

MICROMETERS

Outside Micrometers Series 103



103-127



103-260



103-177



103-217

Features

- Carbide faces.
- Positive locking clamp.*
- Ratchet stop or Friction Thimble for exact repetitive readings.
- Baked-enamel-finished frame.
- Clear graduations on satin-chrome finish.
- Complete with fitted carrying case.

*Unless otherwise noted

- Flatness: 0.6 μ m (.000024") for models up to 300mm (12")
1 μ m (.00004") for models over 300mm (12")
- Parallelism: (2+L/100) μ m [.00008+.00004 (L/4)]*
* L=Maximum measuring length (mm) [(inch)], Fraction rounded down

Specifications

Outside Micrometers

Inch

Order No.	Range	Resolution	Accuracy	Remarks
103-127	0–1"	.001"	\pm .0001"	Friction Thimble type
103-259	0–1"	.001"	\pm .0001"	Ratchet Stop type
103-135	0–1"	.0001"	\pm .0001"	Friction Thimble type
103-128	1–2"	.001"	\pm .0001"	Friction Thimble type with Standard
103-136	1–2"	.0001"	\pm .0001"	Friction Thimble type with Standard
103-132	1–2"	.0001"	\pm .0001"	Ratchet stop type with Standard

Order No.	Range	Resolution	Accuracy	Remarks
103-113	0–1"	.0001"	\pm .0001"	No Ratchet Stop. No Spindle Lock.
103-114	1–2"	.0001"	\pm .0001"	No Ratchet Stop. No Spindle Lock. No Standard.
103-115	2–3"	.0001"	\pm .0001"	No Ratchet Stop. No Spindle Lock. No Standard.
103-116	3–4"	.0001"	\pm .00015"	No Ratchet Stop. No Spindle Lock. No Standard.
103-117	4–5"	.0001"	\pm .00015"	No Ratchet Stop. No Spindle Lock. No Standard.
103-118	5–6"	.0001"	\pm .00015"	No Ratchet Stop. No Spindle Lock. No Standard.

MICROMETERS

Specifications

Inch

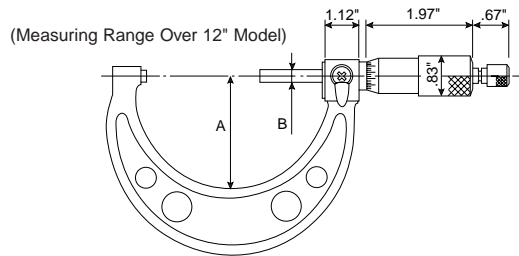
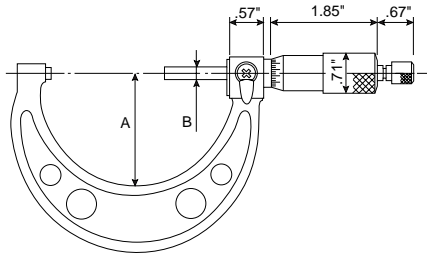
Order No.	Range	Resolution	Accuracy	Remarks
103-177	0-1"	.001"	±.0001"	Ratchet Stop type
103-178	1-2"	.001"	±.0001"	Ratchet Stop type with Standard
103-179	2-3"	.001"	±.0001"	Ratchet Stop type with Standard
103-180	3-4"	.001"	±.00015"	Ratchet Stop type with Standard
103-181	4-5"	.001"	±.00015"	Ratchet Stop type with Standard
103-182	5-6"	.001"	±.00015"	Ratchet Stop type with Standard
103-183	6-7"	.001"	±.0002"	Ratchet Stop type with Standard
103-184	7-8"	.001"	±.0002"	Ratchet Stop type with Standard
103-185	8-9"	.001"	±.0002"	Ratchet Stop type with Standard
103-186	9-10"	.001"	±.00025"	Ratchet Stop type with Standard
103-187	10-11"	.001"	±.00025"	Ratchet Stop type with Standard
103-188	11-12"	.001"	±.00025"	Ratchet Stop type with Standard
103-189H	12-13"	.001"	±.0003"	Ratchet Stop type without Standard
103-190H	13-14"	.001"	±.0003"	Ratchet Stop type without Standard
103-191H	14-15"	.001"	±.0003"	Ratchet Stop type without Standard
103-192H	15-16"	.001"	±.00035"	Ratchet Stop type without Standard
103-193H	16-17"	.001"	±.00035"	Ratchet Stop type without Standard
103-194H	17-18"	.001"	±.00035"	Ratchet Stop type without Standard
103-195H	18-19"	.001"	±.0004"	Ratchet Stop type without Standard
103-196H	19-20"	.001"	±.0004"	Ratchet Stop type without Standard
103-197H	20-21"	.001"	±.0004"	Ratchet Stop type without Standard
103-198H	21-22"	.001"	±.00045"	Ratchet Stop type without Standard
103-199H	22-23"	.001"	±.00045"	Ratchet Stop type without Standard
103-200H	23-24"	.001"	±.00045"	Ratchet Stop type without Standard
103-201H	24-25"	.001"	±.0005"	Ratchet Stop type without Standard
103-202H	25-26"	.001"	±.0005"	Ratchet Stop type without Standard
103-203	26-27"	.001"	±.0005"	Ratchet Stop type without Standard
103-204	27-28"	.001"	±.00055"	Ratchet Stop type with Standard
103-205	28-29"	.001"	±.00055"	Ratchet Stop type with Standard
103-206	29-30"	.001"	±.00055"	Ratchet Stop type with Standard
103-207	30-31"	.001"	±.0006"	Ratchet Stop type with Standard
103-208	31-32"	.001"	±.0006"	Ratchet Stop type with Standard
103-209	32-33"	.001"	±.0006"	Ratchet Stop type with Standard
103-210	33-34"	.001"	±.00065"	Ratchet Stop type with Standard
103-211	34-35"	.001"	±.00065"	Ratchet Stop type with Standard
103-212	35-36"	.001"	±.00065"	Ratchet Stop type with Standard
103-213	36-37"	.001"	±.0007"	Ratchet Stop type with Standard
103-214	37-38"	.001"	±.0007"	Ratchet Stop type with Standard
103-215	38-39"	.001"	±.0007"	Ratchet Stop type with Standard
103-216	39-40"	.001"	±.00075"	Ratchet Stop type with Standard

Order No. 103-904 (0-6" Set)			
Order No.	Range	Resolution	Remarks
101-105	0-1"	.001"	Ratchet Stop type with 5 Standards
101-106	1-2"	.001"	
103-179	2-3"	.001"	
103-180	3-4"	.001"	
103-181	4-5"	.001"	
103-182	5-6"	.001"	

Order No. 103-905 (0-12" Set)			
Order No.	Range	Resolution	Remarks
101-105	0-1"	.001"	Ratchet Stop type with 11 Standards
101-106	1-2"	.001"	
103-179	2-3"	.001"	
103-180	3-4"	.001"	
103-181	4-5"	.001"	
103-182	5-6"	.001"	
103-183	6-7"	.001"	
103-184	7-8"	.001"	
103-185	8-9"	.001"	
103-186	9-10"	.001"	
103-187	10-11"	.001"	
103-188	11-12"	.001"	

MICROMETERS

Outside Micrometers



Dimensions (Unit: inch)

Range	A	B
0-1"/0-25mm	1.10"	.25"
1-2"/25-50mm	1.49"	
2-3"/50-75mm	1.93"	
3-4"/75-100mm	2.36"	
4-5"/100-125mm	3.11"	
5-6"/125-150mm	3.70"	
6-7"/150-175mm	4.17"	
7-8"/175-200mm	4.64"	
8-9"/200-225mm	5.11"	
9-10"/225-250mm	5.63"	
10-11"/250-275mm	6.14"	
11-12"/275-300mm	6.65"	
12-13"	7.36"	.315"
13-14"	7.83"	
14-15"	8.30"	
15-16"	8.78"	
16-17"	9.29"	
17-18"	9.80"	
18-19"	10.31"	
19-20"	10.82"	

Dimensions

Range	A	B
20-21"	12.08"	.315"
21-22"	12.08"	
22-23"	13.07"	
23-24"	13.07"	
24-25"	14.05"	
25-26"	14.05"	
26-27"	15.04"	
27-28"	15.04"	
28-29"	16.10"	
29-30"	16.10"	
30-31"	17.16"	
31-32"	17.16"	
32-33"	18.15"	
33-34"	18.15"	
34-35"	19.17"	
35-36"	19.17"	
36-37"	20.15"	
37-38"	20.15"	
38-39"	21.18"	
39-40"	21.18"	

Specifications

Inch

Order No.	Range	Resolution	Accuracy	Remarks
103-260	0-1"	.0001"	±.0001"	Ratchet Stop type
103-262	1-2"	.0001"	±.0001"	Ratchet Stop type with Standard
103-217	2-3"	.0001"	±.0001"	Ratchet Stop type with Standard
103-218	3-4"	.0001"	±.00015"	Ratchet Stop type with Standard
103-219	4-5"	.0001"	±.00015"	Ratchet Stop type with Standard
103-220	5-6"	.0001"	±.00015"	Ratchet Stop type with Standard
103-221	6-7"	.0001"	±.0002"	Ratchet Stop type with Standard
103-222	7-8"	.0001"	±.0002"	Ratchet Stop type with Standard
103-223	8-9"	.0001"	±.0002"	Ratchet Stop type with Standard
103-224	9-10"	.0001"	±.00025"	Ratchet Stop type with Standard
103-225	10-11"	.0001"	±.00025"	Ratchet Stop type with Standard
103-226	11-12"	.0001"	±.00025"	Ratchet Stop type with Standard

Metric

Order No.	Range	Resolution	Accuracy	Remarks
103-125	0-25mm	0.01mm	±0.002mm	Friction Thimble type
103-126	25-50mm	0.01mm	±0.002mm	Friction Thimble type with Standard
103-133	0-25mm	0.001mm	±0.002mm	Friction Thimble type
103-134	25-50mm	0.001mm	±0.002mm	Friction Thimble type with Standard
103-137	0-25mm	0.01mm	±0.002mm	Ratchet Stop type
103-138	25-50mm	0.01mm	±0.002mm	Ratchet Stop type with Standard
103-139-10	50-75mm	0.01mm	±0.002mm	Ratchet Stop type with Standard
103-140-10	75-100mm	0.01mm	±0.003mm	Ratchet Stop type with Standard
103-141-10	100-125mm	0.01mm	±0.003mm	Ratchet Stop type with Standard
103-142-10	125-150mm	0.01mm	±0.003mm	Ratchet Stop type with Standard
103-143-10	150-175mm	0.01mm	±0.004mm	Ratchet Stop type with Standard
103-144-10	175-200mm	0.01mm	±0.004mm	Ratchet Stop type with Standard
103-145-10	200-225mm	0.01mm	±0.004mm	Ratchet Stop type with Standard
103-146-10	225-250mm	0.01mm	±0.005mm	Ratchet Stop type with Standard
103-147-10	250-275mm	0.01mm	±0.005mm	Ratchet Stop type with Standard
103-148-10	275-300mm	0.01mm	±0.005mm	Ratchet Stop type with Standard

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Specifications

Order No. 103-906 (6–12" Set)			
Order No.	Range	Resolution	Remarks
103-183	6–7"	.001"	} Ratchet Stop type with Standards
103-184	7–8"	.001"	
103-185	8–9"	.001"	
103-186	9–10"	.001"	
103-187	10–11"	.001"	
103-188	11–12"	.001"	

Order No. 103-907 (0–6" Set)			
Order No.	Range	Resolution	Remarks
103-135	0–1"	.0001"	} Friction Thimble type
103-136	1–2"	.0001"	
103-217	2–3"	.0001"	} Ratchet Stop type with Standards
103-218	3–4"	.0001"	
103-219	4–5"	.0001"	
103-220	5–6"	.0001"	

Order No. 103-908 (0–12" Set)			
Order No.	Range	Resolution	Remarks
103-135	0–1"	.0001"	} Friction Thimble type
103-136	1–2"	.0001"	
103-217	2–3"	.0001"	} Ratchet Stop type with Standards
103-218	3–4"	.0001"	
103-219	4–5"	.0001"	
103-220	5–6"	.0001"	
103-221	6–7"	.0001"	
103-222	7–8"	.0001"	
103-223	8–9"	.0001"	
103-224	9–10"	.0001"	
103-225	10–11"	.0001"	
103-226	11–12"	.0001"	

Order No. 103-909 (6"–12" Set)			
Order No.	Range	Resolution	Remarks
103-221	6–7"	.0001"	} Ratchet Stop type with Standards
103-222	7–8"	.0001"	
103-223	8–9"	.0001"	
103-224	9–10"	.0001"	
103-225	10–11"	.0001"	
103-226	11–12"	.0001"	

Order No. 103-922 (0–3" Set)			
Order No.	Range	Resolution	Remarks
103-135	0–1"	.0001"	} Friction Thimble type
103-136	1–2"	.0001"	
103-217	2–3"	.0001"	Ratchet Stop type with Standards

Order No. 103-931 (0–4" Set)			
Order No.	Range	Resolution	Remarks
103-135	0–1"	.0001"	} Friction Thimble type
103-136	1–2"	.0001"	
103-217	2–3"	.0001"	} Ratchet Stop type with Standards
103-218	3–4"	.0001"	

Order No. 103-929 (0–3" Set)			
Order No.	Range	Resolution	Remarks
103-177	0–1"	.001"	} Ratchet Stop type with Standards
103-178	1–2"	.001"	
103-179	2–3"	.001"	

Order No. 103-930 (0–4" Set)			
Order No.	Range	Resolution	Remarks
103-177	0–1"	.001"	} Ratchet Stop type with Standards
103-178	1–2"	.001"	
103-179	2–3"	.001"	
103-180	3–4"	.001"	

Order No. 103-927 (0–75mm Set)			
Order No.	Range	Resolution	Remarks
103-137	0–25mm	0.01mm	} Ratchet Stop type with Standards
103-138	25–50mm	0.01mm	
103-139	50–75mm	0.01mm	

Order No. 103-913-20 (0–150mm Set)			
Order No.	Range	Resolution	Remarks
103-137	0–25mm	0.01mm	} Ratchet Stop type with Standards
103-138	25–50mm	0.01mm	
103-139	50–75mm	0.01mm	
103-140	75–100mm	0.01mm	
103-141	100–125mm	0.01mm	
103-142	125–150mm	0.01mm	

Order No. 103-914-20 (0–300mm Set)			
Order No.	Range	Resolution	Remarks
103-137	0–25mm	0.01mm	} Ratchet Stop type with Standards
103-138	25–50mm	0.01mm	
103-139	50–75mm	0.01mm	
103-140	75–100mm	0.01mm	
103-141	100–125mm	0.01mm	
103-142	125–150mm	0.01mm	
103-143	150–175mm	0.01mm	
103-144	175–200mm	0.01mm	
103-145	200–225mm	0.01mm	
103-146	225–250mm	0.01mm	
103-147	250–275mm	0.01mm	
103-148	275–300mm	0.01mm	

Order No. 103-915 (150–300mm Set)			
Order No.	Range	Resolution	Remarks
103-143	150–175mm	0.01mm	} Ratchet Stop type with Standards
103-144	175–200mm	0.01mm	
103-145	200–225mm	0.01mm	
103-146	225–250mm	0.01mm	
103-147	250–275mm	0.01mm	
103-148	275–300mm	0.01mm	

Order No. 103-932 (0–3" Set)			
Order No.	Range	Resolution	Remarks
103-113	0–1"	.0001"	} without Spindle Lock, without Ratchet Stop, with Standards
103-114	1–2"	.0001"	
103-115	2–3"	.0001"	

Order No. 103-933 (0–6" Set)			
Order No.	Range	Resolution	Remarks
103-113	0–1"	.0001"	} without Spindle Lock, without Ratchet Stop, with Standards
103-114	1–2"	.0001"	
103-115	2–3"	.0001"	
103-116	3–4"	.0001"	
103-117	4–5"	.0001"	
103-118	5–6"	.0001"	