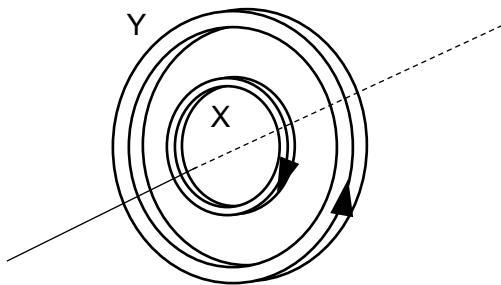


- 24** Two flat circular coils, X and Y, each with 50 turns, are arranged as shown in the diagram.



X has radius 0.050 m and carries a current of 2.0 A. Y has radius 0.10 m and carries a current 4.0 A in the opposite direction to X.

What is the magnitude of the total magnetic flux density at the centre of the coils?

A zero

B $2000\mu_0$

C $3000\mu_0$

D $4000\mu_0$