## **Vision Measuring Systems**

## **QV Active CNC Vision Measuring System**

- Cost effective, multifunction, CNC Vision Measuring System.
- Usability has been improved by adopting a color camera and 8-step zoom optics.
- The zoom ratio of 7X (14X at maximum by changing the fixed-magnification objective lens) enables a wide range of inspection from
- wide view measurement at low magnification to micro-measurement at high magnification.
- The 74 mm maximum working distance (1X optional objective) promotes safe working by reducing the risk of collision, and allows greater freedom in fixture design.



## From wide view measurement to micro-measurement

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)	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
(mm) Vertical (V)	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 monito	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
1X objective (optional) Working distance	•	•		•		•	-	74 mm	1		•		•		•					
1.5X objective (standard accessory) Working distance 2X objective (optional)	2		•		•		•		•	42	mm	•		•		•			•	
2X objective (optional) Working distance						•		•		•	•	42	mm	•			•	•		•

Note: The total magnification indicates the magnification on the monitor when the size of the **QVPAK** video window is 178.8×143.0 mm (default).

## **SPECIFICATIONS**

Model No.		QV Active 202	QV Active 404					
Туре		Standard model	Standard model					
Measuring range (X×Y×Z)		250×200×150 mm (250×200×118 mm: when 1X objective is used)	400×400×200 mm (400×400×168 mm: when 1X objective is used)					
Observation unit		Zoom unit (8 positions)						
Imaging device		Color CMOS camera						
	E1x, E1Y	(2 + 3L/1000) μm						
	E <sub>1Z</sub>	(3 + 5L/1000) μm						
Vision measuring accuracy*	E <sub>2</sub>	(2.5 + 4L/1000) μm						
	Accuracy guaranteed with optics specified	Objective: 1.5X, Optical magnification: 5.25X						
Accuracy guaranteed temperature		20±1 °C	20±1 °C					

<sup>\*</sup> Inspected to a Mitutoyo standard. L=length between two arbitrary points (mm)









