
Folded metallic strip with current. As insulated metallic strip folded as in Fig. Q4.9 carries a steady current of intensity I . The width of the strip is $a = 20d$, where d is the diameter of the cylindrical cavity formed by the strip. With this, the magnitude of the \mathbf{B} field at the point P inside the cavity (see the figure) is

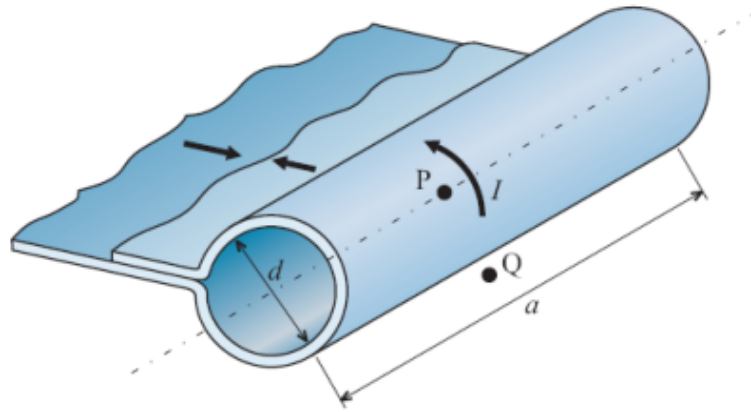


Figure Q4.9 Folded metallic strip carrying a steady current; for Question 4.13.

- (A) considerably larger than
- (B) considerably smaller than
- (C) practically the same as

that at a point Q outside the cavity.

Solution: (A)

Answer: (A)