

8 A car travels along a road at a constant speed of 20 m s^{-1} . Its power output is 23 kW. The total frictional force on the car is proportional to the square of its speed.

What power will be required to travel at a constant speed of 40 m s^{-1} ?

A 46 kW

B 92 kW

C 184 kW

D 368 kW