Tube head
with Bertrand lens and
diaphragm on the Universal R Pol
(471692) microscope and
on Photomicroscope III Pol
(472192)
with binocular tube G Pol
(473034)
Tube head with Bertrand lens and diaphragm on the Universal R Pol (47 16 92) microscope and on the Photomicroscope III Pol (47 21 92) with binocular tube G Pol (47 30 34)

1 Eyepiece with focusing eyepens.
2 Pol eyepiece with reticle and focusing eyepens.
3 Binocular tube G Pol (47 30 34)
4 Screw to orient the crosshair eyepiece, fitted in horizontal groove of tube.

Adjustment:
Turn the eyepens of the Pol eyepiece out. View through the eyepiece against a bright surface.
Looking through the eyepiece, turn the eyepens slowly inwards until the crosslines are in focus.
Insert the Pol eyepiece in one of the tubes, so that the screw (4) engages in the horizontal groove of the tube edge.
Sharpen the image focus in the crosshair eyepiece by moving the microscope adjustment.
Insert eyepiece with focusing eyepens into the second tube. Adjust the distance between tubes so that the user has a round, sharply defined field of view. Turn the eyepens of the eyepiece to focus sharply on the specimen.

5 Slider with mirror,
pushed in: position ← light towards front for observation
pulled out: position → light upwards for photomicrography, projection, T.V.
(Function of the slider positions on the Photomicroscope III, c.f. Directions G 41-170)

6 Housing with focusing and centering Bertrand lens and diaphragm (Bertrand optical system).

7 Slider with Bertrand diaphragm to occlude objects of various size in the center of the field of view,
pushed in: maximum aperture
center position: medium aperture
pulled out: minimum aperture

8 Slider with pinhole diaphragm
pushed in: only the conoscopic image is visible
pulled out: conoscopic and orthoscopic images are visible simultaneously.

9 Knob with scale to focus the conoscopic image.
Certain focusing positions can be marked on the scale.

10 Analyser, pushed in.

11 Tilting compensator, inserted in slot (cross section 6 mm x 20 mm).

12 Revolving nosepiece

13 Slider with double-faced mirror to bring the Bertrand optical system into the beam path,
pushed in: Bertrand optical system in the beam path, For orthoscopic observation the slider with diaphragm must be pulled out (7).

14 Hexagonal socket screws (2x), to center the Bertrand optical system with the Allen key supplied.

15 Clamping screw for analyser slider.