

Micrometer

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

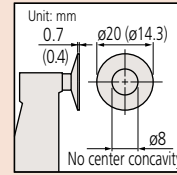
Disk Micrometers

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						
	369-252-30	50 - 75mm						
	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	±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	169-201	0 - 25mm	0.01mm	±4µm	ø20	1µm	4µm	—
	169-202	25 - 50mm						
	169-205	50 - 75mm						
	169-207	75 - 100mm						

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

* Excluding quantizing error

Inch								
	Order No.	Range	Graduation	Accuracy	Anvil dia.	Flatness	Parallelism	Measuring force
Analog	169-203	0 - 1"	.001"	±.0002"	ø20	.00004"	.0002"	—
	169-204	1" - 2"						
	169-206	2" - 3"						
	169-208	3" - 4"						



Quickmike

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

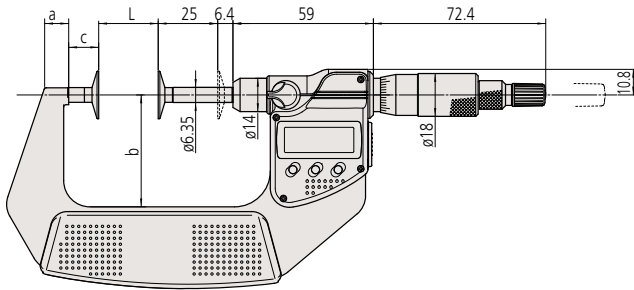
Quickmike type with adjustable measuring force

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

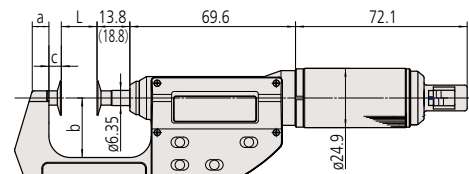
DIMENSIONS

Unit: mm

Digital models up to 75mm

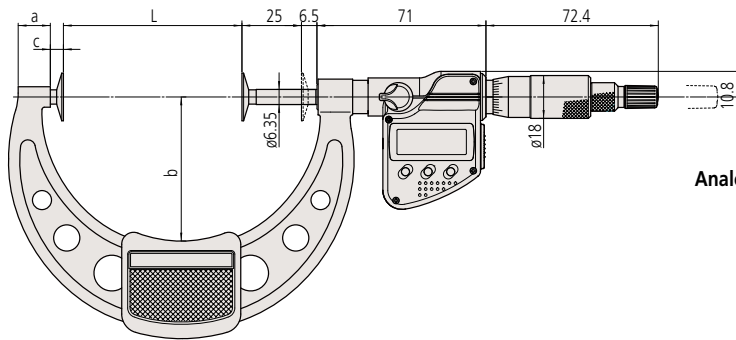


Adjustable measuring force type

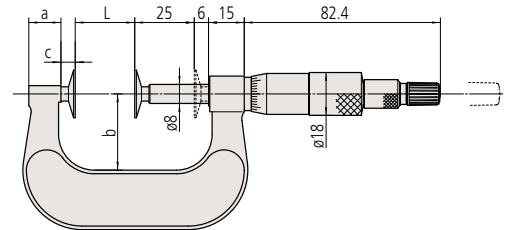


(): Order No.227-223

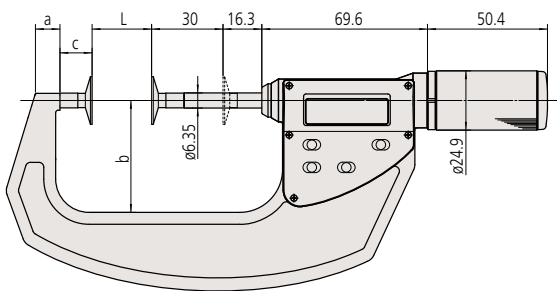
Digital models over 75mm



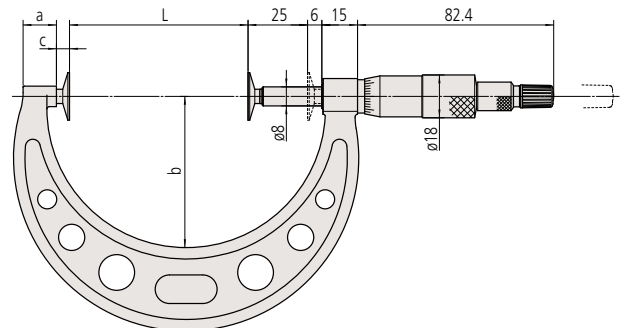
Analog models up to 50mm



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	5.5
75 - 100mm	75	13.5		
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	