

High-speed and High-accuracy Digimatic Micrometer QuantuMike SERIES 293 — IP65 Micrometer with 2 mm/rev Spindle Feed

- The spindle moves four times faster than that of the standard micrometer, enabling faster, easier measurement even when it is repeated many times over.
- The approach speed warning function can detect collision with a workpiece at excessive speed, helping inexperienced users obtain reliable and accurate measurement results.

- The calculation function can calculate offsets added to measurement results before they are passed to a machine. This eliminates errors and the effort needed for calculation, helping reduce the number of rejected machined items.
- The Calibration alert function helps with effective measuring instrument management.
- Bidirectional serial communication supported.



SPECIFICATIONS

Metric

Code No.	Range (mm)	Resolution (mm)	Measuring force ¹ (N)	Maximum permissible error J_{MPE} (μ m)	Flatness (μ m)	Parallelism (μ m)	Mass (g)
With SPC data output							
293-140-40	0 - 25			± 1		1	265
293-141-40	25 - 50		0.001	7 to 12		0.3	325
293-142-40	50 - 75				± 2	2	465
293-143-40	75 - 100						620

Inch / Metric

Code No.	Range (in)	Resolution	Measuring force ¹ (N)	Maximum permissible error J_{MPE} (in)	Flatness (in)	Parallelism (in)	Mass (g)
With SPC data output							
293-180-40	0 - 1			± 0.00005		0.00004	265
293-181-40	1 - 2	0.00005 in / 0.001 mm	7 to 12		0.000012	0.00008	325
293-182-40	2 - 3			± 0.0001			465
293-183-40	3 - 4						620

• Dust/Water protection level: IP65 (IEC60529)²

• Power source: CR2032 battery (1 pc.), included as standard (for operational checks)

• Battery life: Approx. 2 years under normal use

• Position detection method: Electromagnetic rotary sensor

• Standard accessories: Setting standard, 1 pc. (except for 0 to 25 mm (0 to 1 in) models), Spanner (301336), 1 pc.

¹ Measuring force when using the speeder ratchet (Apply a measuring force in the same condition as for measurement and then set the origin.)

² Rustproofing shall be applied after use.

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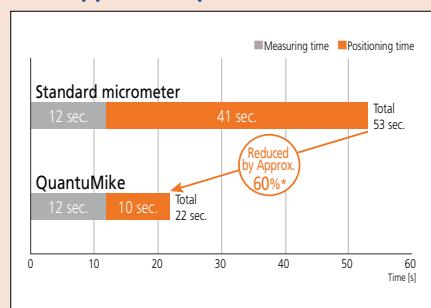


DIGIMATIC S1

Measurement example



Comparison of time needed to measure a 6-stepped workpiece (with one hand)



* According to a Mitutoyo comparison test data for measuring time on typical workpieces.

Ratchet thimble mechanism

