

Micrometer

02
Micrometers

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.



293-140-40

SPECIFICATIONS

Metric							
Code No.	Range (mm)	Resolution (mm)	Measuring force*1 (N)	Maximum permissible error J_{MPE} (μm)	Flatness (μm)	Parallelism (μm)	Mass (g)
With SPC data output							
293-140-40	0 - 25	0.001	7 to 12	±1	0.3	1	265
293-141-40	25 - 50						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 in/ 0.001 mm	7 to 12	±0.00005	0.000012	0.00004	265
293-181-40	1 - 2						325
293-182-40	2 - 3			±0.0001		0.00008	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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Data Management Software by Mitutoyo

U-WAVE^{fit}

IP65

TÜV Rheinland
CERTIFIED

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Water-
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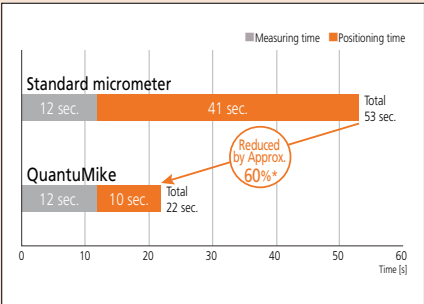
PROPRIETARY
INSPECTION
CERTIFICATE

DIGIMATIC S1

Measurement example



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



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

Ratchet thimble mechanism

