

bScope®

fluorescence

Highlights

- Medical device class I EU MDR 2017-745
- · Trinocular models
- WF 10x/22 mm evepieces
- Reversed ball-bearing quintuple nosepiece with slot for polarization filter
- · Plan IOS and Plan Fluarex IOS objectives
- · Rackless integrated X-Y mechanical stage
- 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 \emptyset 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



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 μ m, 200 μ 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



CONDENSER FOR ZERNIKE PHASE CONTRAST

The height adjustable Zernike NA. 1.25 phase contrast disc condenser comes with phase annuli for 10/20/540x and 5100x 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

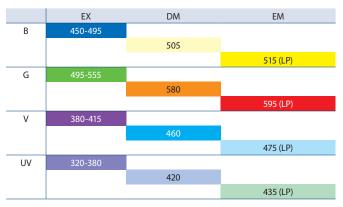
The height adjustable NA. 1.25 simple phase contrast condenser has a free slot for either a slider for 10/S40x phase contrast objectives, or a slider for 20/S100x phase contrast objectives. The condenser has an iris diaphragm and filter holder. The condenser includes a BF position for brightfield contrast 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:



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 (1)
BS.3153-PLi	•	•	•	
BS.3153-PLFi	•	•		

⁽¹⁾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



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 \emptyset 6 mm for slider under bScope $^{\circ}$ head
BS.9651	Polarization attachment for lamphouse of bScope® with 360° scale

MISCELLANEOUS

B5.9993	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 10ncs

CAMERA ACCESSORIES

AE.5130	Universal Ø 23.2 mm tube adapter with built-in 2x lens for SLF	
	photo camera with APS-C sensor. Needs T2 adapter	
AF 5035	TO a devetor for Mileon D CLD distributions	

AE.5025 T2 adapter for Nikon D SLR digital cameraAE.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 140×140 mm, 100 pcs lens tissue sheets, tube of maintenance grease, 10 ml bottle of oil,

packed in a nice toolbox







