

22 A spring has an unstretched length of 0.30 m and a spring constant of 400 N m^{-1} . An object is suspended from the spring and the spring is deformed within its limit of proportionality. The new length of the spring is 0.50 m.

What is the elastic potential energy stored in the spring?

A 8.0 J

B 16 J

C 40 J

D 50 J