

A10 - The dynamics and conservation of mechanical energy

Order code: **5001.A10**



Cena bez DPH

706,00 Eur

Price with VAT

854,26 Eur

Parameters

Quantitative unit

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- Motion
- Motion is relative
- Reference systems
- Trajectory
- Displacement
- Time table
- Tools for the experimental study of motion
- Manual time counting
- Automatic time counting
- Average speed
- How to measure average speed
- Instantaneous velocity
- How to measure instantaneous velocity in one point
- How to measure instantaneous velocity in two points
- Average acceleration

- How to measure average acceleration
- Instantaneous acceleration
- Various types of motion
- Uniform rectilinear motion
- Uniformly accelerated rectilinear motion
- How to achieve uniformly accelerated motion
- Causes of motion
- The concept of force in dynamics
- When no forces are applied to a body
- When an impulse is given to a body
- Friction
- When a constant force is applied to a body
- Taking stock of the work
- Mass
- Fundamental law of dynamics
- Interactions
- Forces at work
- Work when the force is not constant
- Elastic force
- Work of the elastic force
- Conservative forces
- Concept of energy in physics
- Kinetic energy of translation
- Gravitational potential energy
- Force of gravity is conservative
- Elastic potential energy
- Conservative forces and potential energy
- Principle of conservation of mechanical energy
- Periodic motions
- Gravitational pendulum
- Energy of a swinging pendulum
- Elastic pendulum