

# Micrometer

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

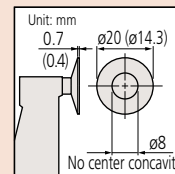
## Disk Micrometers

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

- 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 0-25mm/0-1" measuring range).



## 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. 1 year under normal use

(for series 369-4XX)

Approx. 3 years under normal use

(for series 227-2XX)

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 0-10mm / 0-15mm / 0-25mm

/ 0-30mm (0-1"/0-1.2") models)

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

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

## Optional accessories

- Connecting cables for **369-250-30** to **369-253-30**, **369-350-30** to **369-353-30**  
1m: **05CZA662**  
2m: **05CZA663**
- USB Input Tool Direct**  
USB-ITN-B (2m): **06ADV380B**
- SPC cables for U-WAVE w/ data switch (160mm):  
**02AZD790B**  
For foot switch: **02AZE140B**  
(Refer to page B-68 for details.)
- SPC cables for Quickmike and micrometers with adjustable measuring force device  
**937387**: SPC cable (1m)\*  
**965013**: SPC cable (2m)\*
- only for Quickmike and micrometers with adjustable measuring force device  
**06ADV380E**: USB Input Tool Direct with data switch(2m)  
**02AZD790E**: SPC cable for U-WAVE (160mm)  
For footswitch: **02AZE140E**

## SPECIFICATIONS

Metric											
	Order No.	Range	Resolution	Accuracy*	Anvil dia.	Flatness	Parallelism	Measuring force			
Digimatic (LCD)	369-250-30	0 - 25mm	0.001mm	±4µm	ø20	1µm	4µm	—			
	369-251-30	25 - 50mm		±6µm			6µm				
	369-252-30	50 - 75mm					±4µm		ø14.3	3µm	0.5N - 2.5N
	369-253-30	75 - 100mm									
Quickmike type (LCD)	369-411	0 - 30mm		±4µm	ø14.3		1µm	4µm	—		
	369-412	25 - 55mm									
Quickmike type adjustable measuring force (LCD)	227-221	0 - 15mm	0.001mm	±4µm	ø14.3	1µm	3µm	0.5N - 2.5N			
	227-223	0 - 10mm					2N - 10N				

\* Excluding quantizing error

Metric	Order No.	Range	Graduation	Accuracy	Anvil dia.	Flatness	Parallelism	Measuring force
Analog	<b>169-201</b>	0 - 25mm	0.01mm	±4µm	ø20	1µm	4µm	—
	<b>169-202</b>	25 - 50mm		±4µm			4µm	
	<b>169-205</b>	50 - 75mm		±6µm			6µm	
	<b>169-207</b>	75 - 100mm		±6µm			6µm	

Inch/Metric	Order No.	Range	Resolution	Accuracy*	Anvil dia.	Flatness	Parallelism	Measuring force
Digimatic (LCD)	<b>369-350-30</b>	0 - 1"	.00005"/0.001mm	±.0002"	ø20	.00004"	.0002"	—
	<b>369-351-30</b>	1" - 2"		±.0002"			.0002"	
	<b>369-352-30</b>	2" - 3"		±.0003"			.0003"	
	<b>369-353-30</b>	3" - 4"		±.0003"			.0003"	
Quickmike type (LCD)	<b>369-421</b>	0 - 1.2"	.00005"/0.001mm	±.0002"	ø20	.00004"	.0002"	—
	<b>369-422</b>	1" - 2.2"					.0002"	

\* Excluding quantizing error

Inch	Order No.	Range	Graduation	Accuracy	Anvil dia.	Flatness	Parallelism
Analog	<b>169-203</b>	0 - 1"	.001"	±.0002"	ø20	.00004"	.0002"
	<b>169-204</b>	1" - 2"		±.0002"			.0002"
	<b>169-206</b>	2" - 3"		±.0003"			.0003"
	<b>169-208</b>	3" - 4"		±.0003"			.0003"

## Quickmike

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

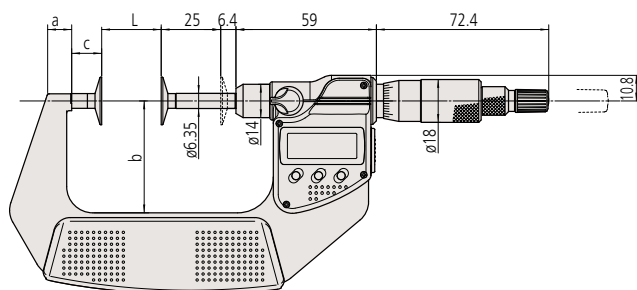
## Quickmike type with adjustable measuring force

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

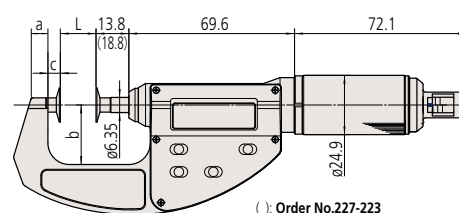
## DIMENSIONS

Unit: mm

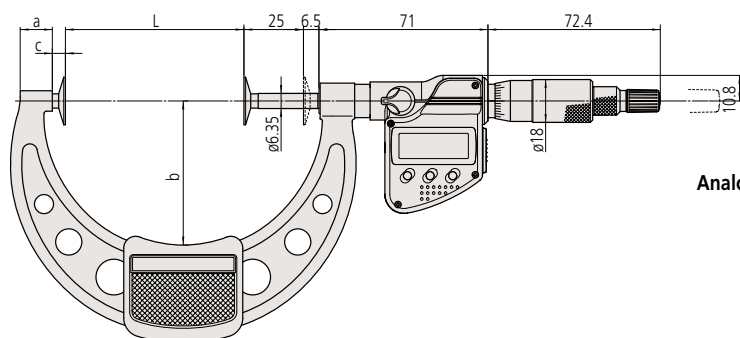
### Digital models up to 75mm



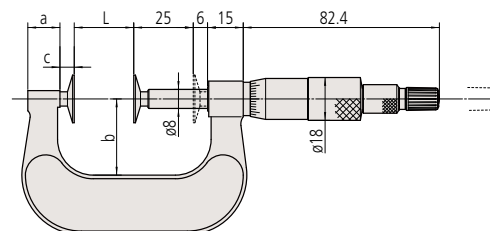
### Adjustable measuring force type



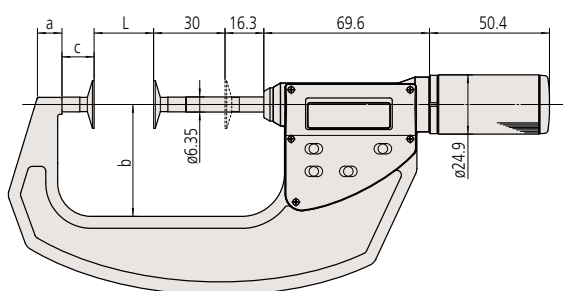
### Digital models over 75mm



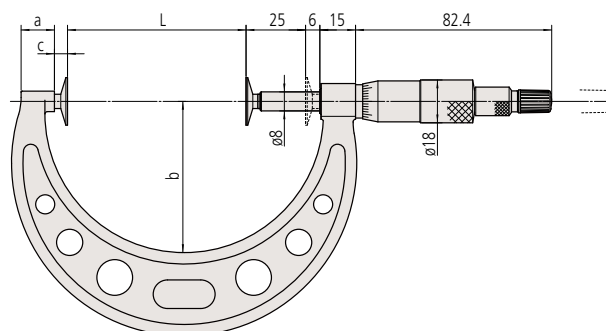
### Analog models up to 50mm



### Quickmike type



### Analog models over 50mm



#### Digital models

Range	L	a	b	c
0 - 25mm	0	7	32	12.9
25 - 50mm	25	9.8	47	
50 - 75mm	50	11.2	60	
75 - 100mm	75	13.5		5.5
0 - 30mm*	0	8.5	36	13.5
25 - 55mm*	25	10.3	47	

\*Quickmike type

#### Analog models

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