

QV ELF Pro

SERIES 363 – CNC Vision Measuring System

FEATURES

Programmable Power Turret (PPT)

The three tube lens selection provides three magnifications with the same objective lens. Replacement of objective lenses allows a wide range of magnification to support a variety of measurements.



1X tube lens and 2.5X objective
View field: 2.5 x 1.88 mm



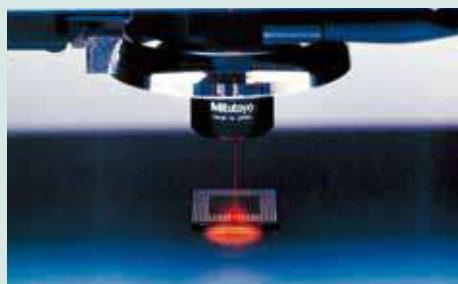
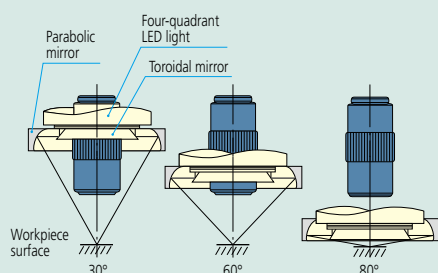
2X tube lens and 2.5X objective
View field: 1.25 x 0.94 mm



6X tube lens and 2.5X objective
View field: 0.41 x 0.31 mm

Programmable Ring Light (PRL)

Fine control of obliquity and direction provides illumination optimal for measurement. Obliquity can be arbitrarily set in the range from 30° to 80°. This type of illumination is effective for enhancing the edge of inclined surfaces or very small steps. Illumination can be controlled independently in every direction, back and forth, right and left. Measurement with edge enhancement is possible by forming a shadow by lighting from only one direction.



Laser Auto Focus (LAF) Function

Mitutoyo offers as a factory fit option on all Quick Vision models the LAF system which enables high-speed focusing.

- A 3D CNC Vision Measuring System offering accuracy in the 2.3 μm class (measuring 100 mm).
- Programmable ring lighting provides the flexibility in lighting direction, angle and intensity, no matter the slope of the workpiece surface, that enables achievement of maximum surface contrast for best imaging resolution, and hence accuracy.
- A lightweight, space-saving design that offers a very high performance/cost ratio.
- The fixed bridge, moving table design is used for the ultimate in rigidity.



SPECIFICATIONS

Model	QV ELF202PRO	
Code No.	363-105	
Measuring range	X : Y	250 : 200 mm
	Z	200 mm
Resolution	0.1 μm	
High-resolution CCD camera	B&W	
Accuracy*	E _{1xy}	$\pm(2.0+0.3L/100)$ μm
	E _{1z}	$\pm(3.0+0.5L/100)$ μm
Max. drive speed (XY/Z axes)	200 mm/s	
Illumination	Surface	Halogen, programmable ring light (LED, white)
	Contour	Halogen
Magnification changing system	Programmable power turret	
Stage glass size	311 x 269 mm	
Max. stage loading	15 kg	
Mass (main unit)	270 kg	

* Programmable power turret: 1X, objective: 2.5X, L = measured distance between two arbitrary points (mm).