

## Z series

### HIGHLIGHTS

- Modular system
- Binocular and trinocular models
- Standard HWF10x/23 mm eyepieces
- Stereo zoom heads with fix 45°, 60° or 90° inclined tubes
- Zoom magnification objectives
- Superior resolution optics
- Multiple stands
- 10 years warranty



ZE.1624 and ST.1735

### TECHNICAL SPECIFICATIONS

#### EYEPIECE(S)

- Pair of SWF 10x/23 mm eyepieces

#### HEADS

- Binocular or trinocular heads with 45°, 60° or 90° inclined tubes
- Diopter  $\pm 6^\circ$  adjustment on both tubes for Z series
- Interpupillary distance from 55 to 75 mm.

#### ZOOM MAGNIFICATION OBJECTIVES

- Zoom objectives with click stops are also available on request
- All optics have an anti-reflection coating for maximum light throughput and are anti-fungus treated

#### MODELS (ZOOM STEREO HEADS)

	Binocular	Trinocular	Tilt tubes	objective zoom	Magnifications	Working distance (mm)	Field of view (mm)
ZE.1624	•		45°	0.7 - 4.5x	7 - 45x	93	32/5.1
ZE.1654		•	45°	0.7 - 4.5x	7 - 45x	93	32/5.1
ZE.1657		• <sup>1</sup>	45°	0.7 - 4.5x	7 - 45x	104	32/5.1
ZE.1670	•		45°	1 - 7x	10 - 70x	104	23/3.3
ZE.1671		• <sup>1</sup>	45°	1 - 7x	10 - 70x	104	23/7.7
ZE.1626	•		60°	0.7 - 4.5x	7 - 45x	93	32/5.1
ZE.1629	•		90°	0.7 - 4.5x	7 - 45x	110	32/5.1
ZE.1659		• <sup>1</sup>	45°	0.4 - 2.5x	4 - 25x	185	57/12.8

<sup>1</sup>) When the trinocular tube is engaged, the image is still available in both other tubes. All zoom stereo heads are supplied with SWF 10x/23 mm eyepieces without eyecups

#### STANDS WITHOUT ILLUMINATION

- ST.1710** Pillar stand with ST.1790 head holder. Pillar height 210 mm, diameter  $\varnothing$  20 mm. Dimensions (h) 250 x (w) 150 x (d) 240 mm
- ST.1715** Pillar stand with ST.1792 head holder. Pillar height 250 mm, diameter  $\varnothing$  20 mm. Dimensions (h) 290 x (w) 150 x (d) 240
- ST.1717** Pillar ergonomically flat stand with ST.1790 head holder. Pillar height 250 mm, diameter  $\varnothing$  20 mm. Dimensions (h) 290 x (w) 250 x (d) 350
- ST.1770** Large pillar wooden stand with ST.1790 head holder. Pillar height 360 mm, diameter  $\varnothing$  29 mm. Dimensions (h) 400 x (w) 580 x (d) 500  
Suitable for SMD inspection.

## STANDS WITH ILLUMINATION

- ST.1735** Rack & pinion stand with 3 W LED illumination and rotatable double-sided coated mirror (one frosted and one aluminium coated side). Especially developed for observation of transparent object. Very suitable equine or porcine embryo collection and transfer. Adjustable light intensity. Supplied with external power supply. Dimensions: 240 x 160 x 290 (D x W x H), min/max height 240-290
- ST.1740** Rack & pinion stand with 10 W halogen illumination. Supplied with frosted filter for transmitted illumination and a blue filter for incident illumination. Both illuminations are adjustable and can be simultaneously used. With integrated power supply. Dimensions: 240 x 160 x 290 (D x W x H), min/max height 240-290 mm
- ST.1750** Tilting rack & pinion stand for GEM observation. Round 260 mm base with object clamp AE.5446. Height 300 mm. Halogen 40 W 230 V incandescent illumination.
- ST.1760** Pillar flat stand for dark field. Supplied with AE.1878 dark field attachment and object clamp AE.5446. Cold light illumination by 100 W cold light source LE.5211 and flexible fiber light guide. Pillar height 210 mm, diameter  $\varnothing$  20mm. Supplied with blue filter. Dimensions: 240 x 150 x 260 (L x W x H) (*Not suitable for ZE.1659*).

## MODELS (STANDS)

	Column (mm)	Diameter (mm)	Rack & pinion	I x p base (mm)	Height (mm)	Head holder	Illumination
ST.1710	210	20		240x150	250	ST.1790	-
ST.1715	250	20		240x150	290	ST.1792	-
ST.1717	250	20		320x250	290	ST.1790	-
ST.1720	610	29		780x270	650	ST.1794	-
ST.1735	-		•	240x160	290		3 W LED
ST.1740	-		•	240x160	290		10 W Hal
ST.1750	-		•	$\varnothing$ 260	300		40 W <sup>1</sup>
ST.1760	210	20		240x160	260	ST.1790	100 W Hal <sup>2</sup>
ST.1770	360	29		500x580	400	ST.1790	-
65.980/65.983	-		•	$\varnothing$ 1000 <sup>3</sup>	0/295	65.983	-

<sup>1</sup>) With 40 W incandescent bulb. <sup>2</sup>) 100 W cold light illumination with fiber light guide. <sup>3</sup>) Length with the 2 arms totally extended  
The stand ST.1760 is not suitable for head holder ZE.1659

## BOOM STANDS

- ST.1720** Articulated one arm boom stand with a 270 x 270 mm base, 610 mm and  $\varnothing$  29mm pillar, with orientable stereo head holder ST.1794. Vertical post 780 mm. Weight 19.5 kg
- 65.980/** Articulated one arm stand to be mounted on a table with 85 mm diameter head holder. Depth positioning of stereo head between 33 and 100 cm.
- 65.983** Working distance between 0 and maximum 295 mm

## HEAD HOLDERS

- ST.1790** Head holder with coarse adjustment
- ST.1796** Head holder with coarse and fine adjustment
- ST.1792** Head holder with coarse adjustment and opening for one fiber light guide
- ST.1794** Orientable head holder with coarse adjustment and opening for one fiber light guide
- ST.1798** Orientable head holder with coarse and fine adjustment and opening for one fiber light guide
- All head holders have an internal diameter of 84 mm and a friction adjustment*

## FOCUSING

- Coarse adjustment and friction adjustment for head holders for ST.1790, St.1792, ST.1794, ST1796
- The head holders ST.1796 and ST.1798 are also equipped with a fine focusing adjustment

## PACKAGING

- Supplied with power cord, dust cover, a spare fuse and user manual
- All packed in a polystyrene box

## ACCESSORIES AND SPARE PARTS

### EYEPIECES

(without eyecups)

- AE.1835** Pair of SWF5x/26 mm eyepieces
- AE.1836** Pair of SWF10x/23 mm eyepieces
- AE.1834** Pair of SWF12.5x/20 mm eyepieces
- AE.1837** Pair of SWF15x/16 mm eyepieces
- AE.1838** Pair of SWF20x/11.5 mm eyepieces
- AE.1840** Pair of SWF30x/7.5 mm eyepieces
- AE.5439** Pair of eyecups
- AE.5425** Pair of eyecups, suitable when wearing for spectacles

### MICROMETER EYEPIECES

(with adjustable lens)

- AE.1839** SWF10x/21mm with 10 mm/100 micrometer reticle and cross hair
- AE.1841** SWF10x/21mm with 10 x 10 mm reticle, 400 squares
- AE.1842** SWF10x/21mm with photo corners marks

### MICROMETER SLIDES

- AE.1112** Object slide 76 x 26 mm with micrometer 50mm/500, 100 µm/division

### ADDITIONAL LENSES

(for ZE.1659)

- AE.1850** Additional 0.7x lens. Working distance 233 mm
- AE.1822** Additional 0.57x lens. Working distance 300 mm

### ADDITIONAL LENSES

(for ZE.1624, ZE.1654, ZE.1670, ZE.1671, ZE.1626)

- AE.1855** Additional 0.3x lens. Working distance 250 mm. Suitable with ST.1720, ST.1770, ST.1780 et ST.1785 stands
- AE.1870** Additional 0.44x lens. Working distance 180 mm. Suitable with ST.1715, ST.1720, ST.1770, ST.1780 and ST.1785 stands
- AE.1856** Additional 0.5x lens. Working distance 150 mm. Suitable with ST.1740. Maximum object size is 15 mm
- AE.1857** Additional 0.75x lens. Working distance 97 mm
- AE.1858** Additional 1.5x lens. Working distance 50 mm
- AE.1859** Additional 2.0x lens. Working distance 34 mm

### ADDITIONAL LENSES

(for ZE.1629)

- AE.1805** Additional 0.3x lens. Working distance 330 mm. Suitable with ST.1720, ST.1770, ST.1780 and ST.1785 stands
- AE.1806** Additional 0.5x lens. Working distance 198 mm. Suitable with ST.1715, ST.1720, ST.1770, ST.1780 and ST.1785 stands
- AE.1807** Additional 0.75x lens. Working distance 125 mm
- AE.1808** Additional 1.5x lens. Working distance 62 mm
- AE.1809** Additional 2.0x lens. Working distance 42 mm

### ADDITIONAL LENSES

(for ZE.1657)

- AE.1807** Additional 0.35x lens. Working distance 250 mm
- AE.1808** Additional 0.5x lens. Working distance 174 mm
- AE.1809** Additional 1.5x lens. Working distance 57 mm

### PROTECTION WINDOWS

(to be screwed under the objectives)

- AE.1845** Protection window for all heads of ZE series except ZE.1659
- AE.1825** Protection window for ZE.1659. Not suitable with additional lenses

### DARK FIELD

- AE.1878** Dark field attachment for all stands with transmitted illumination
- AE.1879** Iris diaphragm suitable with AE.1878
- AE.1871** Object table for AE.1878 with ST.1760 stand. Suitable to observe contact lenses or gems with an object slide

### POLARIZATION

- AE.1890** Analyzer, in rotatable mount. Not suitable with ZE.1659
- AE.1891** Polarizer in mount. Suitable with ST.1740 and ST.1760
- AE.1892** Retardation plate gypsum 1st order red. Suitable with polarizer AE.1891

### MECHANICAL STAGES

- AE.1876** Plain stage 145 x 115 mm with 75 x 50 mm X-Y mechanical stage on ball bearings. Horizontal coaxial adjustment. Double Vernier with 0.1 mm graduations. Only with ST.1710, ST.1715 and ST.1740
- AE.1896** Stage 145 x 115 mm with central glass object plate and 75 x 50 mm X-Y mechanical stage on ball bearings. Horizontal coaxial adjustments. Double Vernier with 0.1 mm graduations. Only with ST.1740 and ST.1760
- AE.1877** Large stage 170 x 155 mm with 100 x 105 mm X-Y mechanical stage on ball bearings. For ST.1710, ST.1715 and ST.1740
- AE.1950** Large 390 x 390 mm stage with 360 x 360 mm X-Y mechanical stage. Only for ST.1720, ST.1770, ST.1780 and ST.1785

### OBJECT STAGES

- AE.1884** Round object high-profile table with frosted glass filter. Interchangeable with dark field ST.1760
- AE.1885** Round object low-profile table with frosted glass filter. Interchangeable with dark field ST.1740

### OBJECT PLATE - ø 94 mm

- AE.1880** Acrylic translucent object plate
- AE.1881** Glass transparent object plate
- AE.1882** Acrylic black/white object plate

## ACCESSORIES AND SPARE PARTS

### FILTERS - ø 40 mm

- AE.1897** Frosted glass filter  
**AE.1898** Blue filter

### OBJECT HOLDER

- AE.5446** Orientable clamp for gems.  
 Interchangeable with object plate clamp

### SPARE BULB AND FUSES

- SL.1868** 30 W 230 V incandescent bulb for ST.1750 stand  
**SL.1869** 10 W 6 V halogen bulb for ST.1740 illumination  
**AE.5252** Fuses for ST.1740 stand. Per 10 pieces

### ACCESSORIES

- AE.5059** Projection 0.45x objective with C-mount for cameras with 1/2" sensor. To be placed over a 23.2 mm tube of a ZE series photo tube. Optional reticle available  
**AE.5063** Projection 0.7x objective with C-mount for cameras with 2/3" sensor. To be placed over a 23.2 mm tube of a ZE series photo tube. Optional reticle available  
**DC.1320** Projection 1x objective with C-mount  
**DC.1324** Projection 0.5x objective with C-mount for cameras with 1/2" sensor. To be inserted into a 23.2 mm tube  
**DC.1326** Projection 0.33x objective with C-mount for cameras with 1/3" sensor. To be inserted into a 23.2 mm tube  
**AE.5006** Projection 0.6x objective with C-mount  
**AE.5130** Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes. Need T2 adapter  
**AE.5020** T2 adapter for Nikon D digital SLR cameras  
**AE.5040** T2 adapter for Canon EOS digital SLR cameras  
*Other T2 adapters on request*



ZE.1624 and ST.1735



ZE.1629 and AE.1796