

## ABSOLUTE Digimatic Micrometers SERIES 227 — with Adjustable Measuring Force

### Measurement example



### Functions

- Adjustable measuring force mechanism
- Origin point setting
- Zero setting
- Hold
- Function Lock
- Auto power off
- Measurement data output
- Error alarm

### Optional Accessories

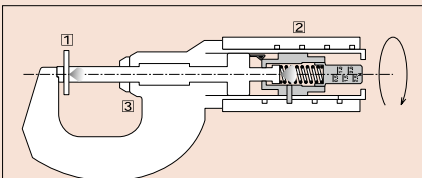
Order No.	Type	Description
05CZA662	B	Connecting cable (1 m)
05CZA663	B	Connecting cable (2 m)
06AFM380B	B	USB Input Tool Direct (2 m)
02AZD790B	B	Connecting cables for U-WAVE-T (160 mm)
02AZE140B	B	Connecting cables for U-WAVE-T For foot switch

### Adjustable Measuring Force



To preset the measuring force, adjust the measuring force setting scale on the thimble with the screwdriver supplied.

### Constant-Measuring-Force Mechanism



- Measuring force is generated by the action of trapping a workpiece between the spindle and the anvil.
- The constant-force unit applies the specified measuring force.
- When the preset measuring force is reached, the count on the LCD is automatically held and the hold symbol appears.  
(To cancel the hold, reverse the thimble more than 1/10 revolution and press the hold button.)

- Digimatic micrometer dedicated to applications requiring a constant/low measuring force such as measuring wire, paper, and plastic/rubber parts.
- Measuring data can be hold at the measuring force setting. This function provides stable measurement and repeatability.
- Measuring force is adjustable (in steps) to suit various kinds of workpieces.
- Non-rotating spindle.
- Measuring faces: Carbide.



227-201-20

### SPECIFICATIONS

Metric												
Order No.	Range (mm)	Resolution (mm)	Measuring force (N)	Maximum permissible error $J_{MPE}$ ( $\mu\text{m}$ )	Flatness ( $\mu\text{m}$ )	Parallelism ( $\mu\text{m}$ )	Measuring force (N)	Accuracy of the selected measuring force* (N)	Repeatability of measuring force* (N)	Mass (g)		
227-201-20	0 - 15	0.001	0.5 - 2.5 (adjustable)	$\pm 2$	0.3	2	0.5, 1.0, 1.5, 2.0, 2.5	$\pm (0.1 + \text{the selected measuring force}/10)$	within 0.1	300		
227-203-20	15 - 30									380		
227-205-20	0 - 10		2 - 10 (adjustable)							$\pm (0.4 + \text{the selected measuring force}/10)$	within 0.4	345
227-206-20	10 - 20											425
227-207-20	20 - 30											415

Inch / Metric												
Order No.	Range (in)	Resolution	Measuring force (N)	Maximum permissible error $J_{MPE}$ (in)	Flatness (in)	Parallelism (in)	Measuring force (N)	Accuracy of the selected measuring force* (N)	Repeatability of measuring force* (N)	Mass (g)		
227-211-20	0 - 0.6	0.00005 in/ 0.001 mm	0.5 - 2.5 (adjustable)	$\pm 0.0001$	0.000012	0.00008	0.5, 1.0, 1.5, 2.0, 2.5	$\pm (0.1 + \text{the selected measuring force}/10)$	within 0.1	300		
227-213-20	0.6 - 1.2									380		
227-215-20	0 - 0.4		2 - 10 (adjustable)							$\pm (0.4 + \text{the selected measuring force}/10)$	within 0.4	345
227-216-20	0.4 - 0.8											425
227-217-20	0.8 - 1.2											415

- Measurement posture: horizontal orientation only (Recommended spindle inclination: within  $\pm 3^\circ$ )
  - SR44 (1 pc.), **938882**, for initial operational checks (standard accessory)
  - Battery life: Approx. 5 years under normal use
  - Length standard: Electrostatic capacity absolute sensor
  - Standard accessories: Setting standard, 1 pc. (except for measuring range 0 to 15 mm (0 to 0.6 in)/0 to 10 mm (0 to 0.4 in) models), Screwdriver (**210183**), 1 pc.
- \* These values are guaranteed when micrometer is used in a horizontal orientation (within  $\pm 3$  degrees)

### DIMENSIONS

