14 A train of mass 3.3×10^6 kg is moving at a constant speed up a slope inclined at an angle of 0.64° to the horizontal. The engine of the train is producing a useful output power of 14 MW.

Assume that there are no frictional forces opposing the motion of the train.

What is the speed of the train?

A $0.43\,m\,s^{-1}$ **B** $4.2\,m\,s^{-1}$ **C** $39\,m\,s^{-1}$ **D** $380\,m\,s^{-1}$