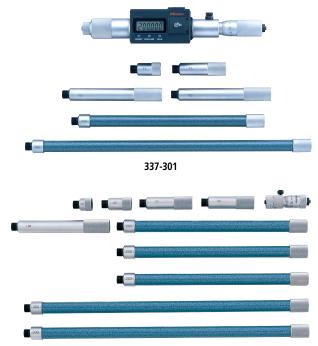
# **Inside Micrometers**

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

- 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 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.
- 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	i							
Order No.	Range (mm)	Resolution (mm)	Micrometer head stroke (mm)	Qty	Extension rods Size (mm)	Display unit (mm)		
Digimatic (L	Digimatic (LCD)							
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								

Metric -									
Order No.	Range (mm)	Graduation (mm)	Micrometer head stroke (mm)	Otv	Extension rods Size (mm)	Main unit (mm)			
Analog	_	(111111)	iledu Siloke (Illili)	Ųij	Jize (IIIIII)	(111111)			
137-201	50 - 150			3	13, 25, 50				
137-202	50 - 300			5	13, 25, 50 (2 pcs.), 100				
137-203	50 - 500		.01 13	6	13, 25, 50 (2 pcs.), 100, 200				
137-204	50 - 1000	0.01		13	13	13	8	13, 25, 50 (2 pcs.), 100, 200 (2 pcs.), 300	50 - 63
137-205	50 - 1500				13, 25, 50 (2 pcs.), 100, 200 (3 pcs.), 300 (2 pcs.)				
Analog (With carbic	le measuring fa	ace)							
137-206	50 - 150			3	13, 25, 50				
137-207	50 - 300			5	13, 25, 50 (2 pcs.), 100				
137-208	50 - 500		13	6	13, 25, 50 (2 pcs.), 100, 200				
137-209	50 - 1000	0.01		13	13	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-5 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.



www.tuv.com ID 0000021605

# **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

 $\pm$ (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

#### **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

Display unit

# **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

ncn / ivietric					
Order No.	Range	Resolution	Micrometer		Extension rods
Order No.	(in)	vezointion	head stroke (in)	Qty	Size (in)
gimatic (LCD)			1		

Order No.	(in)	Kesolution	head stroke (in)	Qty	Size (in)	(in)
Digimatic (LCD)						
337-102	8 - 9	0.0001:-/		-	_	
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, 4, 8, 12 (3 pcs.)	

Inch	ı					
Order No.	Range (in)	Graduation (in)	Micrometer head stroke (in)	Extension rods Qty Size (in)		Main unit (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, 1, 2 (2 pcs.), 4, 8	2 - 2.5
137-214	2 - 40		0.5	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 mea	suring face)	)				
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			6	0.5, 1, 2 (2 pcs.), 4, 8	
137-219	2 - 40	0.001	0.5	8	0.5, 1, 2 (2 pcs.), 4, 8 (2 pcs.), 12	2 - 2.5
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 index line position when setting to a length standard.
- Optional Setting Rings 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	ı			
Order No.	Range (mm)	Graduation (mm)	Accuracy (µm)	Micrometer head stroke (mm)
137-011				
Carbide-tipped	50 - 63	0.01	±3	13
137-013				

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

# **DIMENSIONS**

