

$$T_{avg\ rotation} = \frac{1}{2} \times \frac{1}{15,000RPM} \times \frac{60secs}{1min} \times \frac{1000ms}{1secs} = 2ms$$

$$T_{avg\ transfer} = \frac{1}{15,000RPM} \times \frac{1track}{500sectors} \times \frac{60secs}{1min} \times \frac{1000ms}{1secs} = 0.008ms$$

$$\begin{aligned} T_{access} &= T_{avg\ seek} + T_{avg\ rotation} + T_{avg\ transfer} \\ &= 8ms + 2ms + 0.008ms = 10.008ms \end{aligned}$$