

Micrometer

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

Point Micrometers SERIES 342, 112, 142

- Pointed spindle and anvil for measuring the web thickness of drills, small grooves, keyways and other hard-to-reach features.
- The measuring points (carbide tipped) have approximately 0.3 mm radius.

- **Series 342:** IP65 Digimatic micrometers.
- Equipped with Ratchet Stop for constant measuring force.

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

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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.



342-251-30



112-201



SPECIFICATIONS

Metric				
Order No.	Range (mm)	Resolution (mm)	Accuracy* (µm)	Point
Digimatic (LCD) (With carbide tip)				
342-251-30	0 - 25	0.001	±2	15°
342-252-30	25 - 50			
342-253-30	50 - 75			
342-254-30*2	75 - 100		±3	
342-261-30	0 - 25		±2	30°
342-262-30	25 - 50			
342-263-30	50 - 75			
342-264-30*2	75 - 100	±3		

*1 Excluding quantizing error of ±1 count

*2 Made to order.

Inch/Metric				
Order No.	Range (in)	Resolution	Accuracy* (in)	Point
Digimatic (LCD) (With carbide tip)				
342-351-30	0 - 1	0.00005 in/ 0.001 mm	±0.0001	15°
342-352-30	1 - 2			
342-353-30	2 - 3			
342-354-30	3 - 4		±0.00015	
342-361-30	0 - 1		±0.0001	30°
342-362-30	1 - 2			
342-363-30	2 - 3			
342-364-30	3 - 4	±0.00015		

* Excluding quantizing error of ±1 count

Metric						
Order No.	Range (mm)	Graduation (mm)	Accuracy (µm)	Point		
Analog						
112-153	0 - 25	0.01	±3	15°		
112-154	25 - 50					
112-155	50 - 75		±4	30°		
112-156	75 - 100					
112-201	0 - 25	0.01	±3	30°		
112-202	25 - 50					
112-203	50 - 75		±4	15°		
112-204	75 - 100					
Analog (With carbide tip)						
112-165	0 - 25	0.01	±3	15°		
112-166	25 - 50					
112-167	50 - 75				±4	30°
112-168	75 - 100					
112-213	0 - 25		±3	30°		
112-214	25 - 50					
112-215	50 - 75					
112-216	75 - 100					
Mechanical counter model						
142-153	0 - 25		±3	15°		
142-201				30°		

Inch				
Order No.	Range (in)	Graduation (in)	Accuracy (in)	Point
Analog				
112-177	0 - 1	0.001	±0.00015	15°
112-178	1 - 2			
112-225	0 - 1		±0.00015	30°
112-226	1 - 2			
Analog (With carbide tip)				
112-189	0 - 1	0.001	±0.00015	15°
112-190	1 - 2			
112-191	2 - 3		±0.00015	30°
112-237	0 - 1			
112-238	1 - 2			
Mechanical counter model				
142-177	0 - 1		±0.00015	15°
142-225				30°

Note: For functional details of series 342 refer to page B-8.
Optional connecting cable is available only for water-proof type (Digimatic model).

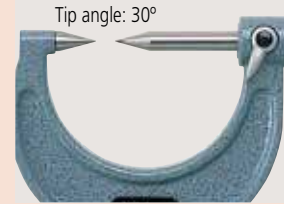
IP Codes (series 342)

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

- Battery for series 342 **SR44** (1 pc.), **938882**, for initial operational checks (standard accessory)
- Battery life: Approx. 2.4 years under normal use (for series 342)
- Length standard: Electromagnetic rotary sensor (for series 342)
- Standard accessories: Reference bar, 1 pc. (except for measuring range 0-25 mm (0-1 in) models) Spanner (**301336**), 1 pc.

Optional Accessories

- Connecting cables for series 342
 - 1 m: **05CZA662**
 - 2 m: **05CZA663**
- USB Input Tool Direct **USB-ITN-B** (2 m): **06AFM380B**
- **U-WAVE-T** dedicated connection cable 160 mm: **02AZD790B**
For foot switch: **02AZE140B**
Refer to page A-25 for details.

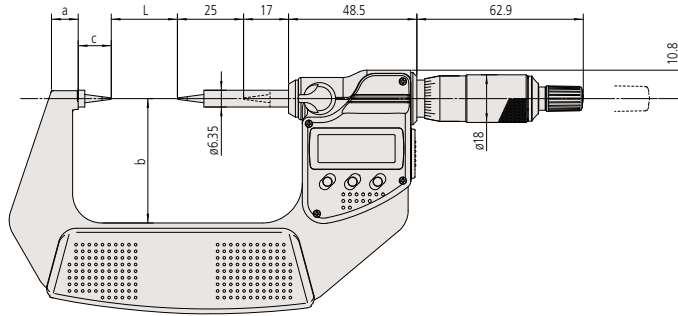
Wireless Data Output **U-WAVE™**

- **U-WAVE-TM 264-622** (IP67 type)
- **264-623** (Buzzer type)
- Connecting unit for **U-WAVE-TM 02AZF310** (IP67/buzzer type common specification)
Refer to page A-15 for details.

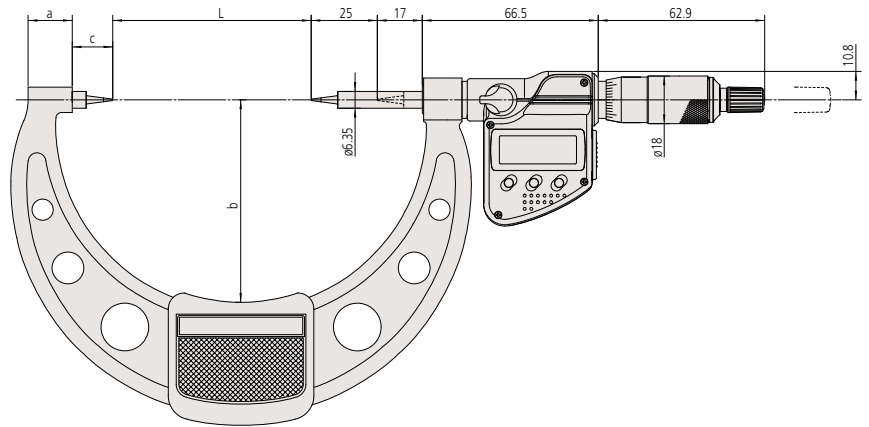
DIMENSIONS

Unit: mm

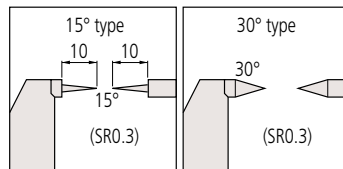
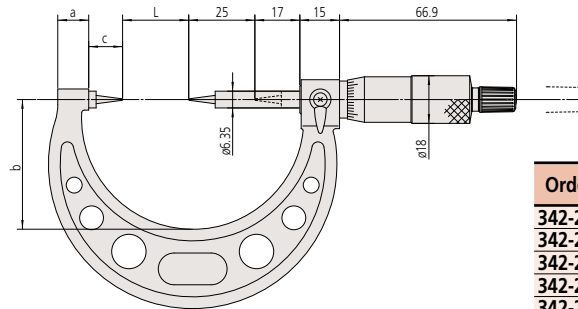
Digimatic models up to 75 mm measuring range



Digimatic models over 75 mm measuring range



Analog models measuring range



Order No.	L	a	b	c	Frame thickness*1
342-251-30	0	7.3	32.5		(11.2)
342-261-30					(12.8)
342-252-30	25	10.1	47	12.5	(12.8)
342-262-30					(12.8)
342-253-30	50	11.5	60		(20.8)
342-263-30					(20.8)
342-254-30	75	16.7	76	15.3	(9)
342-264-30					(10)
112-153	0	10	38		(11)
112-154	25	12	49	12.5	(11)
112-155	50	14	60		(13)
112-156	75	16.7	79	15.3	

*1 Digimatic type: thickness over heat shield