Inside Micrometers

For easy and accurate measurement of inside size and diameter

Tubular Inside Micrometers SERIES 137, 337 — Extension Rod Type

MeasurLink® ENABLED Data Management Software by Mitutoyo

Inch / Metric

- Wide range of inside measurements possible An inside length standard is required for by combining extension rods and anvils with the micrometer head.
- Two types of measuring faces are available; with or without carbide tip. (Order No. 337-101/301/302/102/303/304 only available with carbide tip)
- The sleeve is rotated to adjust the reference point adjustment when setting to a length standard.
- accurately setting the micrometer.
- Order No. 337-101/301/302/102/303/304 features:
- IP65 (water-proof) protection level that enables use in the presence of cutting fluid.
- A large-character LCD display.
- Storage of 2 preset values for use when setting to an inside length standard.
- · A function lock that prevents accidental changing of the reference setting during measurement.



137-205

SPECIFICATIONS

| Metric - | | | | | | | |
|--------------|------------------|------------|------------------|---|---|--------------|--|
| Order No. | Range (mm) | Resolution | | | Extension rods | Display unit | |
| Order No. | Marige (IIIII) | (mm) | head stroke (mm) | Qty | Size (mm) | (mm) | |
| Digimatic (L | CD) | | | | | | |
| 337-101 | 200 - 225 | | | — | _ | | |
| 337-301 | 200 - 1000 | 0.001 | 25 | 6 | 25, 50, 100 (2 pcs.), 200, 300 | 200 - 225 | |
| 337-302 | 200 - 1500 | | | 7 | 25, 50, 100, 200, 300 (3 pcs.) | | |
| Metric | | | | | | | |
| Order No. | Range (mm) | Graduation | Micrometer | | Extension rods | Main unit | |
| Order No. | Range (mm) | (mm) | head stroke (mm) | Qty | Size (mm) | (mm) | |
| Analog | | | | | | | |
| 137-201 | 50 - 150 | | | 3 | 13, 25, 50 | | |
| 137-202 | 50 - 300 | 0.01 13 | 5 | 13, 25, 50 (2 pcs.), 100 | 50 - 63 | | |
| 137-203 | 50 - 500 | | 6 | 13, 25, 50 (2 pcs.), 100, 200 | | | |
| 137-204 | 50 - 1000 | | 8 | 13, 25, 50 (2 pcs.), 100, 200 (2 pcs.), 300 | | | |
| 137-205 | 50 - 1500 | | | | 13, 25, 50 (2 pcs.), 100, 200 (3 pcs.), 300 (2 pcs.) | | |
| Analog | | | | | | | |
| | le measuring fac | <u>e</u>) | 1 | | ı | | |
| 137-206 | 50 - 150 | | | 3 | 13, 25, 50 | | |
| 137-207 | 50 - 300 | | 5 | 13, 25, 50 (2 pcs.), 100 | | | |
| 137-208 | 50 - 500 | | 6 | 13, 25, 50 (2 pcs.), 100, 200 | | | |
| 137-209 | 50 - 1000 | 0.01 | 01 13 | 8 | 13, 25, 50 (2 pcs.), 100, 200 (2 pcs.), 300 | 50 - 63 | |
| 137-210 | 50 - 1500 | | | 10 | 13, 25, 50 (2 pcs.), 100, 200 (3 pcs.), 300 (2 pcs.) | | |

MeasurLink ENABLED

Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink® (refer to page A-25 for details).



These marks indicate that a product has successfully passed IP65-level testing, which is carried out by the independent German certification organization TÜV Rheinland.



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IP Codes

Level 6: Dust-proof.

No ingress of dust allowed.

Level 5: Protected against water jets.

Water projected in jets against the enclosure from any direction shall have no harmful effects.

Technical Data

• Spindle feed error 3 µm/0.00015 in Note: "Spindle feed error" refers to the difference between the maximum and minimum indication error values within the measuring range of the micrometer head



Functions (for 337-101/301/302/102/303/304)

Zero-setting Origin restoration Data hold 2-point Preset Function lock Automatic power ON/OFF Error alarm Data output

Technical Data

- Battery and Scale Type (for 337-101/301/302/102/303/304) SR44 (1 pc.), **938882**, for initial operational checks (standard accessory)
- Battery life: Approx. 1.2 years under normal use
- Scale type: Electromagnetic induction-type rotary encoder

Optional Accessories

Refer to page A-21 for details

- Connecting cables with IT/DP/MUX, etc. 1 m: **05CZA662**
- 2 m: 05CZA663
- USB Input Tool Direct (2 m): 06AFM380B
- Connecting cables for U-WAVE-T For standard (160 mm): 02AZD790B For foot switch: 02AZE140B

| mem incli | | | | | | |
|-----------------|--------|------------------------|------------------|--------------------|-------------------------|--------------|
| Order No. | Range | Resolution | Micrometer | | Extension rods | Display unit |
| Order No. | (in) | Nesolution | head stroke (in) | Qty | Size (in) | (in) |
| Digimatic (LCD) | | | | | | |
| 337-102 | 8 - 9 | 0.0001:-/ | | $\left - \right $ | _ | |
| 337-303 | 8 - 40 | 0.0001 in/ 0.001 mm | 1 | 6 | 1, 2, 4 (2 pcs.), 8, 12 | 8 - 9 |
| 337-304 | 8 - 60 | 0.001111111 | | 7 | 1 2 / 8 12 /3 ncs \ | |

| 337 307 | 0 00 | | | 7 1, 2, 4, 0, 12 (3 pcs./ | | | |
|-------------------|------------|------------|------------------|-----------------------------|---|-----------|--|
| Inch | | | | | | | |
| Order No. | Range | Graduation | Micrometer | | Extension rods | Main unit | |
| Order Hor | (in) | (in) | head stroke (in) | Qty | Size (in) | (in) | |
| Analog | | | | | | | |
| 137-211 | 2 - 6 | | | 3 | 0.5, 1, 2 | | |
| 137-212 | 2 - 12 | | | 5 | 0.5, 1, 2 (2 pcs.), 4 | | |
| 137-213 | 2 - 20 | 0.001 | 0.5 | 6 | 0.5, 1, 2 (2 pcs.), 4, 8 | 2 - 2.5 | |
| 137-214 | 2 - 40 | | | 8 | 0.5, 1, 2 (2 pcs.), | | |
| 197 = 11 | 2 10 | | | Ľ | 4, 8 (2 pcs.), 12 | | |
| 137-215 | 2 - 60 | | | 10 | 0.5, 1, 2 (2 pcs.), 4, 8 (3 pcs.), 12 (2 pcs.) | | |
| Analog | | | | | | | |
| (With carbide mea | suring fac | e) | | | | | |
| 137-216 | 2 - 6 | | | 3 | 0.5, 1, 2 | | |
| 137-217 | 2 - 12 | | | 5 | 0.5, 1, 2 (2 pcs.), 4 | | |
| 137-218 | 2 - 20 | | 0.5 | 6 | 0.5, 1, 2 (2 pcs.), 4, 8 | | |
| 137-219 | 2 - 40 | 0.001 | | 8 | 0.5, 1, 2 (2 pcs.), | 2 - 2.5 | |
| | | | | Ĺ | 4, 8 (2 pcs.), 12 | | |
| 137-220 | 2 - 60 | | | 10 | 0.5, 1, 2 (2 pcs.), 4, 8 (3 pcs.), 12 (2 pcs.) | | |

Tubular Inside Micrometers SERIES 137 — Extension Rod Type (main unit)

- Micrometer head for Extension Rod Type inside micrometer.
- The sleeve is rotated to adjust the reference point adjustment when setting to a length standard.
- Optional Setting Rings and Gauge Block Accessory Sets are available as reference gages for datum adjustment. (Refer to pages C-47 and E-17 to E-20 for details)



SPECIFICATIONS

Technical Data

micrometer head

Spindle feed error 3 µm/0.00015 in
Note: "Spindle feed error" refers to the difference between the maximum and minimum indication error values within the specification range of the

| Metric | ı | | |
|----------------|------------|-----------------|-----------------------------|
| Order No. | Range (mm) | Graduation (mm) | Micrometer head stroke (mm) |
| 137-011 | | | |
| Carbide-tipped | 50 - 63 | 0.01 | 13 |
| 137-013 | | | |

| Inch | ı | | |
|----------------|------------|-----------------|-----------------------------|
| Order No. | Range (in) | Graduation (in) | Micrometer head stroke (in) |
| 137-012 | | | |
| Carbide-tipped | 2 - 2.5 | 0.001 | 0.5 |
| 137-014 | | | |

DIMENSIONS



