

**Problem P7**

A spring-loaded slider of mass 1.5 kg is positioned in the frictionless U-slot as shown in the figure. It is released from rest at point A, with the spring horizontal. The spring can be assumed to have an initial stretch of 0.1 m, and the spring constant is 50 N/m. (a) Find the speed of the slider at position B. (b) Calculate the force exerted by the slot on the slider at this position.

