

Leica BME

Compound Microscope System

Great discoveries begin with vision.



Systems. Solutions. Leica.

The Vision for the Next Generation

Superior performance. Durable construction. Exclusive features. The Leica BM E has been designed with exacting attention to each and every microscope component, to create a streamlined, high performance instrument unique in its class. The BM E is a result of the Leica Microsystems vision to design a microscope that truly meets the needs of its users and offers a flexible system of microscopy.

The vision to see images more clearly.

The BM E utilizes the new Leica **E** series optics designed by optical engineers for high contrast, sharpness and resolving power. The quality of the optical glass and design combine into a system beyond the average microscope:

- Superior quality Leica \(\mathbb{E}_1\) series all-glass, finite-corrected optics for brilliant, high-contrast imaging. Upgradeable to Leica \(\mathbb{E}_2\) series optics for even better performance!
- Anti-Fungus/mold warranty protects your microscope and investment
- Spring-loaded, high magnification objectives prevent broken sample slides
- 18mm FOV (standard) 10x eyepiece optimizes viewing field for easy, comfortable operation
- Eyepieces accept a large selection of 21 mm reticles
- Eyequards can be used with or without glasses and block out ambient light

The vision to illuminate.

The BM E's illumination systems are designed to provide maximum image quality for a variety of applications. Features include:

- Designed to meet or exceed international safety standards
- Available with either Fluorescent or Tungsten-Halogen illumination
- Long-life illumination: Fluorescent lamp provides 10,000 hours of cool, bright light and Halogen lamp provides 2,000 hours of stable and balanced light
- Angled lamp door for Halogen illumination prevents accidental breakage
- Easy lamp change helps minimize downtime

III EXCLUSIVELY LEICA

Great discoveries begin with vision.



André-Marie Ampère 1775-1836

A mathematician, physicist and chemist, Ampère defined the relationship between electricity and magnetism through mathematical demonstration (Ampère's Law).



Superior quality Leica \mathbf{E}_1 series optics, and upgradeable to \mathbf{E}_2 series!



Available with either Fluorescent or Tungsten-Halogen illumination





Leica Confidence

The Vision to Provide Comfort and Convenience.

When you're looking for a microscope that gives you the ultimate in comfort and quality at a reasonable price, take a close look at the Leica BM E Compound Microscope:

- The compact size keeps key controls within easy reach
- Low position of mechanical stage controls minimizes wrist movement
- The stylish, approachable design makes it inviting to use
- Coaxial coarse and fine focus controls for precision and ease of use
- Precision machined nosepiece for excellent parfocality and parcentration
- Compact size for ease of use, easy manipulation of specimens
- Low heat output for comfortable operation
- Blue filter is built in to prevent accidental loss on Tungsten-Halogen models
- 45° viewing angle and 360° rotatable viewing bodies make it easy to share, but prevent removal

The vision to provide all the extras

A wide range of accessories to meet your specific needs:

- \blacksquare Upgradeable to higher level $\boldsymbol{E}_{\mathcal{P}}$ series Leica optics
- Choice of fixed or mechanical stages with Abbe or disc diaphragm condensers
- 35mm camera solutions for photomicrography
- Fixed or separate video accessories provide flexibility
- Hardwood or soft padded cases available for storage and transporting
 - **III** EXCLUSIVELY LEICA



Leica video accessories increase the versatility of the BM E



Available with economical photographic accessories

Great discoveries begin with vision.

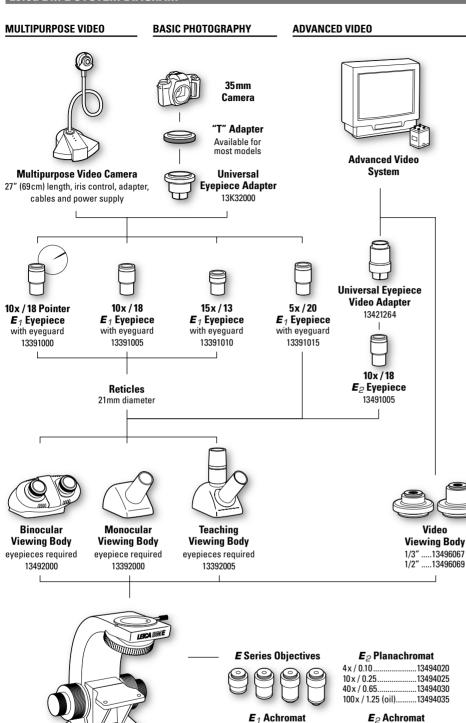


James Clerk Maxwell 1831-1879

Maxwell's experiments demonstrated that light and electricity are closely related. He showed that there were all kinds of electromagnetic waves, operating at different frequencies, beyond perception of the human eye.

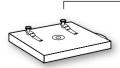


Leica BM E SYSTEM DIAGRAM



1339400
1339400
1339401
1339401

13494000
13494005
13494010
13494015



Fixed Stage

factory installed, includes 0.65 na disc diaphragm condenser 13397005



Fixed Stage

factory installed, includes 1.25 na Abbe condenser 13397010



factory installed, includes 1.25 na Abbe condenser 13397000

PRECONFIGURED SYSTEMS

COMPONENTS	SYSTEMS			
230 V	П			
120V Mirror	Н			
Monocular Binocular				
Fluorescent Tungsten Halogen	H			
E ₁ 4x, 10x, 40x E ₁ 100x (oil)				
Abbe Condenser Disc Diaphragm				
Standard Stage Mechanical Stage				
	13395M01	13395F12 13395F11 13395H12 13395H11 13395F22 13395F21 13395H21 13395H21		

ACCESSORIES



Attachable Mirror



Replacement Lamps ..13396030 Halogen Flourescent....13396025

Immersion Oil 13614800



Dustcover 13596010



STANDS *

COMPONENTS	STANDS
230V 120V	
Mirror **	
Tungsten Halogen Fluorescent	
* Specify stage and condenser type to be factory installed ** Includes 13397005 standard stage	13393040 13393000 13393010 13393005 13393015

POWER CORDS

with disc diaphragm condenser



India/ South Africa 13593900 13583900

China

Japan Argentina 13603900 13613900

Denmark

13533900

Israel

13573900

Leica BM E Specifications

VIEWING BODIES

- All-glass, high quality, coated optics
- 45° viewing angle, 360° rotation
- Standard Allen screw (1.5mm) and thumbscrew combination for easy rotation of body
- Anti-fungus/mold warranty

Monocular Single viewing eyetube

Verticle and 45° viewing angles Monocular 50/50 coating light split

Teaching Binocular

- Dual focusing eyetubes
- 54mm to 74mm IPD range, sliding

Video • 1/2" or 1/3"

E1 EYEPIECES

- · All-glass, high quality, coated optics
- Upgradeable to **E**2 optics
- Match \boldsymbol{E}_{2} objectives with \boldsymbol{E}_{2} eyepieces and \boldsymbol{E}_1 objectives with \boldsymbol{E}_1 eyepieces
- Anti-fungus/mold warranty
- 5x, 20mm FOV
- 10x, 18mm FOV
- 15x, 13mm FOV

Rubber **Eyeguards**

- Included with all eyepieces
- 34.2 mm (1.35") diameter, 10 mm (0.4") height
- Fold over eyepiece

Reticules

- Accepts 21 mm diameter discs
- Use in 10x eyepiece without pointer and 15x

OBJECTIVES

- · All-glass, high quality, coated optics
- Upgradeable to E2 optics
- Match E2 objectives with E2 eyepieces and \boldsymbol{E}_1 objectives with \boldsymbol{E}_1 eyepieces
- Finite corrected, 160mm tube length
- Anti-fungus / mold warranty
- Thread size AMO 0.800 x 36
- DIN color coded and marked

	Magnification	Numeric Aperture	Working Distance	Cover Glass	
E ₁ Achromat	4x	0.10	26.2 mm	-	
•	10 x	0.25	7.8 mm	0.17	
	40 x	0.65	0.31 mm	0.17	
	100x oil	1.25	0.10 mm	0.17	
E ₂ Achromat	4x	0.10	24.43 mm	-	
	10 x	0.25	4.46 mm	0.17	
	40 x	0.65	0.45 mm	0.17	
	100x oil	1.25	0.14 mm	0.17	
E ₂ Planachromat**	4x	0.10	26.2mm	-	
	10 x	0.25	7.8 mm	0.17	
	40 x	0.65	0.31 mm	0.17	
	100x oil	1.25	0.10 mm	0.17	
BATRICIONO AND WITIOUT					

DIMENSIONS AND WEIGHT (with fluorescent, monocular model)

· Cast aluminum

Dimensions

- 38.4 cm (h) x 17.9 cm (w) x 23.0 cm (d)
- 15.12" (h) x 7.05" (w) x 9.06" (d)

Shipping

33.8 cm (h) x 52.1 cm (w) x 45.7 cm (d)

Dimensions

13.30" (h) x 20.50" (w) x 18.00" (d)

Weight

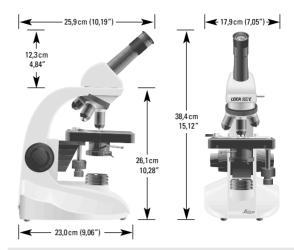
· 3.74 kg, 8.24 lbs.

Shipping Weight

• 8.8kg, 13.75lbs.

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ADDITIONAL

Construction

· Cast aluminum

Nose Piece

- Quadruple rear facing with positive stops
- Rubber grip on turret

Illumination

- Critical or mirror
- Tungsten-halogen lamp: 2,000 hours life, 12W
- Fluorescent lamp: 10,000 hours life, 7W

Electrical

Designed to meet international safety standards

Tungsten-Halogen

120VAC ±10% 50/60 Hz 220-240VAC ±10% 50/60 Hz 120VAC ±10% 60 Hz

Fluorescent

220-240VAC ±10% 50/60 Hz

Stages Fixed

Size: 13.0 cm (X) x 12.4 cm (Y) 5.12" (X) x 4.88" (Y)

Mechanical

- Right handed
- Size: 13.5 cm (X) x 13.5 cm (Y) 5.12" (X) x 5.12" (Y)
- Control shaft length 8.2 cm, 3.23"
- Travel: 7.8 cm (X) x 3.6 cm (Y) 3.07" (X) x 1.42" (Y)
- Front loading specimen holder for one standard slide

Sub Stage

Assemblies

Cam and follower with ball bearings

Condensers

- Disc diaphragm 0.65 na
 - Standard condenser 0.90 / 1.25 oil Minimum aperture: 1.3 ± 1 mm
 - Maximum aperture: 29mm

Focusing Mechanism

- Coaxial coarse and fine focus knobs with markings on fine focus knobs for each side
- 100 divisions of 4 microns each
- One full fine focus turn equals 400 microns
- One full coarse focus turn equals 4mm

Contrast Technique

Miscellaneous

Dust cover, multilingual instruction manual and immersion oil included with each complete

Telephone 716 686 3000 Fax 716 686 3085 www.leica-microsystems.com ISO-9001 Certified

Brightfield

