

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).



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		4µm	—	
	369-253-30	75 - 100mm		—			3µm	0.5N - 2.5N	
Quickmike type (LCD)	369-411	0 - 30mm	0.01mm	—	ø20	1µm	—	2N - 10N	
	369-412	25 - 55mm		—			—	—	
Quickmike type adjustable measuring force (LCD)	227-221	0 - 15mm	0.01mm	—	ø14.3	1µm	—	—	
	227-223	0 - 10mm		—			—	—	

* Excluding quantizing error

Inch

	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		±6µm			6µm	
	169-205	50 - 75mm		—			—	—
	169-207	75 - 100mm		—	—	—	—	—

Inch/Metric

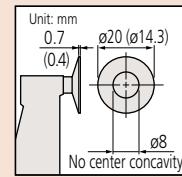
	Order No.	Range	Resolution	Accuracy*	Anvil dia.	Flatness	Parallelism	Measuring force
Digimatic (LCD)	369-350-30	0 - 1"	0.001mm	±.0002"	ø20	.00004"	.0002"	—
	369-351-30	1" - 2"		±.0002"			.0003"	
	369-352-30	2" - 3"		.00005" / .001mm			.0004"	
	369-353-30	3" - 4"		±.0003"	—	—	.0003"	—
Quickmike type (LCD)	369-421	0 - 1.2"	0.001"	±.0002"	ø20	.00004"	.0002"	—
	369-422	1" - 2.2"		—			.0003"	

* Excluding quantizing error

Inch

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

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



Quickmike

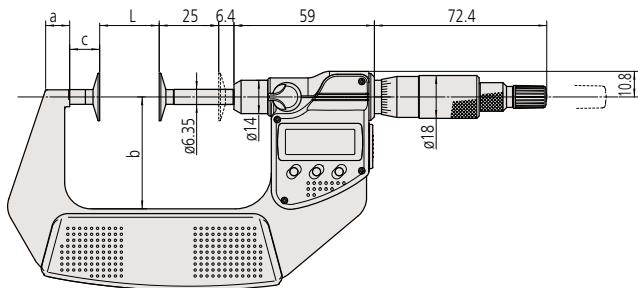
Provides a speedy spindle feed of 10mm per thimble rotation, which enables widely differently sized features to be measured quickly.

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.

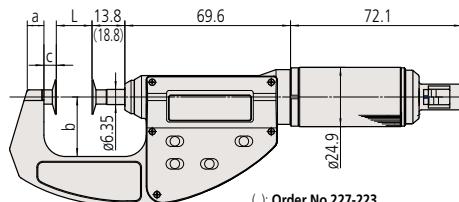
DIMENSIONS

Digital models up to 75mm



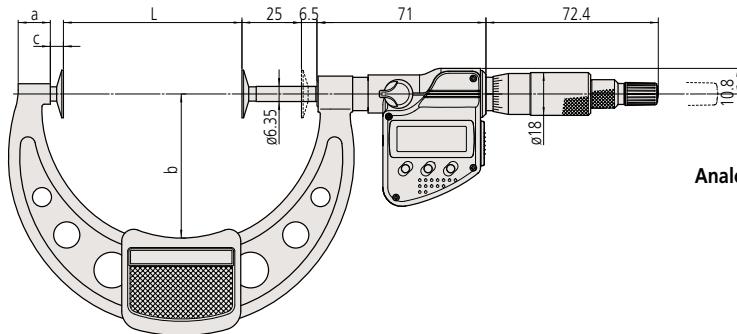
Unit: mm

Adjustable measuring force type

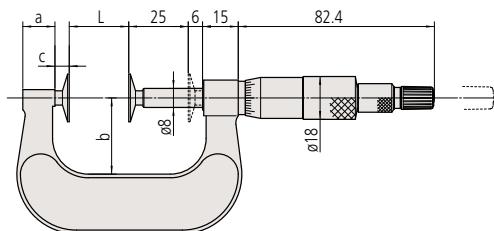


(): Order No.227-223

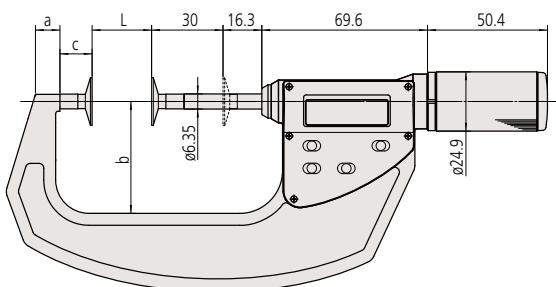
Digital models over 75mm



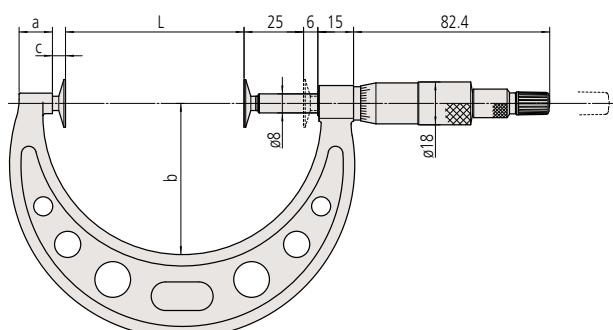
Analog models up to 50mm



Quickmike type



Analog models over 50mm



Digital models

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

*Quickmike type

Analog models

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