27 A flat search coil containing 50 turns each of area $2.0 \cdot 10^{-4}\,m^2$ is connected to a galvanometer. The total resistance of the circuit is 100 Ω. The coil is placed so that its plane is normal to a magnetic field of flux density 0.25 T.

The coil is moved to a region of negligible magnetic field over a time *t*.

What is the amount of charge that passes through the galvanometer during this time *t*.

A $5.0 \cdot 10^{-7}\,C$ **B** $2.5 \cdot 10^{-5}\,C$ **C** $2.5 \cdot 10^{-1}\,C$ **D** $4.0 \cdot 10^{4}\,C$