

# Micrometer

The origin of Mitutoyo's trustworthy brand of small tool instruments

## Disk Micrometers SERIES 369, 227, 169 — Non-Rotating Spindle Type

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

- Measures "root tangent length" of spur gears and helical gears.
- Determination of the root tangent length: refer to "Quick Guide to Precision Measuring Instruments".
- Non-rotating spindle type.
- Measurable range of gear pitch: 0.5 to 6 module (series 227: 0.4 to 3 module).
- Equipped with Ratchet Stop for constant measuring force.
- Supplied with a setting standard (except for 0-25 mm / 0-1 in measuring range).



**IP65 ABSOLUTE**

### SPECIFICATIONS

Metric								
	Order No.	Range	Resolution	Accuracy*	Anvil dia.	Flatness	Parallelism	Measuring force
Digimatic (LCD)	<b>369-250-30</b>	0 - 25 mm	0.001 mm	±4 μm	20 mm	1 μm	4 μm	—
	<b>369-251-30</b>	25 - 50 mm						
	<b>369-252-30</b>	50 - 75 mm						
	<b>369-253-30</b>	75 - 100 mm						
Quickmike type (LCD)	<b>369-411-20</b>	0 - 30 mm	±4 μm	14.3 mm	3 μm	0.5 - 2.5 N		
	<b>369-412-20</b>	25 - 55 mm					2 - 10 N	
Quickmike type adjustable measuring force (LCD)	<b>227-221-20</b>	0 - 15 mm	±4 μm	14.3 mm	3 μm	0.5 - 2.5 N		
	<b>227-223-20</b>	0 - 10 mm					2 - 10 N	

\* Excluding quantizing error of ±1 count

Metric								
	Order No.	Range	Graduation	Accuracy	Anvil dia.	Flatness	Parallelism	Measuring force
Analog	<b>169-201</b>	0 - 25 mm	0.01 mm	±4 μm	20 mm	1 μm	4 μm	—
	<b>169-202</b>	25 - 50 mm						
	<b>169-205</b>	50 - 75 mm						
	<b>169-207</b>	75 - 100 mm						

Inch/Metric								
	Order No.	Range	Resolution	Accuracy*	Anvil dia.	Flatness	Parallelism	Measuring force
Digimatic (LCD)	<b>369-350-30</b>	0 - 1 in	0.00005 in/ 0.001 mm	±0.0002 in	20 mm	0.00004 in	0.0002 in	—
	<b>369-351-30</b>	1 - 2 in						
	<b>369-352-30</b>	2 - 3 in						
	<b>369-353-30</b>	3 - 4 in						
Quickmike type (LCD)	<b>369-421-20</b>	0 - 1.2 in	±0.0002 in	—	—	—	0.0002 in	
	<b>369-422-20</b>	1 - 2.2 in						

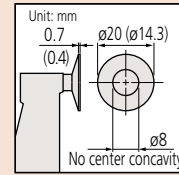
\* Excluding quantizing error of ±1 count

Inch							
	Order No.	Range	Graduation	Accuracy	Anvil dia.	Flatness	Parallelism
Analog	<b>169-203</b>	0 - 1 in	0.001 in	±0.0002 in	20 mm	0.00004 in	0.0002 in
	<b>169-204</b>	1 - 2 in					
	<b>169-206</b>	2 - 3 in					
	<b>169-208</b>	3 - 4 in					

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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).

### Anvil



( ): Adjustable measuring force type

### Battery for Series 369 and 227

**SR44** (1 pc), **938882**, for initial operational checks (standard accessory)

Battery life: Approx. 2.4 years under normal use

(for series 369-2XX, 3XX)

Approx. 5 year under normal use

(for series 369-4XX)

Approx. 5 years under normal use

(for series 227-2XX)

Approx. 18,000 hours in continuous use

Length standard: Electromagnetic rotary sensor

(for series 369-2XX, 3XX)

Electrostatic capacity absolute sensor

(for series 369-4XX, 2XX)

Standard accessories: Reference bar, 1 pc

(except for measuring range 0-10 mm / 0-15 mm /

0-25 mm / 0-30 mm (0-1/0-1.2 in) models)

Spanner (301336), 1 pc (for series 169-2XX, 369-2XX, 3XX)

Screwdriver (No.210183), 1 pc (for series 227-2XX)

### Optional Accessories

- Connecting cables for **369, 227 Series**

1 m: **05CZA662**

2 m: **05CZA663**

- **USB Input Tool Direct**

USB-ITN-B (2 m): **06AFM380B**

Wireless data output **U-WAVE fit**

U-WAVE-TM **264-622** (IP67 type)

**264-623** (Buzzer type)

Connecting unit for U-WAVE-TM

**02AZF310** (IP67 type)

Refer to page A-15 for details

Note: cannot be used with Quickmike type



### Quickmike

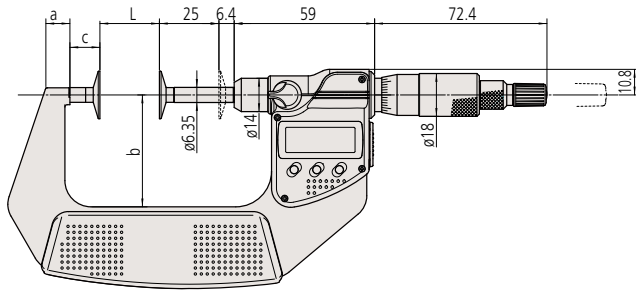
Provides a speedy spindle feed of 10 mm per thimble rotation, which enables widely differently sized features to be measured quickly.

### Quickmike Type with Adjustable Measuring Force

Digimatic micrometer dedicated to applications requiring a constant/low measuring force such as measuring wire, paper, and plastic/rubber parts.

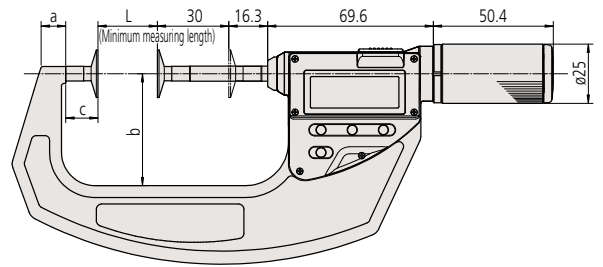
## DIMENSIONS

### Digital models up to 75 mm



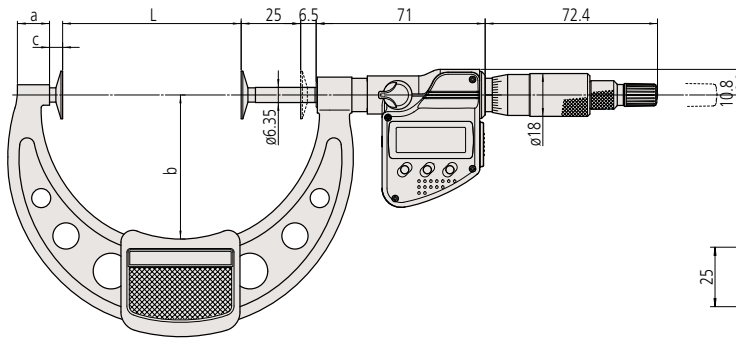
### Quickmike type

Unit: mm

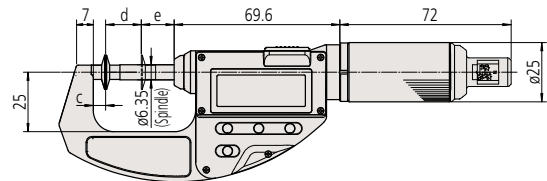


Range	L	a	b	c
0 - 30 mm	0	8.5	36	13.5
25 - 55 mm	25	10.3	47	

### Digital models over 75 mm



### Quickmike adjustable measuring force type

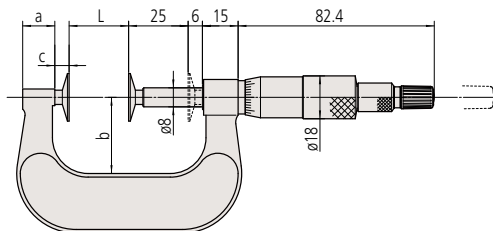


### Digital models

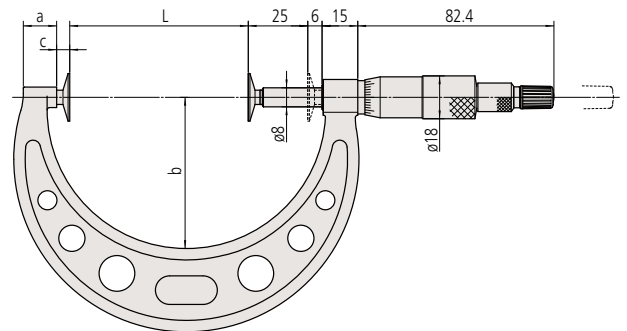
Range	L	a	b	c
0 - 25 mm	0	7	32	12.9
25 - 50 mm	25	9.8	47	
50 - 75 mm	50	11.2	60	5.5
75 - 100 mm	75	13.5		

Range	C	d	e
0 - 15 mm	5.2	15	13.8
0 - 10 mm		10	18.8

### Analog models up to 50 mm



### Analog models over 50 mm



### Analog models

Range	L	a	b	c
0 - 25 mm	0	13.8	25	5.7
25 - 50 mm	25		32	
50 - 75 mm	50	12	49	5.5
75 - 100 mm	75	14	63	