3B SCIENTIFIC® PHYSICS



U14320 Upright vessel with three glass tubes

Operating instructions





The upright vessel with three glass tubes is used to observe water levels in connected tubes, and also serves as an overflow vessel for measurements of the volume and density of solid bodies.

1. Safety instructions

- Handle the glass vessel carefully to avoid breakage and resulting injury.
- Avoid exerting mechanical loads on the apparatus.
- Proceed carefully when interchanging the glass tubes.
- Be careful when using coloured water not to let it splash on your clothes, for example.

2. Description, technical data

The upright vessel consists of a glass cylinder in a plastic base plate. Two outlets each with a GL screw connection are located at the bottom for the purpose of mounting either two differently shaped glass tubes, or a dummy joint and an overflow tube.

Height:	Approximately 300 mm
Diameter:	90 mm
Tube diameter:	10 mm
Screw connection:	GL-17

2.1 Scope of delivery

1 upright vessel with a plastic base plate 2 differently shaped glass tubes

- ① Upright vessel
- ② Glass tubes
- ③ Overflow tube

1 overflow tube with a drop outlet

1 dummy screw joint

3. Procedure

- It is practical to use coloured water during the experiments.
- For experiments to observe liquid levels in connected tubes, undo both the screw connections on the upright cylinder.
- Mount the two differently shaped glass tubes and screw them tightly into place.
- Fill the upright cylinder to approximately 2/3 with water.
- Check the water level in all three vessels.
- As a demonstration, tilt the apparatus toward either side and check the water level again in each case.
- For experiments to determine the volume of solid bodies, mount the dummy connection and the over-flow tube with the drop outlet, and screw them tightly into place.
- Position the measuring cylinder under the drop outlet.
- Fill the upright cylinder with water until it starts to flow out of the overflow tube.
- Empty the measuring cylinder of water.
- Immerse the sample body into the water vessel.
- To determine the volume of the body, read the level of the displaced water which has overflowed into the measuring cylinder.