Torsion Scale With Laser
EQ090B

Function

Destined for the study of the identification of the torsional elastic constant of a wire through the dynamic method. Simple harmonic motion. Identifying the torsional elastic constant of the scale wire through the static method. Behavior of torsional elastic constant in relation to wire length L, through the dynamic method. Relationship between L and the simple harmonic motion period, when the wire diameter is kept constant. Relationship between K and wire length L, when the wire diameter is kept constant. Torsional elastic constant in relation to wire diameter, through the dynamic method. Identifying scale sensitivity. Experimental determination of the moment of inertia of a bar, theorem of parallel axes, Steiner´s theorem or Huygens-Steiner theorem. Friction torque (viscous torque), elastic torque and resulting torque. Over damped or aperiodic motion. Under damped or pseudo-periodic motion. Critically damped or critically aperiodic motion.

Knowledge areas

Physics

Level

Graduation - Technical education