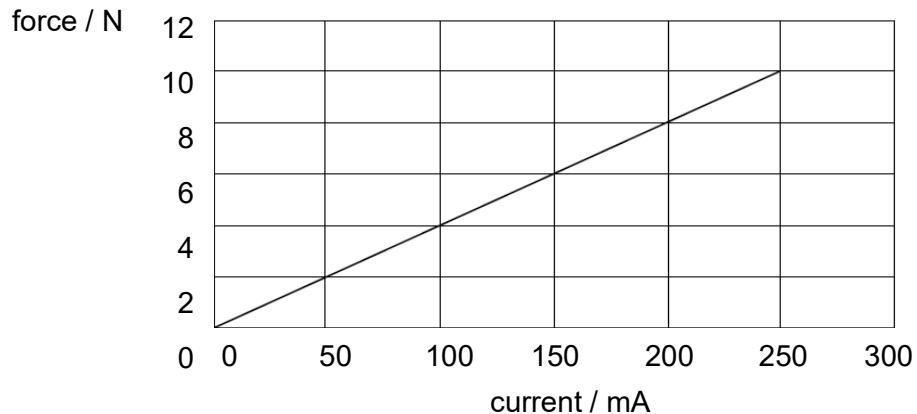


- 26** A straight wire which is part of a closed circuit, is positioned at right angles to a uniform magnetic field. The graph below shows the variation of the magnetic force acting on the wire with respect to the current flowing in the wire.



The circuit is subsequently switched off and the same piece of wire is then vibrated at a frequency of 80 Hz and amplitude of 24 mm. The plane of vibration is assumed to always remain perpendicular to the magnetic field.

What is the maximum e.m.f. induced across the wire?

- A** 0.077 V
- B** 0.48 V
- C** 77 V
- D** 480 V