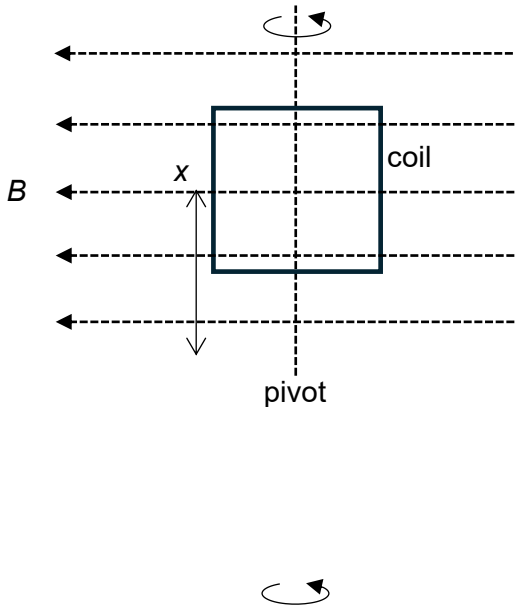
25 A 20-turns square coil of side of length x = 8.0 mm is pivoted at its centre and placed in a uniform magnetic field of flux density B = 0.010 T such that two sides of the coil are parallel to the field and two sides of the coil are perpendicular to the field as shown below. The coil rotates about the pivot with a frequency of 25 Hz.



What is the maximum e.m.f. induced by the coil?

A 1.3×10^{-5} V **B** 3.2×10^{-4} V **C** 2.0×10^{-3} V **D** 1.2 V