Subwoofer Esotar² 1200

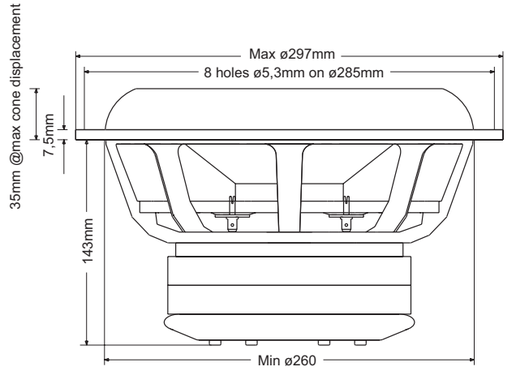
The Esotar² 1200 Subwoofer features a unique construction: a massive dual-stacked magnet system powers a large 75 mm diameter aluminum voice coil and MSP cone diaphragm.

Dynaudio's exclusive MSP material provides the ideal combination of rigidity, light weight and excellent inner damping to naturally reproduce the lowest frequencies without distortion. The Esotar² 1200 utilizes an ultra-rigid die cast frame basket to ensure the most anti-resonant foundation of a powerful, accurate and controlled bass response.

Thanks to the innovative Dynaudio construction with precise parameters and extremely tight tolerances, this newly-designed 30 cm (12") diameter woofer has been optimized to achieve the most advanced sub-bass performance. And due to the very low distortion and an amazingly quick rise response, the Esotar² 1200 is also extremely easy to seamlessly integrate into any high performance autosound system.

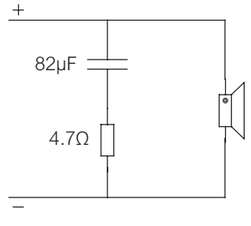
Combining powerful yet deep bass performance with incredible extension down to 18 Hz, the Esotar² 1200 reproduces the highest sound pressure levels down to the lowest notes by precisely following the amplifier's signal, even at the highest output levels.

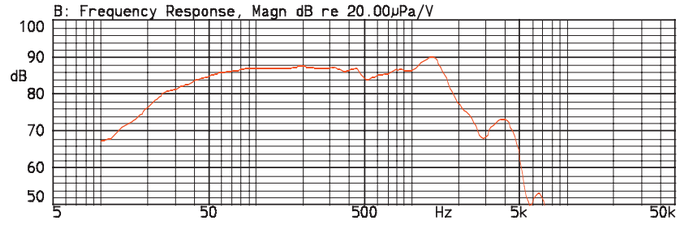
The Esotar² 1200 brings Dynaudio's most sophisticated engineering and development into the world of automotive subwoofer systems to establish another car audio industry benchmark.



Thiele Small Parameters		
Nominal impedance	Znom	4 Ω
DC resistance	Re	3.3 Ω
Voice coil inductance	Le	1.1 mH
Resonance frequency	fs	18.7 Hz
Mechanical Q factor	Qms	3
Electrical Q factor	Qes	0.4
Total Q factor	Qts	0.34
Mechanical resistance	Rms	4.4 kg/s
Moving mass (incl. air load)	Mms	114 g
Suspension compliance	Cms	0.64 mm/N
Effective dome diameter	d	233 mm
Effective piston area	Sd	425 cm²
Equivalent volume	Vas	163 l
Force factor	BL	11.1 Tm
Recommended frequency range		18–300 Hz
Magnet and Voice Coil Properties		
Voice coil diameter	dc	75 mm
Voice coil height	hc	30 mm
Linear excursion, peak to peak		20.5 mm
Max. excursion, peak to peak		58 mm
Power Handling		
Nominal long term IEC		400 W
Transient (10 ms)		1500 W
Mechanical Properties		
Net weight		8.8 kg
Overall dimension		ø 297 x 162 mm

Impedance compensation circuit

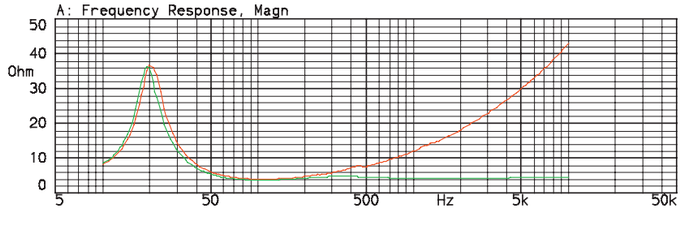




SPL

Red line: on-axis response

Measurement conditions:
Level: 2.83 V
Distance: 1 m
Box volume: 71 l



Impedance
(with and without impedance correction circuit)

Red line: impedance, free air
Green line: impedance,
free air with compensation.

Measurement conditions:
Level: 3.16 V, 50 ohm
Driver in free air

Facts

Large 75 mm voice coil ensures high power handling

Diaphragm with very high excursion, 58 mm peak-to-peak

High power handling,
400W long term IEC

Rigid die-cast chassis with aerodynamically shaped ribs

Materials and parameters are optimized for the harsh environmental conditions in a car