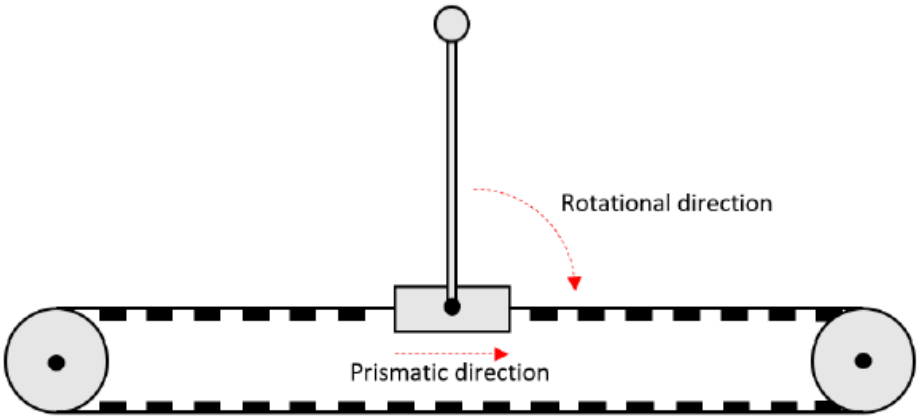
System parameters



- The mass of the cart = 0.5 [kg]
- The mass of the rod = 0.082 [kg]
- The mass of the weight attached to the pendulum = 0.002 [kg]
- The mass of the pendulum = 0.084 [kg]
- The total length of the rod = 0.35 [m]
- The gravitational acceleration is assumed to be g = 9.82 [m/s2]
- Radios of the belt rollers = 0.05 [m]
- Length of the conveyor belt = 1.72 [m]
- Dampening coefficient of the conveyor belt = 5 [N/(m/s)]
- Dampening coefficient of the pendulum = 0.0012 [N/(m/s)]