18 A coil contains N turns of insulated copper wire wound on to a cylindrical iron core of diameter D. The copper wire has a diameter d. The resistivity of copper is ρ. Diameter D is much greater than diameter d.

What is the total resistance between the two ends of the coil?

A $\dfrac{4N\rho D}{d^2}$　　　　**B** $\dfrac{4N\rho d}{D^2}$　　　　**C** $\dfrac{8N\rho D}{d^2}$　　　　**D** $\dfrac{8N\rho d}{D^2}$