Inside Micrometers
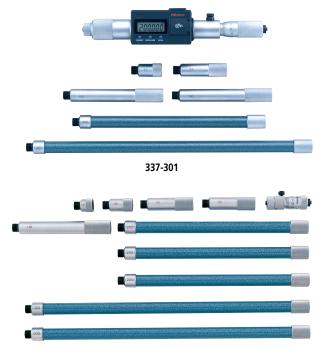
For easy and accurate measurement of inside size and diameter

Tubular Inside Micrometers
SERIES 137, 337 — Extension Rod Type

MeasurLink® ENABLED
Data Management Software by Mitutoyo

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).

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

TÜVRheinland CERTIFIED
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ID 0000021605

(Refer to page X for details.)

- 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 Nos. 337-101/301/302/102/303/304 only available with carbide tip.)
- The sleeve is rotated to adjust the index line position 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.

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
Accuracy
±(3 + number of rods + maximum measurement length/50) μm (fraction rounded up)
Excluding quantizing error (only for Digimatic)

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

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-25 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**

337-301

137-205

SPECIFICATIONS

Metric

Order No.	Range	Resolution	Micrometer head stroke	Qty	Extension rods Size	Display unit
Digimatic (LCD)						
337-101	200 - 225 mm			—	—	
337-301	200 - 1000 mm	0.001 mm	25 mm	6	25, 50, 100 (2pcs), 200, 300 mm	200 - 225 mm
337-302	200 - 1500 mm			7	25, 50, 100, 200, 300 (3pcs) mm	

Metric

Order No.	Range	Graduation	Micrometer head stroke	Qty	Extension rods Size	Main unit
Analog						
137-201	50 - 150 mm			3	13, 25, 50 mm	
137-202	50 - 300 mm			5	13, 25, 50 (2 pcs.), 100 mm	
137-203	50 - 500 mm			6	13, 25, 50 (2 pcs.), 100, 200 mm	
137-204	50 - 1000 mm	0.01 mm	13 mm	8	13, 25, 50 (2 pcs.), 100, 200 (2 pcs.), 300 mm	50 - 63 mm
137-205	50 - 1500 mm			10	13, 25, 50 (2 pcs.), 100, 200 (3 pcs.), 300 (2 pcs.) mm	
Analog (With carbide measuring face)						
137-206	50 - 150 mm			3	13, 25, 50 mm	
137-207	50 - 300 mm			5	13, 25, 50 (2 pcs.), 100 mm	
137-208	50 - 500 mm			6	13, 25, 50 (2 pcs.), 100, 200 mm	
137-209	50 - 1000 mm	0.01 mm	13 mm	8	13, 25, 50 (2 pcs.), 100, 200 (2 pcs.), 300 mm	50 - 63 mm
137-210	50 - 1500 mm			10	13, 25, 50 (2 pcs.), 100, 200 (3 pcs.), 300 (2 pcs.) mm	

Inch/Metric

Order No.	Range	Resolution	Micrometer head stroke	Qty	Extension rods Size (inch)	Display unit
Digimatic (LCD)						
337-102	8 - 9 in			—	—	
337-303	8 - 40 in	0.0001 in/ 0.001 mm	1 in	6	1, 2, 4 (2 pcs.), 8, 12 in	8 - 9 in
337-304	8 - 60 in			7	1, 2, 4, 8, 12 (3 pcs.) in	

Inch

Order No.	Range	Graduation	Micrometer head stroke	Qty	Extension rods Size (inch)	Main unit
Analog						
137-211	2 - 6 in			3	0.5, 1, 2 in	
137-212	2 - 12 in			5	0.5, 1, 2 (2 pcs.), 4 in	
137-213	2 - 20 in			6	0.5, 1, 2 (2 pcs.), 4, 8 in	
137-214	2 - 40 in	0.001 in	0.5 in	8	0.5, 1, 2 (2 pcs.), 4, 8 (2 pcs.), 12 in	2 - 2.5 in
137-215	2 - 60 in			10	0.5, 1, 2 (2 pcs.), 4, 8 (3 pcs.), 12 (2 pcs.) in	
Analog (With carbide measuring face)						
137-216	2 - 6 in			3	0.5, 1, 2 in	
137-217	2 - 12 in			5	0.5, 1, 2 (2 pcs.), 4 in	
137-218	2 - 20 in			6	0.5, 1, 2 (2 pcs.), 4, 8 in	
137-219	2 - 40 in	0.001 in	0.5 in	8	0.5, 1, 2 (2 pcs.), 4, 8 (2 pcs.), 12 in	2 - 2.5 in
137-220	2 - 60 in			10	0.5, 1, 2 (2 pcs.), 4, 8 (3 pcs.), 12 (2 pcs.) in	

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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 index line position when setting to a length standard.

- Optional Setting Rings (nominal size below 300 mm), CERA Inside Micro Checker and Gauge Block Accessory Sets are available as reference gages for datum adjustment (refer to page C-47 and E-17 to E-20 for details).

137-011

SPECIFICATIONS

Metric

Order No.	Range	Graduation	Accuracy	Micrometer head stroke
137-011				
Carbide-tipped	50 - 63 mm	0.01 mm	±3 μm	13 mm
137-013				

Inch

Order No.	Range	Graduation	Accuracy	Micrometer head stroke
137-012				
Carbide-tipped	2 - 2.5 in	0.001 in	±0.00015 in	0.5 in
137-014				

DIMENSIONS

Unit: mm

137-011

137-205

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