15 A sound wave propagates from left to right through a gas.

Fig. 15(a) shows the positions of some gas molecules at a particular instant of time.
Fig. 15(b) shows the variation with time *t* of the displacement *s* of one of these particles.

The distance between particles P and Q is 0.26 m.

Fig. 15(a)

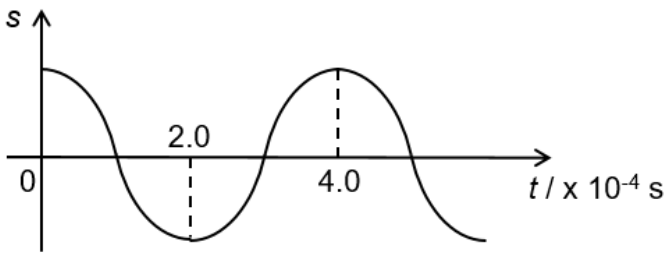

Fig. 15(b)

What is the speed of sound in this gas?

A 300 m s^{-1} **B** 330 m s^{-1} **C** 380 m s^{-1} **D** 660 m s^{-1}