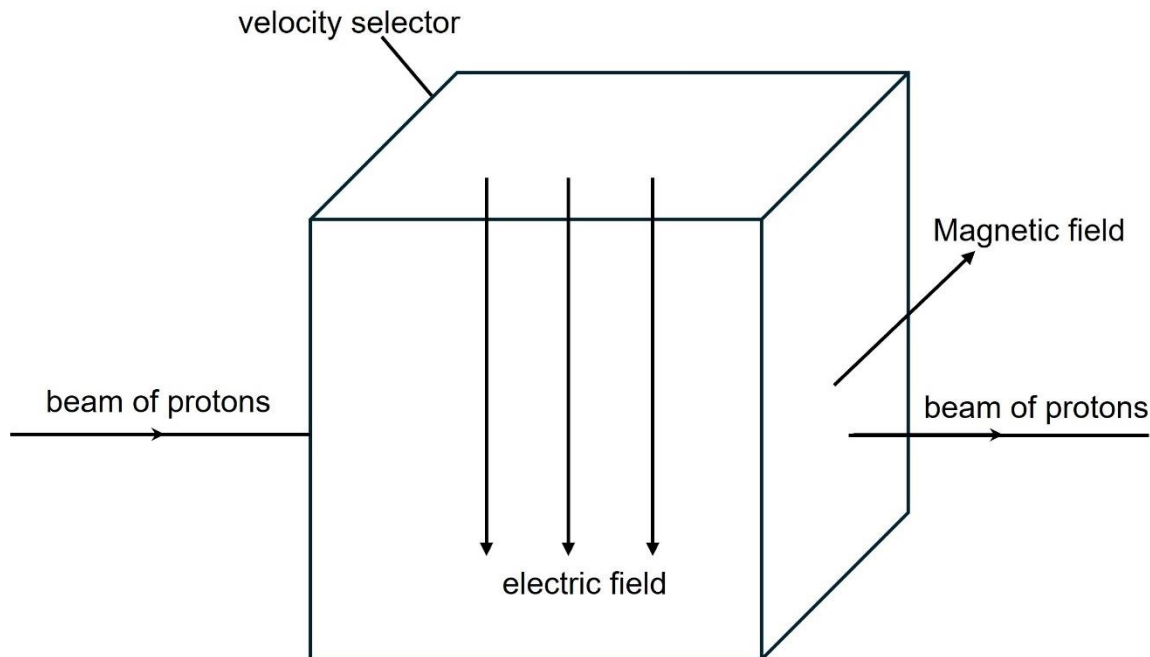


- 23** A beam of protons enters a velocity selector as shown. The electric field E acts vertically downwards, and the magnetic field B is directed into the page.



If only protons with a particular speed emerge undeflected, which change would result in the protons being deflected downwards?

- A** Increasing the electric field strength only
- B** Increasing the magnetic field strength only
- C** Increasing both E and B by the same factor
- D** Increasing the proton's speed

- 24** A rectangular coil of wire lies in a uniform magnetic field of 0.20 T . The field is perpendicular to the