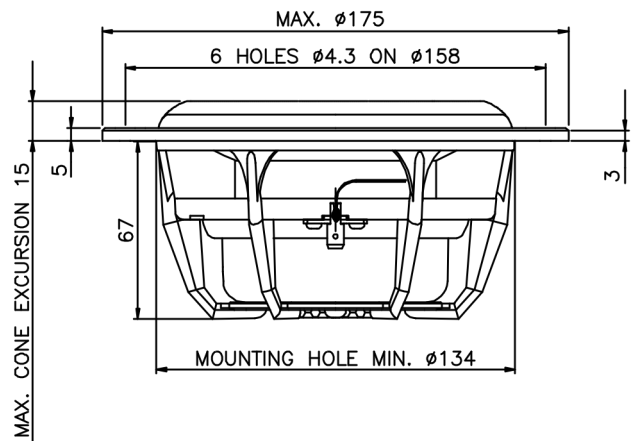


Woofers Esotec MW 162

The MW 162 is a medium sized woofer designed for 2-way or 3-way systems or combined with a subwoofer in a high quality full range installation.

Due to the combination of smooth frequency response and good dispersion, this driver makes it possible to design a 2-way installation with a clear and detailed midrange as well as a strong and powerful bass.

- Diaphragm and dust cap moulded as one piece
- Large 75 mm voice coil ensures high power handling
- Internal double magnet system with vented pole piece
- Aluminium voice coil wire provides for a low moving mass
- 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	3.1 Ω
Voice coil inductance	Le	0.22 mH
Resonance frequency	fs	55 Hz
Mechanical Q factor	Qms	2.2
Electrical Q factor	Qes	0.57
Total Q factor	Qts	0.45
Mechanical resistance	Rms	2.7 kg/s
Moving mass (incl. air load)	Mms	17.4 g
Suspension compliance	Cms	0.48 mm/N
Effective cone diameter	d	124 mm
Effective piston area	Sd	120 cm ²
Equivalent volume	Vas	9.8 l
Force factor	Bl	5.7 Tm
Recommended frequency range	40-4000 Hz	
Recommended closed box volume	7-21 l	

Magnet and Voice Coil Properties		
Voice coil diameter	dc	75 mm
Voice coil height	hc	10.9 mm
Voice coil layers	nc	2
Magnetic gap height	hg	5 mm
Linear excursion, peak to peak		6 mm
Max. excursion, peak to peak		17 mm
Magnet weight	wm	0.53 kg

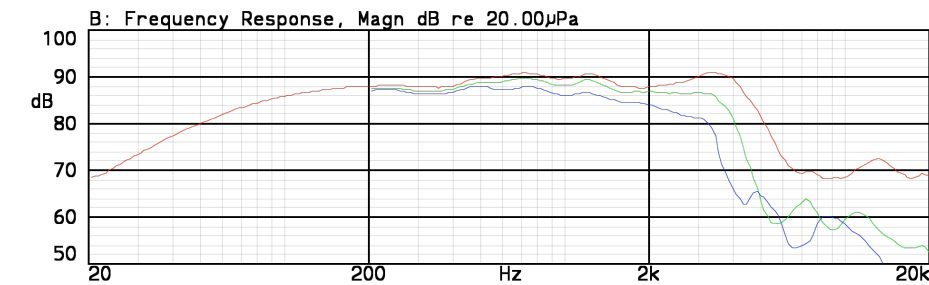
Power Handling	
Nominal long term IEC	120 W
Transient (10 ms)	1000 W

Mechanical Properties	
Net weight	1.2 kg
Overall dimension	ø175x77 mm

All specifications subject to change without notice

Woofers Esotec MW 162

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



Mode: SSR

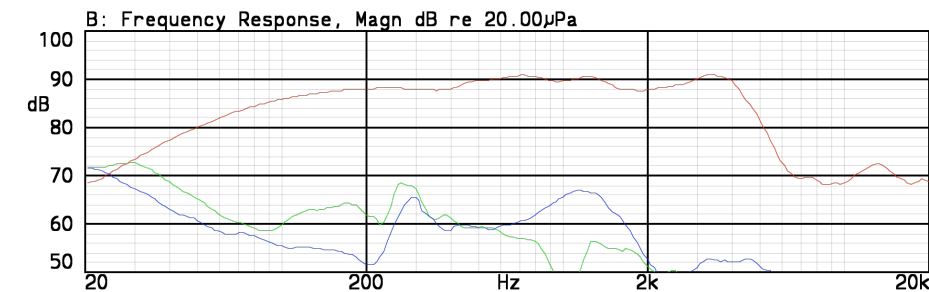


Red line: on-axis response
Green line: 30° horizontal
Blue line: 60° horizontal

Measurement conditions

Level: 2.83 V
Distance: 1 m
Box volume: 15.6 l

Frequency response • 2nd and 3rd harmonic distortion



Mode: SSR



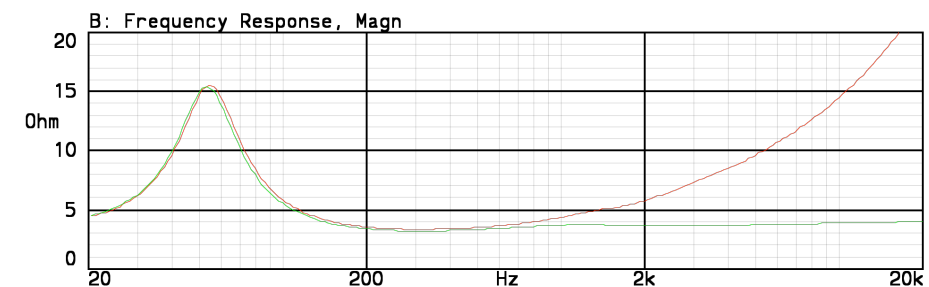
Red line: on-axis response
Green line: 2nd harmonic
Blue line: 3rd harmonic

2nd and 3rd harmonic raised 20 dB

Measurement conditions

Level: 2.83 V
Distance: 1 m
Box volume: 15.6 l

Impedance • with and without impedance correction circuit



Mode: Impedans



Thick line: impedance, free air
Thin line: impedance, free air with compensation. See drawing below.

Measurement conditions

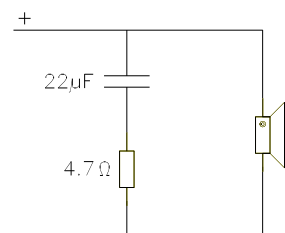
Level: 2 V, 10 ohm
Driver in free air

The driver exhibits a very linear frequency response and a good dispersion up to 3.5 kHz even 60 degrees off-axis. This, combined with the low distortion and the linear impedance, makes it possible to achieve excellent results even with simple crossovers.

The driver is a simple load for the amplifier and the use of an impedance correction circuit will make it even more simple.

The low suspension compliance makes the driver suitable for small enclosures normally used in cars while also allowing for mounting without a dedicated enclosure, e.g. in a hat shelf or in a door.

Impedance correction circuit



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