

Vision Measuring System Quick Scope Series



High-speed Image Auto Focus achieves stable focusing.



Vision Measuring Systems



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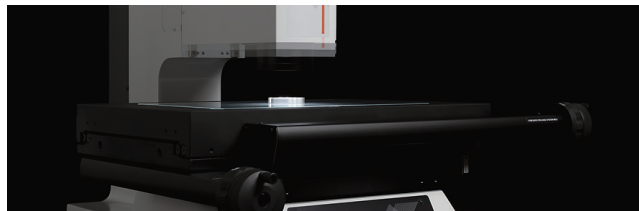


FEATURES

- High definition and high-speed auto focus 3-megapixel camera
- 4-quadrant LED ring light using high-intensity LED provides better observation performance
- Interchangeable objective lens zoom unit provides a very sharp image thanks to the high numerical aperture

Instant image auto focus

Since non-contact measurement requires the workpiece to be only lightly fixed to the stage, height measurement can be performed efficiently. Also, in contrast to a laser-equipped microscope, measurement is less influenced by the surface roughness of the workpiece.



4-quadrant LED ring light

LED sources are standard for all illumination methods. Color tone is kept constant even after illumination intensity adjustment so high color-reproducibility observation is possible. In addition to stage and coaxial lighting, 4-quadrant reflected illumination is provided to enable contrast of surface features to be adjusted so that edge detection accuracy is maximized.



Interchangeable objective lens zoom unit

The newly designed 7X-zoom unit and optional interchangeable objectives provide magnification from 13X-184X on the monitor. A wide range of measurement is covered: wide view measurement at low magnification, to micro-measurement at high magnification.



Z-objective 1X (optional)

Z-objective 1.5X (standard accessory)

Z-objective 2X (optional)

Optical magnification	0.5X	0.65X	0.75X	0.85X	0.98X	1X	1.28X	1.3X	1.5X	1.7X	2X	2.25X	2.5X	3X	3.5X	3.75X	4X	5X	5.25X	7X
View field Horizontal (H) (mm)	13.60	10.46	9.07	8.00	6.94	6.80	5.31	5.23	4.53	4.00	3.40	3.02	2.72	2.27	1.94	1.81	1.70	1.36	1.30	0.97
View field Vertical (V) (mm)	10.80	8.31	7.20	6.35	5.51	5.40	4.22	4.15	3.60	3.18	2.70	2.40	2.16	1.80	1.54	1.44	1.35	1.08	1.03	0.77
Total magnification (on the monitor)	13.20	17.10	19.80	22.40	25.80	26.40	33.70	34.30	39.50	44.80	52.70	59.30	65.90	79.10	92.30	98.90	105.50	131.80	138.40	184.50
Objective lens																				
1X objective (optional) Working distance	74 mm																			
1.5X objective (standard accessory) Working distance	42 mm																			
2X objective (optional) Working distance	42 mm																			

SPECIFICATIONS

	QS-L2010Z/AFC	QS-L3017Z/AFC	QS-L4020Z/AFC
Drive method	X/Y axes: Manual Z axis: CNC with Auto focus		
Observation	zoom unit (in 8 steps)		
Measuring range (X×Y×Z)	200×100×150 mm	300×170×150 mm	400×200×150 mm
Resolution / Scale type	0.1 μm / Linear encoder		
Indication accuracy *1	(2.2+20L / 1000) μm		
	X axis, Y axis	(4.5+0.006L) μm	
	Z axis		
Optical magnification	0.5X to 3.5X (with 1X objective) optional 0.75X to 5.25X (with 1.5X objective) standard 1.0X to 7.0X (with 2X objective) optional		
Illumination	Co-axial light / Stage light / 4-quadrant ring light (LED)		

*1: L = measuring length (mm)

Specification applicable at 20 °C, optical magnification 2.5X.

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Vision Measuring Systems

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3M 0919 • Printed in USA • Sept. 2019