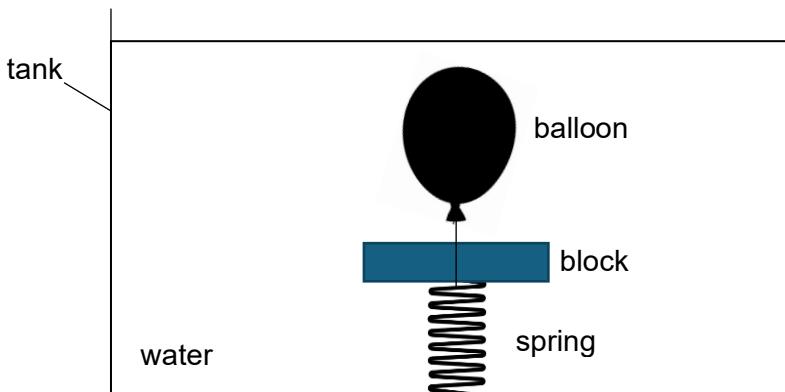


- 6 A uniform plastic block with a light balloon attached to its centre is supported by a spring that is fixed to the bottom of a tank. The tank is completely filled with water of density 1000 kg m^{-3} as shown.

The block is in equilibrium and has a weight of 60 N and a volume of $5.0 \times 10^{-3} \text{ m}^3$. The spring has a spring constant of 5000 N m^{-1} . The balloon displaces 0.015 m^3 of water.



What is the extension of the spring?

- A** 0.0076 m **B** 0.017 m **C** 0.027 m **D** 0.051 m