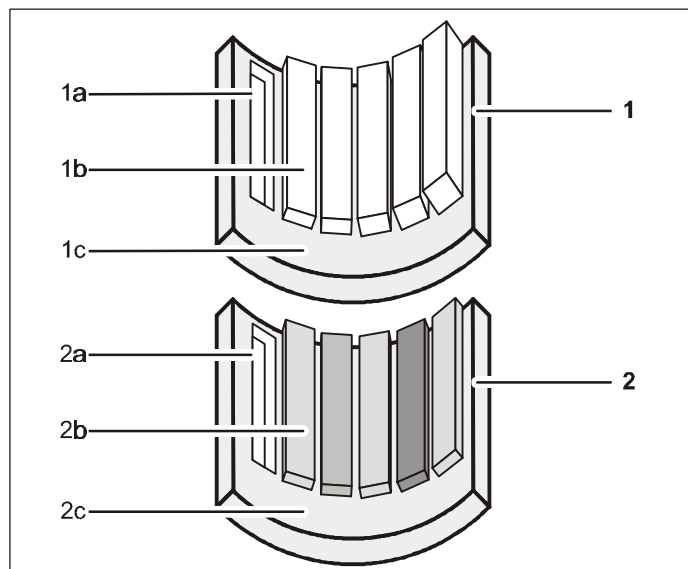


11/01-W97-Set



Instruction sheet 554 834

Set of Absorbers X-ray (554 834)

- 1 Set of absorbers I**
empty diaphragm (1a),
absorbers of different thicknesses (1b), guide (1c)
- 2 Set of absorbers II**
empty diaphragm (2a), absorbers of different materials (2b),
guide (2c)

1 Description

The set of absorbers x-ray makes possible quantitative experiments on the attenuation of x-rays as a function of the thickness d or the atomic number Z of the absorber. It consists of two sets of absorbers with six absorbers of different thicknesses and six absorbers of different materials.

The absorber sets are mounted in the target holder of the goniometer (554 83) in place of the stage for measuring.

2 Scope of supply

- 1 Set of absorbers I (different thicknesses, same material)
- 1 Set of absorbers II (different materials, constant thickness)

3 Technical data

Set of absorbers I:

Thicknesses: 0.5 mm/ 1.0 mm/ 1.5 mm/
2.0 mm/ 2.5 mm/ 3.0 mm

Material: Al ($Z = 13$)

Set of absorbers II:

Materials: C (6)/ Al (13)/ Fe (26)/
Cu (29)/ Zr (40)/ Ag (47)
(polystyrene is used for the
carbon sample)

Thickness: 0.5 mm

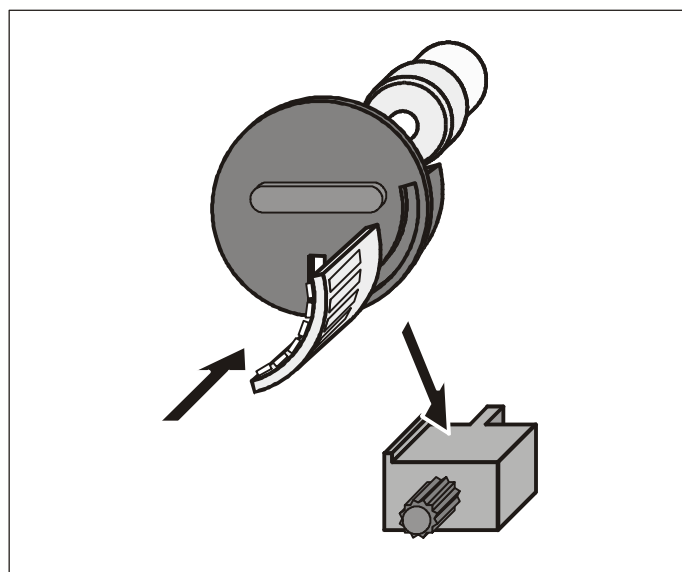
General data:

Dimensions: 40 mm x 35 mm x 35 mm

Dimensions of diaphragm: 2.5 mm x 15 mm

Diaphragm spacing: 5 mm
(corresponds to approx. 10°)

4 Mounting in the goniometer (554 83)



- Demount the target holder and remove the target stage from the holder.
- Place the guide of the set of absorbers in the 90° curved slot of the target holder, carefully slide it into the target holder as far as it will go and mount the target holder.

5 Carrying out the experiment

- Attach the sensor and align it in the 0° position.
- Advance the target in steps of approx. 10° (target scan mode).
- Run an automatic scan of the target from approx. -5° to 65° .