

35 An electrical cable consists of seven strands of copper wire, each of diameter 0.30 mm, connected in parallel.

The resistivity of copper is $1.72 \times 10^{-8} \Omega\text{m}$. The current in the cable is 13 A.

What is the potential difference (p.d.) between two points on the cable a distance of 1.0 m apart?

A 0.0045 V

B 0.11 V

C 0.45 V

D 3.2 V