

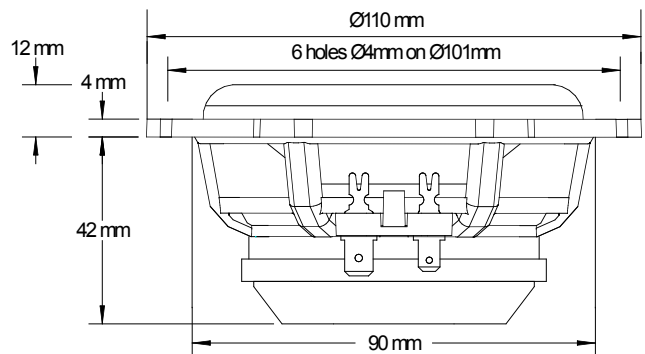
Woofers Esotar² 430

The Esotar² 430 is a midrange designed for 2-way or 3-way systems. It delivers an impressive clarity and natural reproduction in almost any application.

The driver exhibits a very linear frequency response and a good dispersion from 200Hz and up to 7kHz, even 60 degrees off-axis. This, combined with the low distortion and the linear impedance, makes it possible to achieve excellent results.

The driver is a simple load for the amplifier and the use of an impedance correction circuit will make it even simpler. The low suspension compliance makes the driver suitable for small enclosures normally used in cars.

- Diaphragm and dust cap moulded as one piece
- Internal double magnet system with vented pole piece
- Magnetsystem with neodymium magnet and vented pole piece
- Aluminium voice coil wire provides for a low moving mass, wound on aluminium former
- Rigid die-cast chassis with aerodynamically shaped ribs
- Materials and parameters are optimized for the harsh environmental conditions in a car
- Smooth high-frequency roll-off
- Natural midrange reproduction



Thiele Small Parameters		
Nominal impedance	Znom	4 Ω
DC resistance	Re	4 Ω
Voice coil inductance	Le	0,19 mH
Resonance frequency	Fs	64 Hz
Mechanical Q factor	Qms	1,5
Electrical Q factor	Qes	0,21
Total Q factor	Qts	0,18
Mechanical resistance	Rms	1,3 kg/s
Moving mass (incl. air load)	Mms	4,9 g
Suspension compliance	Cms	1,2 mm/N
Effective cone diameter	D	75 mm
Effective piston area	Sd	45 cm ²
Equivalent volume	Vas	3,5 l
Force factor	Bl	6,2 Tm
Recommended frequency range	200-7000 Hz	
Recommended closed box volume	0,5-4 l	

Magnet and Voice Coil Properties		
Voice coil diameter	dc	34 mm
Voice coil height	hc	9,5 mm
Voice coil layers	nc	2
Magnetic gap height	hg	5 mm
Linear excursion, peak to peak		4,9 mm
Max. excursion, peak to peak		21 mm
Magnet weight:		
Neodymium	wm	0,1 kg

Power Handling	
Nominal long term IEC	150 W
Nominal long term IEC, with 250Hz high pass filter	200 W
Transient (10 ms)	1000 W

Mechanical Properties	
Net weight	0,47 kg
Overall dimension	Ø110x49 mm

All specifications subject to change without notice

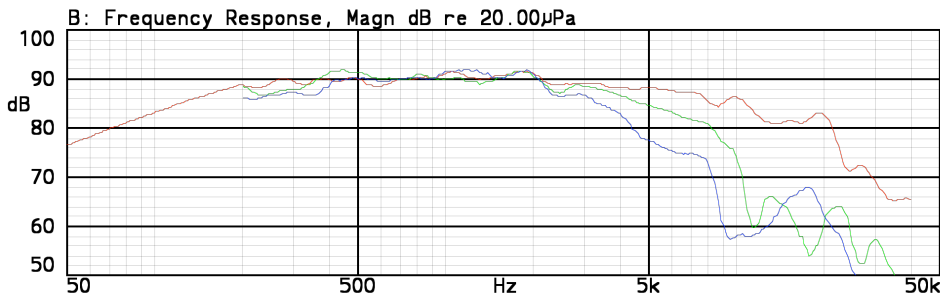
Dynaudio A/S, 8660 Skanderborg, Denmark

Sales & Marketing

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Woofer Esotar² 430

Frequency response • on-axis, 30° and 60° off-axis



Red line: on-axis response
Green line: 30° horizontal
Blue line: 60° horizontal

Measurement conditions

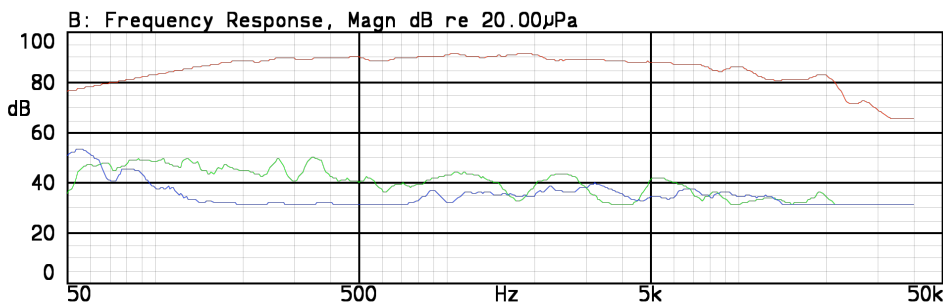
Level: 2.83 V
Distance: 1 m
Box volume: 4 l

15-OCT-2008 10:16:22

Mode: SSR



Frequency response • 2nd and 3rd harmonic distortion



Red line: on-axis response
Green line: 2nd harmonic
Blue line: 3rd harmonic

Measurement conditions

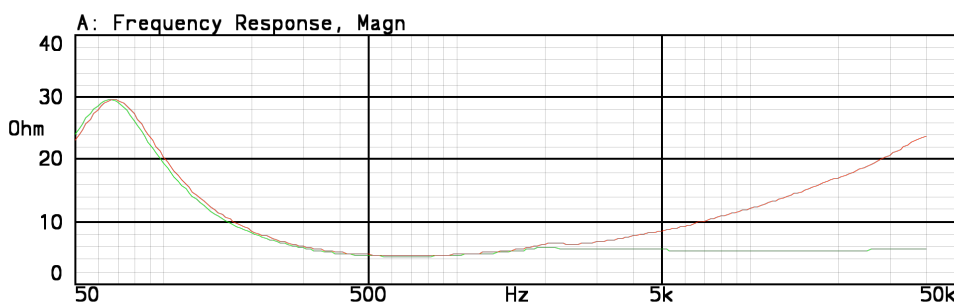
Level: 2.83 V
Distance: 1 m
Box volume: 4 l

15-OCT-2008 10:14:16

Mode: SSR



Impedance • with and without impedance correction circuit



Red line: impedance, free air
green line: impedance, free air with compensation. See drawing below.

Measurement conditions

Level: 3,16 V, 50 ohm
Driver in free air

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Mode: SSR



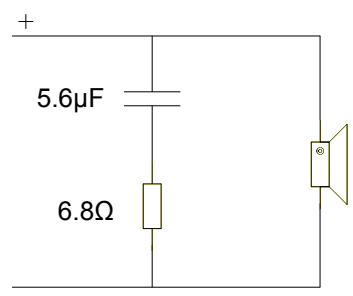
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Impedance correction circuit



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