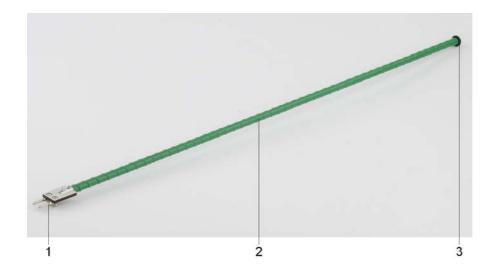
# 3B SCIENTIFIC® PHYSICS



## Heating Rod K 1017340

#### Instruction manual

04/14 MH/ALF



- Connector plug
- 2 Heating rod
- 3 Spacer ring

### 1. General instructions

Heating rod K is solely designed for use inside Kundt's tube E (1017339).

- Do not leave switched on for more than 30 minutes.
- Do not cover the Kundt's tube while heating is taking place.
- Do not heat the Kundt's tube to any higher than 50°C.
- When heating the tube, make sure that the microphone probe is positioned eccentrically inside the tube. The heating rod may not be directly below the microphone probe (there is a risk of the transducer being damaged by overheating).
- Do not use the heating rod without the spacer ring.
- If it may be deduced that the equipment may no longer be used without risk (e.g. if there is visible damage), it must immediately be taken out of action.

### 2. Description

Heating rod K is designed to heat air or other gases inside Kundt's tube E (1017339).

## 3. Technical data

Operating voltage: max. 12 V DC/AC

Power consumption: 36 W Impedance of filament: 4 ohms

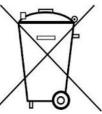
Connectors: Pair of 4-mm plugs
Length: 900 mm approx.
Diameter: 11 mm approx.
Weight: 110 g approx.

#### 4. Operation

- Insert heating rod K into the pair of sockets provided in the guide disc on the end cap of Kundt's tube E and carefully slide it into the tube.
- Connect an external power supply to the safety sockets in the end cap.
- Operate the heating rod at a maximum voltage of 12 V and do not leave it on for more than 30 minutes.
- Do not heat the Kundt's tube to any higher than 50°C.
- Monitor the temperature inside the Kundt's tube, e.g. using a pocket digital thermometer which updates every second (1002803) and an immersion sensor NiCr-Ni type K (1002804).

#### 6. Storage, cleaning and disposal

- Keep the equipment in a clean, dry and dust-free place.
- Before cleaning the equipment, disconnect it from its power supply.
- Use a soft, damp cloth to clean it.
- The packaging should be disposed of at local recycling points.
- Should you need to dispose of the equipment itself, never throw it away in normal domestic waste. Local regulations for the disposal of electrical equipment will apply.



#### 5. Additionally recommended equipment

Kundt's tube E	1017339
Microphone probe, long	1017342
Microphone probe, short	4008308
Microphone box (230 V, 50/60 Hz)	1014520
or	
Microphone box (115 V, 50/60 Hz)	1014521
Pulse box K	1017341
Microsecond counter (230 V, 50/60 Hz)	1017333
or	
Microsecond counter (115 V, 50/60 Hz)	1017334



Fig. 1 Connection of heating rod K