See all 68 Products in Family

In-line Port Right Angle Bend

Photo represents a complete Zoom Lens. For individual component line art, see the Technical Information tab.

+6

Stock **#89-921** **1 In Stock**

- 1 + **A$651**.00

ADD TO CART

Volume Pricing	
Qty 1+	**A$651.00** each
Need More?	Request Quote

Product Downloads

General

Accessory (Optional)	**Note:**
Lens Accessory	**Type:**
In-line Port Right Angle Bend	**Title:**

Regulatory Compliance

RoHS 2015:	**Certificate of Conformance:**
Compliant	View
Reach 235:	
Compliant	

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.

LIGHTING ACCESSORIES

#89-918 Polarizer

#89-919 Fiber Optic Light Guide Adapter

#89-920 10mm Fiber Optic Adapter

#89-921 In-Line Port w/ Right Angle Bend

NOTE: In-Line Illumination Has Limited Field Illumination With Large FOVS

ILLUMINATION

CAMERA

CAMERA MOUNTS

#89-860 C\CS Camera Mount

#89-861 F Camera Mount

#89-862 EOS Camera Mount

#89-863 Pentax K Camera Mount

#89-864 ⅓" Camera Mount

#89-865 Micro ⅓" Camera Mount

#89-866 Sony Alpha Camera Mount

CAMERA TUBES

#89-867 Camera Tube 0.4X\80FL

#89-868 Camera Tube 0.5X\100FL

#89-869 Camera Tube 0.6X\120FL

#89-870 Camera Tube 0.8X\160FL

#89-871 Camera Tube 1X\200FL

#89-872 Mini Camera Tube 0.8X\160FL

#89-873 Mini Camera Tube 1X\200FL

#89-874 Mini Camera Tube 1.5X\300FL

#89-875 Mini Camera Tube 2X\400FL

#89-876 Mini Camera Tube 2.5X\500FL

#89-877 Mini Camera Tube 3X\600FL

MOUNTING

#89-911 Camera Tube Clamp

#89-924 Tube Clamp Mount, 76mm Dia.

#89-925 Tube Clamp Mount, 82mm Dia.

#89-926 Tube Clamp Mount, 83mm Dia.

#89-927 Tube Clamp Mount, 84mm Dia.

ACCESSORIES

ZOOM MODULES

7X ZOOM

#89-878 7:1 Zoom Manual

#89-879 7:1 Zoom Manual w/ Detents

#89-880 7:1 Zoom Stepper Motorized

CONTROL

#89-884 Fixed Aperture Set Required For Fixed Magnification Systems

12.5X ZOOM

#89-881 12.5:1 Zoom Manual

#89-882 12.5:1 Zoom Manual w/ Detents

#89-883 12.5:1 Zoom Stepper Motorized

CONTROL

ACCESSORIES

LOWER FUNCTION MODULES

#89-886 15mm Focus Manual

#89-887 15mm Focus Stepper Motor

#89-888 In-Line Illumination

#89-889 In-Line Illumination With Analyzer

#89-890 In-Line Illumination 5mm Focus Manual

#89-891 In-Line Illumination 5mm Focus Manual w/ Analyzer

#89-892 In-Line Illumination 5mm Focus Stepper Motor

#89-893 In-Line Illumination 5mm Focus Stepper Motor w/ Analyzer

#89-885 Basic

CONTROL

ILLUMINATION

ILLUMINATION

CONTROL

#89-904 Objective Adapter

Mitutoyo Style Objective (M26 x 36TPI)

ACCESSORIES

ILLUMINATION

LOWER LENSES

#89-894 0.4X\500FL

#89-895 0.5X\400FL

#89-896 0.67X\300FL

#89-897 1X\200FL

#89-898 1.25X\160FL

#89-899 1.43X\140FL

#89-900 1.67X\120FL

#89-901 2X\100FL

#89-902 3X\67FL

#89-903 4X\50FL

#89-905 50/50 Cube

#89-906 Mirror Cube

#89-907 Mirror Cube Adapter

#89-910 In-Line Mount

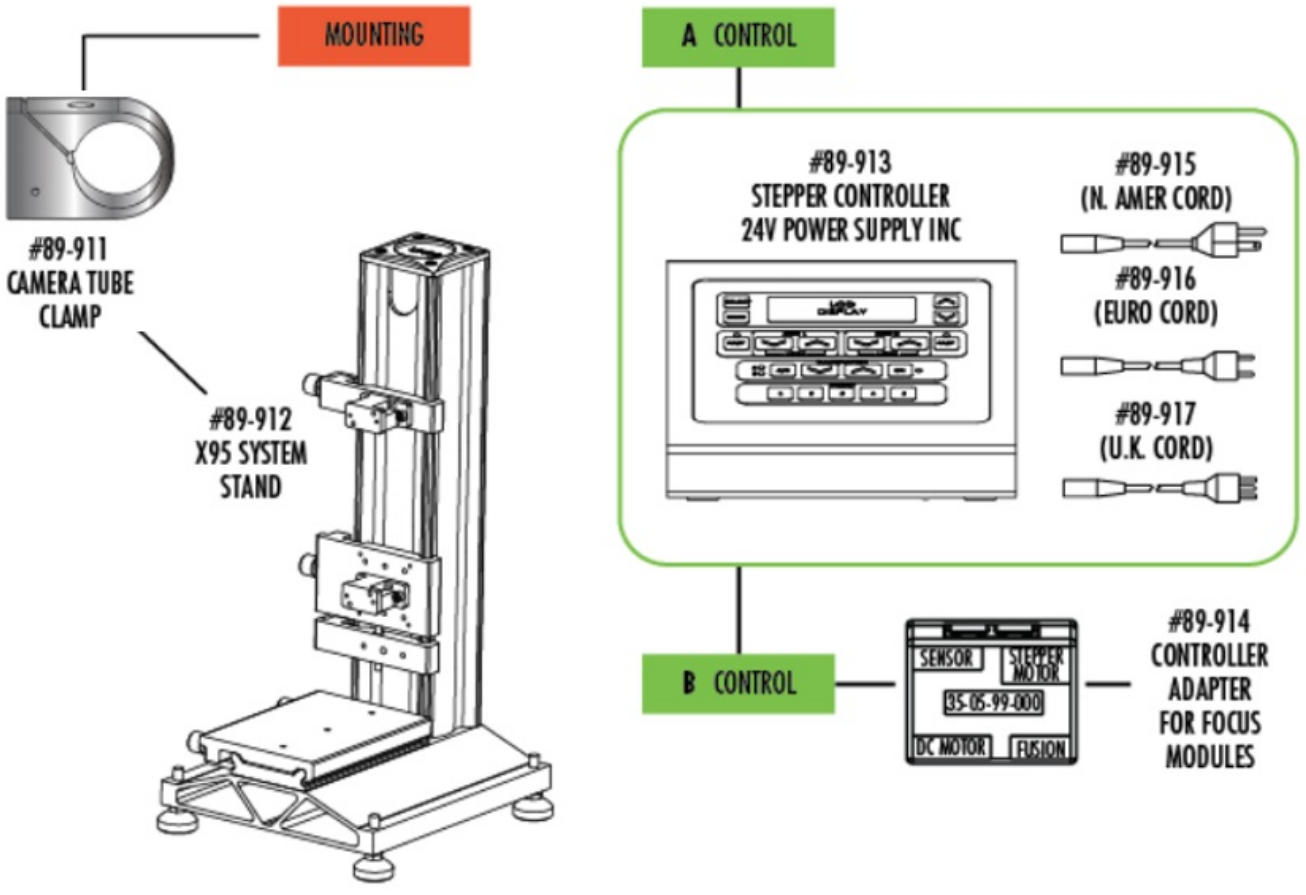
#89-908 25.4mm Filter Holder

#89-884 Aperture Set

#89-909 Adjustable Iris

ACCESSORIES

NOTE: Not Every Combination Will Present Desired Results



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