

Wib120_vHE

High End Wideband.



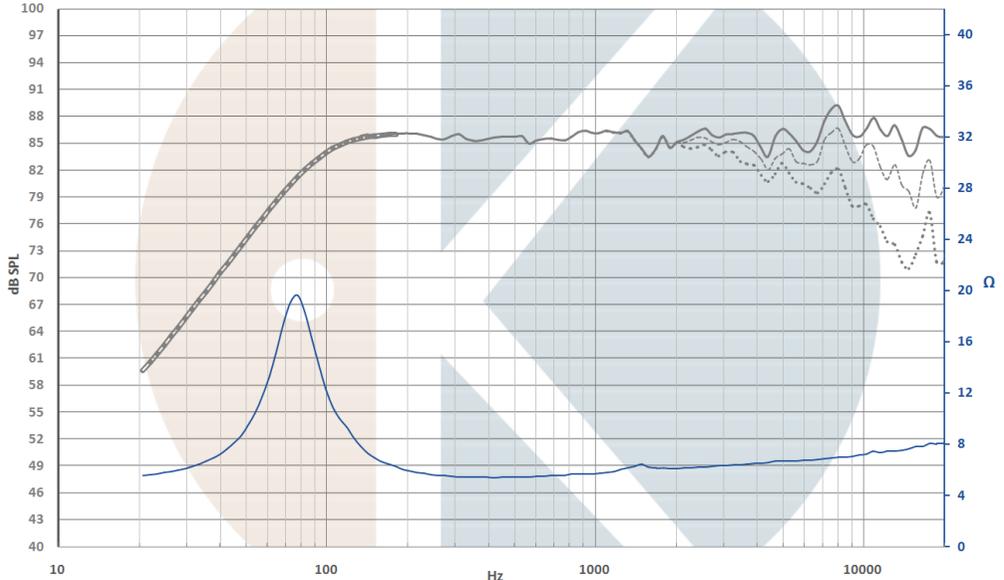
Wib120_vHE is a modern wide band, allying low frequency extension and linear frequency response up to 22kHz. The cone (exponential profile) is made of mixed cellulose and glass fiber, with specific damping applied on the back of the membrane to minimize sound coloration.

It integrates several innovations (dynamik spider, stepped voice coil, Kombo magnets, ...) to ensure high dynamic range and clean transient response.

The motor structure is built with very low carbon steel, high grade magnets (Ferrite and Neodymium).

A large cooper ring reduces the inductance non-linearity to the minimum (0.08mH at 1kHz).

Thanks to the stepped voice coil, the Wib120_vHE has low moving mass and wider force factor $[B(X)]$ than most of its competitors.



On IEC baffle / Distance: 1m / Signal input: 2,83V / Dash curves: 20° & 40°
Impedance measured in free air / Smoothing: 1/12 Octave

Curve below 150Hz is simulated in 3.5L sealed enclosure, ($F_{sc} = 110\text{Hz} / Q_t c = 0.83$)

Wib120_vHE

Our products can be adapted to your technical requirements and brand spirit.

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Advanced construction

Membrane

Paper - GF cone, damped on its back
Aluminum dust cap (0.035mm Thickness)

Suspension

Low lost NBR surround
dynamik spider

Voice coil:

Ø24mm, stepped winding, CCAW ribbon
Aluminum former

Motor structure:

Dual high-grade magnets (Fe + NdFeB)
Demodulated by Cooper ring
Optimized and vented pole pieces design
Very low carbon steel

Frame

Injected aluminum
Vented spider

T&S

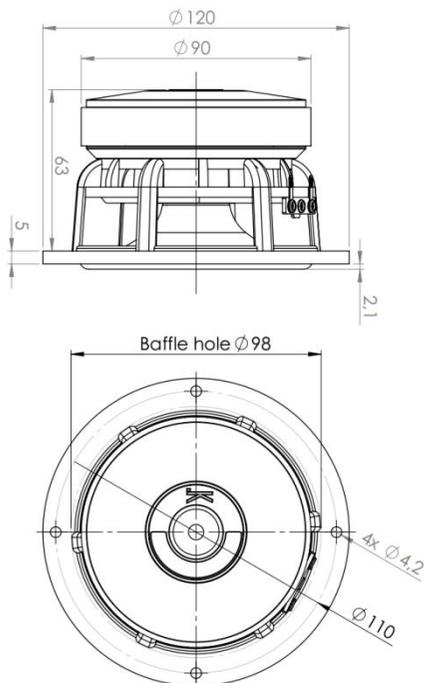
Fs 68Hz
SPL 86dB/2.8V/1m
Re 5.6Ω

Qms 2.25
Qts 0.56
Bl 3.98N/A

VAS 4.4L
Mms 4.9g
Sd 52.8cm²

Linear excursion: +/-4 mm
Maximal excursion: +/-6mm

Nominal power: 40W
Maximal power handling: 60W



Integrated innovation



.Konstant Le(X)



.Kombo magnets



.dynamik spider



.Kompliance surround

Visit our website to discover our innovation

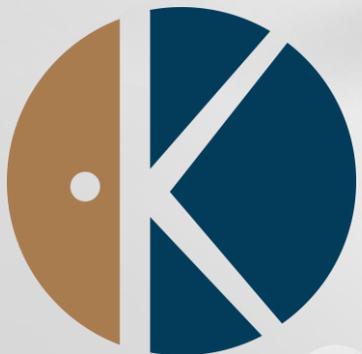
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.Kartesian
S P E A K E R I N N O V A T O R

Kapella_4

Kapella_4 is a loudspeaker kit designed by Kartesian and dedicated to DIY community and HiFi lovers.

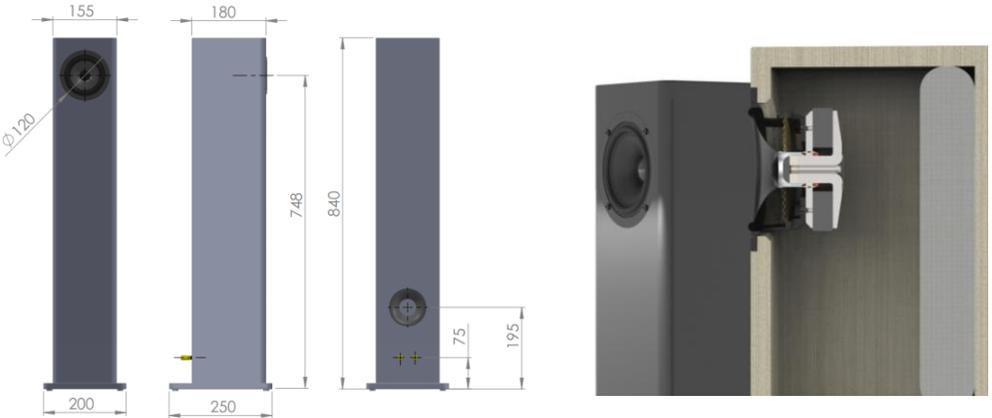
It uses the Wib120_vHE, an advanced 4" wideband driver integrating several Kartesian innovation.

Kapella_4 is a very good project for those who want to create an elegant and very compact floor stand loudspeaker (840mm height, 155mm wide), with beautiful sounding.

Kapella_4 covers a wide frequency band (45 - 25000Hz à -3dB), which is perfect for daily listening at domestic sound level (up-to 95dB at 1m).

We recommend 20 to 50W (under 8Ω load) amplifier to work with Kapella_4.

It can be digital amplifier with integrated streamer / DAC, or vintage tube amplifier.



Components assembling



Enclosure

Drawings available in separated sheet.

Driver

Kartesian reference : Wib120_vHE.

Damping material

Polyester 125 x 250mm, 25 to 40mm thickness.

More damping can be added to slow down the air flow and decrease output level of the vent.

It could be useful if you install Kappella_4 in a corner.

Vent

Kartesian reference Vent_v75 .

Terminal

Up to your choice.

We suggest regular terminal going through the back panel.

Passive filter (Optional)

It provides more linear frequency response from 2 to 15kHz.

Made of 3 components, it is located in the feet stand.

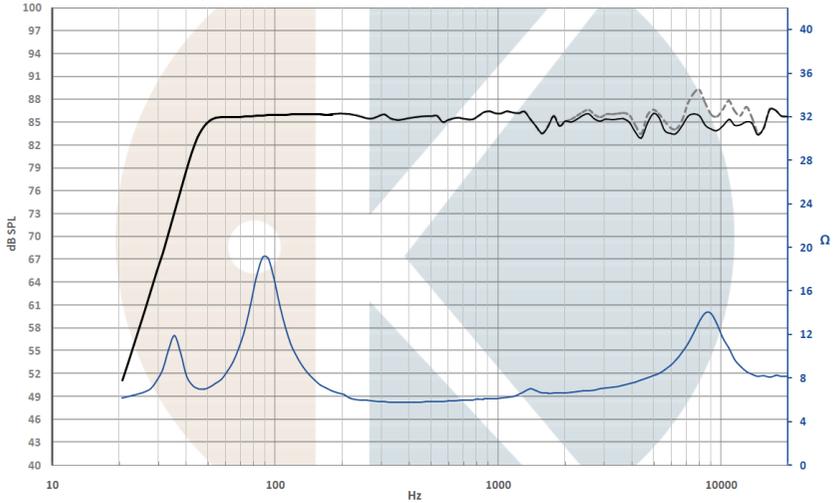
Kapella_4 : Kit details

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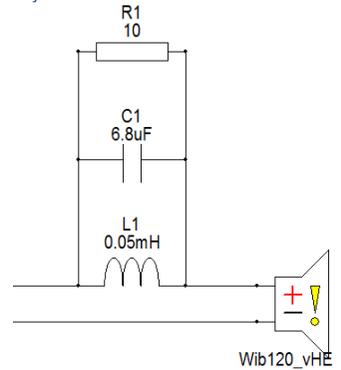
Frequency response & passive filter



With Kapella_4 enclosure and passive filter / Distance: 1m / Signal input: 2,83V / On speaker axe / Smoothing: 1/12 Octave
 Dash curve : without passive filter / Curve below 180Hz measured with pressure field microphone (sum of vent and driver output)
 Impedance measured in Kapella_4 enclosure, with passive filter

Passive filter is screwed on the feet stand, in a window cut on enclosure bottom.

It is a cut band filter made of 3 components (L, C, R) connected in parallel.



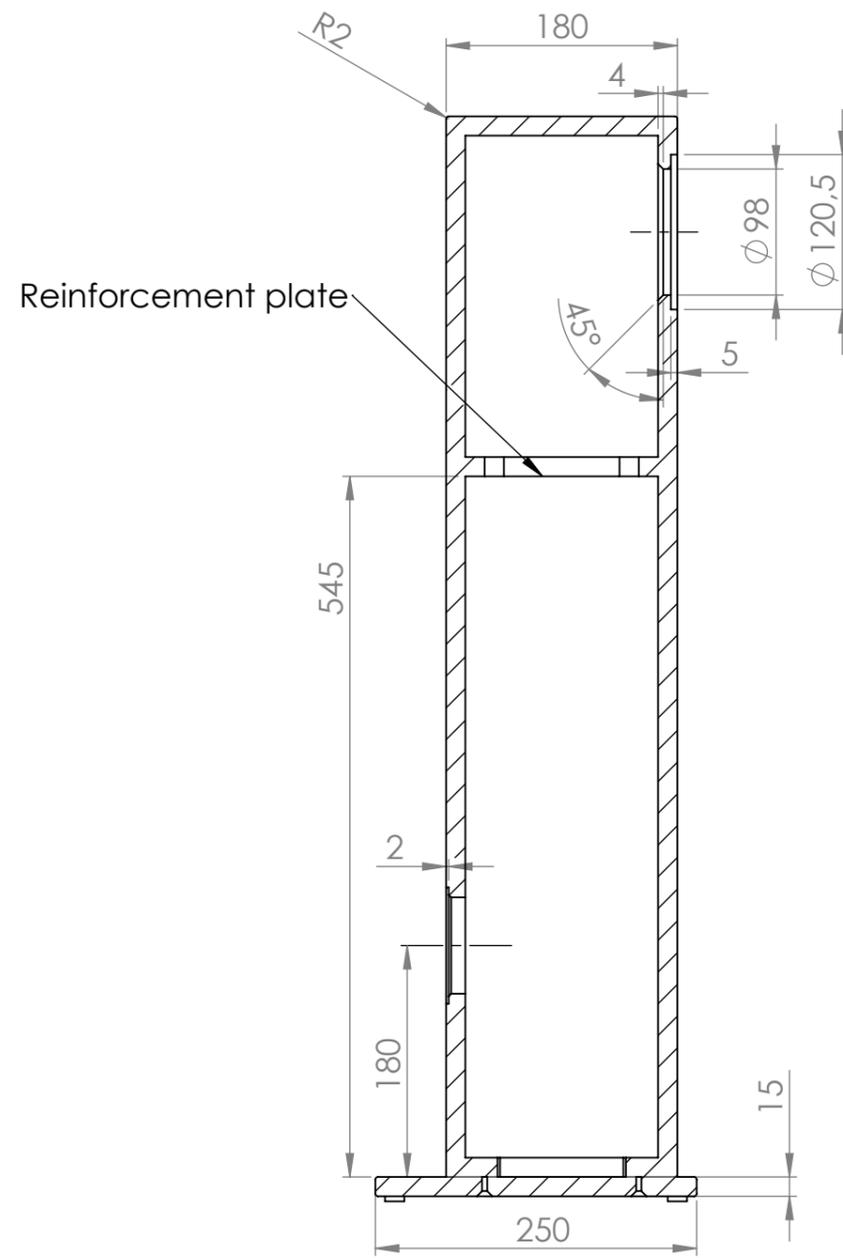
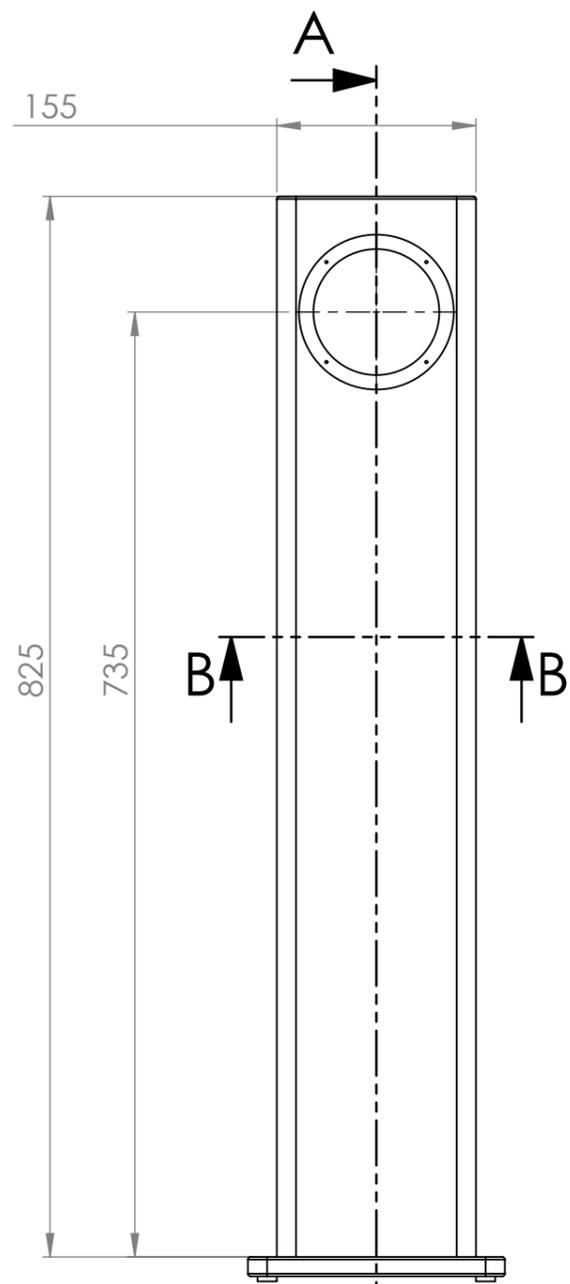
Inspiration for finish / painting



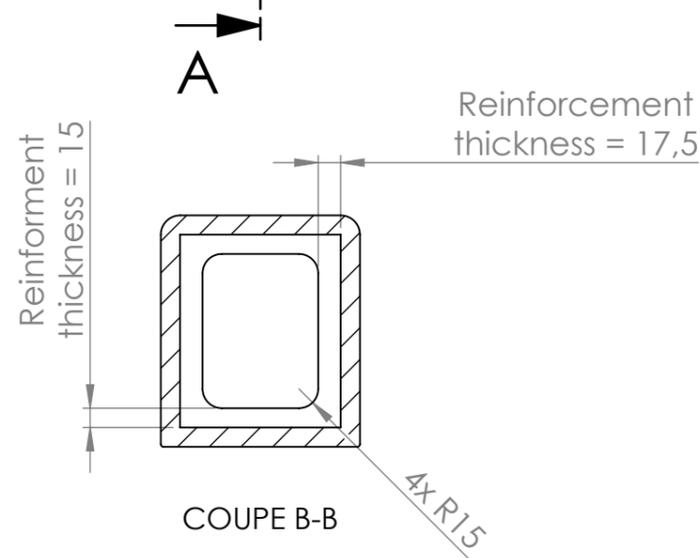
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COUPE A-A



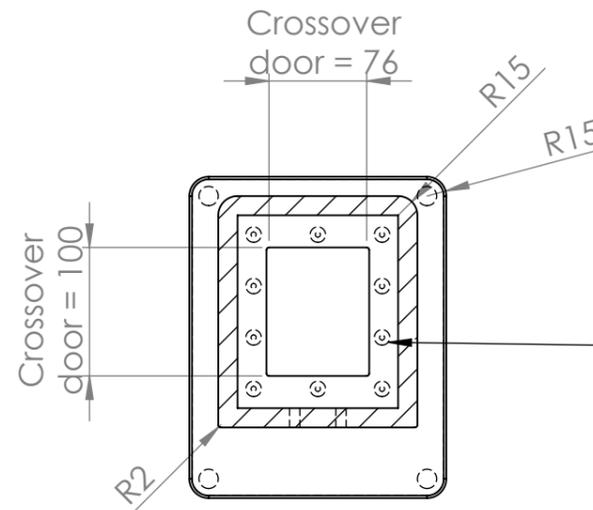
COUPE B-B

Kapella_4
Kartesian loudspeaker kit
Dedicated to DIY community

Enclosure material : MDF or Plywood
Thickness : 15mm

Unit : [mm]

Note: This kit is dedicated to DIY community. Kartesian couldn't be responsible of assembling mistake and its consequences..



COUPE C-C

Terminal holes : $\phi 8$
(depends on your terminal)

Suggested to attach
basement on
enclosure : 10x M4
screws with nuts in
bottom of enclosure

