# 3B SCIENTIFIC® PHYSICS



# Five-Beam Optical Halogen Lamp 1003187

#### Instruction sheet

07/12 ALF



- 1 Sockets (not shown)
- 2 Lever for reflecting mirror
- 3 Lamp housing
- 4 Air slits
- 5 Fan
- 6 Light apertures

## 1. Safety instructions

Caution. Lamps get hot when they are switched on for a long period of time.

- When handling the lamp during the experiment, use a cloth or other protection. Do not cover the air slits.
- After the experiment leave the lamp to cool.

#### 3. Technical data

Halogen lamp: 12 V, 50 W

Connection: via 4-mm safety jacks

Slit width: 2 mm Slit spacing: 18 mm

Housing dimensions: approx. 210x118x85 mm<sup>3</sup>

### 2. Description

The five-beam optical halogen lamp is a bright light source with five parallel light apertures for experiments involving ray optics to be conducted on a lab bench.

It consists of a metal housing with integrated ventilation fan and includes an adjustable reflecting mirror for setting the beam length. Thanks to a magnetic foil the lamp can also be used on a whiteboard.

#### 4. Operation

#### 4.1 General notes

Suitable voltage sources for operation of the halogen lamp are, for example:

Transformer 12 V, 60 W (230 V, 50/60 Hz) 1000593

or

Transformer 12 V, 60 W (115 V, 50/60 Hz)

- Do not allow the lamp to suffer mechanical shocks.
- Do not supply the lamp with an operating voltage in excess of 12 V.

#### 4.2 Accessories

Set of optical components 1002993 Spare halogen lamp 12 V, 50 W 1002837

# 4.3 Changing the bulb

Any deposits of fat from the skin on a halogen lamp bulb cause the glass to become fogged and significantly reduce the life of the bulb.

- Do not touch the glass bulb of the halogen lamp with fingers.
- Remove the securing screws and remove the lid of the casing.
- Take out the defective halogen bulb.
- Holding the replacement bulb with a cloth or other protective material, push the connecting wires into the socket.
- Screw the lid back on.