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A flat circular coil of 500 turns, each of diameter 30 mm, is placed such that a uniform magnetic field passes normally through its plane. Over a period of 60 ms, the flux density is reduced steadily from 20 mT to zero, then increased steadily to 20 mT in the opposite direction.

Which of the following is the average e.m.f. induced in the coil during this period?

A

0

B

0.12 V

C

0.24 V

D

0.94 V