

U21853 Baroscope

Instruction sheet

7/03 ALF



- ① Base
- ② Stand rod with pivot
- ③ Styrofoam sphere
- ④ Balance beam
- ⑤ Counterweight

The baroscope is used to demonstrate the effect of buoyancy on an object in air.

1. Safety instructions

- Check the vacuum bell jar for damage before conducting the experiment.
- Defective vacuum bell jars can result in implosions.

2. Description, technical data

The baroscope consists of a balance beam mounted on a metal base on whose cross balance beam a styrofoam sphere is suspended from an eyelet. At the other end of the balance beam there is an adjustable counterweight to establish equilibrium.

Styrofoam sphere:	50 mm Ø
Base:	120 mm x 90 mm
Height:	125 mm

3. Operation

- Place the baroscope on a vacuum experiment plate.
- Adjust the balance beam so that it is in a state of equilibrium under atmospheric pressure.
- Cover it with the vacuum bell jar and evacuate the chamber.
- Styrofoam sphere falls due to the drop in air buoyancy.

Additionally required:

- 1 Chamber e.g.
*Vacuum experiment plate U21850
and vacuum bell jar U21851*
- 1 Vacuum pump e.g.
*Membrane pump U14502 or
Vacuum hand-operated U20500 or
Water-jet pump U16050*
- 1 Vacuum hose e.g. U10140