

# ZOOM STEREO MICROSCOPES

## EMZ-5 ZOOM STEREO BODY

- Crisp, high resolution, precision optics provide an excellent, erect, unreversed stereoscopic image.
- Rugged all metal body designed to last a lifetime.
- Zoom Range: 0.7X to 4.5X
- Zoom Ratio: 6.5:1
- Ergonomically positioned bilateral zoom controls.
- Binocular eyetubes inclined at 45° for fatigue free viewing.
- Total magnification range available with auxillary lenses and eyepieces: 2.1X to 270X.
- Dual dioptic adjustment ( $\pm 5$  diopters) allows the specimen to remain in focus throughout the entire zoom magnification range.
- Interpupillary distance adjustment from 54mm to 75mm.
- Binocular body can be rotated a full 360° and locked in any position.
- Standard working distance 93mm.
- Working distance with optional auxillary lenses: 34mm to 251mm.



EMZ-5 with MA502 SWF10X



EMZ-5 on PK Stand with MA502 SWF10X eyepieces



EMZ-5 on PKL Stand with MA502 SWF10X eyepieces



EMZ-5 on ABE Stand with MA502 SWF10X eyepieces

## EMZ-5TR ZOOM STEREO BODY

- Trinocular zoom body for use in photographic and video applications. When the beamsplitter is engaged 100% of the light from the left optical path is directed to the phototube. The image can still be viewed through the right eyetube.
- Crisp, high resolution, precision optics provide an excellent, erect, unreversed stereoscopic image.
- Rugged all metal body designed to last a lifetime.
- Zoom Range: 0.7X to 4.5X
- Zoom Ratio: 6.5:1
- Ergonomically positioned bilateral zoom controls.
- Binocular eyetubes inclined at 45° for fatigue free viewing.
- Total magnification range available with auxiliary lenses and eyepieces: 2.1X to 270X.
- Dual dioptric adjustment ( $\pm 5$  diopters) allows the specimen to remain in focus throughout the entire zoom magnification range.
- Interpupillary distance adjustment from 54mm to 75mm.
- Trinocular body can be rotated a full 360° and locked in any position.
- Standard working distance 93mm.
- Working distance with optional auxiliary lenses: 34mm to 251mm.



EMZ-5TR with MA502 SWF10X



EMZ-5TR on PK Stand with MA502 SWF10X eyepieces



EMZ-5TR on PKL Stand with MA502 SWF10X eyepieces



EMZ-5TR on ABE Stand with MA502 SWF10X eyepieces

# ZOOM STEREO MICROSCOPES



EMZ-5 with MA502 SWF10X eyepieces

## EMZ-5 ZOOM STEREO BODY

Body: Binocular, rotatable 360°  
Zoom Ratio: 6.5:1  
Zoom Range: 0.7X to 4.5X  
Zoom Control: Dual, graduated, bilateral mount.  
Magnification: 7X - 45X (With 10X eyepieces)  
Field of view: 32mm - 5.1mm (With 10X eyepieces)  
Working Distance: 93mm, Eyetube Inclination: 45°  
Interpupillary Distance Adjustment: 54mm - 75mm  
Dioptric Adjustment: Dual ( $\pm 5$  diopters)

Extended Magnification Range : 2.1X - 270X  
Extend working distances: 34mm - 251mm  
(With supplemental objectives and eyepieces)

## EMZ-5D ZOOM STEREO BODY WITH DETENT



EMZ-5TR with MA502 SWF10X eyepieces

## EMZ-5TR ZOOM STEREO BODY

Body: Trinocular, rotatable 360°  
Zoom Ratio: 6.5:1  
Zoom Range: 0.7X to 4.5X  
Zoom Control: Dual, graduated, bilateral mount.  
Magnification: 7X - 45X (With 10X eyepieces)  
Field of view: 32mm - 5.1mm (With 10X eyepieces)  
Working Distance: 93mm, Eyetube Inclination: 45°  
Interpupillary Distance Adjustment: 54mm - 75mm  
Dioptric Adjustment: Dual ( $\pm 5$  diopters)

Extended Magnification Range : 2.1X - 270X  
Extend working distances: 34mm - 251mm  
(With supplemental objectives and eyepieces)

## EMZ-5TRD ZOOM STEREO BODY WITH DETENT



EMZ-10 with MA502 SWF10X eyepieces

## EMZ-10 ZOOM STEREO BODY

Body: Binocular, rotatable 360°  
Zoom Ratio: 6.5:1  
Zoom Range: 0.7X to 4.5X  
Zoom Control: Dual, graduated, bilateral mount.  
Magnification: 7X - 45X (With 10X eyepieces)  
Field of view: 32mm - 5.1mm (With 10X eyepieces)  
Working Distance: 110mm  
Eyetube Inclination: 45°  
Interpupillary Distance Adjustment: 54mm - 75mm  
Dioptric Adjustment: Dual ( $\pm 5$  diopters)

Extended Magnification Range : 2.1X - 270X  
Extend working distances: 45mm - 332mm  
(With supplemental objectives and eyepieces)



EMZ-2 with MA502 SWF10X eyepieces

### EMZ-2 ZOOM STEREO BODY

Body: Binocular, rotatable 360°  
 Zoom Ratio: 6.5:1  
 Zoom Range: 0.7X to 4.5X  
 Zoom Control: Graduated knurled ring  
 Magnification: 7X - 45X (With 10X eyepieces)  
 Field of view: 32mm - 5.1mm (With 10X eyepieces)  
 Working Distance: 93mm  
 Eyetube Inclination: 45°  
 Interpupillary Distance Adjustment: 54mm - 75mm  
 Dioptic Adjustment: Dual ( $\pm 5$  diopters)

Extended Magnification Range : 2.1X - 270X  
 Extend working distances: 34mm - 251mm  
 (With supplemental objectives and eyepieces)



EMZ-2TR with MA502 SWF10X eyepieces

### EMZ-2TR ZOOM STEREO BODY

Body: Trinocular, rotatable 360°  
 Zoom Ratio: 6.5:1  
 Zoom Range: 0.7X to 4.5X  
 Zoom Control: Graduated knurled ring  
 Magnification: 7X - 45X (With 10X eyepieces)  
 Field of view: 32mm - 5.1mm (With 10X eyepieces)  
 Working Distance: 93mm  
 Eyetube Inclination: 45°  
 interpupillary Distance Adjustment: 54mm - 75mm  
 Dioptic Adjustment: Dual ( $\pm 5$  diopters)

Extended Magnification Range : 2.1X - 270X  
 Extend working distances: 34mm - 251mm  
 (With supplemental objectives and eyepieces)



Z-7100 with MA502 SWF10X eyepieces

### Z-7100 ZOOM STEREO BODY

Body: Binocular, rotatable 360°  
 Zoom Ratio: 6.5:1  
 Zoom Range: 0.7X to 4.5X  
 Zoom Control: Dual, graduated, bilateral mount.  
 Magnification: 7X - 45X (With 10X eyepieces)  
 Field of view: 32mm - 5.1mm (With 10X eyepieces)  
 Working Distance: 110mm  
 Eyetube Inclination: 90°  
 Interpupillary Distance Adjustment: 54mm - 75mm  
 Dioptic Adjustment: Dual ( $\pm 5$  diopters)

Extended Magnification Range : 2.1X - 270X  
 Extend working distances: 45mm - 332mm  
 (With supplemental objectives and eyepieces)

# ZOOM STEREO MICROSCOPES



EMZ-8U with MA502 SWF10X eyepieces

## EMZ-8U ZOOM STEREO BODY WITH INLET FOR FIBER LIGHT GUIDE

Body: Binocular, rotatable 360°  
Zoom Ratio: 6.5:1  
Zoom Range: 0.7X to 4.5X  
Zoom Control: Dual, graduated, bilateral mount.  
Magnification: 7X - 45X (With 10X eyepieces)  
Field of view: 32mm - 5.1mm (With 10X eyepieces)  
Working Distance: 104mm, Eyetube Inclination: 45°  
Interpupillary Distance Adjustment: 54mm - 75mm  
Dioptric Adjustment: Dual ( $\pm 5$  diopters)

Extended Magnification Range : 2.45X - 202.5X  
Extend working distances: 57mm - 250mm  
(With supplemental objectives and eyepieces)

## EMZ-8UD ZOOM STEREO BODY WITH DETENT



EMZ-8TR with MA502 SWF10X eyepieces

## EMZ-8TR ZOOM STEREO BODY

**Benefits: Direct light to all three viewing ports simultaneously**

Body: Trinocular, rotatable 360°  
Zoom Ratio: 6.5:1  
Zoom Range: 0.7X to 4.5X  
Zoom Control: Dual, graduated, bilateral mount.  
Magnification: 7X - 45X (With 10X eyepieces)  
Field of view: 32mm - 5.1mm (With 10X eyepieces)  
Working Distance: 104mm, Eyetube Inclination: 45°  
Interpupillary Distance Adjustment: 54mm - 75mm  
Dioptric Adjustment: Dual ( $\pm 5$  diopters)

Extended Magnification Range : 2.45X - 202.5X  
Extend working distances: 57mm - 250mm  
(With supplemental objectives and eyepieces)

## EMZ-8TRD ZOOM STEREO BODY WITH DETENT



EMZ-8TRU with MA502 SWF10X eyepieces

## EMZ-8TRU ZOOM STEREO BODY WITH INLET FOR FIBER LIGHT GUIDE

**Benefits: Direct light to all three viewing ports simultaneously**

Body: Trinocular, rotatable 360°  
Zoom Ratio: 6.5:1  
Zoom Range: 0.7X to 4.5X  
Zoom Control: Dual, graduated, bilateral mount.  
Magnification: 7X - 45X (With 10X eyepieces)  
Field of view: 32mm - 5.1mm (With 10X eyepieces)  
Working Distance: 104mm, Eyetube Inclination: 45°  
Interpupillary Distance Adjustment: 54mm - 75mm  
Dioptric Adjustment: Dual ( $\pm 5$  diopters)

Extended Magnification Range : 2.45X - 202.5X  
Extend working distances: 57mm - 250mm  
(With supplemental objectives and eyepieces)



EMZ-12 with MA502 SWF10X eyepieces

### EMZ-12 ZOOM STEREO BODY WITH INLET FOR FIBER LIGHT GUIDE

Body: Binocular, rotatable 360°  
Zoom Ratio: 6.25:1  
Zoom Range: 0.4X to 2.5X  
Zoom Control: Graduated knurled ring  
Magnification: 4X - 25X (With 10X eyepieces)  
Field of view: 57mm - 9.2mm (With 10X eyepieces)  
Working Distance: 185mm, Eyetube Inclination: 45°  
Interpupillary Distance Adjustment: 54mm - 75mm  
Dioptric Adjustment: Dual ( $\pm 5$  diopters)

Extended Magnification Range : 2.28X - 75X  
Extend working distances: 185mm - 300mm  
(With supplemental objectives and eyepieces)

### EMZ-12D ZOOM STEREO BODY WITH DETENT



EMZ-12TR with MA502 SWF10X eyepieces

### EMZ-12TR ZOOM STEREO BODY WITH INLET FOR FIBER LIGHT GUIDE

Body: Trinocular, rotatable 360°  
Zoom Ratio: 6.25:1  
Zoom Range: 0.4X to 2.5X  
Zoom Control: Graduated knurled ring  
Magnification: 4X - 25X (With 10X eyepieces)  
Field of view: 57mm - 9.2mm (With 10X eyepieces)  
Working Distance: 185mm, Eyetube Inclination: 45°  
Interpupillary Distance Adjustment: 54mm - 75mm  
Dioptric Adjustment: Dual ( $\pm 5$  diopters)

Extended Magnification Range : 2.28X - 75X  
Extend working distances: 185mm - 300mm  
(With supplemental objectives and eyepieces)

### EMZ-12TRD ZOOM STEREO BODY WITH DETENT

# ZOOM STEREO MICROSCOPES



EMZ-13 with MA502 SWF10X eyepieces

## EMZ-13 ZOOM STEREO BODY

Body: Binocular, rotatable 360°  
Zoom Ratio: 7:1  
Zoom Range: 1X to 7X  
Zoom Control: Dual, graduated, bilateral mount.  
Magnification: 10X - 70X (With 10X eyepieces)  
Field of view: 23mm - 3.2mm (With 10X eyepieces)  
Working Distance: 90mm, Eyetube Inclination: 45°  
Interpupillary Distance Adjustment: 54mm - 75mm  
Dioptric Adjustment: Dual ( $\pm 5$  diopters)

Extended Magnification Range : 3X - 420X  
Extend working distances: 32mm - 230mm  
(With supplemental objectives and eyepieces)

## EMZ-13D ZOOM STEREO BODY WITH DETENT



EMZ-13TR with MA502 SWF10X eyepieces

## EMZ-13TR ZOOM STEREO BODY

Body: Trinocular, rotatable 360°  
Zoom Ratio: 7:1  
Zoom Range: 1X to 7X  
Zoom Control: Dual, graduated, bilateral mount.  
Magnification: 10X - 70X (With 10X eyepieces)  
Field of view: 23mm - 3.2mm (With 10X eyepieces)  
Working Distance: 90mm, Eyetube Inclination: 45°  
Interpupillary Distance Adjustment: 54mm - 75mm  
Dioptric Adjustment: Dual ( $\pm 5$  diopters)

Extended Magnification Range : 3X - 420X  
Extend working distances: 32mm - 230mm  
(With supplemental objectives and eyepieces)

## EMZ-13TRD ZOOM STEREO BODY WITH DETENT

## TURRET-TYPE

# STEREO MICROSCOPES



**EMT-1**  
with MA502 SWF10X eyepieces

**EMTR-1**  
with MA502 SWF10X eyepieces

### EMT-1 & EMTR-1 TURRET STEREO BODY

Body: Binocular or trinocular, rotatable 360°  
Paired Objectives: 1X, 2X  
Magnification: 10X, 20X (With 10X eyepieces)  
Field of view: 23mm, 11.5mm (With 10X eyepieces)  
Working Distance: 108mm  
Eyetube Inclination: 45°  
Interpupillary Distance Adjustment: 54mm - 75mm  
Dioptric Adjustment: Left eyetube

Extended Magnification Range : 10X - 60X  
Extend working distances: None



**EMT-2**  
with MA502 SWF10X eyepieces

**EMTR-2**  
with MA502 SWF10X eyepieces

### EMT-2 & EMTR-2 TURRET STEREO BODY

Body: Binocular or trinocular, rotatable 360°  
Paired Objectives: 1X, 3X  
Magnification: 10X, 30X (With 10X eyepieces)  
Field of view: 23mm, 7.6mm (With 10X eyepieces)  
Working Distance: 81mm  
Eyetube Inclination: 45°  
Interpupillary Distance Adjustment: 54mm - 75mm  
Dioptric Adjustment: Left eyetube

Extended Magnification Range : 5X - 180X  
Extend working distances: 21mm - 108mm  
(With supplemental objectives and eyepieces)



**EMT-3**  
with MA502 SWF10X eyepieces

**EMTR-3**  
with MA502 SWF10X eyepieces

### EMT-3 & EMTR-3 TURRET STEREO BODY

Body: Binocular or trinocular, rotatable 360°  
Paired Objectives: 2X, 4X  
Magnification: 20X, 40X (With 10X eyepieces)  
Field of view: 11.5mm, 5.7mm (With 10X eyepieces)  
Working Distance: 63mm  
Eyetube Inclination: 45°  
Interpupillary Distance Adjustment: 54mm - 75mm  
Dioptric Adjustment: Left eyetube

Extended Magnification Range : 10X - 240X  
Extend working distances: 22mm - 108mm  
(With supplemental objectives and eyepieces)



## TURRET-TYPE

# STEREO MICROSCOPES



**EMT-4**  
with MA502 SWF10X eyepieces

**EMTR-4**  
with MA502 SWF10X eyepieces

### EMT-4 & EMTR-4 TURRET STEREO BODIES

Body: Binocular or trinocular, rotatable 360°  
 Paired Objectives: 1X, 4X  
 Magnification: 10X, 40X (With 10X eyepieces)  
 Field of view: 23mm, 5.7mm (With 10X eyepieces)  
 Working Distance: 63mm  
 Eyetube Inclination: 45°  
 Interpupillary Distance Adjustment: 54mm - 75mm  
 Dioptic Adjustment: Left eyetube  
 Extended Magnification Range : 5X - 240X  
 Extend working distances: 22mm-108mm

## FIXED-OBJECTIVE TYPE

# STEREO MICROSCOPES



EMF-1, EMF-2 with MA502 SWF10X eyepieces

### EMF-1, EMF-2 FIXED-OBJECTIVE STEREO BODY

	EMF-1	EMF-2
Body	Binocular rotatable 360°	
Paired Objective	1X	2X
Magnification (with 10X eyepieces)	10X	20X
Field of view	23mm	11.5mm
Working Distance	108mm	
Eyetube Inclination	45°	
Interpupillary Distance Adjustment	54mm - 75mm	
Dioptic Adjustment	Left eyetube	
Extended Magnification Range (with optional eyepieces)	5X - 30X	10X - 60X

# CONFIGURATION SAMPLES



EMF-2 / SWF10X / PK



EMT-1 / SWF10X / PKL



EMTR-2 / SWF10X / PBH



EMX-1 / SWF10X / PX

# LONG WORKING DISTANCE TURRET STEREO



## EMX-1 TURRET STEREO BODIES

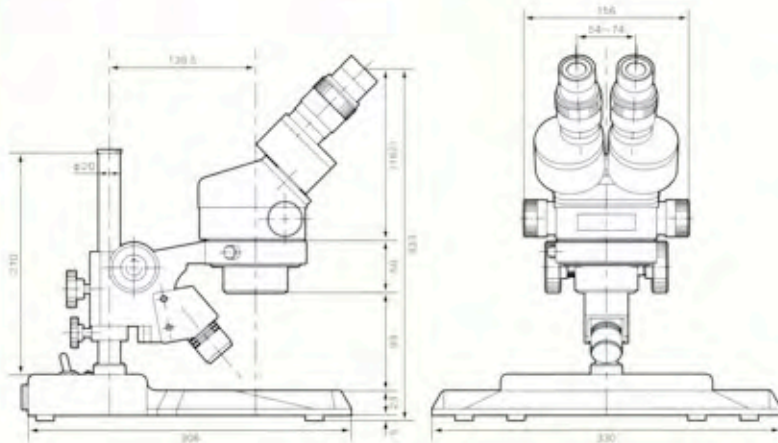
Body: Binocular, rotatable 360°  
 Paired Objectives: 0.5X, 1X  
 Magnification: 5X, 10X (With 10X eyepieces)  
 Field of view: 46mm, 23mm (With 10X eyepieces)  
 Working Distance: 225mm  
 Eyetube Inclination: 45°  
 Interpupillary Distance Adjustment: 54mm - 75mm  
 Dioptic Adjustment: Left eyetube  
 Extended Magnification Range : 5X - 30X  
 Extend working distances: 300mm  
 (With supplemental objectives and eyepieces)

EMX-1 with MA502 SWF10X eyepieces

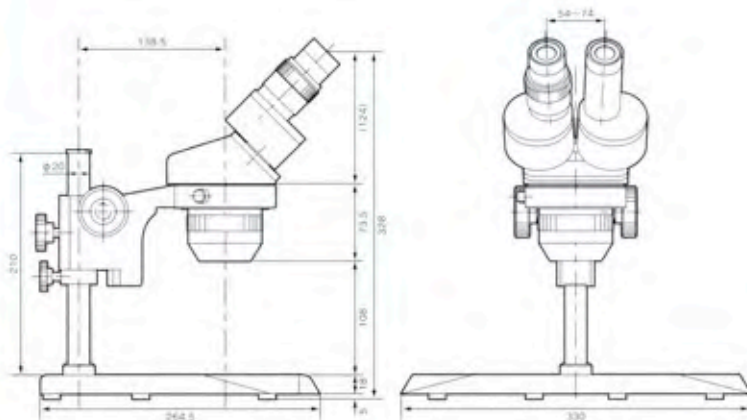
# CONFIGURATION SAMPLES



EMZ-5 / SWF10X / PKL



EMF-2 / SWF10X / PK



# EYEPIECES AND EYEPIECE ACCESSORIES

## EYEPIECES

A large selection of interchangeable super widefield eyepieces are available for all EM Series stereo microscopes.

- MA501** Super Widefield 5X Eyepiece, field No.26
- MA718** Super Widefield 7.5X Eyepiece with 25mm diameter reticle mount, field No.26
- MA502** Super Widefield 10X Eyepiece with 25mm diameter reticle mount, field No.23
- MA520** Super Widefield 12.5X Eyepiece with 25mm diameter reticle mount, field No.20
- MA503** Super Widefield 15X Eyepiece with 25mm diameter reticle mount, field No.15.4
- MA535** Super Widefield 15X High-eyepoint eyepiece with 25mm diameter reticle mount, field No.16.0
- MA504** Super Widefield 20X Eyepiece with 25mm diameter reticle mount, field No.11.5
- MA903** Super Widefield Focusing Eyepiece 20X with 25mm diameter reticle mount, field No.11.5
- MA521** Super Widefield 30X Eyepiece field No. 7.7
- MA519** Super Widefield 10X Focusing eyepiece (single) with 25mm diameter reticle mount, field No.21
- MA600** Eyeshields (paired)

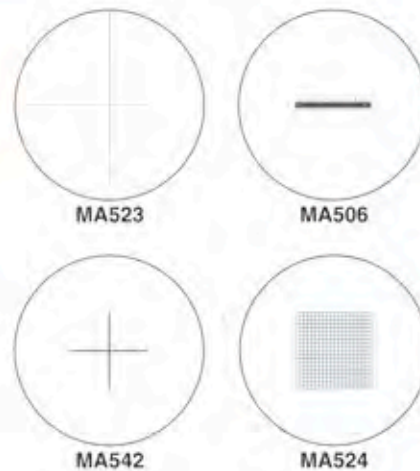


Note: All eyepieces are paired unless otherwise indicated.

## EYEPIECE MICROMETERS

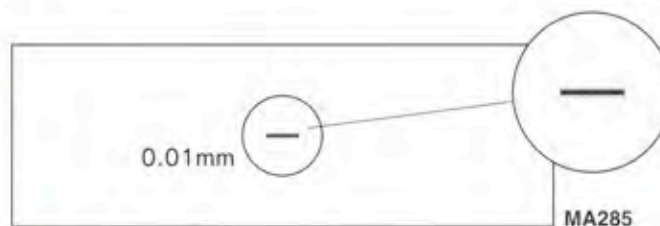
Eyepiece micrometers can be inserted into the 10X, 15X or 20X eyepieces for the purpose of specimen measurement. Linear scales, counting grids, and cross-line micrometers are just a few of the choices available to facilitate measurement of your specimens.

- MA523** Cross-line, 25mm diameter
- MA506** 10mm divided into 100 units, 25mm diameter
- MA509** 5mm divided into 100 units, 25mm diameter
- MA510** 10mm square divided into 100 parts, 25mm diameter (Each side of each individual square 1.0mm)
- MA524** 10mm square divided into 400 parts, 25mm diameter (Each side of each individual square 0.5mm)
- MA542** Cross-line with 0.01mm graduations, 25mm diameter



## STAGE MICROMETERS

Stage micrometers are used to calibrate eyepiece micrometers. Stage micrometers are available in both English and metric scales for reflected and transmitted light.



- MA285** 1mm divided into 100 units (0.01mm), for transmitted light
- MA286** 0.04" divided into 40 units (0.001"), for transmitted light
- MA287** 0.1mm by 0.1mm counting square for transmitted light
- MA292** 1mm divided into 100 parts(0.01mm), for reflected light

# AUXILIARY OBJECTIVE LENSES

A large selection of auxiliary objective lenses are available for EM Series stereo microscopes.

**AUXILIARY LENSES FOR: EMZ-1, EMZ-2, EMZ-2TR, EMZ-5, EMZ-5D, EMZ-5TR, EMZ-5TRD, EMZ-6, EMZ-9, EMZ-13 & EMZ-13TR**

- MA530** Auxiliary lens 0.3X, Working distance 251mm
- MA525** Auxiliary lens 0.44X, Working distance 171mm
- MA517** Auxiliary lens 0.5X, Working distance 148mm
- MA526** Auxiliary lens 0.75X, Working distance 97mm
- MA507** Auxiliary lens 1.5X, Working distance 49mm
- MA511** Auxiliary lens 2.0X, Working distance 33mm



**AUXILIARY LENSES FOR: EMZ-10 and Z-7100**

- MA545** Auxiliary lens 0.3X, Working distance 326mm
- MA558** Auxiliary lens 0.44X, Working distance 247mm
- MA546** Auxiliary lens 0.5X, Working distance 194mm
- MA547** Auxiliary lens 0.75X, Working distance 127mm
- MA548** Auxiliary lens 1.5X, Working distance 64mm
- MA549** Auxiliary lens 2.0X, Working distance 44mm



**AUXILIARY LENSES FOR: EMZ-8TR, EMZ-8TRD, EMZ-8TRU, EMZ-8UD**

- MA791** Auxiliary lens 0.28X, Working distance 300mm
- MA792** Auxiliary lens 0.35X, Working distance 280mm
- MA794** Auxiliary lens 0.5X, Working distance 174mm
- MA795** Auxiliary lens 1.5X, Working distance 57mm
- MA802** Auxiliary lens 2.0X, Working distance 36.6mm



**AUXILIARY LENSES FOR: EMT-2, EMTR-2, EMT-3, EMTR-3, EMT-4, EMTR-4**

- MA515** Adapter\*
- MA518** Auxiliary lens 0.5X, Working distance 108mm
- MA527** Auxiliary lens 0.75X, Working distance 72mm
- MA513** Auxiliary lens 1.5X, Working distance 35mm
- MA514** Auxiliary lens 2.0X, Working distance 22mm



\*NOTE: The MA515 adapter is required when using the MA518, MA527, MA513, or MA514 with the EMT-2 and EMTR-2

**AUXILIARY LENS FOR EMX-1, EMZ-12, EMZ-12D, EMZ-12TR & EMZ-12TRD**

- MA652** Auxiliary lens 0.7X Working distance 233mm
- MA796** Auxiliary lens 0.57X Working distance 300mm

