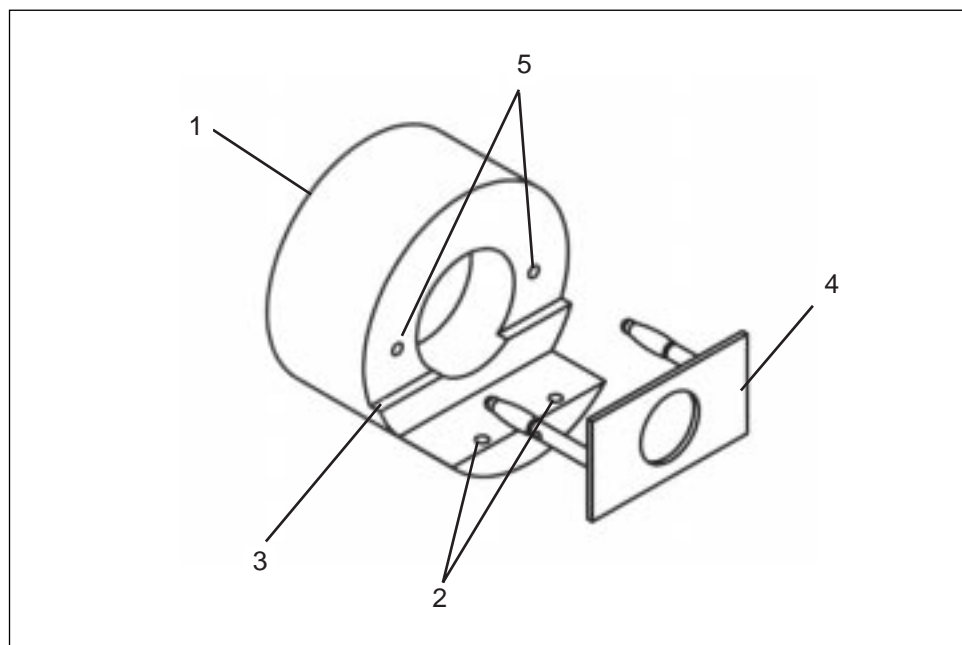




Crystal holder for Laue photographs

09058.11

Operating instructions



1 PURPOSE AND CHARACTERISTIC FEATURES

This holder is for use with the Phywe X-ray unit 09058.99 to hold single crystals for taking Laue photographs (roentgenograms).

It can be used to hold any of the Phywe mounted single crystals (LiF and KBr) or unmounted NaCl crystals (crystallographic orientations (100), (110) and (111)).

In addition, other suitable single crystals for Laue experiments can be used, provided they are not so thick that their self-absorption is too high.

2 FUNCTION ELEMENTS AND OPERATING ELEMENTS (see Fig.)

Fit the cylindrical holder to the radiation outlet tube of the X-ray unit. A flatly inserted, ring-shaped magnetic foil (1) acts to adhere the holder to the inner wall of the X-ray unit. Position mounted single crystals with their two pins in the pair of holes (2) in the holder, so that the rounded side of the crystal mounting is always directed towards the source of X-rays. This avoids shading of Laue reflexes.

Place unmounted crystals on the ledge (3) of the crystal holder and then fix it in position with the separate clamping device (4). To do this, fit it with its pins in the pair of holes (5). To remove the clamping device, grasp it at the overlying sides and draw it carefully and with feeling from the holder.

We recommend that you first use the diaphragm tube with 1 mm hole diameter, which is standardly supplied with the X-ray unit, in the radiation outlet tube of the X-ray unit. Then position the crystal for the Laue photographs on the holder and push this over the radiation outlet tube.

3 RECOMMENDED ACCESSORIES

Single crystals	
– LiF-(100)- single crystal, mounted	09056.05
– KBr-(100)- single crystal, mounted	09056.01
– LiF-(100)- single crystal, 3 unmounted crystals of orientation (100), (110) and (111)	09058.01
Film holder	09058.08
Polaroid film, ISO 3000/36°, pack of 20	09058.20
Developing cassette for single films	09058.21
or	
X-ray film, 90 mm x 120 mm, 10 sheets	06696.03
X-ray film developer, for 4.5 l sol	06696.20
X-ray film fixer, for 4.5 l sol	06696.30