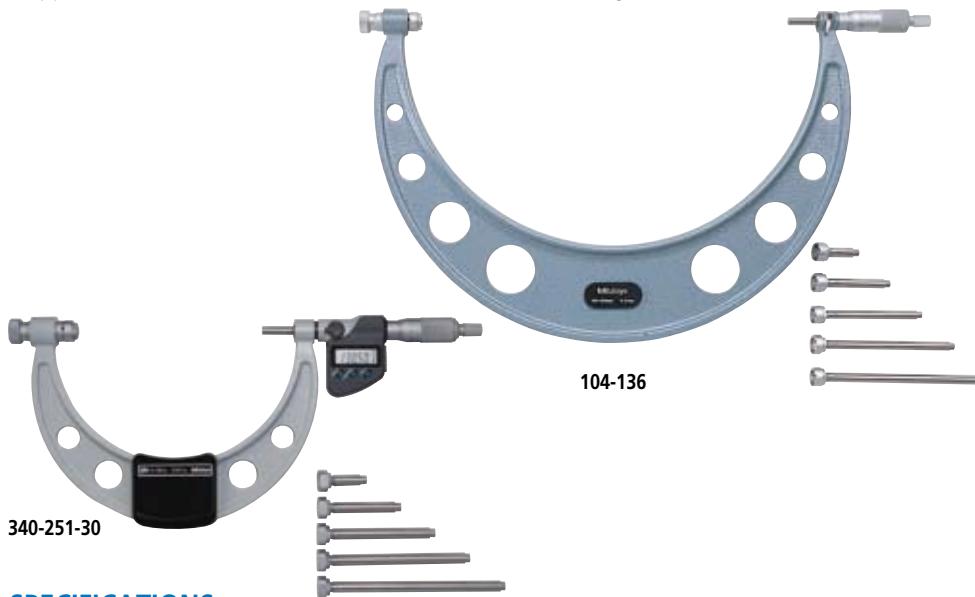


# Micrometer

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

## Outside Micrometers SERIES 340, 104 — with Interchangeable Anvils

- Wide measuring range with interchangeable anvils.
- Measuring face of the spindle is carbide tipped (standard model).
- IP 65 water/dust protection (series 340).
  - \* Models with a measuring range up to 300mm.
- Equipped with Ratchet Stop for constant measuring force.



### SPECIFICATIONS

#### Metric

Order No.	Range	Resolution	Interchangeable anvils	Setting Standard		Micrometer head stroke
				Qty	Size	
<b>Digimatic (LCD)</b>						
<b>340-251-30</b>	0 - 150mm			6pcs.	5   25-125mm	
<b>340-252-30</b>	150 - 300mm				6   150-275mm	
<b>340-520</b>	300 - 400mm				300-375mm	
<b>340-521</b>	400 - 500mm				400-475mm	
<b>340-522</b>	500 - 600mm				500-575mm	
<b>340-523</b>	600 - 700mm				600-675mm	
<b>340-524</b>	700 - 800mm				700-775mm	
<b>340-525</b>	800 - 900mm				800-875mm	
<b>340-526</b>	900 - 1000mm				900-975mm	

#### Metric

Order No.	Range	Graduation	Interchangeable anvils	Setting Standard		Micrometer head stroke
				Qty	Size	
<b>Analog</b>						
<b>104-171*</b>	0 - 50mm			1pcs.	1   25mm	
<b>104-139A</b>	0 - 100mm			4pcs.	3   25-75mm	
<b>104-135A</b>	0 - 150mm			6pcs.	5   25-125mm	
<b>104-161A</b>	50 - 150mm				4   50-125mm	
<b>104-140A</b>	100 - 200mm			4pcs.	4   100-175mm	
<b>104-136A</b>	150 - 300mm			6pcs.	6   150-275mm	
<b>104-141A</b>	200 - 300mm				200-275mm	
<b>104-142A</b>	300 - 400mm				300-375mm	
<b>104-143A</b>	400 - 500mm				400-475mm	
<b>104-144A</b>	500 - 600mm				500-575mm	
<b>104-145A</b>	600 - 700mm				600-675mm	
<b>104-146A</b>	700 - 800mm				700-775mm	
<b>104-147A</b>	800 - 900mm				800-875mm	
<b>104-148A</b>	900 - 1000mm				900-975mm	

\* The frame is fitted with a heat shield.



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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ID 000040191

#### IP Codes (series 340)

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:

0.6µm / .000024" for models up to 300mm/ 12"  
1.0µm / .00004" for models over 300mm/ 12"

Parallelism:

2µm / .00008" for models up to 75mm/ 3"

3µm / .00012" for models up to 150mm/ 6"

(2+R/100)µm for models over 150mm,

R= max. range (mm)

Fraction rounded up

±[.00008" + .00004 (R/4)]" For models over 6"

R= max. range (inch)

Fraction rounded up

Accuracy:

±(4+R/75)µm, R = max. range (mm)

±[.00016" + .00004(R/3)]" R = max. range (inch)  
(excluding quantizing error for digital models)

Fraction rounded up

Excluding quantizing error

#### Inch/Metric

Order No.	Range	Resolution	Interchangeable anvils	Setting Standard		Micrometer head stroke
				Qty	Size	
<b>Digimatic (LCD)</b>						
<b>340-251-30</b>	0 - 6"	.00005"/ 0.001mm		5	1"- 5"	
<b>340-252-30</b>	6" - 12"				6"- 11"	
<b>340-720</b>	12" - 18"				12"- 17"	
<b>340-721</b>	18" - 24"	.0001"/ 0.001mm		6	18"- 23"	
<b>340-722</b>	24" - 30"				24"- 29"	
<b>340-723</b>	30" - 36"				30"- 35"	

#### Inch

Order No.	Range	Interchangeable anvils	Graduation	Setting Standard		Micrometer head stroke
				Qty	Size	
<b>Analog</b>						
<b>104-165</b>	0 - 2"	1pcs.	.0001"	1	1"	
<b>104-149</b>	0 - 4"	4pcs.		3	1"- 3"	
<b>104-137</b>	0 - 6"	6pcs.		5	1"- 5"	
<b>104-162</b>	2" - 6"		4pcs.	4	2"- 5"	
<b>104-150</b>	4" - 8"				4"- 7"	
<b>104-138</b>	6" - 12"	6pcs.		6	6"- 11"	
<b>104-151</b>	8" - 12"	4pcs.		4	8"- 11"	
<b>104-152</b>	12" - 16"	4pcs.		4	12"- 15"	
<b>104-201</b>	12" - 18"	6pcs.		6	12"- 17"	
<b>104-153</b>	16" - 20"	4pcs.		4	16"- 19"	
<b>104-202</b>	18" - 24"	6pcs.		6	18"- 23"	
<b>104-154</b>	20" - 24"	4pcs.		4	20"- 23"	
<b>104-155</b>	24" - 28"	4pcs.		4	24"- 27"	
<b>104-203</b>	24" - 30"	6pcs.		6	24"- 29"	
<b>104-156</b>	28" - 32"	4pcs.		4	28"- 31"	
<b>104-204</b>	30" - 36"	6pcs.		6	30"- 35"	
<b>104-157</b>	32" - 36"	4pcs.		4	32"- 35"	
<b>104-158</b>	36" - 40"	6pcs.		6	36"- 39"	
<b>104-205</b>	36" - 42"	6pcs.		6	36"- 41"	

## DIMENSIONS

### Battery for series 340

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

Battery life: Approx. 2.4 years under normal use  
(for series 340-2XX)

Approx. 1.8 years under normal use  
(for series 340-5XX, 340-7XX)

Length standard: Electromagnetic rotary sensor (for series 340)

Standard accessories: Spanner (301336), 1 pc

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

Spanner (200154), 1 pc

(for maximum measuring range 400mm (16") or over)

### Optional accessories

Connecting cables for

**340-251-30 & 340-252-30, 340-351-30 & 340-252-30**

1m: **05CZA662**

2m: **05CZA663**

### USB Input Tool Direct

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

SPC cables for U-WAVE w/ data switch (160mm):

**02AZD790B**

For foot switch: **02AZE140B**

Connecting cables for

**340-520/1/2/3/4/5/6, 340-720/1/2/3 models**

Recommended cables:

L-Type (does not interfere with operating the thimble.)

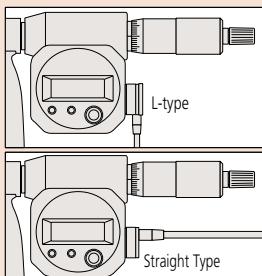
1m: **04AZB512**

2m: **04AZB513**

Straight type (may interfere with operating the thimble.)

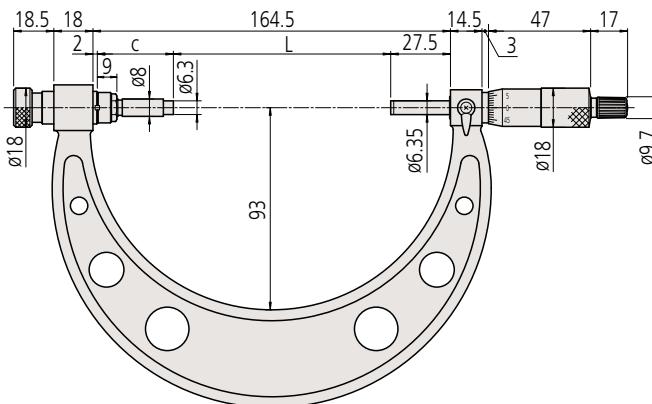
1m: **959149**

2m: **959150**



104-135A

Unit: mm



### Interchangeable anvil

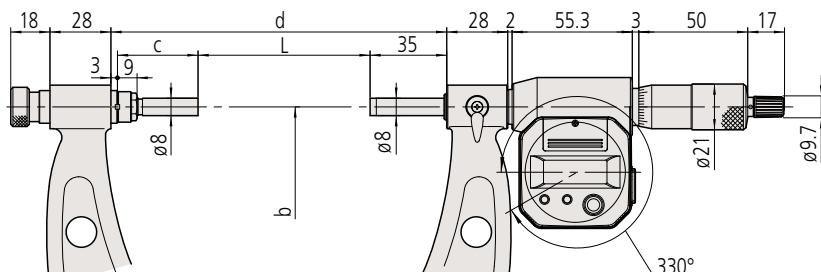
L : Range (mm)

Range	0 to 150mm models	0 - 25	25 - 50	50 - 75	75 - 100	100 - 125	125 - 150
Range	150 to 300mm models	150 - 175	175 - 200	200 - 225	225 - 250	250 - 275	275 - 300
Order No.	<b>303950</b>	<b>303951</b>	<b>303952</b>	<b>303953</b>	<b>303954</b>	<b>303955</b>	
c: Overall length (mm)	135	110	85	60	35	10	
Interchangeable anvil	M1	M2	M3	M4	M5	M6	

L : Range (mm)

Range	300 to 400mm models	300 - 325	325 - 350	350 - 375	375 - 400	
Range	400 to 500mm models	400 - 425	425 - 450	450 - 475	475 - 500	
Range	500 to 600mm models	500 - 525	525 - 550	550 - 575	575 - 600	
Range	600 to 700mm models	600 - 625	625 - 650	650 - 675	675 - 700	
Range	700 to 800mm models	700 - 725	725 - 750	750 - 775	775 - 800	
Range	800 to 900mm models	800 - 825	825 - 850	850 - 875	875 - 900	
Range	900 to 1000mm models	900 - 925	925 - 950	950 - 975	975 - 1000	
Order No.	<b>304001</b>	<b>304002</b>	<b>304003</b>	<b>304004</b>		
c: Overall length (mm)	87	62	37	12		
Interchangeable anvil	M3	M4	M5	M6		

### Over 400mm up to 1000mm



L : Range (mm)

Range	300 to 400mm models	300 - 325	325 - 350	350 - 375	375 - 400	b	d
Range	400 to 500mm models	400 - 425	425 - 450	450 - 475	475 - 500	273	525
Range	500 to 600mm models	500 - 525	525 - 550	550 - 575	575 - 600	332	625
Range	600 to 700mm models	600 - 625	625 - 650	650 - 675	675 - 700	382	725
Range	700 to 800mm models	700 - 725	725 - 750	750 - 775	775 - 800	430	825
Range	800 to 900mm models	800 - 825	825 - 850	850 - 875	875 - 900	480	925
Range	900 to 1000mm models	900 - 925	925 - 950	950 - 975	975 - 1000	530	1025
Order No.	<b>304001</b>	<b>304002</b>	<b>304003</b>	<b>304004</b>			
c: Overall (mm)	87	62	37	12			
Interchangeable anvil	M3	M4	M5	M6			