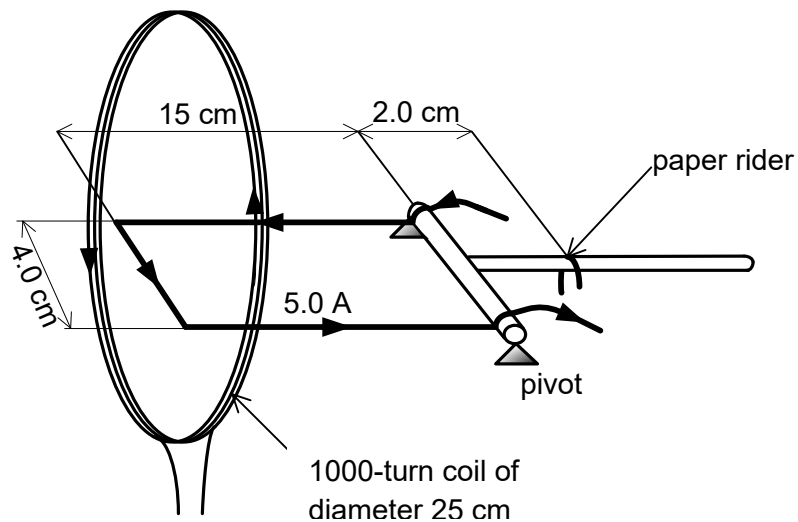


- 25** One end of a flat rectangular coil of negligible mass is placed at the centre of a 1000-turn circular coil of diameter 25 cm as shown.

A current of 5.0 A is passed through the rectangular coil.

When a 5.0 g paper rider is placed 2.0 cm to the right of the pivot, the rectangular coil is balanced horizontally.



What is the magnitude of the current in the 1000-turn circular coil in order for the rectangular coil to remain horizontal?

- | | |
|----------------|----------------|
| A 3.3 A | B 5.0 A |
| C 6.5 A | D 9.0 A |

