

Transmitted-light microscopy with the Axiostar

The benefits at a glance

ICS optics (Infinity Color-Corrected System) to ensure bright, high contrast images

Sturdy, pyramid-shaped stand and robust design of all the mechanical components

Easy to operate and with outstanding reliability as with the research microscopes

Vertically adjustable and centerable condenser for Köhler illumination
Suitable for all objectives from 2.5x to 100x with a 20 mm field of view

Microscopy techniques: brightfield, phase contrast (10x–100x), darkfield (2.5x–40x) and qualitative polarization contrast

Patented swing mechanism to adjust the viewing height of the binocular tube and the phototube

Possibilities of attaching an SLR camera, a microscope camera or a video camera for the documentation, presentation and processing of images



System Overview



Axiostar with ICS optics

Performance which is plain to see

The Axiostar transmitted-light microscope is the ideal microscope for biological and medical examinations in routine applications or training courses.

The mechanical reliability and the sturdy design of Axiostar are particularly beneficial features. Although this in an entry-level instrument, it features the same optical quality as the large research microscopes from Carl Zeiss: The ICS- optics (Infinity Color-Corrected System) guarantee brilliant and high-contrast images.

Stand

The Axiostar stand includes the following components:

- 4 or 5 position nosepiece
- luminous field diaphragm
- Abbe-condenser 0.9/1.25 for Köhler illumination with mount for phase contrast and darkfield slider
- mechanical stage with coaxial drive on the right, scratch-proof ceramic surface and specimen holder
- focusing drive

- power unit and 20 Watt illuminator
- on/off switch with pilot lamp on the right side of the stand
- knurled screw to lock the binocular tube. The screw can be easily loosened without any need for a tool, and the tube can then be easily and quickly turned around 180°

Selections can be made from a wide range of ICS objectives and suitable eyepieces.

Condenser

The 0.9/1.25 condenser is suitable for Köhler illumination. All objectives with magnifications ranging from 2.5x to 100x can be used in a 20 mm field of view.

Homogeneous illumination of the object field with 2.5x magnification is achieved with a swing-in, low-power device which can be attached below the condenser.

An opening for the insertion of sliders for phase contrast and darkfield makes the condenser suitable for further microscopy techniques.

Illumination

Illumination is performed using a continuously variable 6 V/20 W halogen lamp. The power unit recognizes the available line voltage and adjusts automatically.

Documentation

The following accessories are available for the documentation, presentation and processing of microscope images:

- Phototube with two switching positions (100% for observation/ 50% for observation - 50% for camera) for photo and video documentation
- Adapters for the connection of an SLR camera, a microscope camera or a video camera for photo and video documentation
- Photo reticle for insertion into a focusing eyepiece
- **MC 80 DX** microscope camera for professional photomicrography
- **AxioVision™** software for image archiving and processing in combination with a digital camera

System overview Axiostar

Eyepiece eyecup
444801-0000-000

Crossline micrometer
14:140, d=26
454060-0000-000

Crossline graticule
474064-0000-000

Micrometer
10:100, d=26
474066-9901-000

Net micrometer
12.5x12.5/5;10, d=26
474068-0000-000

Measuring graticule
2x20:200, d=26
454089-0000-000

Measuring and counting
graticule, d=26
454088-0000-000

Net graticule
25/2x2, d=26
454087-0000-000

Micrometer
10:100, d=21
434011-0000-000

Crossline micrometer
10:100, d=21
434013-0000-000

Net micrometer
10x10/5:10, d=21
454020-0000-000

Slider for Ph 1
000000-1037-992

Slider for Ph 2
000000-1037-187

Slider for Ph 3
000000-1037-993

Slider for darkfield 0.25/0.9
000000-1037-994

Slider for darkfield 0.65/0.9
000000-1037-995

Swing-in polarizer
453617-0000-000

Eyepiece PI 10x/18 Br.
444131-9901-000

Eyepiece PI 10x/18 Br. foc.
444132-9901-000
(optional with screw-in
diaphragm part
444132-0206-000)

Eyepiece E-PI 10x/20 Br.
444231-9902-000

Eyepiece E-PI 10x/20 Br. foc.
444232-9901-000
(optional with screw-in
diaphragm part
444232-0206-000)

Eyepiece PI 16x/16 Br.
444053-0000-000

Eyepiece PI 16x/16 Br. foc.
444054-0000-000

Auxiliary microscope, d=30
000000-1006-362

Pinhole diaphragm, d=30
444020-0000-000

SLR camera
000000-1057-127

T2-adapter
416010-0000-000

Adapter for
SLR camera
2.5x for T2
456005-0000-000

Databack D4
456073-0000-000

35 mm Mot DX
film cassette
456071-0000-000

Camera body
MC 80 DX
456031-0000-000

Projective P 2,5x
456021-0000-000
Projective P 10x
456023-0000-000

Adapter 60
for microscope camera,
d=30
456006-0000-000

M 4"x5" camera back
456060-0000-000

Sheet-film double cassette
for 4"x5"
416131-0000-000

Polaroid-Land sheet-film holder 545 for 4"x5"
416128-0000-000

Polaroid-Land film-pack holder 550 for 4"x5"
416127-0000-000

Video camera

Control panel MC 80 DX
456048-0000-000

Ultraflat keyboard
419195-9066-000

Adapter 60 - 44
456140-0000-000

Video zoom 44 C 1/3" 0.33x...1.6x
452989-0000-000

Video zoom 44 ENG 1/2" 0.5x...2.4x
452984-0000-000

Video zoom 60 ENG 1/2" 0.5x...2.4x
456124-0000-000

Video zoom 60 C 1/3" 0.35x...1.6x
456125-0000-000

Adapter Video 60 C 2/3" 1.0x
456105-0000-000

Adapter Video 60 C 1/3" 0.63x
456107-0000-000

Adapter Video 60 C 1/2" 0.5x
456106-0000-000

Adapter Video 60 C 1/3" 0.5x
456119-0000-000

Adapter Video 60 C 1/3" 0.4x
456108-0000-000

Adapter Video 60 ENG 2/3" 1.0x
456115-0000-000

Adapter Video 60 ENG 2/3" 0.8x
456117-0000-000

Adapter Video 60 ENG 1/2" 0.63x
456118-0000-000

Swing in low-power system,
d=8
445312-0000-000

Color filter carrier for filter d=32
451834-0000-000

000000-1031-031

"Axiostar" microscope stand
with 5x revolving nosepiece W 0.8
000000-1061-030

Further accessories

- Focusing eyepieces, also suitable for eyeglass wearers
- Drawing eyepiece 8x/18:
Can be inserted in the phototube instead of a usual eyepiece. The microscope image and a piece of paper lying in front of the observer are visible simultaneously through the drawing eyepiece. Hand drawings can therefore be performed easily and quickly
- Swing-in, low-power device for the 2.5x objective
- Swing-in color filter mount
- Various filters:
E.g. to change the color temperature or to enhance phase contrast. The filters can be mounted directly on the luminous-field diaphragm or in the swing-in color filter mount
- Measuring graticules, counting graticules and crossline micrometers for insertion into a focusing eyepiece
- Axiostar container:
The container, tailor-made for the microscope, permits convenient, dust-protected storage of the instrument, and also accepts the line cable and the tool bag

Microscopy techniques

Phase contrast

The appropriate sliders are inserted into the condenser:

- slider for phase contrast 1 in combination with objectives marked Ph1
- slider for phase contrast 2 in combination with objectives marked Ph2
- slider for phase contrast 3 in combination with objectives marked Ph3

Darkfield

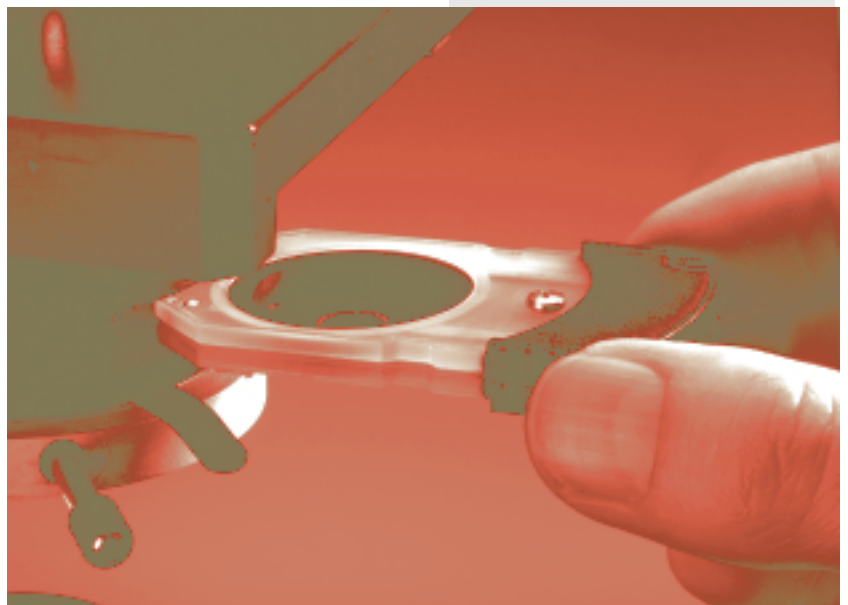
The appropriate sliders are inserted into the condenser:

- The 0.25/0.9 slider for darkfield is suitable for objectives with magnifications between 2.5x and 10x
- The 0.65/0.9 slider for darkfield is suitable for objectives with magnifications between 10x and 40x

Polarization contrast

Axiostar permits observation in polarized light the easy way. In addition to a screw-in analyzer, both a simple polarization filter and, optionally, a polarizer with rotary lambda plate are available.

Quick and easy: Sliders für phase contrast or darkfield can be inserted into the condensor



Axiostar

High performance and convenience

Details at a glance

Optics	ICS optics
Objectives	2,5x–100x CP-Achromat, A-Plan, Achroplan [®] , Plan-Neofluar [®]
Eyepieces	for fields of 18 mm or 20 mm in diameter focusing for photo reticles and measuring micrometers
Nosepiece	4 or 5 positions
Condenser	numerical aperture 0.9/1.25; vertically adjustable, centerable, with mount for phase contrast and darkfield sliders, adjustable aperture diaphragm
Observation tube	Binocular tube Phototube 100 vis/50 vis - 50 doc
Specimen stage	mechanical stage with ceramic surface and coaxial drive on the right side. Travelrange: 75 mm x 30 mm
Illumination	6 V / 20 W halogen lamp automatic adjustment to line voltage
Dimensions and weights	viewing height: 410–450 mm 6.7 kg
Contrasting techniques	<ul style="list-style-type: none"> • brightfields • darkfield • phase contrast • qualitative polarization contrast