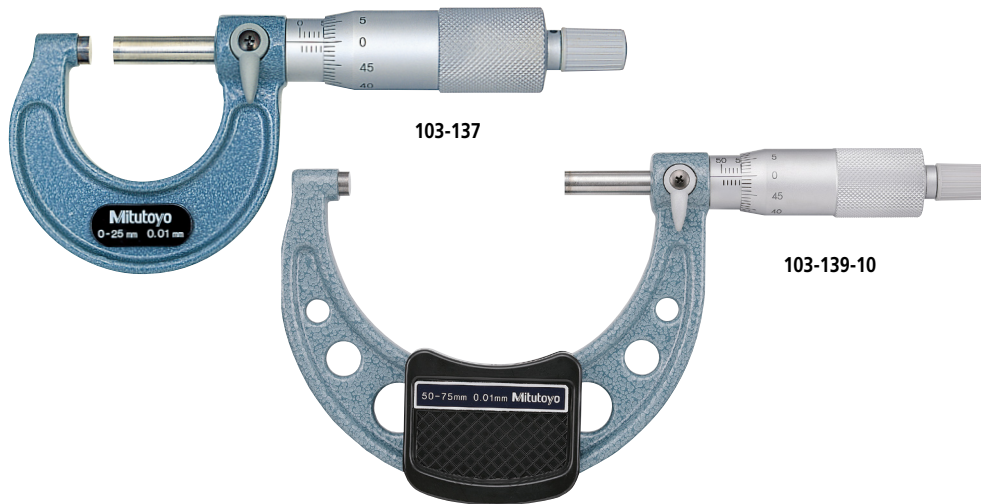


Micrometer

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

Outside Micrometers SERIES 103

- Baked-enamel-finished frame.
- Measuring faces: Carbide.
- Equipped with Ratchet Stop for constant measuring force.



Metric With ratchet stop			
Order No.	Range	Graduation	Accuracy
103-129	0 - 25 mm	0.001 mm	±2 μm
103-130	25 - 50 mm	0.001 mm	
103-139-10	50 - 75 mm	0.001 mm	
103-140-10	75 - 100 mm	0.01 mm	±3 μm
103-141-10	100 - 125 mm		
103-142-10	125 - 150 mm		
103-143-10	150 - 175 mm	0.01 mm	±4 μm
103-144-10	175 - 200 mm		
103-145-10	200 - 225 mm		
103-146-10	225 - 250 mm	0.01 mm	±5 μm
103-147-10	250 - 275 mm		
103-148-10	275 - 300 mm		
103-149	300 - 325 mm	0.01 mm	±6 μm
103-150	325 - 350 mm		
103-151	350 - 375 mm		
103-152	375 - 400 mm	0.01 mm	±7 μm
103-153	400 - 425 mm		
103-154	425 - 450 mm		
103-155	450 - 475 mm	0.01 mm	±8 μm
103-156	475 - 500 mm		
103-157	500 - 525 mm		
103-158	525 - 550 mm	0.01 mm	±9 μm
103-159	550 - 575 mm		
103-160	575 - 600 mm		
103-161	600 - 625 mm	0.01 mm	±10 μm
103-162	625 - 650 mm		
103-163	650 - 675 mm		
103-164	675 - 700 mm	0.01 mm	±11 μm
103-165	700 - 725 mm		
103-166	725 - 750 mm		
103-167	750 - 775 mm	0.01 mm	±12 μm
103-168	775 - 800 mm		
103-169	800 - 825 mm		
103-170	825 - 850 mm	0.01 mm	±13 μm
103-171	850 - 875 mm		
103-172	875 - 900 mm		
103-173	900 - 925 mm	0.01 mm	±14 μm
103-174	925 - 950 mm		
103-175	950 - 975 mm		
103-176	975 - 1000 mm	0.01 mm	±15 μm

Inch	With ratchet stop			
Order No.	Range	Graduation	Accuracy	
103-177	0 - 1 in	0.001 in	±0.0001 in	
103-131		0.0001 in		
103-178		0.001 in		
103-132	1 - 2 in	0.0001 in	±0.00015 in	
103-179	2 - 3 in	0.001 in		
103-180	3 - 4 in			
103-181	4 - 5 in	±0.0002 in		
103-182	5 - 6 in		0.001 in	
103-183	6 - 7 in			
103-184	7 - 8 in	±0.00025 in		
103-185	8 - 9 in		0.001 in	
103-186	9 - 10 in			
103-187	10 - 11 in	0.001 in	±0.0003 in	
103-188	11 - 12 in			0.001 in
103-189	12 - 13 in			
103-190	13 - 14 in	±0.00035 in		
103-191	14 - 15 in		0.001 in	
103-192	15 - 16 in			
103-193	16 - 17 in	±0.0004 in		
103-194	17 - 18 in		0.001 in	
103-195	18 - 19 in			
103-196	19 - 20 in	±0.00045 in		
103-197	20 - 21 in		0.001 in	
103-198	21 - 22 in			
103-199	22 - 23 in	±0.0005 in		
103-200	23 - 24 in		0.001 in	
103-201	24 - 25 in			
103-202	25 - 26 in	±0.00055 in		
103-203	26 - 27 in		0.001 in	
103-204	27 - 28 in			
103-205	28 - 29 in	±0.0006 in		
103-206	29 - 30 in		0.001 in	
103-207	30 - 31 in			
103-208	31 - 32 in	±0.00065 in		
103-209	32 - 33 in		0.001 in	
103-210	33 - 34 in			
103-211	34 - 35 in	±0.0007 in		
103-212	35 - 36 in		0.001 in	
103-213	36 - 37 in			
103-214	37 - 38 in	±0.00075 in		
103-215	38 - 39 in		0.001 in	
103-216	39 - 40 in			

Metric With ratchet stop			
Order No.	Range	Graduation	Accuracy
103-137	0 - 25 mm	0.01 mm	±2 μm
103-138	25 - 50 mm	0.01 mm	

Inch With friction thimble			
Order No.	Range	Graduation	Accuracy
103-135	0 - 1 in	0.0001 in	±0.0001 in
103-136	1 - 2 in		



An inspection certificate is supplied as standard. Refer to page X for details.

Technical Data

Measuring Force:

5 - 10 N (for maximum measuring range 300 mm or less)

10 - 15 N (for maximum measuring range 325 mm or more)

Flatness: 0.6 μm/0.000024 in for models up to 300 mm/12 in

1 μm/0.00004 in for models over 300 mm/12 in

Parallelism:

(2 + R/100) μm, R = max, range (mm)

[0.00008+0.00004 (R/4)] in, R = max, range (inch)

*fraction rounded down

Standard accessories: Reference bar, 1 pc

(except for measuring range 0-25 mm (0-1 in) models)

Spanner (301336), 1 pc

(for maximum measuring range up to 300 mm (12 in))

Spanner (200154), 1 pc

(for maximum measuring range 325 mm (13 in) or over)



103-904-10



103-905-10



103-906