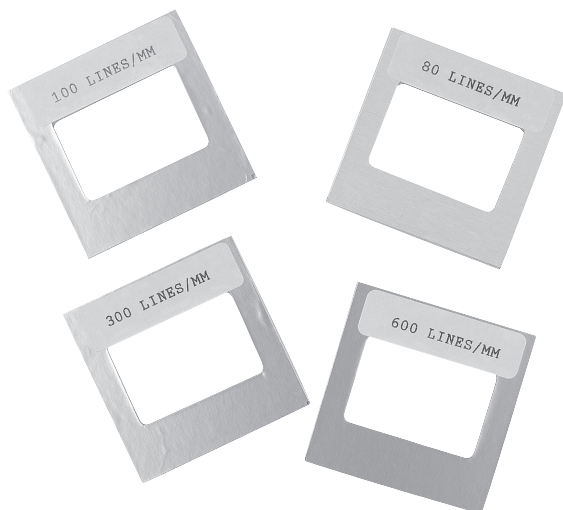


U19515 Set of 4 gratings

Instruction sheet

6/03 ALF



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

1. Safety instructions

- To avoid scratching or soiling the surface of the grating, hold the slide only by its edges.

2. Description, technical data

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.

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 μm , 10 μm , 3,3 μm , 1,7 μm

3. Experiment topics

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