

bScope

large samples



HIGHLIGHTS

- Suitable for extra-large samples
- Materials science microscopes
- Long WD brightfield and brightfield/darkfield objectives
- WF 10x/22 mm eyepieces
- Polarizer and analyzer filters
- Integrated mechanical X-Y stage
- 5 W NeoLED™ reflected NeoLED™ brightfield/darkfield illumination

SPECIFICATIONS

EYEPIECES

(Ø 30 mm tube)

Wide field WF 10x/22 mm eyepieces with 22 mm field of view

HEAD

The bScope is equipped with:

- A Siedentopf trinocular type head, 30° inclined tubes
- A ± 5 diopter adjustment on left eyepiece
- The interpupillary distance is adjustable between 48 to 76 mm
- A Ø 23.2 mm camera tube
- The prisms inside the head are designed to minimize the light absorption for perfect digital imaging
- Light path selector (100:0 / 0:100). Generates an erect image

NOSEPIECE

Revolving and reversed ball-bearing quadruple nosepiece

OBJECTIVES

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

This line of metallurgical microscope comes in two versions:

- The brightfield model that suits most materials science applications
- The model with brightfield and darkfield illumination for the most advanced analysis



● BS.4053-PLMRi

BS.4053-PLMRi

380 (h) x 415 (w) x 345 mm (d) | 15 kg



OBJECTIVES	Series	2x/0.7	5x/0.12	10x/0.25	20x/0.40	50x/0.70	80x/0.80	100x/0.85
Plan PLMi (BF)	BS.81xx	WD 11 mm	WD 26.1 mm	WD 20.2 mm	WD 8.8 mm	WD 3.7 mm	WD 1.3 mm*	WD 0.4 mm*
Plan PLMi (BF/DF)	BS.88xx		WD 9.7 mm	WD 9.3 mm	WD 7.2 mm	WD 2.5 mm	WD 0.8 mm*	WD 0.8 mm*

* Optional

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

WD = working distance

FOCUSING

- Double coaxial, low-positioned coarse and fine adjustments with 180 graduations
- Precision 1.3 µm, 130 µm per rotation, total travel range is approximately 20 mm
- Supplied with an adjustable rack stop to prevent damage to sample and objectives. Improved coarse & fine adjustment, which is equipped with tension control

STAGE

The bScope is equipped with:

- a scratch resistant 30 x 25 cm flat base
- a 185x140 mm mounted mechanical X-Y stage with 35x30 mm travel



REFLECTED LED ILLUMINATION

Reflected intensity adjustable 5 W LED Köhler illumination with

- External power supply
- Push-pull type rotatable polarizer
- Push-pull analyzer
- Built-in condenser with iris diaphragm and field iris diaphragm
- Integrated rotating filter disc with green, blue, yellow and white filters

POLARIZATION

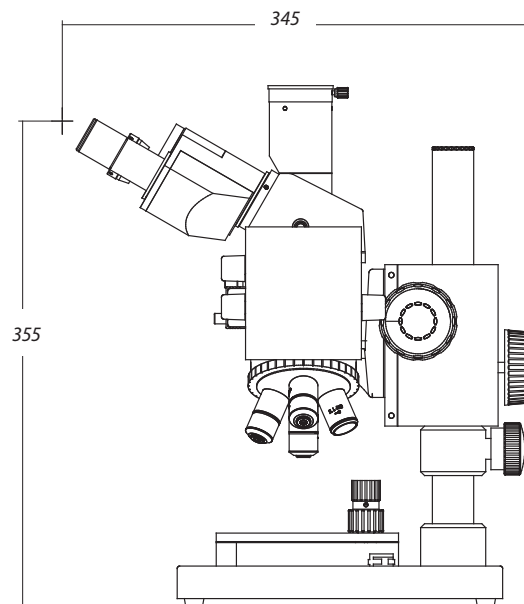
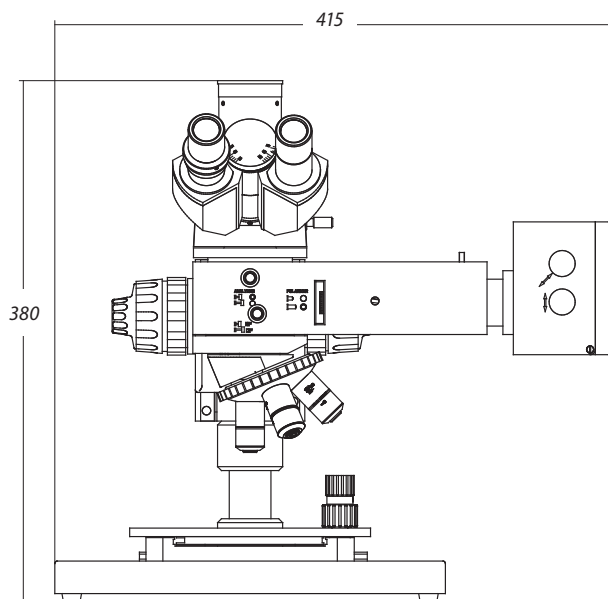
The bScope has an integrated slot above the nosepiece for an optional polarization filter for transmitted illumination

PACKAGE CONTENT

Polystyrene packaging ensures a low environmental footprint while maintaining maximum safety during transport. Supplied with power cord, dust cover, tools, a spare fuse and user manual

MODELS	Trino	WF 10x/22 mm eyepieces	5x/10x/20x/50x IOS brightfield objectives	5x/10x/20x/50x IOS brightfield/darkfield objectives	Brightfield illumination	darkfield illumination	Reflected NeoLED™ Köhler illumination
BS.4053-PLMRi	•	•	•		•		•
BS.4053-PLMRi-BD	•	•		•	•	•	•

DIMENSIONS



accessories

EYEPIECES

Ø 23.2 mm tube

- BS.6310** WF 10x/22 mm eyepiece
- BS.6310-M** WF 10x/22 mm eyepiece with micrometer scale
- BS.6315** WF 15x/12 mm eyepiece
- BS.6399** Pair of eyecups

OBJECTIVES FOR BRIGHTFIELD

Plan infinity corrected PLMi, IOS 45 mm parfocal*

- BS.8102** 2x/0.7 PLMi objective. WD 11 mm
- BS.8105** 5x/0.12 PLMi objective. WD 26.1 mm
- BS.8110** 10x/0.25 PLMi objective. WD 20.2 mm
- BS.8120** 20x/0.40 PLMi objective. WD 8.8 mm
- BS.8150** 50x/0.70 PLMi objective. WD 3.7 mm
- BS.8180** S80x/0.80 PLMi objective. WD 1.3 mm
- BS.8100** S100x/0.85 oil objective. WD 0.4 mm

OBJECTIVES FOR BRIGHTFIELD AND DARKFIELD

Plan infinity corrected PLMi, IOS 45 mm parfocal*

- BS.8805** 5x/0.12 PLMi objective. WD 9.7 mm
- BS.8810** 10x/0.25 PLMi objective. WD 9.3 mm
- BS.8820** 20x/0.40 PLMi objective. WD 7.2 mm
- BS.8850** 50x/0.70 PLMi objective. WD 2.5 mm
- BS.8880** 80x/0.80 PLMi objective. WD 0.8 mm
- BS.8800** 100x/0.85 PLMi objective. WD 0.8 mm

WD = working distance

*No coverglass correction

CAMERA ACCESSORIES*

- BS.5120** standard 23.2mm photo port**
- BS.9810** C-mount with 1x magnification for 1 inch sensor cameras
- BS.9850** C-mount with 0.5x magnification for 1/2 inch sensor cameras
- BS.9865** C-mount with 0.65x magnification for 2/3 inch sensor cameras

* Only for BS.40xx series

** Included

MISCELLANEOUS

- AE.5226** Glass fuses 3A 250V, 10 pieces
- BS.9047** Stand extension pole 28cm
- BS.9986-R** Spare 5W LED

