

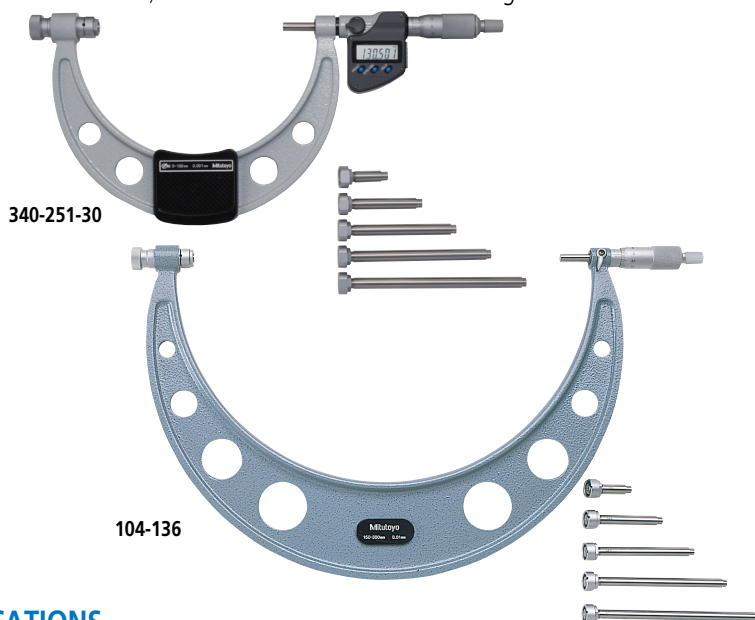
Micrometer

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

Outside Micrometers SERIES 340, 104 — with Interchangeable Anvils

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

- 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 300 mm.
- Equipped with Ratchet Stop for constant measuring force.



SPECIFICATIONS

Metric						
Order No.	Range	Resolution	Interchangeable anvils	Setting Standard		Micrometer head stroke
				Qty	Size	
Digimatic (LCD)						
340-251-30	0 - 150 mm	0.001 mm	6 pcs.	5	25-125 mm	25 mm
340-252-30	150 - 300 mm			6	150-275 mm	
340-520	300 - 400 mm		4 pcs.	4	300-375 mm	
340-521	400 - 500 mm				400-475 mm	
340-522	500 - 600 mm				500-575 mm	
340-523	600 - 700 mm				600-675 mm	
340-524	700 - 800 mm				700-775 mm	
340-525	800 - 900 mm				800-875 mm	
340-526	900 - 1000 mm				900-975 mm	

Metric						
Order No.	Range	Graduation	Interchangeable anvils	Setting Standard		Micrometer head stroke
				Qty	Size	
Analog						
104-171*	0 - 50 mm	0.01 mm	1 pc.	1	25 mm	25 mm
104-139A	0 - 100 mm		4 pcs.	3	25-75 mm	
104-135A	0 - 150 mm		6 pcs.	5	25-125 mm	
104-161A	50 - 150 mm		4 pcs.	4	50-125 mm	
104-140A	100 - 200 mm				100-175 mm	
104-136A	150 - 300 mm		6 pcs.	6	150-275 mm	
104-141A	200 - 300 mm		4 pcs.	4	200-275 mm	
104-142A	300 - 400 mm				300-375 mm	
104-143A	400 - 500 mm				400-475 mm	
104-144A	500 - 600 mm				500-575 mm	
104-145A	600 - 700 mm				600-675 mm	
104-146A	700 - 800 mm				700-775 mm	
104-147A	800 - 900 mm				800-875 mm	
104-148A	900 - 1000 mm				900-975 mm	

* The frame is fitted with a heat shield.

Inch/Metric						
Order No.	Range	Resolution	Interchangeable anvils	Setting Standard		Micrometer head stroke
				Qty	Size	
Digimatic (LCD)						
340-351-30	0 - 6 in	0.00005 in/ 0.001 mm	6 pcs.	5	1 - 5 in	1 in
340-352-30	6 - 12 in	0.0001 in/ 0.001 mm		6	6 - 11 in	
340-720	12 - 18 in				12 - 17 in	
340-721	18 - 24 in				18 - 23 in	
340-722	24 - 30 in				24 - 29 in	
340-723	30 - 36 in				30 - 35 in	

Inch						
Order No.	Range	Interchangeable anvils	Graduation	Setting Standard		Micrometer head stroke
				Qty	Size	
Analog						
104-165	0 - 2 in	1 pc.	0.0001 in	1	1 in	1 in
104-149	0 - 4 in	4 pcs.		3	1 - 3 in	
104-137	0 - 6 in	6 pcs.		5	1 - 5 in	
104-162	2 - 6 in	4 pcs.		4	2 - 5 in	
104-150	4 - 8 in				4 - 7 in	
104-138	6 - 12 in	6 pcs.		6	6 - 11 in	
104-151	8 - 12 in	4 pcs.		4	8 - 11 in	
104-152	12 - 16 in				12 - 15 in	
104-201	12 - 18 in	6 pcs.		6	12 - 17 in	
104-153	16 - 20 in	4 pcs.		4	16 - 19 in	
104-202	18 - 24 in	6 pcs.		6	18 - 23 in	
104-154	20 - 24 in	4 pcs.		4	20 - 23 in	
104-155	24 - 28 in				24 - 27 in	
104-203	24 - 30 in	6 pcs.		6	24 - 29 in	
104-156	28 - 32 in	4 pcs.		4	28 - 31 in	
104-204	30 - 36 in	6 pcs.		6	30 - 35 in	
104-157	32 - 36 in	4 pcs.		4	32 - 35 in	
104-158	36 - 40 in				36 - 39 in	
104-205	36 - 42 in	6 pcs.		6	36 - 41 in	

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink (refer to page A-5 for details).



These marks indicate that a product has successfully passed IP65-level testing, which is carried out by the independent German certification organization TÜV Rheinland.



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:

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

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

Parallelism:

2 µm/ 0.00008 in for models up to 75 mm / 3 in

3 µm/ 0.00012 in for models up to 150 mm / 6 in

(2+R/100) µm for models over 150 mm,

R= max. range (mm)

Fraction rounded up

±[0.00008 in + .00004 (R/4)] in For models over 6 in

R= max. range (inch)

Fraction rounded up

Accuracy:

±(4+R/75) µm, R = max. range (mm)

±[0.00016 in + 0.00004 (R/3)] in R = max. range (inch)

(excluding quantizing error for digital models)

Fraction rounded up

Excluding quantizing error

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, 340-3XX)

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 300 mm (12 in))

Spanner (200154), 1 pc

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

Optional Accessories

Connecting cables for

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

Wireless data output **U-WAVE**™

U-WAVE-TM **264-622** (IP67 type)

264-623 (Buzzer type)

Connecting unit for U-WAVE-TM

02AZF310 (IP67 type)

Refer to page A-15 for details

USB Input Tool Direct

USB-ITN-B (2 m): **06AFM380B**

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

02AZD790B

For foot switch: **02AZE140B**

Connecting cables for

340-5XX, **340-7XX**

Recommended cables:

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

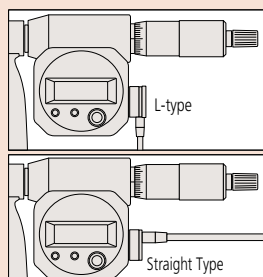
1 m: **04AZB512**

2 m: **04AZB513**

Straight type (may interfere with operating the thimble.)

1 m: **959149**

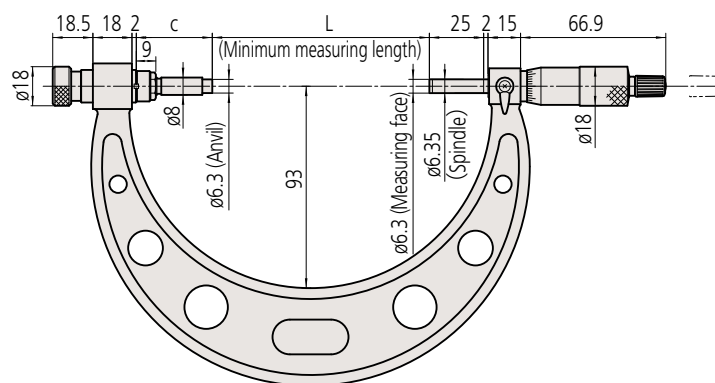
2 m: **959150**



DIMENSIONS

104-135A

Unit: mm

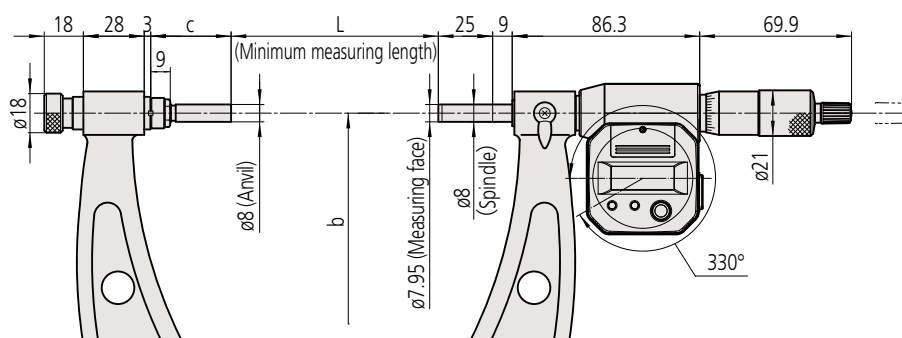


Interchangeable Anvil

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

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

Over 400 mm up to 1000 mm



		L : Range (mm)					b
Range	300 to 400 mm models	300 - 325	325 - 350	350 - 375	375 - 400		224
Range	400 to 500 mm models	400 - 425	425 - 450	450 - 475	475 - 500		273
Range	500 to 600 mm models	500 - 525	525 - 550	550 - 575	575 - 600		332
Range	600 to 700 mm models	600 - 625	625 - 650	650 - 675	675 - 700		382
Range	700 to 800 mm models	700 - 725	725 - 750	750 - 775	775 - 800		430
Range	800 to 900 mm models	800 - 825	825 - 850	850 - 875	875 - 900		480
Range	900 to 1000 mm models	900 - 925	925 - 950	950 - 975	975 - 1000		530
Order No.		304001	304002	304003	304004		
c: Overall (mm)		87	62	37	12		
Interchangeable anvil		M3	M4	M5	M6		