

4 An experiment is carried out to measure the resistance of a wire.

The current in the wire is $(1.0 \pm 0.2)\text{ A}$ and the potential difference across the wire is $(8.0 \pm 0.4)\text{ V}$.

What is the resistance of the wire and its uncertainty?

A $(8.0 \pm 0.2)\Omega$

B $(8.0 \pm 0.6)\Omega$

C $(8 \pm 1)\Omega$

D $(8 \pm 2)\Omega$

5 The Young modulus of the material of a wire is to be found. The Young modulus E is given by the