clear, precise reproduction of the critical midrange area.

A relatively large voice coil diameter results in high power handling capacity.

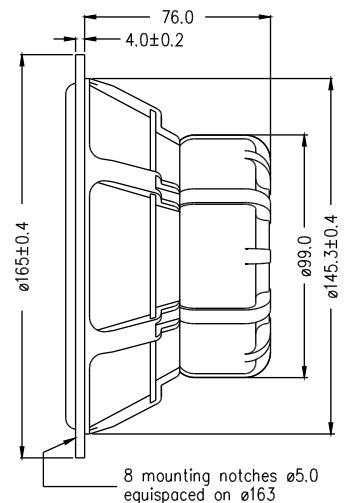
The magnet system with a T-shaped cross section of the pole piece gives low modulation distortion.

The bullet shaped phase plug reduces compression due to temperature variations in the voice coil and avoids resonances that would occur in the volume between the dust cap and the pole piece and increases the power handling capacity.

The extremely stiff and stable injection moulded metal basket keeps the critical components in perfect alignment.



The frequency responses above show measured free field sound pressure in 0, 30, and 60 degrees angle using a 12l 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	4 Ohms	Voice Coil Resistance	3.3 Ohms
Recommended Frequency Range	50 - 3000 Hz	Voice Coil Inductance	0.78 mH
Short Term Power Handling *	100 W	Force Factor	6.0 N/A
Long Term Power Handling *	250 W	Free Air Resonance	64 Hz
Characteristic Sensitivity (2.83V, 1m)	90.0 dB	Moving Mass	16.9 g
Voice Coil Diameter	39 mm	Air Load Mass In IEC Baffle	0.82 g
Voice Coil Height	12 mm	Suspension Compliance	0.4 mm/N
Air Gap Height	6 mm	Suspension Mechanical Resistance	1.3 Ns/m
Linear Coil Travel (p-p)	6 mm	Effective Piston Area	126 cm ²
Maximum Coil Travel (p-p)	19 mm	VAS	8 Litres
Magnetic Gap Flux Density	0.88 T	QMS	5.49
Magnet Weight	0.42 kg	QES	0.65
Total Weight	1.70 kg	QTS	0.58