

# Micrometers

## SERIES 103 – Economy Micrometer

- Baked-enamel-finished frame.
- Equipped with Ratchet Stop for constant measuring force.
- Measuring faces: carbide.
- Setting standard included on models measuring above 25 mm / 1" maximum measuring range.



103-138

### Specifications

Metric			
Code No.	Range	Graduation	Accuracy
With ratchet stop			
103-137	0 - 25 mm	0.01 mm	±2 μm
103-129		0.001 mm	
103-138	25 - 50 mm	0.01 mm	±2 μm
103-130		0.001 mm	
103-139-10	50 - 75 mm	0.01 mm	±3 μm
103-140-10	75 - 100 mm		
103-141-10	100 - 125 mm		
103-142-10	125 - 150 mm		
103-143-10	150 - 175 mm		
103-144-10	175 - 200 mm		
103-145-10	200 - 225 mm		
103-146-10	225 - 250 mm		
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		
103-153	400 - 425 mm		
103-154	425 - 450 mm		
103-155	450 - 475 mm		
103-156	475 - 500 mm		
103-157	500 - 525 mm		
103-158	525 - 550 mm		
103-159	550 - 575 mm	0.01 mm	±9 μm
103-160	575 - 600 mm		
103-161	600 - 625 mm		
103-162	625 - 650 mm		
103-163	650 - 675 mm		
103-164	675 - 700 mm		
103-165	700 - 725 mm		
103-166	725 - 750 mm		
103-167	750 - 775 mm		
103-168	775 - 800 mm		
103-169	800 - 825 mm	0.01 mm	±12 μm
103-170	825 - 850 mm		
103-171	850 - 875 mm		
103-172	875 - 900 mm		
103-173	900 - 925 mm		
103-174	925 - 950 mm		
103-175	950 - 975 mm		
103-176	975 - 1000 mm		

Inch			
Code No.	Range	Graduation	Accuracy
With ratchet stop			
103-177	0 - 1"	.001"	±.0001"
103-131		.0001"	
103-178	1 - 2"	.001"	±.0001"
103-132		.0001"	
103-179	2 - 3"	.001"	±.00015"
103-180	3 - 4"		
103-181	4 - 5"		
103-182	5 - 6"		
103-183	6 - 7"		
103-184	7 - 8"		
103-185	8 - 9"		
103-186	9 - 10"		
103-187	10 - 11"		
103-188	11 - 12"		
103-189	12 - 13"	.001"	±.00025"
103-190	13 - 14"		
103-191	14 - 15"		
103-192	15 - 16"		
103-193	16 - 17"		
103-194	17 - 18"		
103-195	18 - 19"		
103-196	19 - 20"		
103-197	20 - 21"		
103-198	21 - 22"		
103-199	22 - 23"	.001"	±.0003"
103-200	23 - 24"		
103-201	24 - 25"		
103-202	25 - 26"		
103-203	26 - 27"		
103-204	27 - 28"		
103-205	28 - 29"		
103-206	29 - 30"		
103-207	30 - 31"		
103-208	31 - 32"		
103-209	32 - 33"	.001"	±.00035"
103-210	33 - 34"		
103-211	34 - 35"		
103-212	35 - 36"		
103-213	36 - 37"		
103-214	37 - 38"		
103-215	38 - 39"		
103-216	39 - 40"		

With friction thimble			
Code No.	Range	Graduation	Accuracy
103-135	0 - 1"	.001" *1	±.0001"
103-136	1 - 2"		

\*1 .0001 reading is obtained with vernier.

### Technical Data

Flatness: 0.6 μm / .000024" for models up to 300 mm / 12", 1 μm / 0.0004" for models over 300 mm / 12"

Parallelism\*2: (2+R/100) μm / [.00008+.00004 (R/4)]"

\*2 R = max. range (mm/inch)

Note: Fractions rounded down



103-904-10



103-905-10



103-906

