

# 千分尺

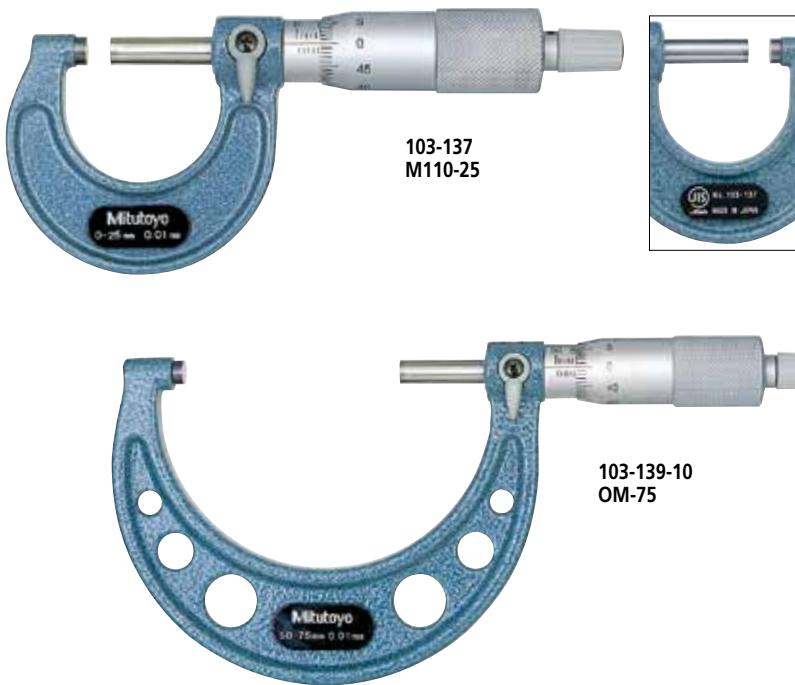
品牌信赖的证明，三丰测量工具的起点

## 外径千分尺

### 103 系列

### M110 · OM

- 烤漆尺架。
- 测量面为硬质合金。
- 带有恒定测力的装置。



## 规格

千分尺套装 / 带有棘轮套管

货号	型号	测量范围	千分尺种类
103-913-50	OMST-150C	0 - 150mm	测量范围以25mm递增的千分尺6个, 25~125mm范围内以25mm递增的量杆5个
103-914-50	OMST1-300C	0 - 300mm	测量范围以25mm递增的千分尺12个, 25~275mm范围内以25mm递增的量杆11个
103-915-10	OMST2-300	150 - 300mm	测量范围以25mm递增的千分尺6个, 150~275mm范围内以25mm递增的量杆6个

\* 标准套装以外的产品，需要定制。

带有棘轮锁紧装置

货号	型号	测量范围	分度值
103-137	M110-25	0 - 25mm	0.01mm
103-129	M120-25		0.001mm
103-138	M110-50		0.01mm
103-130	M120-50	25 - 50mm	0.001mm
103-139-10	OM-75	50 - 75mm	
103-140-10	OM-100	75 - 100mm	
103-141-10	OM-125	100 - 125mm	
103-142-10	OM-150	125 - 150mm	
103-143-10	OM-175	150 - 175mm	
103-144-10	OM-200	175 - 200mm	
103-145-10	OM-225	200 - 225mm	
103-146-10	OM-250	225 - 250mm	
103-147-10	OM-275	250 - 275mm	
103-148-10	OM-300	275 - 300mm	
103-149	OM-325	300 - 325mm	
103-150	OM-350	325 - 350mm	
103-151	OM-375	350 - 375mm	
103-152	OM-400	375 - 400mm	
103-153	OM-425	400 - 425mm	
103-154	OM-450	425 - 450mm	
103-155	OM-475	450 - 475mm	
103-156	OM-500	475 - 500mm	

\* JIS B 7502 的该产品是 M110-25, 50。



测量仪器附带检查成绩单  
详细信息参见 U-12 页

## 规格

平面度： 测量范围小于 300mm 型为 0.6μm

测量范围大于 300mm 型为 1μm

平行度：

$$\left(2 + \frac{\text{最大测量范围}}{100}\right) \mu\text{m} (\text{小数圆整})$$

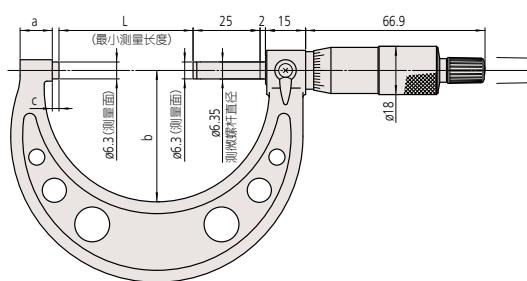
精度：

$$\pm \left(1 + \frac{\text{最大测量长度}}{75}\right) \mu\text{m} (\text{小数圆整})$$



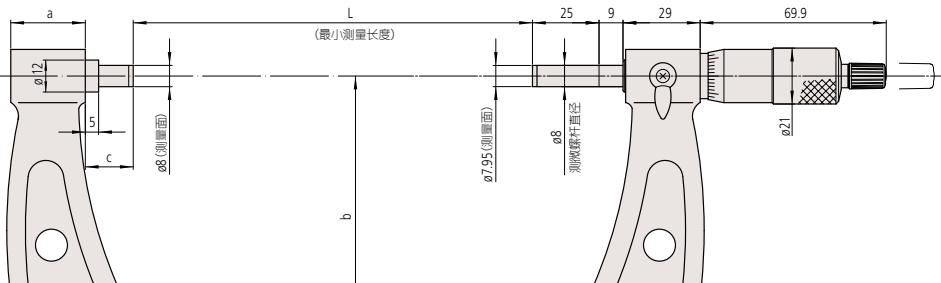
## 尺寸

测量范围小于 300mm 型  
M110-25, 50, OM-75~300



单位 : mm

测量范围大于 300mm 型  
OM-325~1000



型号	测量范围	L	a	b	c
M110-25	0 - 25mm	0	9	28	
M110-50	25 - 50mm	25	10	38	
OM-75	50 - 75mm	50	12	49	2.5
OM-100	75 - 100mm	75	14	60	
OM-125	100 - 125mm	100	16.7	79	5.3
OM-150	125 - 150mm	125	18.8	94	5.7
OM-175	150 - 175mm	150	19.1	106	6.1
OM-200	175 - 200mm	175	18.2	118	6.3
OM-225	200 - 225mm	200	16.8	130	6.7
OM-250	225 - 250mm	225		143	5.5
OM-275	250 - 275mm	250		156	
OM-300	275 - 300mm	275		169	6.5

型号	测量范围	L	a	b	c
OM-525	500 - 525mm	500		307	40
OM-550	525 - 550mm	525		315	
OM-575	550 - 575mm	550		332	40
OM-600	575 - 600mm	575		350	15
OM-625	600 - 625mm	600		355	40
OM-650	625 - 650mm	625		365	15
OM-675	650 - 675mm	650		382	40
OM-700	675 - 700mm	675		395	15
OM-725	700 - 725mm	700		405	40
OM-750	725 - 750mm	725		420	15
OM-775	750 - 775mm	750		430	40
OM-800	775 - 800mm	775		450	15
OM-825	800 - 825mm	800		465	40
OM-850	825 - 850mm	825		480	15
OM-875	850 - 875mm	850		495	40
OM-900	875 - 900mm	875		510	15
OM-925	900 - 925mm	900		525	40
OM-950	925 - 950mm	925		540	15
OM-975	950 - 975mm	950		550	40
OM-1000	975 - 1000mm	975		565	15

### ●关于特殊尺寸、特殊规格

我们也可以根据客户需要定制特殊尺寸、特殊规格的产品。对于可以对应的规格等内容，请向本公司的特约店或您附近的本公司营业课进行详细咨询。

### ▼特殊对应事例

测微螺杆	测砧长度		
	标准长度	标准长度+25mm	标准长度+50mm
	<input type="radio"/> *1	<input type="radio"/> *2	<input type="radio"/> *3
标准长度			
标准长度+25mm	<input type="radio"/> *1	<input type="radio"/> *2	<input type="radio"/> *3
标准长度+50mm	<input type="radio"/> *2	<input type="radio"/> *3	<input type="radio"/> *4

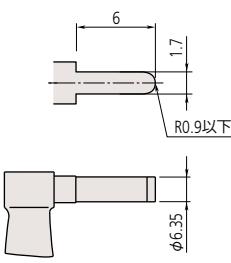
\*1: 适用于 M110-25~50, OM-75~275

\*2: 适用于 M110-25~50, OM-75~250

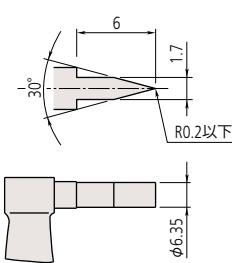
\*3: 适用于 M110-25~50, OM-75~225

\*4: 适用于 M110-25~50, OM-75~200

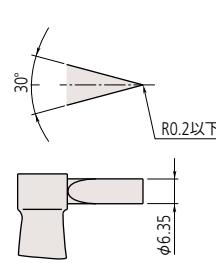
#### • 测砧测量面为窄弧面形



#### • 测砧测量面为薄刃形



#### • 测砧测量面为刀刃形

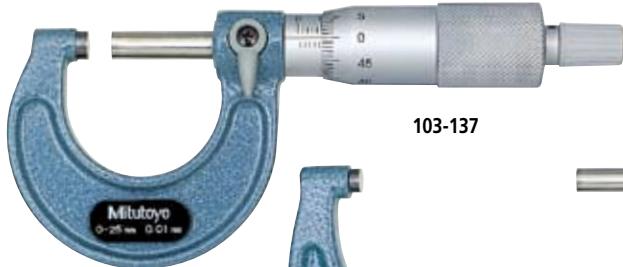


# Micrometer

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.



103-137



103-139-10

Metric With ratchet stop			
Order No.	Range	Graduation	Accuracy
103-137	0 - 25mm	0.01mm	
103-129		0.001mm	
103-138	25 - 50mm	0.01mm	
103-130		0.001mm	
103-139-10	50 - 75mm		
103-140-10	75 - 100mm		
103-141-10	100 - 125mm		
103-142-10	125 - 150mm		
103-143-10	150 - 175mm		
103-144-10	175 - 200mm		
103-145-10	200 - 225mm		
103-146-10	225 - 250mm		
103-147-10	250 - 275mm		
103-148-10	275 - 300mm		
103-149	300 - 325mm		
103-150	325 - 350mm		
103-151	350 - 375mm		
103-152	375 - 400mm		
103-153	400 - 425mm		
103-154	425 - 450mm		
103-155	450 - 475mm		
103-156	475 - 500mm		
103-157	500 - 525mm		
103-158	525 - 550mm		
103-159	550 - 575mm		
103-160	575 - 600mm		
103-161	600 - 625mm		
103-162	625 - 650mm		
103-163	650 - 675mm		
103-164	675 - 700mm		
103-165	700 - 725mm		
103-166	725 - 750mm		
103-167	750 - 775mm		
103-168	775 - 800mm		
103-169	800 - 825mm		
103-170	825 - 850mm		
103-171	850 - 875mm		
103-172	875 - 900mm		
103-173	900 - 925mm		
103-174	925 - 950mm		
103-175	950 - 975mm		
103-176	975 - 1000mm		
0.01mm			

Inch With ratchet stop			
Order No.	Range	Graduation	Accuracy
103-177	0 - 1"	.001"	
103-131	0 - 1"	.0001"	
103-178	1" - 2"	.001"	
103-132	1" - 2"	.0001"	
103-179	2" - 3"		
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"		
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"		
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"		
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"		
.001"			

Inch With friction thimble			
Order No.	Range	Graduation	Accuracy
103-135	0 - 1"	.0001"	±.0001"
103-136	1" - 2"	.0001"	±.0001"



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

### Technical Data

Flatness: 0.6µm/.000024" for models up to 300mm/12"  
1µm/.00004" for models over 300mm/12"

#### Parallelism:

(2 + R/100) µm, R = max, range (mm)  
[.00008+.00004 (R/4)]", R = max, range (inch)

\*fraction rounded down

Standard accessories: Reference bar, 1 pc

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

Spanner (301336), 1 pc

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

Spanner (200154), 1 pc

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



103-904-10



103-905-10



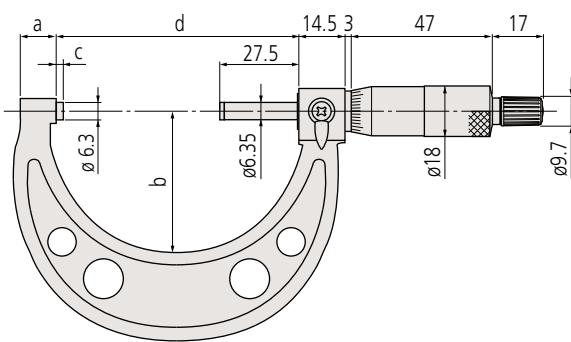
103-906

Metric	Micrometer set / With ratchet thimble	
Order No.	Range	Models included
103-927-10	0 - 75mm (3 pcs./set)	103-137, 103-138, 103-139-10, 2 micrometer standards
103-913-50	0 - 150mm (6 pcs./set)	103-137, 103-138, 103-139-10, 103-140-10, 103-141-10, 103-142-10, 5 micrometer standards
103-915-10	150 - 300mm (6 pcs./set)	103-143-10, 103-144-10, 103-145-10, 103-146-10, 103-147-10, 103-148-10, 6 micrometer standards
103-914-50	0 - 300mm (12 pcs./set)	All micrometers of 103-913-50 and 103-915-10 in one set, 11 micrometer standards

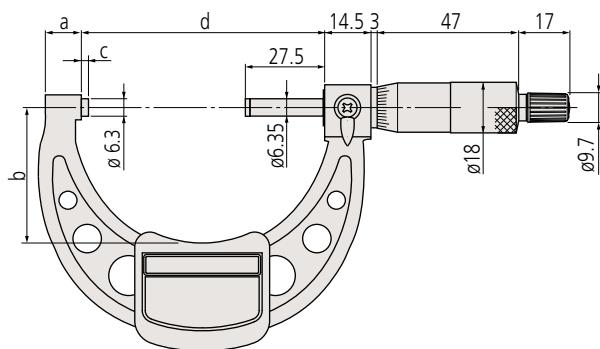
Inch	Micrometer set / With ratchet thimble	
Order No.	Range	Models included
103-929	0 - 3"(3 pcs./set)	103-177, 103-178, 103-179, 2 micrometer standards
103-930	0 - 4"(4 pcs./set)	103-177, 103-178, 103-179, 103-180, 3 micrometer standards
103-904-10	0 - 6"(6 pcs./set)	103-177, 103-178, 103-179, 103-180, 103-181, 103-182, 5 micrometer standards
103-906	6" - 12"(6 pcs./set)	103-183, 103-184, 103-185, 103-186, 103-187, 103-188, 6 micrometer standards
103-905-10	0 - 12"(12 pcs./set)	All micrometers of 103-904-10 and 103-906 in one set, 11 micrometer standards

## DIMENSIONS

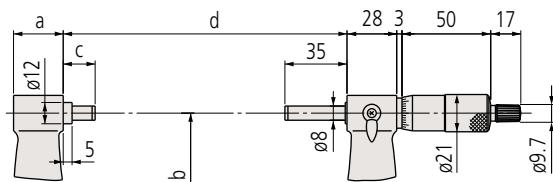
Models up to 75mm measuring range



Models 75mm to 300mm



Models over 300mm measuring range



Range	a	b	c	d
0 - 25mm	9	28		30
25 - 50mm	10	38		55
50 - 75mm	12	47		80
75 - 100mm	14	58		105
100 - 125mm	16.7	77	5.3	132.8
125 - 150mm	18.8	92	5.7	158.2
150 - 175mm	19.1	104	6.1	183.6
175 - 200mm	18.2	115	6.3	208.8
200 - 225mm	16.8	128	6.7	234.2
225 - 250mm	18	141	5.5	258

Range	a	b	c	d
250 - 275mm	153		6.5	284
275 - 300mm	166			309
300 - 325mm	187			353
325 - 350mm	199			378
350 - 375mm	212			403
375 - 400mm	224			428
400 - 425mm	236			453
425 - 450mm	248			478
450 - 475mm	261			503
475 - 500mm	273			528

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Range	a	b	c	d
500 - 525mm	307		40	575
525 - 550mm			15	
550 - 575mm	332		40	625
575 - 600mm			15	
600 - 625mm	355		40	675
625 - 650mm			15	
650 - 675mm	382		40	725
675 - 700mm			15	
700 - 725mm	405		40	775
725 - 750mm			15	
750 - 775mm	430		40	825
775 - 800mm			15	
800 - 825mm	455		40	875
825 - 850mm			15	
850 - 875mm	480		40	925
875 - 900mm			15	
900 - 925mm	505		40	975
925 - 950mm			15	
950 - 975mm	530		40	1025
975 - 1000mm			15	