527326-12-7E AID: 258164| 27/06/2020

1000 read requests ,to a randomly chosen sector disk head on outside track ;CSCAN

seek time:

average seek for one request = 0.2% across disk

estimate 1 track seek + interpolation with avg seek time

= 1 + (2/33.3) \* 12.0

= 1.72 ms

Rotation time:

We don’t know head position when seek ends ;random reads

= 4.15 ms (half rotation)

Transfer time:

Just as before ,at least 9.5 microsecond

Total time :

= 2 ms per block

For 1000 blocks:

= 1000 \* 2 ms

=2 s

|  |
| --- |
| 2s |

Total time for 1000 blocks