# **3B SCIENTIFIC® PHYSICS**



# Set of 4 Gratings 1003081

## Instruction sheet

06/18 ALF



#### 1. Description

Transmission grating for spectroscopic examinations and for experiments on diffraction and interference.

Four line gratings mounted in slide frame with protective glass plates. Useful for students and demonstration experiments to study the relation between line spacing, angle of diffraction and wave length.

### 2. Technical data

Dimensions:	50 mm x 50 mm
Projection aperture:	24 mm x 35 mm
No. of lines:	80, 100, 300, 600
	lines/mm
Grating constant:	12.5; 10; 3.3; 1.7 µm

#### 3. Experiment topics

- To avoid scratching or soiling the surface of the grating, hold the slide only by its edges.
- 3.1 Examination of the spectra of various spectral light sources
- Angle of diffraction depending on the wave length
- Diffraction pattern depending on the wave angle
- 3.2 Diffraction pattern depending on the grating constant
- 3.3 Determination of an unknown gas by means of its spectrum