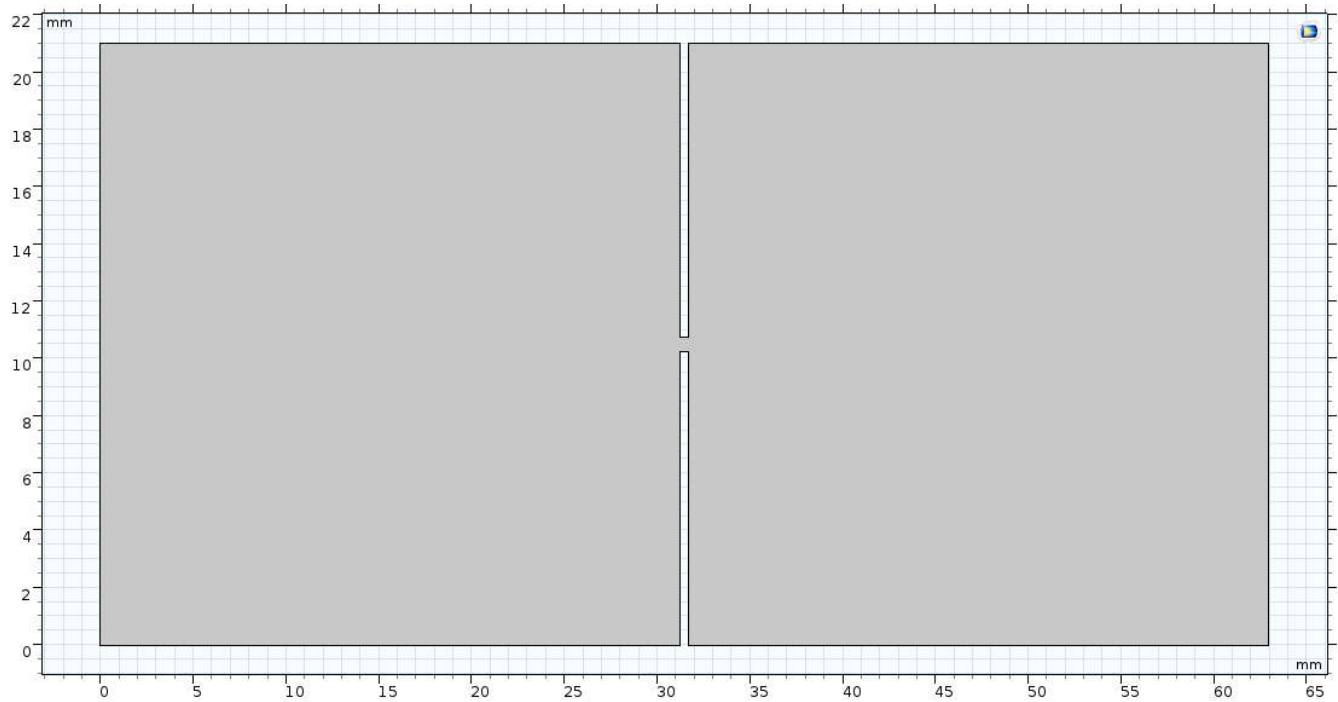


Model setup

The 2D model consists of a straight pipe with a diameter of 21 mm and a length of 63 mm. A coaxial orifice with a diameter of 0.5 mm is located in the middle of the pipe length.



The density ρ is $1.08 \cdot 10^3 \text{ kg/m}^3$ and the dynamic viscosity μ of $4 \cdot 10^{-3}$ are used to reach the desired reference Reynolds number of 418.8.

The laminar flow interface is used and the model is driven by a pressure boundary condition with an inlet pressure of 10^5 Pa . The Outlet is set to zero and backflow is suppressed.