



# BINOCULAR MICROSCOPE BM-9bi



# Technical Specifications

## Optical System

- Infinity and Colour - corrected optical system.
- Upright microscope body for bright field observation.
- Fully compatible with future upgrades such as fluorescence, phase contrast, and digital imaging.

## Microscope Body, Stage & Focus Mechanism

### Microscope Body

- Aluminum die-cast frame with anti-corrosive protective coating for enhanced durability.
- Ergonomic and modular design for extended use and service life.

### Mechanical Stage

- Rackless, rectangular mechanical stage with corrosion-resistant coating.
- Travel Range: 80 mm (X-axis) × 60 mm (Y-axis).
- Equipped with two slide holders, high-quality ball-bearing system, and spring-loaded specimen holder.
- Stage upper limit stopper included to protect objectives and specimens.
- XY controls located on the right-hand side; specimen holder with spring clips on the left.
- Built-in wear-protection features and adjustable rack stop mechanism.

### Focusing System

- Coaxial coarse and fine focusing system with ergonomic knobs accessible from both sides.
- Z-axis stroke per full rotation: 15 mm.
- Fine focus graduation: 0.2 mm per rotation.
- Refocusing function included to prevent loss of focus after stage adjustment.

### Illumination

- Integrated scientific-grade white LED illumination (5 W).
- Uniform, heat-free illumination across the entire field of view.
- LED lifespan 1,00,000 hours.
- Optical feedback/display system incorporated for precise light control.
- Future-ready design for energy efficiency and upgrade ability.

### Objectives

- Long Working Distance (LWD) Plan Achromat objectives with antifungal/mould protection. Certification to be provided.
  - 10x, N.A. 0.25, W.D. 6 mm
  - 20x, N.A. 0.40, W.D. 3.0 mm
  - 40x, N.A. 0.65, W.D. 0.7 mm
  - 100x (Oil), N.A. 1.25, W.D. 0.23 mm
- 15 object markers to be included.
- Safety mechanisms to prevent contact between slide and objective.

### Eyepiece & Observation Tube

- Binocular Siedentopf head with ergonomic design.
- Eyepieces: 10x (FOV 20 mm), with diopter adjustment ( $\pm 5$ ) on both eyepieces.
- Interpupillary distance range: 45mm ( $\pm 5$  mm).
- Dual interlock mechanism included.

### Condenser

A high-quality Abbe condenser (N.A. 1.25) comes standard, fully centerable and vertically adjustable for precise illumination control. The system is designed to be phase-contrast ready, allowing easy upgrades for more advanced imaging techniques.