

# Inside Micrometers

For easy and accurate measurement of inside size and diameter

## Tubular Inside Micrometers SERIES 137, 337 — Extension Rod Type

**MeasurLink<sup>®</sup> ENABLED**  
Data Management Software by Mitutoyo

- Wide range of inside measurements possible 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.
- An inside length standard is required for 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.



## SPECIFICATIONS

Metric						
Order No.	Range (mm)	Resolution (mm)	Micrometer head stroke (mm)	Extension rods		Display unit (mm)
				Qty	Size (mm)	
Digimatic (LCD)						
337-101	200 - 225	0.001	25	—	—	200 - 225
337-301	200 - 1000			6	25, 50, 100 (2 pcs.), 200, 300	
337-302	200 - 1500			7	25, 50, 100, 200, 300 (3 pcs.)	
Metric						
Order No.	Range (mm)	Graduation (mm)	Micrometer head stroke (mm)	Extension rods		Main unit (mm)
				Qty	Size (mm)	
Analog						
137-201	50 - 150	0.01	13	3	13, 25, 50	50 - 63
137-202	50 - 300			5	13, 25, 50 (2 pcs.), 100	
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			10	13, 25, 50 (2 pcs.), 100, 200 (3 pcs.), 300 (2 pcs.)	
Analog (With carbide measuring face)						
137-206	50 - 150	0.01	13	3	13, 25, 50	50 - 63
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			8	13, 25, 50 (2 pcs.), 100, 200 (2 pcs.), 300	
137-210	50 - 1500			10	13, 25, 50 (2 pcs.), 100, 200 (3 pcs.), 300 (2 pcs.)	

Inch / Metric						
Order No.	Range (in)	Resolution	Micrometer head stroke (in)	Extension rods		Display unit (in)
				Qty	Size (in)	
Digimatic (LCD)						
337-102	8 - 9	0.0001 in/ 0.001 mm	1	—	—	8 - 9
337-303	8 - 40			6	1, 2, 4 (2 pcs.), 8, 12	
337-304	8 - 60			7	1, 2, 4, 8, 12 (3 pcs.)	
Inch						
Order No.	Range (in)	Graduation (in)	Micrometer head stroke (in)	Extension rods		Main unit (in)
				Qty	Size (in)	
Analog						
137-211	2 - 6	0.001	0.5	3	0.5, 1, 2	2 - 2.5
137-212	2 - 12			5	0.5, 1, 2 (2 pcs.), 4	
137-213	2 - 20			6	0.5, 1, 2 (2 pcs.), 4, 8	
137-214	2 - 40			8	0.5, 1, 2 (2 pcs.), 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 measuring face)						
137-216	2 - 6	0.001	0.5	3	0.5, 1, 2	2 - 2.5
137-217	2 - 12			5	0.5, 1, 2 (2 pcs.), 4	
137-218	2 - 20			6	0.5, 1, 2 (2 pcs.), 4, 8	
137-219	2 - 40			8	0.5, 1, 2 (2 pcs.), 4, 8 (2 pcs.), 12	
137-220	2 - 60			10	0.5, 1, 2 (2 pcs.), 4, 8 (3 pcs.), 12 (2 pcs.)	

**MeasurLink<sup>®</sup> ENABLED**  
Data Management Software by Mitutoyo

Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink (refer to page A-5 for details).

**IP 65**

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



## 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-27 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**

### Technical Data

- Spindle feed error 3  $\mu\text{m}$ /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 micrometer head

## 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)



137-011

### SPECIFICATIONS

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

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

### DIMENSIONS

