

# 1.0X Lower Lens



Lower Lens

Stock **#89-897** [CONTACT US](#)

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+

S\$396<sup>00</sup>

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| Volume Pricing |                               |
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| Qty 1+         | S\$396.00 each                |
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Product Downloads

| General                              |                |
|--------------------------------------|----------------|
| Lower Lens (One Required)            | Note:          |
| Modular High Magnification Zoom Lens | Type:          |
| 1.0X Lower Lens                      | Title:         |
| Optical Properties                   |                |
| 1.0X                                 | Magnification: |

| Regulatory Compliance     |                             |
|---------------------------|-----------------------------|
| <a href="#">Compliant</a> | RoHS 2015:                  |
| <a href="#">View</a>      | Certificate of Conformance: |
| <a href="#">Compliant</a> | Reach 235:                  |

## Product Details

- Wide Range of Magnifications Achievable
- Interchangeable Components Provide Maximum Flexibility
- Motorized and Inline Options Available
- [7X and 12.5X High Precision Zoom Lens Kits](#) Also Available

7X and 12.5X High Precision Zoom Lenses are modular lens systems that consist of a camera mount, camera tube, core module, lower function module, and lower lens. Added versatility is achieved by swapping out modules to change magnification, field of view, or the optical pathway. 7X and 12.5X High Precision Zoom Lenses are compatible with M26 x 36 TPI Mitutoyo-style objectives and with camera sensor coverages and mounts ranging from C-Mount to F-Mount and to 35mm DSLR cameras. 50/50 and 90° cubes are available to introduce right angle turns or to support multiple imaging paths. A motor controller for multi-axis zoom and focus functionality is also available and can be connected to USB, Ethernet, or RS-232/422/285 ports.

### Zoom Lens Technical Guide

This downloadable PDF includes everything you need to configure and get started with your zoom lens. Inside, you'll find:

- Guidance on selecting components to best meet application needs
- Required components and how they are integrated
- Available accessories, including in-line illumination
- Par-focalization and par-centering guidance
- Optical performance specifications

[Download Zoom Lens Technical Guide](#)

A complete zoom lens requires a camera mount, camera tube, zoom module, lower function module, and lower lens. An item selection guide can be found on the Technical Information tab.



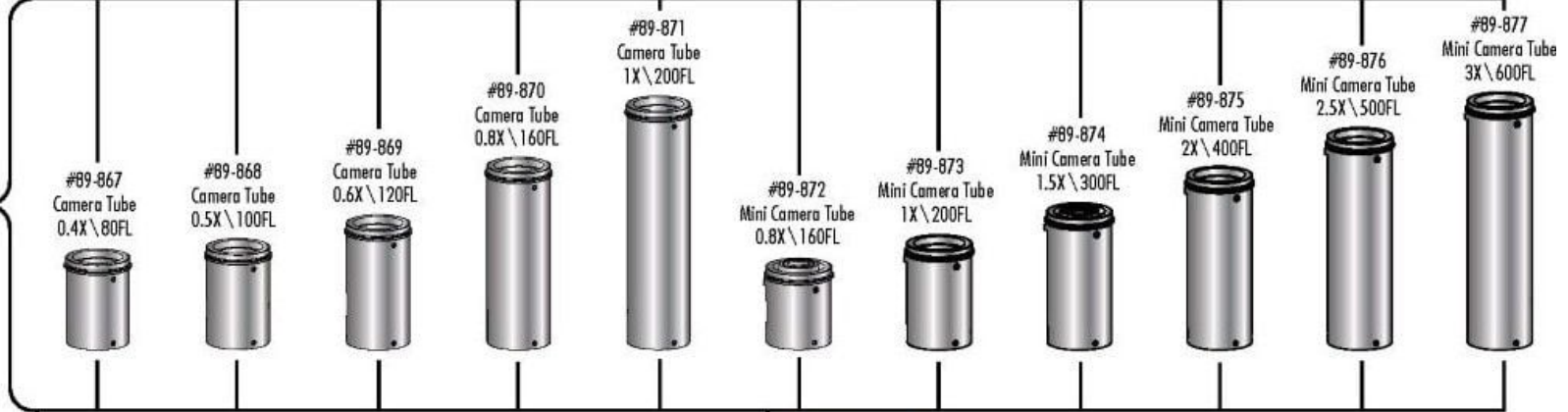
**CAMERA MOUNTS**

**CAMERA**



**ILLUMINATION**

**CAMERA TUBES**

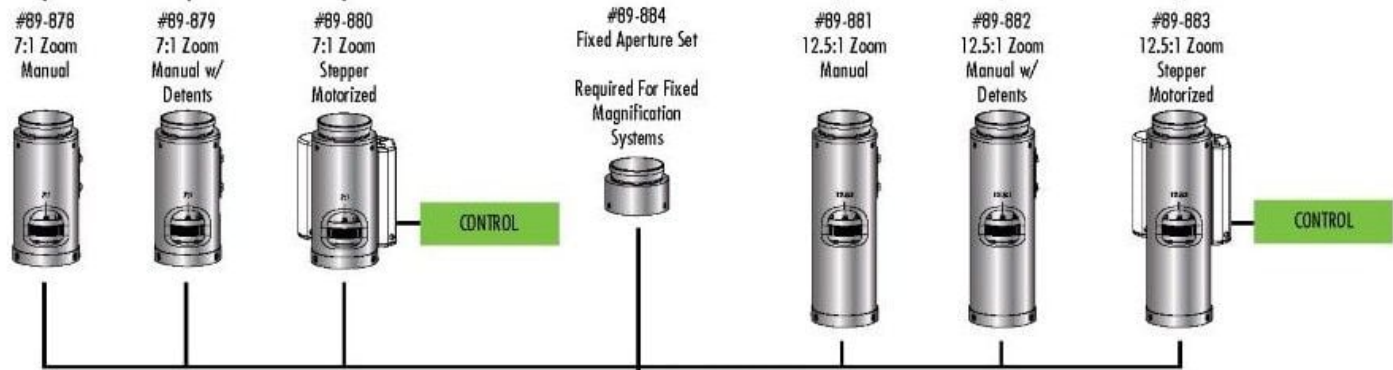


**ZOOM MODULES**

**ACCESSORIES**

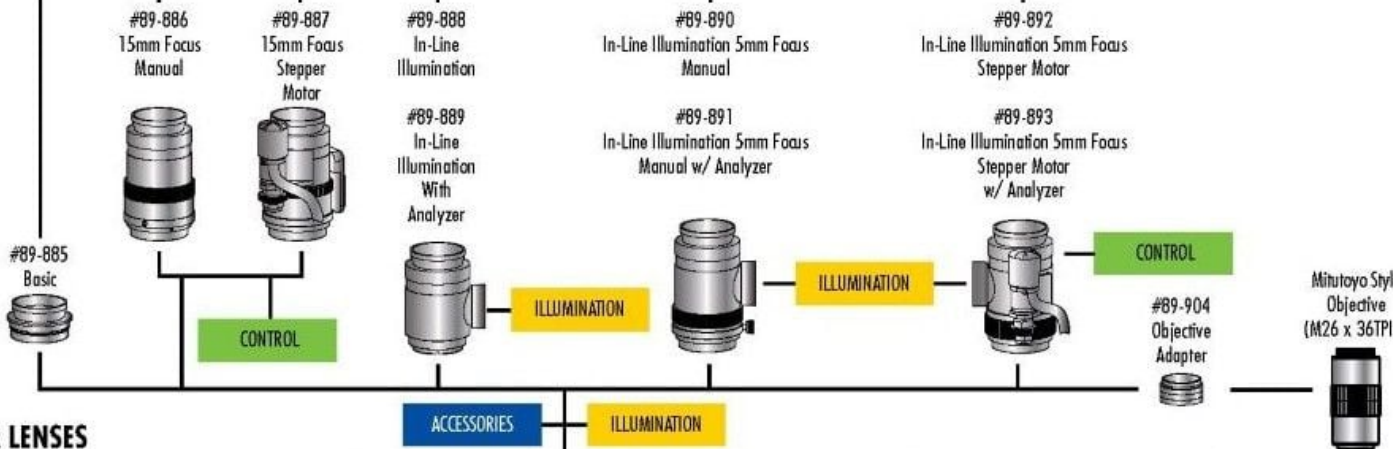
**7X ZOOM**

**12.5X ZOOM**



**LOWER FUNCTION MODULES**

**ACCESSORIES**

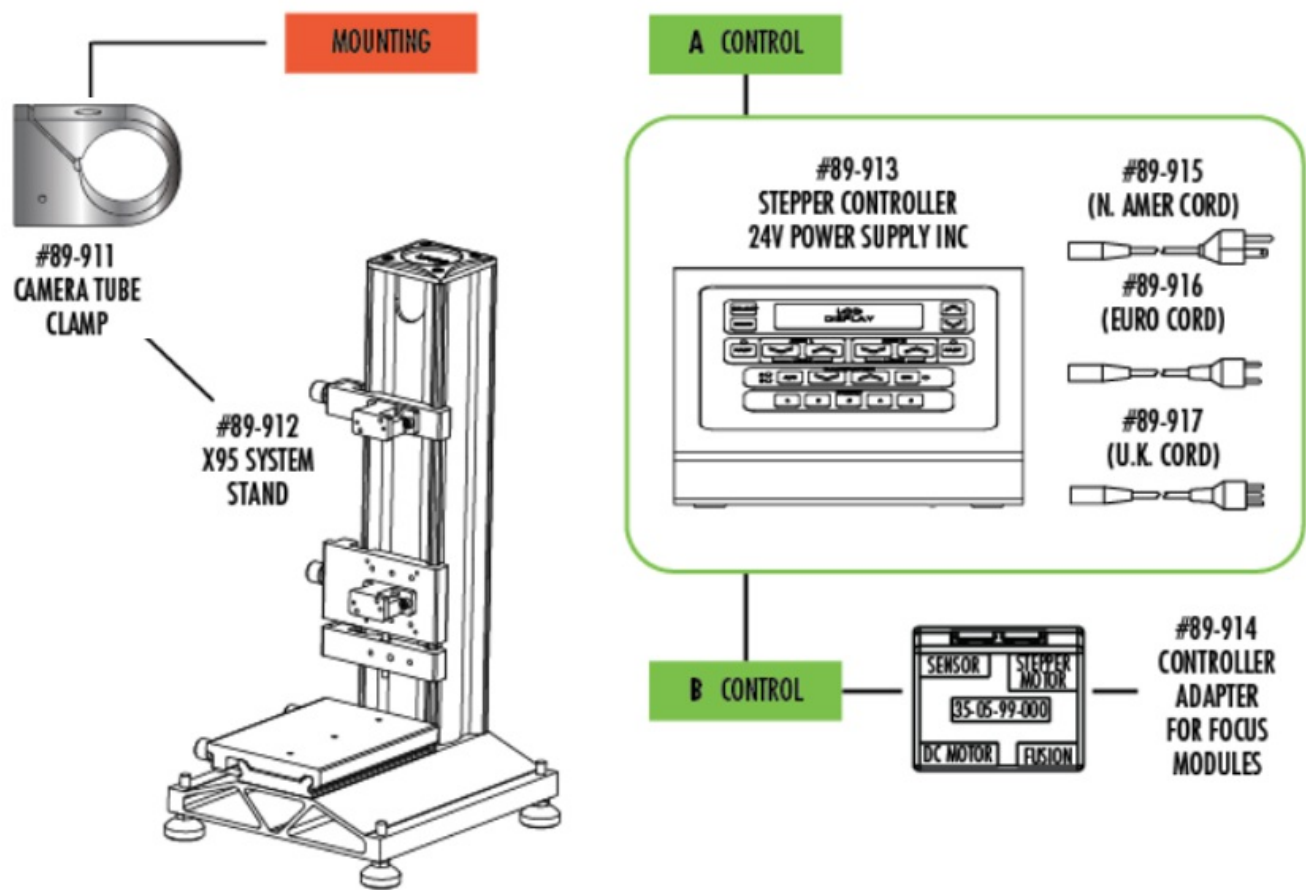


**LOWER LENSES**

**ACCESSORIES**

**ILLUMINATION**





Technical Information

| Specifications        |                    |                 |          |                 |          |                 |          |            |          |                 |          |            |          |
|-----------------------|--------------------|-----------------|----------|-----------------|----------|-----------------|----------|------------|----------|-----------------|----------|------------|----------|
| Lower Lens:           |                    | 0.4X Lower Lens |          |                 |          | 1.0X Lower Lens |          |            |          | 4.0X Lower Lens |          |            |          |
| Working Distance:     |                    | 490mm           |          |                 |          | 190mm           |          |            |          | 32mm            |          |            |          |
| Zoom Modules:         |                    | 7X Zoom         |          | 12.5X Zoom      |          | 7X Zoom         |          | 12.5X Zoom |          | 7X Zoom         |          | 12.5X Zoom |          |
| Max Coax. FOV Dia.:   |                    | Not Recommended |          | Not Recommended |          | Not Recommended |          | 20mm       |          | 9.4mm           |          | 9.9mm      |          |
| Range:                |                    | Low Mag         | High Mag | Low Mag         | High Mag | Low Mag         | High Mag | Low Mag    | High Mag | Low Mag         | High Mag | Low Mag    | High Mag |
| 0.4X Camera Tube      | NA                 | 0.0047          | 0.016    | 0.0036          | 0.019    | 0.012           | 0.039    | 0.009      | 0.048    | 0.047           | 0.16     | 0.036      | 0.19     |
|                       | Res (lp/mm)        | 14              | 47       | 11              | 58       | 35              | 116      | 27         | 144      | 142             | 435      | 108        | 576      |
|                       | PMAG               | 0.067X          | 0.46X    | 0.045X          | 0.55X    | 0.17X           | 1.2X     | 0.11X      | 1.4X     | 0.67X           | 4.6X     | 0.45X      | 5.5X     |
|                       | DOF (mm)           | 25              | 2.4      | 44              | 1.5      | 4.1             | 0.38     | 7          | 0.25     | 0.25            | 0.024    | 0.44       | 0.015    |
|                       | Hor. FOV 1/3" (mm) | 71              | 10       | 107             | 8.7      | 29              | 4.1      | 43         | 3.5      | 7.1             | 1        | 11         | 0.87     |
|                       | Hor. FOV 1/2" (mm) | 95              | 14       | 143             | 12       | 38              | 5.5      | 57         | 4.6      | 10              | 1.4      | 14         | 1.2      |
|                       | Hor. FOV 2/3" (mm) | 131             | 19       | 196             | 16       | 52              | 7.6      | 79         | 6.4      | 13              | 1.9      | 20         | 1.6      |
| 1.0X Camera Tube      | NA                 | 0.0047          | 0.016    | 0.0036          | 0.019    | 0.012           | 0.039    | 0.009      | 0.048    | 0.047           | 0.16     | 0.036      | 0.19     |
|                       | Res (lp/mm)        | 14              | 47       | 11              | 58       | 35              | 116      | 27         | 144      | 142             | 465      | 108        | 576      |
|                       | PMAG               | 0.17X           | 1.2X     | 0.11X           | 1.4X     | 0.42X           | 2.9X     | 0.28X      | 3.5X     | 1.7X            | 12X      | 1.1X       | 14X      |
|                       | DOF (mm)           | 25              | 2.4      | 44              | 1.5      | 4.1             | 0.38     | 7          | 0.25     | 0.25            | 0.024    | 0.44       | 0.015    |
|                       | Hor. FOV 1/3" (mm) | 29              | 4.1      | 43              | 3.5      | 11              | 1.7      | 17         | 1.4      | 2.9             | 0.41     | 4.3        | 0.35     |
|                       | Hor. FOV 1/2" (mm) | 38              | 5.5      | 57              | 4.6      | 15              | 2.2      | 23         | 1.9      | 3.8             | 0.55     | 5.7        | 0.46     |
|                       | Hor. FOV 2/3" (mm) | 52              | 7.6      | 79              | 6.4      | 21              | 3.0      | 31         | 2.6      | 5.2             | 0.76     | 7.9        | 0.64     |
| 3.0X Mini Camera Tube | NA                 | 0.0047          | 0.016    | 0.0036          | 0.019    | 0.012           | 0.039    | 0.009      | 0.048    | 0.047           | 0.16     | 0.036      | 0.19     |
|                       | Res (lp/mm)        | 14              | 47       | 11              | 58       | 35              | 116      | 27         | 144      | 142             | 465      | 108        | 576      |
|                       | PMAG               | 0.50X           | 3.5X     | 0.34X           | 4.1X     | 1.3X            | 8.7X     | 0.84X      | 10X      | 5.0X            | 35X      | 3.4X       | 41X      |
|                       | DOF (mm)           | 25              | 2.4      | 44              | 1.5      | 4.1             | 0.38     | 7          | 0.25     | 0.25            | 0.024    | 0.44       | 0.015    |
|                       | Hor. FOV 1" (mm)   | 25              | 3.7      | 38              | 3.1      | 10              | 1.5      | 15         | 1.2      | 2.5             | 0.37     | 3.8        | 0.31     |
|                       | Hor. FOV 4/3" (mm) | 36              | 5.2      | 54              | 4.3      | 14              | 2.1      | 21         | 1.7      | 3.6             | 0.52     | 5.4        | 0.43     |
|                       | Hor. FOV 35mm (mm) | 71              | 10       | 107             | 8.7      | 29              | 4.1      | 43         | 3.5      | 7.1             | 1        | 11         | 0.87     |