

Micrometer

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

Point Micrometers SERIES 342, 112, 142

MeasurLink® ENABLED
Data Management Software by Mitutoyo

- Measures trough diameters, such as drill web diameters.
- The measuring points (carbide tipped) have approximately 0.3 mm radius.
- Series 342:** IP65 Digimatic micrometers.
- Equipped with Ratchet Stop for constant measuring force.



342-251-30



112-201

SPECIFICATIONS

Metric				
Order No.	Range (mm)	Resolution (mm)	Maximum permissible error J_{MPE} (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		±3	15°
342-254-30*	75 - 100			
342-261-30	0 - 25	0.001	±2	30°
342-262-30	25 - 50			
342-263-30	50 - 75		±3	30°
342-264-30*	75 - 100			

* Made to order.

Metric				
Order No.	Range (mm)	Graduation (mm)	Maximum permissible error J_{MPE} (μm)	Point
Analog				
112-153	0 - 25	0.01	±3	15°
112-154	25 - 50			
112-155	50 - 75		±4	15°
112-156	75 - 100			
112-201	0 - 25		±3	30°
112-202	25 - 50			
112-203	50 - 75			
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	15°
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°

Note: For functional details of series 342 refer to page B-8.

Optional connecting cable is available only for water-proof type (Digimatic model).

Inch / Metric				
Order No.	Range (in)	Resolution	Maximum permissible error J_{MPE} (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		±0.00015	15°
342-354-30	3 - 4			
342-361-30	0 - 1	0.00005 in / 0.001 mm	±0.0001	30°
342-362-30	1 - 2			
342-363-30	2 - 3		±0.00015	30°
342-364-30	3 - 4			

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

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.



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.



Tip angle: 15°



Tip angle: 30°

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 to 25 mm (0 to 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-27 for details.

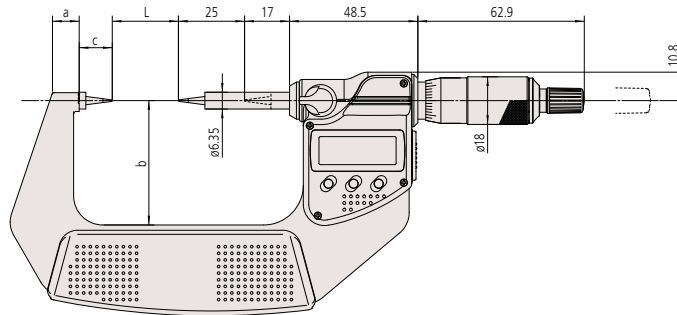
Wireless Data Output U-WAVE™

- U-WAVE-TM 264-622 (IP67 type)
264-623 (Buzzer type)
- U-WAVE-TMB Transmitter
Mitutoyo Bluetooth® U-WAVE
264-626 (IP type)
264-627 (Buzzer type)
Refer to page A-16 for details.
- Connecting unit for U-WAVE-TM/TMB
02AZF310 (IP67/buzzer type common specification)
Refer to pages A-16 and A-18 for details.

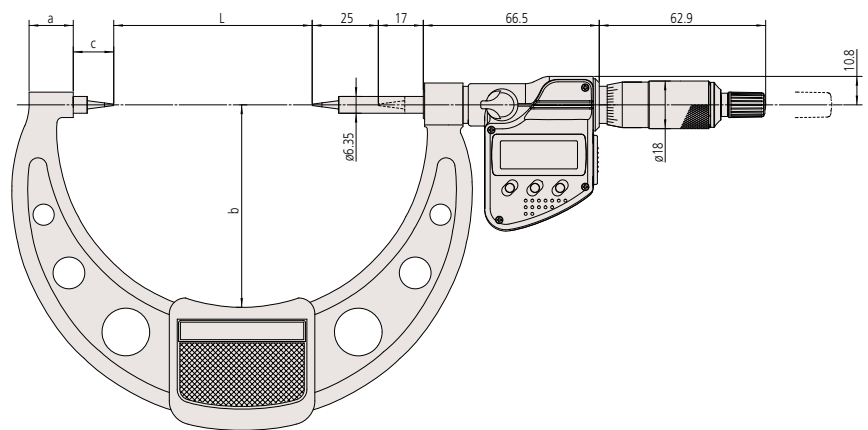
DIMENSIONS

Unit: mm

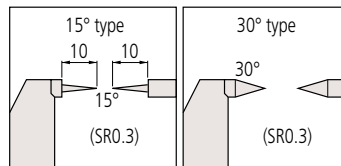
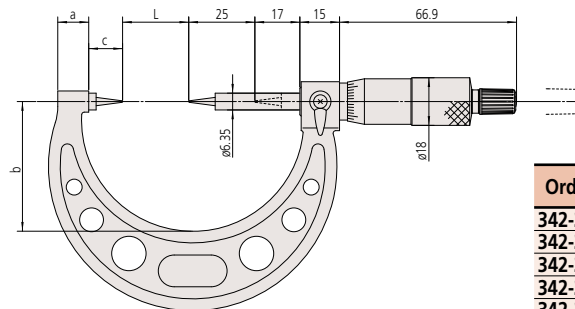
Digimatic models up to 75 mm measuring range



Digimatic models over 75 mm measuring range



Analog models measuring range



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

* Digimatic type: thickness over heat shield