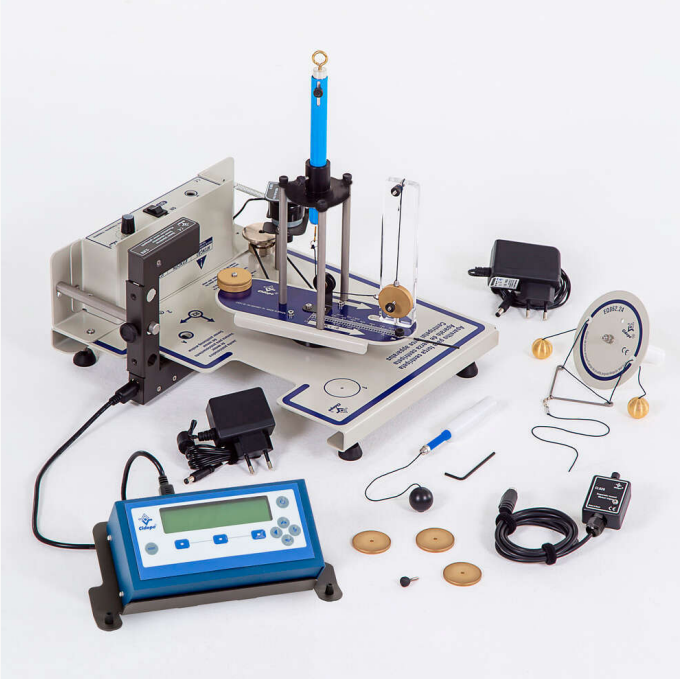

Rotational dynamics device, centripetal force, conical pendulum, analog and digital multimeter, photoelectric sensor

EQ062K2JM2

Function

Intended for experimental study, physics laboratory and carrying out physics experiments on: Movement in two dimensions. Dynamics. Centripetal force as a function of mass. The relationship of centripetal force to mass of the body in uniform circumferential motion with radius R. A little more about the relationship between centripetal force to mass and centripetal acceleration in an MCU. The centripetal force as a function of the radius of the path. Adjusting centripetal forces and initial radius of the circumferential path. The relationship of the centripetal force to the radius of the path. Centripetal force as a function of frequency with sensor and multimeter. Applying different centripetal forces on a mobile in MCU, keeping mass and radius constant. Period measurement and determination of mobile frequency in MCU. The relationship of centripetal force to frequency. A little more about the relationship between centripetal force and frequency. Centripetal force as a function of angular velocity, sensor. Applying centripetal forces of different intensities, measuring the period and determining the angular velocity of a mobile in MCU, keeping constant the mass and the radius of the trajectory. The direct dependence of the centripetal force on the square of the angular velocity. Centripetal force as a function of mass, tangential velocity and radius in an MCU, with sensor and multimeter. The centripetal acceleration. Measuring centripetal force. The period and frequency of the rover. The relationship of centripetal force to mass, tangential velocity, and radius of uniform circumferential motion. Conical pendulum, etc.

Knowledge areas

Physics

Key Experiments

The centripetal force in relation to radius
The centripetal force in relation to mass