

12 A pendulum bob of mass 1.27 kg is supported by a string so that the radius of its path is 0.600 m. It is moving with velocity 0.575 m s^{-1} horizontally at the centre of its motion when the string is vertical.

What is the tension in the string at this instant?

A 11.8 N

B 12.5 N

C 13.2 N

D 13.7 N