3B SCIENTIFIC® PHYSICS



Piston vacuum pump U8421210

Instruction sheet

10/10 ALF



- 1 Vacuum hose
- 2 Foot stirrup
- 3 Pump housing
- 4 Hose connection
- 5 Handle

1. Safety instructions

Caution: danger of overturning or breakage if used in an improper manner.

- Place your foot firmly on the stirrup provided for this purpose.
- Do not put your weight on or bend over the pump or the piston rod.
- Carefully select the distance between the pump and the experimental apparatus to ensure that the vacuum hose is not ripped out or disconnected.

2. Description

The piston vacuum pump can be used for all vacuum experiments in which a final pressure of 400 hPa is required.

This vacuum pump operates on the principle of a double-stroke piston pump. Air is pumped out of the experiment apparatus both during the upward and the downward movement of the piston.

2.1 Scope of delivery

1 Piston vacuum pump

1 Vacuum hose, 5 mm diam.

3. Technical data

Final pressure: 400 hPa Hose connection: 5 mm diam.

Dimensions: 160 x 235 x 560 mm³ Weight: approx. 1.7 kg

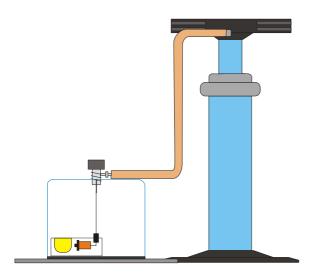
4. Sample experiment

4.1 Propagation of sound waves in air

In order to conduct this experiment, the following apparatus is additionally required.

1 Vacuum cylinderU84212301 Base plateU84212251 Electric doorbellU218541 AC/DC Power SupplyU33030

Experiment leads



5. Maintenance

Make sure that the sealing rings are always properly lubricated. To do so, carry out the following steps:

- Unscrew the lid and remove it along with the piston. If necessary, clean and lubricate these components.
- While reassembling, insert the piston properly.
 Make sure that the components are assembled to fit perfectly before screwing them on (also see the instructions printed on the pump).