

21 A spring is fixed at one end and extended by applying force F to the other end. The spring has extension x and elastic potential energy E_P . The spring constant is k .

The spring obeys Hooke's law.

Which relationship is correct for this spring?

A $E_P \propto F$

B $E_P \propto x$

C $E_P \propto k$

D $E_P \propto x^2$