

# Micrometer

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

## Disk Micrometers SERIES 323, 223, 123

- Measures "root tangent length" of spur gears and helical gears.
- Determination of the root tangent length: refer to "Quick Guide to Precision Measuring Instruments".
- Equipped with Ratchet Stop for constant measuring force.
- Supplied with a setting standard (except for 0-25mm/0-1" measuring range).

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### SPECIFICATIONS

Metric					
Order No.	Range	Resolution	Accuracy*	Anvil dia.	Measurable module
Digimatic (LCD)					
323-250	0 - 25mm	0.001mm	±4μm	ø20mm	0.5 - 6
323-251	25 - 50mm				
323-252	50 - 75mm				
323-253	75 - 100mm				
			±6μm		

\* Excluding quantizing error

Metric					
Order No.	Range	Graduation	Accuracy	Anvil dia.	Measurable module
Mechanical counter model					
223-101	0 - 25mm	0.01mm	±4μm	ø20mm	0.5 - 6
223-102	25 - 50mm		±4μm		
Analog					
123-101	0 - 25mm	0.01mm	±4μm	ø20mm	0.5 - 6
123-113*			±4μm		
123-102			±4μm		
123-114*			±4μm		
123-103	25 - 50mm	0.01mm	±6μm	ø20mm	0.5 - 6
123-115*			±6μm		
123-104	50 - 75mm	0.01mm	±6μm	ø20mm	0.5 - 6
123-116*			±6μm		
123-105	75 - 100mm	0.01mm	±7μm	ø30mm	0.7 - 11
123-106	100 - 125mm		±7μm		
123-107	125 - 150mm		±8μm		
123-108	150 - 175mm		±8μm		
123-109	175 - 200mm	0.01mm	±8μm	ø30mm	0.7 - 11
123-110	200 - 225mm		±9μm		
123-111	225 - 250mm		±9μm		
123-112	250 - 275mm		±9μm		
123-111	275 - 300mm	0.01mm	±9μm	ø30mm	0.7 - 11

\* The measuring disks have carbide tips.

Inch/Metric					
Order No.	Range	Resolution	Accuracy*	Anvil dia.	Measurable module
Digimatic (LCD)					
323-350	0 - 1"	0.001mm	±.0002"	.787"	0.5 - 6
323-351	1" - 2"				
323-352	2" - 3"				
323-353	3" - 4"				

\* Excluding quantizing error

Inch					
Order No.	Range	Graduation	Accuracy	Anvil dia.	Measurable module
Mechanical counter model					
223-125	0 - 1"	.001"	±.0002"	.787"	0.5 - 6
Analog					
123-125	0 - 1"	.001"	±.0002"	.787"	0.5 - 6
123-126	1" - 2"		±.0003"		
123-127	2" - 3"		±.0003"		
123-128	3" - 4"		±.0003"		



These marks indicate that a product has successfully passed IP65-level testing, which is carried out by the independent German certification organization TÜV Rheinland.



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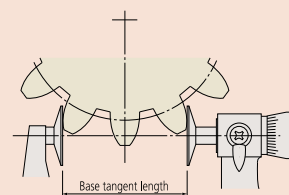
### IP Codes (323 series)

- 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

- Flatness: 1μm/.00004" for models up to 100mm/4"  
1.6μm/.000063" for models over 100mm/4"
- Parallelism: 4μm/.00016" for models up to 50mm/2"  
6μm/.00024" for models up to 100mm  
(5+R/75)μm for models over 100mm,  
R = max. range (mm)  
fraction rounded up  
.00024" for models up to 4"

### Root tangent length of gear (En)



### Battery for series 323

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

### Optional accessories for series 323

Connecting cables

1m: 05CZA662

2m: 05CZA663

USB Input Tool Direct

USB-ITN-B (2m): 06ADV380B

Connecting cables for U-WAVE-T

02AZD790B 160mm

For foot switch: 02AZE140B

Refer to page A-21 for details.

