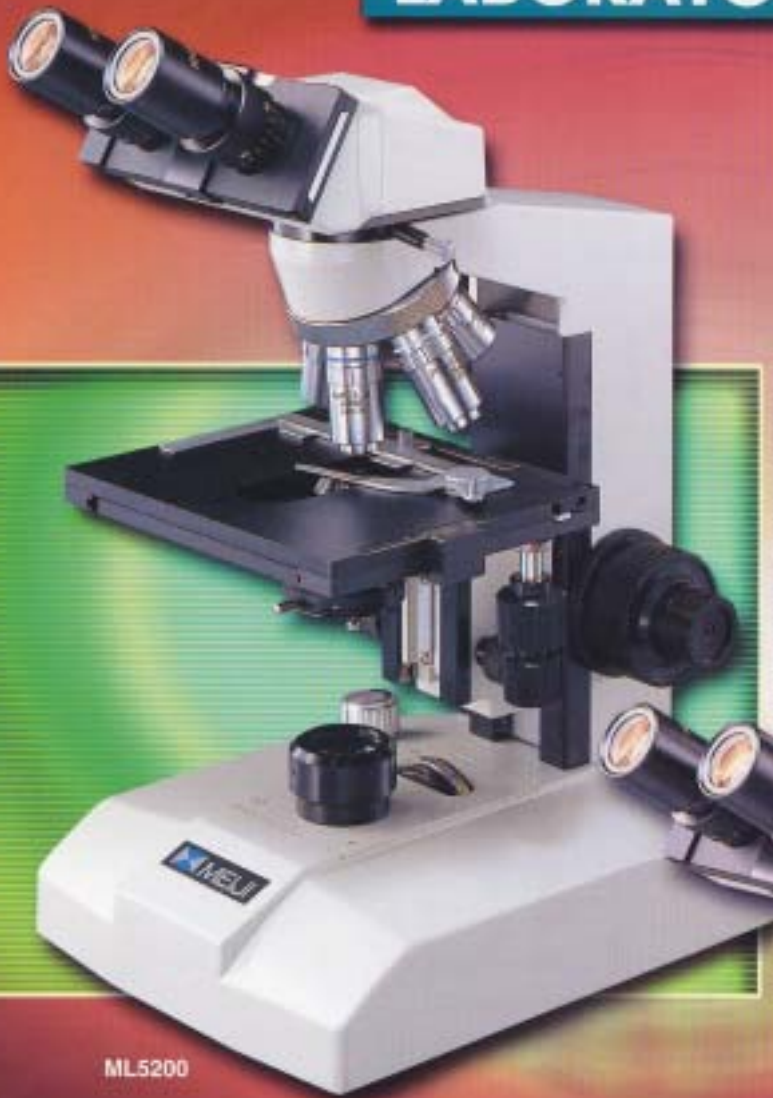




# ML5000 Series

## LABORATORY MICROSCOPES

*BRIGHTFIELD  
PHASE CONTRAST  
DARKFIELD*



ML5200



ML5500

### ISSCO

Industrial & Scientific Supply Co./P/L  
SYDNEY - MELBOURNE - BRISBANE

[www.issco.com.au](http://www.issco.com.au)

Ph. (02) 9743 2588 Fax. (02) 9736 2835

### FEATURES OF ML5000 SERIES

The high quality and dependability of the ML5000 Series with the added advantage of an ergonomic reversed quintuple nosepiece for mounting extra objectives and an optional 50W illuminator. The ML5000 Series encompasses 12 standard configurations.

#### ① VIEWING HEADS

Available with standard binocular heads or trinocular heads:  
 Binocular head: Inclined at 30°, rotatable through 360°.  
 Dual graduated diopter eyetubes with interpupillary adjustments of 52mm to 72mm.

Trinocular head: Inclined at 30°, rotatable through 360°.  
 A sliding beam splitter directs 100% of the light to the eyepieces or 80% to the camera and 20% to the eyepieces.

#### ② EYEPIECES

Paired DIN KHW10X with 20mm field of view, 22mm eye relief.

#### ③ OBJECTIVE CHANGER

Smooth operating, ball bearing mounted ergonomic, reverse-angle, quintuple nosepiece.

#### ④ OBJECTIVES

SM Semi Planachromats, BF Semi Planachromats, Planachromats or Phase Contrast.

#### ⑤ STAGES

Flat-top stage : 171mm x 140mm surface with 80mm (X) by 52mm (Y) movement, graduated with vernier readings to 0.1mm, detachable specimen guide, drop-down right or left-handed controls. An attachable clinical specimen holder is available at option.

#### ⑥ CONDENSER

An Achromatic, N.A. 1.25 substage condenser with iris diaphragm and filter tray. Or, Zernike type Phase condenser N.A.1.25.

#### ⑦ ILLUMINATOR

Variable-intensity Koehler illumination for apertures up to 1.25. Available in 6V 30W (built-in) or 12V 50W (attached lamp house) models.

#### ⑧ FOCUSING MOVEMENT

Coaxial coarse and fine focusing controls with graduation reading 2 microns per division. Incorporates tension adjustment and safety Auto-focus stop unit.

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#### SIZE AND WEIGHT

30W Models;  
 Binocular Models: 195mm(W) × 255mm(D) × 395mm(H), Net weight: 6.4Kg  
 Trinocular Models: 195mm(W) × 255mm(D) × 440mm(H), Net weight: 6.5Kg

50W Models;  
 Binocular Models: 195mm(W) × 360mm(D) × 395mm(H), Net weight: 7.5Kg  
 Trinocular Models: 195mm(W) × 360mm(D) × 440mm(H), Net weight: 7.6Kg



## COMPONENTS AND ACCESSORIES

### ACHROMAT OBJECTIVES

- MA482** S.Flat achromat 4X, N.A. 0.10, W.D.20.0mm
- MA483** S.Flat achromat 10X, N.A. 0.25, W.D.6.6mm
- MA484** S.Flat achromat S20X, N.A. 0.40, W.D.3.1mm
- MA485** S.Flat achromat S40X, N.A. 0.65, W.D.0.4mm
- MA486** S.Flat achromat S60X, N.A. 0.85, W.D.0.2mm
- MA487** S.Flat achromat S100X, N.A. 1.25, W.D.0.13mm

### SM SEMI PLANACHROMAT OBJECTIVES

- MA611** SM Semi Plan 4X, N.A. 0.10, W.D.19.83mm
- MA612** SM Semi Plan 5X, N.A. 0.10, W.D.19.83mm
- MA613** SM Semi Plan 10X, N.A. 0.25, W.D.6.23mm
- MA614** SM Semi Plan S20X, N.A. 0.40, W.D.3.13mm
- MA615** SM Semi Plan S40X, N.A. 0.65, W.D.0.43mm
- MA616** SM Semi Plan S60X, N.A. 0.85, W.D.0.23mm
- MA617** SM Semi Plan S100X, N.A. 1.25, oil, W.D.0.12mm



SM SEMI PLAN OBJECTIVES

### BF SEMI PLANACHROMAT OBJECTIVES

- MA690** BF Semi Plan 4X, N.A. 0.10, W.D.19.83mm
- MA691** BF Semi Plan 10X, N.A. 0.25, W.D.6.23mm
- MA692** BF Semi Plan S20X, N.A. 0.40, W.D.3.1mm
- MA693** BF Semi Plan S40X, N.A. 0.65, W.D.0.43mm
- MA694** BF Semi Plan S50X, oil, N.A. 0.95, W.D.0.25mm
- MA696** BF Semi Plan S100X, N.A. 1.25, oil, W.D.0.15mm
- MA811** BF Semi Plan S50X, N.A. 0.95, oil, with iris, W.D.0.24mm
- MA813** BF Semi Plan S100X, N.A. 1.25, oil, with iris, W.D.0.15mm



BF SEMI PLAN OBJECTIVES

### MISCELLANEOUS COMPONENTS

- MA326** Spare bulb 6V 30W halogen
- MA275/05** Spare bulb 12V 50W halogen
- MA327** Fuse 3A
- MA609/05** Wooden carrying case
- MA676** Attachable clinical specimen holder for MA596R Mechanical stage
- MA680** Polarizer set for 30W version (Polarizer to fit filter tray/analyser to fit viewing head)
- MA681** Polarizer set for 50W version (Polarizer to fit filter tray/analyser to fit viewing head)
- MA700** Immersion oil
- MA701** Dust cover

### FILTERS

- MA196** ND2 Neutral density filter, 29.8mm diameter
- MA197** ND8 Neutral density filter, 29.8mm diameter
- MA289/05** Blue clear filter, 29.8mm diameter
- MA290/05** Green clear filter, 29.8mm diameter
- MA759** Green interference filter, 29.8mm diameter
- MA291** Polarizing filter, 29.8mm diameter

### EYEPIECE MICROMETERS (FOR USE WITH MA407 EYEPIECE)

- MA284** Cross-line reticule, 21mm diameter
- MA255** Eyepiece micrometer, 10mm divided into 100 units, 21mm diameter
- MA256** Eyepiece micrometer 5mm divided into 100 units, 21mm diameter
- MA283/05** 10mm square divided into 100 parts, 1.0mm square, 21mm diameter
- MA540** Cross-line with 0.1mm graduations, 21mm diameter
- MA254/05** Wallon and Beckett reticule 21mm diameter



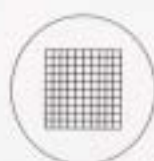
**MA284**  
Cross-line



**MA255**  
10mm in 100 parts



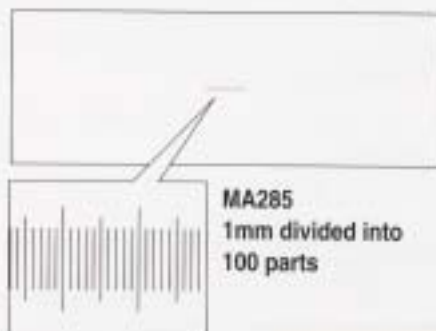
**MA256**  
5mm in 100 parts



**MA283/05**  
10mm square in  
100 square

### STAGE MICROMETERS

- MA285** Objective micrometer, 0.01mm ruling
- MA286** 0.04" divided into 40 units, 0.001"



**MA285**  
1mm divided into  
100 parts

# PHASE CONTRAST MICROSCOPES


**ML5870**
**ISSCO**

 Ph.(02) 9743 2588  
 Fax.(02) 9736 2835

**ML5970**
**ORDERING INFORMATION FOR ML5000 SERIES**

MODEL	BODY	EYEPIECES (DIN)	OBJECTIVES (DIN)	MECHANICAL STAGE	CONDENSER	ILLUMINATOR	
ML5000	Binocular	KHW10X, 20mm f.o.v.	SM Semi Plan 4X, 10X, S40X, S100X oil	Flat-top, 80mm x 52mm movement, with (right hand control)	Achromatic N.A. 1.25 with blue filter	Koehler 6V 30W Halogen	
ML5100	Trinocular						
ML5050	Binocular		BF Semi Plan 4X, 10X, S40X, S100X oil				
ML5150	Trinocular						
ML5200	Binocular		Planachromat 4X, 10X, S40X, S100X oil				Koehler 12V 50W Halogen
ML5300	Trinocular						
ML5400	Binocular						
ML5500	Trinocular	with centering telescope	Achromat Phase 10X, S20X, S40X, S100X oil	Zernike type Phase condenser N.A.1.25 with green filter	Koehler 6V 30W Halogen		
ML5855	Binocular		BF Semi Plan Phase 10X, S20X, S40X, S100X oil	Zernike type Phase condenser N.A.1.25 with green interference filter	Koehler 12V 50W Halogen		
ML5955	Trinocular						
ML5870	Binocular		Trinocular				
ML5970	Trinocular						

• Supplied in styrofoam case with dust cover and instruction manual.

• Left hand control mechanical stage is optional. Please indicate the letter "L" after the model number when ordering the ML5000 series microscope with left hand control mechanical stage (For instance: Model ML5000L).

## ISSCO

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### PHASE CONTRAST SET, PH-A

comprising:

- MA715** Zernike type N.A. 1.25 Phase condenser in turret mount, individual centerable phase annuli for 10X, 20X, 40X and 100X with brightfield position with iris and filter tray for 29.8mm diameter filter
  - MA695** BF Semi Planachromat Phase objective 10X, N.A. 0.25
  - MA697** BF Semi Planachromat Phase objectives S20X, N.A. 0.40
  - MA698** BF Semi Planachromat Phase objectives S40X, N.A. 0.65
  - MA699** BF Semi Planachromat Phase objectives S100X, N.A. 1.25 oil
  - MA458** Centering telescope to check phase annulus
  - MA759** Green interference filter, 29.8mm diameter.
- The unit is equipped in Models: ML5870 and ML5970.



PH-A

### PHASE CONTRAST SET, PH-B

comprising:

- MA715** Zernike type N.A. 1.25 Phase condenser in turret mount, individual centerable phase annuli for 10X, 20X, 40X and 100X with brightfield position with iris and filter tray for 29.8mm diameter filter
  - MA448** DIN Achromat Phase objective 10X, N.A. 0.25
  - MA449** DIN Achromat Phase objectives S20X, N.A. 0.40
  - MA450** DIN Achromat Phase objectives S40X, N.A. 0.65
  - MA451** DIN Achromat Phase objectives S100X, N.A. 1.25 oil
  - MA458** Centering telescope to check phase annulus
  - MA290/05** Green clear filter, 29.8mm diameter.
- The unit is equipped in Models: ML5855 and ML5955.



PH-B

### PHASE AND DARKFIELD SET, PD-A

comprising:

- MA716** Zernike type N.A. 1.25 Phase condenser in turret mount, individual centerable phase annuli for 10X, 20X and 40X, darkfield stop for 40X and iris and filter tray for 29.8mm diameter filter
- MA448** DIN Achromat Phase objective 10X, N.A. 0.25
- MA449** DIN Achromat Phase objectives S20X, N.A. 0.40
- MA450** DIN Achromat Phase objectives S40X, N.A. 0.65
- MA458** Centering telescope to check phase annulus
- MA290/05** Green clear filter, 29.8mm diameter



PD-A

### ACCESSORIES FOR HIGH POWER DARKFIELD MICROSCOPY

- MA274** Darkfield condenser, Cardiod type, for high power use (N.A. 1.25) in a centering mount (to be used with 100X objective with iris only).
- MA811** BF Semi planachromat S50X, N.A. 0.95 oil, with iris diaphragm
- MA813** BF Semi planachromat S100X, N.A. 1.25 oil, with iris diaphragm
- MA430** S.Plan objectives S100X oil, with iris diaphragm



Darkfield condenser and objectives with iris diaphragm

### COMPONENTS AND ACCESSORIES

#### VIEWING HEADS (without eyepieces)

- MA403** Inclined Monocular head
- MA602** Inclined Binocular head
- MA603** Inclined Trinocular head

#### EYEPIECES

- MA406** DIN HWF10X, Field No.18, Eye Relief 24mm (ea)
- MA407** DIN KHW10X, Field No.20, Eye Relief 22mm (ea)
- MA408** DIN HWF15X, Field No.12.2, Eye Relief 15mm (ea)
- MA409** DIN HWF20X, Field No.9, Eye Relief 9mm (ea)