# **3B SCIENTIFIC<sup>®</sup> PHYSICS**



# Optical Lamp K U8475400

## Instruction sheet

08/07 SP/ALF



- 1 Protective cap
- 2 Alignment guide, horizontal
- 3 Alignment guide, vertical

## 1. Safety instructions

- Do not operate the lamp with a voltage higher than 12 V.
- Do not subject the light source to mechanical shocks or vibrations.

Caution! Lamps become hot when operated for long periods! There is a risk of burning!

- Do not touch a hot lamp.
- After a long period of operation, allow the lamp to cool for at least 20 minutes.

The light becomes very intense.

• Do not look directly into the lamp.

The grease from your hands will smudge the lamp and considerably reduce its operating life.

• Do not touch halogen lamp bulbs with your fingers, for example when changing a bulb. Instead use a cloth or a similar form of protection.



- 4 4-mm safety sockets
- 5 Knurled securing screw
- 6 Light aperture and halogen lamp

#### 2. Description

The optical lamp K is used for experiments with the optical bench K (Kröncke optical system) in combination with the optical rider K.

The halogen lamp is mounted in a cylindrical housing on a reflector (100x100 mm<sup>2</sup>). It can be positioned with the coil either horizontal or vertical.

#### 2.1 Accessories

Halogen lamp 12 V, 20 W

U8475410

3. Technical data	
Halogen lamp:	12 V, 20 W
Connectors:	4 mm safety sockets
Overall dimensions:	60x100x100 mm approx.
Mass:	130 g approx.

#### 4. Operation

Recommended additional equipment:		
For supplying the voltage for the halogen lamp:		
Transformer 12 V, 25 VA (230 V, 50/60 Hz)		
	U8475430-230	
or Transformer 12 V, 25 VA (115 V, 50/60 Hz)		
	U8475430-115	
For mounting the halogen light source:		
Optical rider K	U8475350	
For carrying out the experiments:		
Optical bench K, 450 mm	U8475336	
or		
Optical bench K, 1000 mm	U8475337	
Optical components from the Kröncke optical system		

- Set up the experiment.
- Mount the halogen light source on the optical rider K in the vertical or horizontal position according to preference, and connect it to the transformer.
- Carry out the experiment.

#### 5. Changing the bulb

- Disconnect the voltage supply from the halogen light source.
- If necessary, allow the halogen light source to cool.
- Loosen the knurled securing screws and remove the protective cap.
- Using a cloth or similar material, take out the halogen bulb replace it with the new one.
- Refit the protective cap and tighten the screws.
- When disposing of a used halogen lamp, comply with local regulations.