4 Water is ejected at a speed of 0.5 m s^{-1} onto a wall from the nozzle of a hose with a diameter of 0.01 m. The density of water is 1000 kg m^{-3}.

If the water does not rebound, what is the force exerted by the water on the wall?

A 5.0 x 10^{-3} N   **B** 2.0 x 10^{-2} N   **C** 2.5 x 10^{-2} N   **D** 7.9 x 10^{-2} N