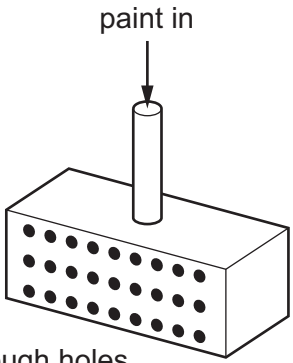
8 A device for spraying paint consists of a box with its axes horizontal and vertical. One of its vertical faces contains small holes. Paint is fed into the box under pressure via a vertical tube and exits through the holes as fine streams moving horizontally.



The paint is ejected at a speed of $2.5\,\text{m}\,\text{s}^{-1}$ through 400 holes, each of area $0.4\,\text{mm}^2$. The density of the paint is $900\,\text{kg}\,\text{m}^{-3}$.

What is the horizontal force required to hold the device stationary as it ejects the paint?

A 0.36 N **B** 0.90 N **C** 2.3 N **D** 900 N