

1 The drag force F acting on a moving sphere obeys an equation of the form $F = kAv^2$, where A represents the sphere's frontal area and v represents its speed.

What are the base units of the constant k ?

A $\text{kg m}^5 \text{s}^{-4}$

B $\text{kg m}^{-2} \text{s}^{-1}$

C kg m^{-3}

D $\text{kg m}^{-4} \text{s}^2$

2 The table contains some quantities, together with their symbols and units.