Inside Micrometers

For easy and accurate measurement of inside diameters

Tubular Inside Micrometers
SERIES 137, 337 — Extension Rod Type

- 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. (No. 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.
  - An output port for measurement data that enables inclusion in a statistical process control or networked measurement system. Refer to page A-3 for details.
  - Ability to use Interface Input Tools that enable conversion of measurement data to keyboard signals that are then directly input to cells in off-the-shelf spreadsheet software such as Excel. Refer to page A-5 for details.



337-301



137-205

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

(Refer to page X for details.)

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-21 for details.
Connecting cables with **IT/DP/MUX**, etc.
1m: **05CZA662**
2m: **05CZA663**
USB Input Tool Direct (2m): **06ADV380B**
Connecting cables for **U-WAVE-T**
For standard (160mm): **02AZD790B**
For foot switch: **02AZE140B**

SPECIFICATIONS

Metric

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

Inch/Metric

Order No.	Range	Resolution	Micrometer head stroke	Extension rods Qty	Extension rods Size (inch)	Display unit
Digimatic (LCD)						
337-102	8" - 9"	.0001"/ 0.001mm	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.)	

Metric

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

Inch

Order No.	Range	Graduation	Micrometer head stroke	Extension rods Qty	Extension rods Size (inch)	Main unit
Analog						
137-211	2" - 6"	.001"	.5"	3	.5", 1", 2"	2 - 2.5"
137-212	2" - 12"			5	.5", 1", 2" (2 pcs.), 4"	
137-213	2" - 20"			6	.5", 1", 2" (2 pcs.), 4", 8"	
137-214	2" - 40"			8	.5", 1", 2" (2 pcs.), 4", 8" (2 pcs.), 12"	
137-215	2" - 60"			10	.5", 1", 2" (2 pcs.), 4", 8" (3 pcs.), 12" (2 pcs.)	
Annalog (With carbide measuring face)						
137-216	2" - 6"			3	.5", 1", 2"	
137-217	2" - 12"			5	.5", 1", 2" (2 pcs.), 4"	
137-218	2" - 20"			6	.5", 1", 2" (2 pcs.), 4", 8"	
137-219	2" - 40"			8	.5", 1", 2" (2 pcs.), 4", 8" (2 pcs.), 12"	
137-220	2" - 60"			10	.5", 1", 2" (2 pcs.), 4", 8" (3 pcs.), 12" (2 pcs.)	

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