

13 The density of argon gas at a pressure of $1.00 \times 10^5 \text{ Pa}$ is 1.60 kg m^{-3} .

What is the root-mean-square speed of the argon molecules?

A 216 m s^{-1}

B 250 m s^{-1}

C 306 m s^{-1}

D 433 m s^{-1}