

# bScope® fluorescence

## Highlights

- Medical device class I – EU MDR 2017-745
- Trinocular models
- WF 10x/22 mm eyepieces
- Reversed ball-bearing quintuple nosepiece with slot for polarization filter
- Plan IOS and Plan Fluarex IOS objectives
- Rackless integrated X-Y mechanical stage
- Color coded condenser
- Epi-fluorescence illumination with four monochromatic LEDs
- 3 W NeoLED™ adjustable transmitted illumination system
- Integrated carrying grip
- Cable Storage System and anti-theft system
- 10 years warranty

## TECHNICAL SPECIFICATIONS

### EYEPIECES

Wide field HWF 10x/22 mm secured eyepieces (Ø 30 mm tube)

### HEAD

The bScope® is equipped with a Siedentopf type head and equipped with 30° inclined Ø 30 mm tubes and with a  $\pm 5$  diopter adjustment on left eyepiece. The interpupillary distance is adjustable between 48 to 76 mm

The trinocular head comes with a Ø 23.2 mm photo tube, ensuring maximum flexibility. The prisms inside the heads are designed to minimize the light absorption for perfect digital imaging. The trinocular head has a light path selector (100:0 / 0:100) and generates an erect image

### NOSEPIECE

Revolving and reversed ball-bearing quintuple nosepiece

### OBJECTIVES

The state-of-the-art production techniques and multi layer coatings used for the manufacturing of the bScope® objectives enable the bScope® to be used for the most demanding applications. World class spherical aberration correction and modern CNC and assembly technology ensure the perfect centering of the objectives

Plan infinity corrected PLi 4x/0.10, 10x/0.25, 20x/0.40, S40x/0.65, S60x/0.85 and S100x/1.25 oil immersion IOS objectives for applications where violet or Ultra-Violet excitation is not needed

Plan Fluarex infinity corrected PLFi 4x/0.10, 10x/0.25, 20x/0.40, S40x/0.65 and S100x/0.90 IOS objectives for applications where either higher resolving power or violet or ultra-violet excitation is needed



BS.3153-PLi ●

### TRINOCULAR MODELS

505 (h) x 195 (w) x 450 mm (d) | 8.8 kg

*All S40x, S60x and S100x oil immersion objectives are spring loaded.*

*All optics are anti-fungus treated and anti-reflection coated for maximum light throughput*

### FOCUSING

Double coaxial, low-positioned coarse and fine adjustments with 180 graduations. Precision 1.1  $\mu\text{m}$ , 200  $\mu\text{m}$  per rotation, total travel range is approximately 19 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustment is equipped with friction control

### STAGE

The bScope® is equipped with a scratch-resistant 152/197 x 131 mm stage with integrated 75 x 36 mm X-Y rackless mechanical stage, Vernier scale, soft-close removable specimen holder. The rackless stage has no protruding parts, enables more smooth movements and is safer in use. Low-positioned X-Y control knobs prevent fatigue during long working sessions

### CONDENSER FOR BRIGHTFIELD

The standard height adjustable Abbe N.A. 1.25 condenser for brightfield comes with an iris diaphragm and swing-out filter holder. The condenser is color coded. Optionally available swing-out Abbe condenser (BS.9105)

## CONDENSER FOR ZERNIKE PHASE CONTRAST

The height adjustable Zernike NA. 1.25 phase contrast disc condenser comes with phase annuli for 10/20/S40x and S100x phase contrast objectives, an iris diaphragm, a swing-out filter holder and also a BF position for brightfield contrast. Phase contrast objectives are available in either EPL-PHi or PL-PHi versions. Supplied with alignment telescope and green filter

## CONDENSER FOR SIMPLE PHASE CONTRAST

The height adjustable NA. 1.25 simple phase contrast condenser has a free slot for either a slider for 10/S40x phase contrast objectives, or a slider for 20/S100x phase contrast objectives. The condenser has an iris diaphragm and filter holder. The condenser includes a BF position for brightfield contrast with an iris diaphragm and filter holder. Phase contrast objectives available in either EPL-PHi or PL-PHi version. Supplied with alignment telescope and green filter

## POLARIZATION

The bScope® has an integrated slot above the nosepiece for an optional polarization filter

## FLUORESCENCE ATTACHMENTS

- Epi-illumination with four 5 W LEDs for fluorescence excitation from 450 to 470 nm (blue), 515 to 535 nm (green), 390 to 400 (violet) and 360 to 370 nm (ultraviolet). External 100-240 V power supply
- External 110 or 230 V power supply
- Supplied with UV protection shield
- Fluorescence filter sets:

	EX	DM	EM
B	450-495	505	515 (LP)
G	495-555	580	595 (LP)
V	380-415	460	475 (LP)
UV	320-380	420	435 (LP)

## NEOLED™ TRANSMITTED ILLUMINATION

The 3 W adjustable Köhler NeoLED™ transmitted illumination is powered by an internal 100-240 V power supply making it suitable for worldwide use.

The innovative NeoLED™ design offers larger apertures, allowing the optical system of the bScope® microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics. Other benefits of the NeoLED™ is the low energy consumption, no heating and a long operating life span

## KÖHLER ILLUMINATION

A Köhler illumination ensures for all infinity corrected IOS models the highest possible contrast and the maximum achievable resolving power. Generates a uniform illumination of the sample and eliminates all interference from dust on lenses and side glare of the light source

## CORDLESS USE

The optional rechargeable batteries turn the bScope® into a cordless system for transmitted illumination

## CSS – CABLE STORAGE SYSTEM

Allows users to easily stow away excess cable length into the back of the instrument during operation and to roll up the power cable for easy storage

## CARRYING GRIP

The integrated carrying grip at the back of the microscope ensures safe transportation of the microscope

## ANTI-THEFT SLOT

At the back of the microscope a Kensington Security Slot is placed, which can be used to secure the instrument from theft

## PACKAGE CONTENT

Smart styrofoam packaging ensures a low environmental footprint while maintaining maximum safety during transport. Supplied with power cord, dust cover, tools, a spare fuse, white filter, user manual and 5 ml immersion oil

## BSCOPE® WITH EPI-FLUORESCENCE 4 LED ILLUMINATION (BLUE, GREEN, VIOLET AND ULTRA-VIOLET)

MODELS	Trinocular	HWF 10x/22 mm eyepieces	Quintuple nosepiece Plan PLi 4/10/S40/ S100x	Quintuple nosepiece Plan Fluarex PLFi 4/10/S40/ S100x <sup>(1)</sup>
BS.3153-PLi	•	•	•	
BS.3153-PLFi	•	•		•

<sup>(1)</sup>The Plan Fluarex infinity corrected IOS objectives are recommended for applications either higher resolving power or violet or ultra-violet excitation is needed

## ACCESSORIES AND SPARE PARTS

### EYEPIECES

- BS.6310** WF 10x/22 mm eyepiece
- BS.6310-M** WF 10x/22 mm eyepiece
- BS.6315** WF 15x/12 mm eyepiece, Ø 30 mm tube
- BS.6399** Pair of eyecups, Ø 30 mm tube

### OBJECTIVES

- BS.8404** Plan PLi 4x/0.10 IOS objective. WD 21.0 mm
- BS.8410** Plan PLi 10x/0.25 IOS objective. WD 5.0 mm
- BS.8420** Plan PLi 20x/0.40 IOS objective. WD 8.8 mm
- BS.8440** Plan PLi S40x/0.65 IOS objective. WD 0.66 mm
- BS.8400** Plan PLi S100x/1.25 IOS objective (oil). WD 0.36 mm
- 86.550** Plan Fluarex 4x /0.15 IOS objective. WD 21.6 mm
- 86.552** Plan Fluarex 10x/0.35 IOS objective. WD 2.9 mm
- 86.554** Plan Fluarex 20x/0.60 IOS objective. WD 1.5 mm
- 86.556** Plan Fluarex S40x/0.75 infinity corrected IOS objective. WD 0.6 mm
- 86.558** Plan Fluarex S100x/0.90 IOS objective. WD 0.62 mm
- BS.7400** Plan Fluarex S100x/1.30 IOS objective (oil). WD 0.13 mm

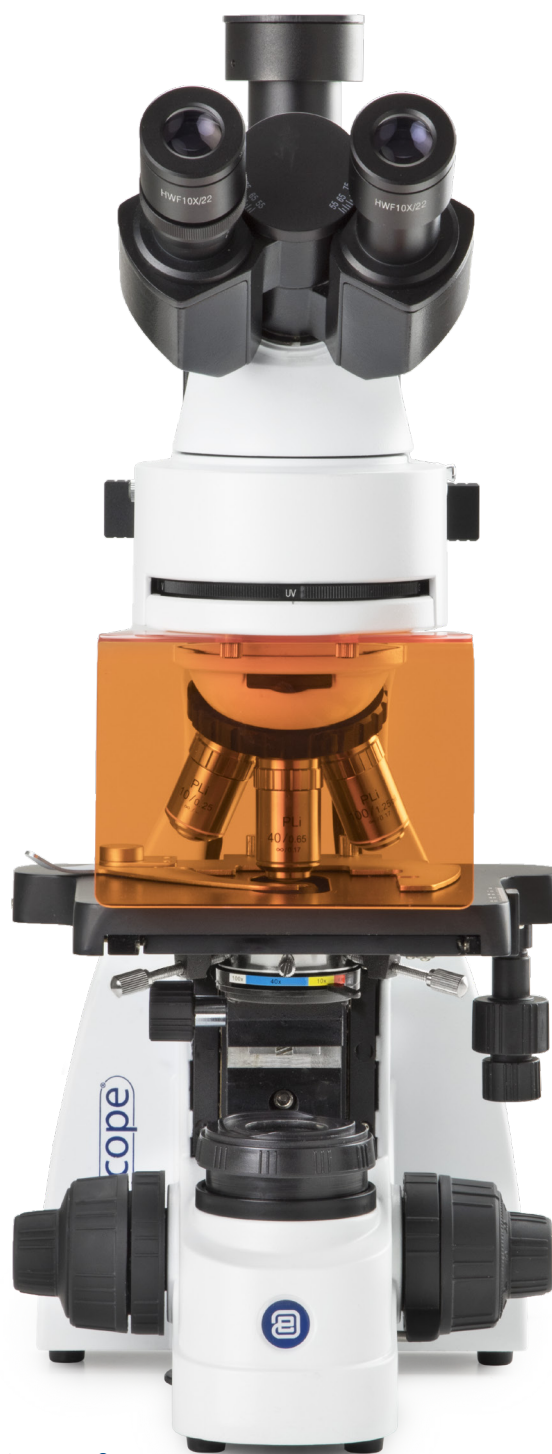
WD = working distance

### CONDENSERS

- BS.9102** Abbe condenser 1,25 NA with slot for darkfield and phase contrast sliders
- BS.9170** Darkfield stop for BS.9102 condenser
- BS.9105** Swing-out Abbe condenser 0.9/1.25 NA

### PHASE CONTRAST ATTACHMENTS

- BS.9120** Zernike phase contrast kit with E-plan EPLPHi 10/20/S40 and S100x oil phase contrast IOS infinity corrected objectives, Zernike rotating condenser, telescope and green filter
- BS.9126** Zernike phase contrast kit with plan PLPHi 10/20/S40 and S100x oil phase contrast IOS infinity corrected objectives, Zernike rotating condenser, telescope and green filter
- BS.9148** Alignment telescope for bScope® IOS version with Ø 30 mm tubes
- BS.9159** Phase contrast kit with Abbe condenser with slot for slider. E-plan EPLPHi 20/S100x phase contrast infinity corrected objectives, slider with 20 and 100x annuli, telescope and green filter



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- BS.9163** Phase contrast kit with Abbe condenser with slot for slider. Plan PLPHi 20/S100x phase contrast infinity corrected objectives, slider with 20 and 100x annuli, telescope and green filter

## POLARIZATION ATTACHMENTS

- BS.9647** Polarization polarizer Ø 6 mm for slider under bScope® head  
**BS.9651** Polarization attachment for lamphouse of bScope® with 360° scale

## MISCELLANEOUS

- BS.9993** NeoLED™ replacement unit  
**AE.1370** Set of rechargeable batteries, three pieces  
**SL.1385** 100 W HBO mercury vapor lamp for fluorescence  
**AE.5226** Glass fuses 3A 250V, 10pcs

## CAMERA ACCESSORIES

- AE.5130** Universal Ø 23.2 mm tube adapter with built-in 2x lens for SLR photo camera with APS-C sensor. Needs T2 adapter  
**AE.5025** T2 adapter for Nikon D SLR digital camera  
**AE.5040** T2 adapter for Canon EOS SLR digital camera

## DISPOSABLES

- PB.5155** Microscope slides 76 x 26 mm, ground edges, 50 pieces  
**PB.5157-W** Microscope slides 76 x 26 mm, ground edges. White frosted side, 50 pieces per pack  
**PB.5157-B** Microscope slides 76 x 26 mm, ground edges. Blue frosted side, 50 pieces per pack  
**PB.5165** Cover glasses 18 x 18 mm, thickness 0.13-0.17 mm, 100 pieces  
**PB.5168** Cover glasses 22 x 22 mm, thickness 0.13-0.17 mm, 100 pieces  
**PB.5245** Lens cleaning paper, 100 sheets per pack  
**PB.5255** Immersion oil (25 ml). n = 1.482  
**PB.5274** Isopropyl alcohol 99% (200 ml)  
**PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue/paper, brush, air blower, cotton swabs  
**PB.5276** Microscope maintenance and servicing kit, 16pcs: cleaning brush, 6 pcs screwdriver set, air blower, 3 pcs Allen key, 1.5, 2, 2.5 mm, lens cleaning fluid 20 ml, cleaning cloth 140 x 140 mm, 100 pcs lens tissue sheets, tube of maintenance grease, 10 ml bottle of oil, packed in a nice toolbox



● BS.3153-PLi



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