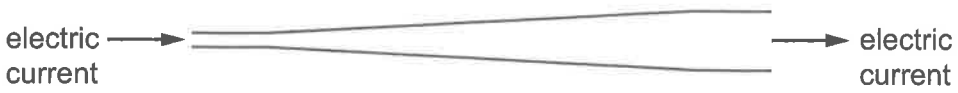
20 A length of metal wire with a circular cross-section is connected into an electric circuit. The wire carries a constant electric current.



Part of the wire has a diameter that increases uniformly with distance along the wire.

The drift velocity v of the charge carriers is related by a constant K to the diameter d of the wire.

Which equation for v is correct?

A $v = \frac{K}{d^2}$ **B** $v = \frac{K}{d}$ **C** $v = Kd$ **D** $v = Kd^2$