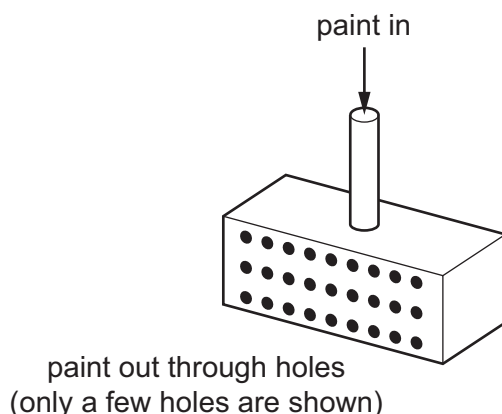


- 7 A device for spraying paint consists of a box with its faces horizontal and vertical. One of its vertical faces contains small holes. Paint is fed into the box under pressure via a vertical tube and exits through the holes as fine streams moving horizontally.



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

- 8 Each diagram illustrates a pair of forces of equal magnitude.

Which diagram gives an example of a pair of forces that is described by Newton's third law of motion?

