

## TABAQ with 4 inch drivers

TABAQ was originally designed for 3 inch speakers with high Qts. By pure luck, you might say, the design also works well for 4 inch drivers with a more moderate Qts as these drivers have a lower Fs.

Therefore, the tuning of 55 Hz remains for 4 inch constructions.

The following simulations are done with Tang Bang W4-1320SJ with the following parameters:

Fs 75 Hz

Vas 6.41 liter

Qts 0.355

Re 6.8 Ohm

Lv 0.013 mH

Sd 57 cm<sup>2</sup>

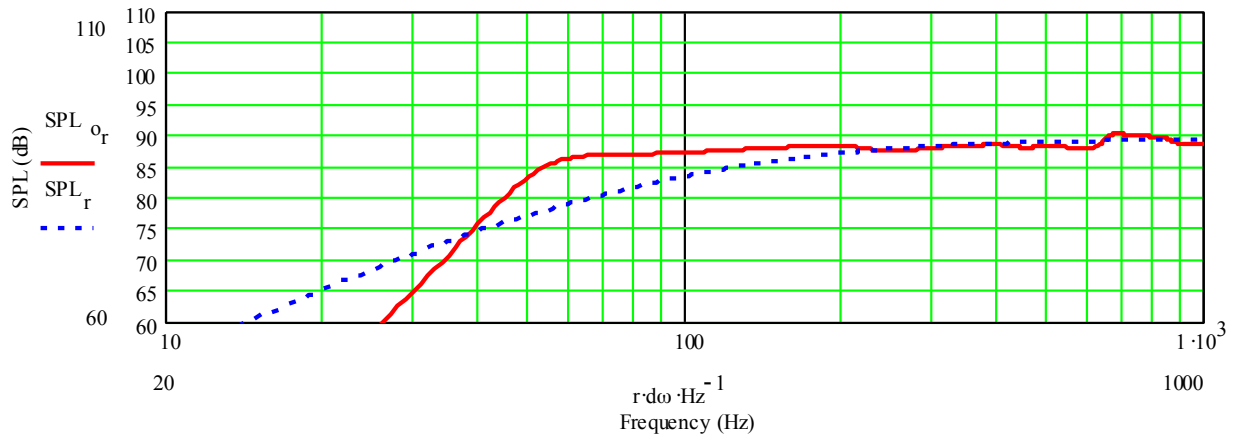
I spend some time to see if any more performance could be squeezed out of this driver, or any driver with similar T/S parameters.

Using standard TABAQ design, the stuffing is lighter.

If you can accept a larger enclosure, you will get some improvement of the bass: Increasing the volume (cross section of the pipe) and increasing the cross section of the port to balance the tuning frequency.

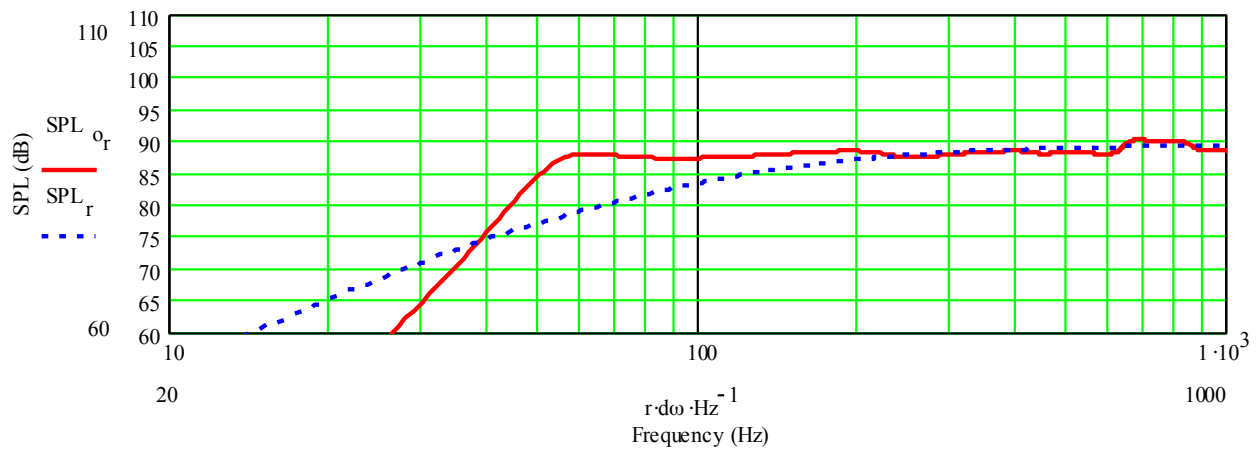
## Standard TABAQ

This is standard TABAQ but with the lighter stuffing 63 gram.



## Larger volume

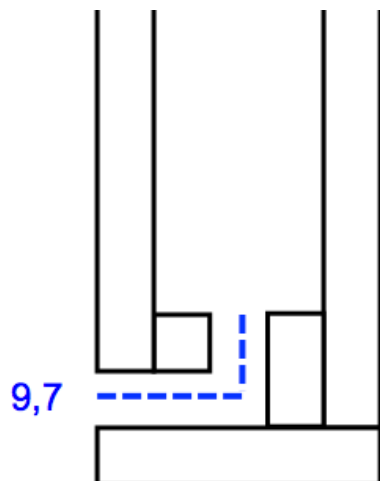
In this example, the cross section of the line has been increased to  $171 \text{ cm}^2$  and the volume of the last part of the line (the opening) has been increased to  $22.8 \text{ cm}^3$ . Stuffing is 84 gram.



### About the opening

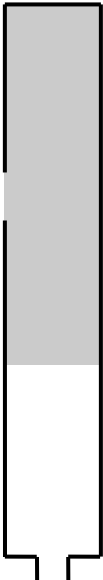
Width and depth of the enclosure can be designed as you wish as long as the cross section remains the same.

The port length:

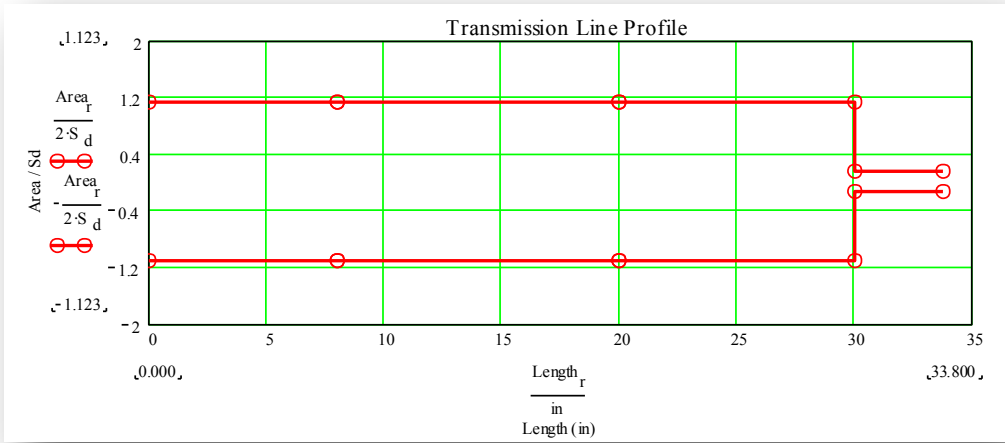


TABAQ Original Geometry

Driver – Closed end 8”	20,3 cm	128 cm <sup>2</sup>
Driver – Aperture 22”	55,9 cm	128 cm <sup>2</sup>
Aperture – 3.8 ”	9,7 cm	16 cm <sup>2</sup>
Stuffing upper 2/3	0.227 lb	103 gram



Profile MJK model:



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Private use is welcome !