

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

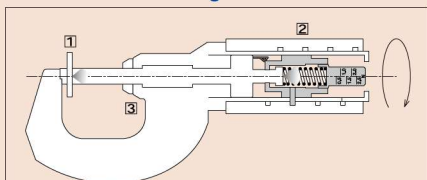
| Code No. | Type | Description |
|-----------|--------|---|
| 264-020 | — | USB Input Tool Series USB Keyboard Signal Conversion Type IT-020U |
| 05CZA662 | B | Connection cable (1 m) |
| 05CZA663 | B | Connection cable (2 m) |
| 06AFM380B | B | USB Input Tool Direct (2 m) |
| 02AZD730G | IP67 | U-WAVE-T |
| 02AZD880G | Buzzer | U-WAVE-T |
| 02AZE200 | — | U-WAVE-T mounting bracket |
| 02AZD790B | B | Connection cable for U-WAVE-T (160 mm) |
| 02AZE140B | B | Connection cable 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 face 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.)

ABSOLUTE Digimatic Micrometers SERIES 227 — with Adjustable Measuring Force

- Digimatic micrometer equipped with a constant/low measuring force mechanism. The measurement-value hold function automatically retains the data at a specified measuring force. (Pressing with a larger force than the specified measuring force does not affect the measurement result.)
- It is suitable for measuring flexible workpieces such as electric wire, paper, and rubber.
- Non-rotating spindle reduces workpiece deformation.
- Measuring faces: Carbide tipped



227-201-20

SPECIFICATIONS

| Metric | | | | | | | | | | |
|----------------------|------------|-----------------|------------------------|--|---------------|------------------|-------------------------|---|---------------------------------------|----------|
| Code No. | Range (mm) | Resolution (mm) | Measuring force (N) | Maximum permissible error J_{MPE} (μm) | Flatness (μm) | Parallelism (μm) | Measuring force (N) | Accuracy of the selected measuring force* (N) | Repeatability of measuring force* (N) | Mass (g) |
| With SPC data output | | | | | | | | | | |
| 227-201-20 | 0 - 15 | 0.001 | 0.5 - 2.5 (adjustable) | ±2 | 0.3 | 2 | 0.5, 1.0, 1.5, 2.0, 2.5 | ± (0.1+ the selected measuring force/10) | within 0.1 | 300 |
| 227-203-20 | 15 - 30 | | | | | | | | | 380 |
| 227-205-20 | 0 - 10 | | 2 - 10 (adjustable) | | | | 2, 4, 6, 8, 10 | ± (0.4+ the selected measuring force/10) | within 0.4 | 345 |
| 227-206-20 | 10 - 20 | | | | | | | | | 425 |
| 227-207-20 | 20 - 30 | | | | | | | | | 415 |

| Inch / Metric | | | | | | | | | | |
|----------------------|------------|-------------------------|------------------------|--|---------------|------------------|-------------------------|---|---------------------------------------|----------|
| Code 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) |
| With SPC data output | | | | | | | | | | |
| 227-211-20 | 0 - 0.6 | 0.00005 in/ 0.001 mm | 0.5 - 2.5 (adjustable) | ±0.0001 | 0.000012 | 0.00008 | 0.5, 1.0, 1.5, 2.0, 2.5 | ± (0.1+ 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) | | | | 2, 4, 6, 8, 10 | ± (0.4+ 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 ±3°)
- Power source: SR44 battery (1 pc.), **938882** included as standard (for operational checks)
- Battery life: Approx. 5 years under normal use
- Position detection method: 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 ±3 degrees)

DIMENSIONS

