

Micrometer

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

Spline Micrometers SERIES 331, 111, 131

- The anvil and spindle are of small diameter for measuring splined shafts, slots and keyways.
- IP65 water/dust protection (series 331).
- Measuring faces: Carbide.
- Equipped with Ratchet Stop for constant measuring force.

MeasurLink® ENABLED
Data Management Software by Mitutoyo



331-251-30



111-115

SPECIFICATIONS

Metric					
Order No.	Range	Resolution	Accuracy*	Remarks	
Digimatic (LCD)					
331-251-30	0 - 25 mm	0.001 mm	±2 μm	Type A	
331-252-30	25 - 50 mm				
331-253-30	50 - 75 mm				
331-254-30	75 - 100 mm		±3 μm	Type B	
331-261-30	0 - 25 mm		±2 μm		
331-262-30	25 - 50 mm				
331-263-30	50 - 75 mm		±3 μm		
331-264-30	75 - 100 mm				

* Excluding quantizing error of ±1 count

Inch/Metric					
Order No.	Range	Resolution	Accuracy*	Remarks	
Digimatic (LCD)					
331-351-30	0 - 1 in	0.00005 in/ 0.001 mm	±0.0001 in	Type A	
331-352-30	1 - 2 in				
331-353-30	2 - 3 in				
331-354-30	3 - 4 in		±0.00015 in	Type B	
331-361-30	0 - 1 in		±0.0001 in		
331-362-30	1 - 2 in				
331-363-30	2 - 3 in		±0.00015 in		
331-364-30	3 - 4 in				

* Excluding quantizing error of ±1 count

Metric				
Order No.	Range	Graduation	Accuracy	Remarks
Analog				
111-215	0 - 25 mm	0.01 mm	±3 µm	Type B
111-115	0 - 25 mm			Type A
111-116	25 - 50 mm			
111-117	50 - 75 mm			
111-118	75 - 100 mm			
111-119	100 - 125 mm			
111-120	125 - 150 mm			
111-121	150 - 175 mm			
111-122	175 - 200 mm			
111-123	200 - 225 mm			
111-124	225 - 250 mm	±5 µm		
111-125	250 - 275 mm	±6 µm		
111-126	270 - 300 mm			
Mechanical counter model				
131-115	0 - 25 mm		±3 µm	Type A

Note: For the function of series 331, refer to page B-8.
Also, other than the waterproof type only the connection cable (option) cannot be used.

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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 Rheinland.



(Refer to page X for details.)

IP Codes (series 331)

Level 6: Dust-proof.

No ingress of dust allowed.

Level 5: Protected against water jets.

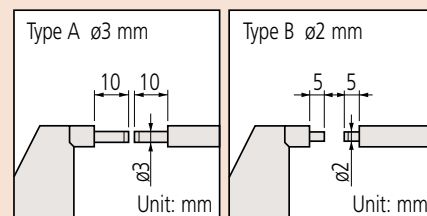
Water projected in jets against the enclosure from any direction shall have no harmful effects.

Technical Data

Flatness: 0.3 µm / 0.000012 in

Parallelism: (2+R/100) µm, R = max. range (mm)

[0.00008 in + 0.00004(R/4)] in R = max range (inch)
fraction rounded down



Battery for Series 331

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

Battery life: Approx. 2.4 years under normal use (for series 331)

Length standard: Electromagnetic rotary sensor (for series 331)

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 331

1 m: **05CZA662**

2 m: **05CZA663**

USB Input Tool Direct

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

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)

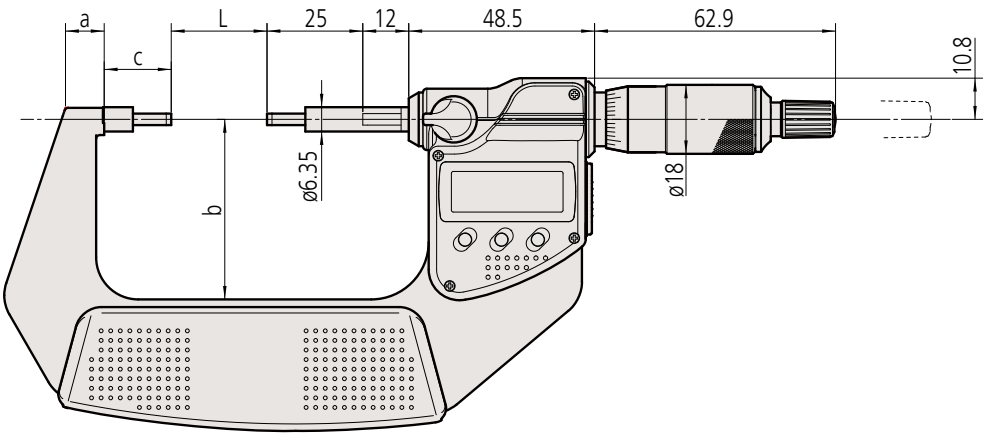
Refer to page A-15 for details

DIMENSIONS

Digital Models

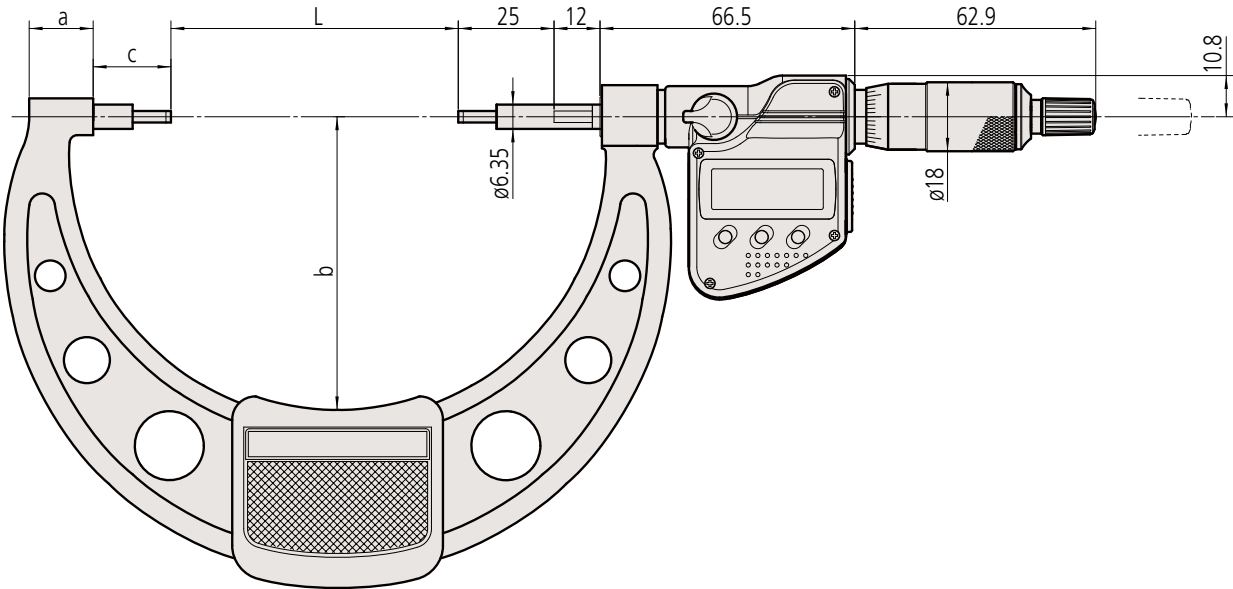
Models up to 75 mm measuring range

Unit: mm



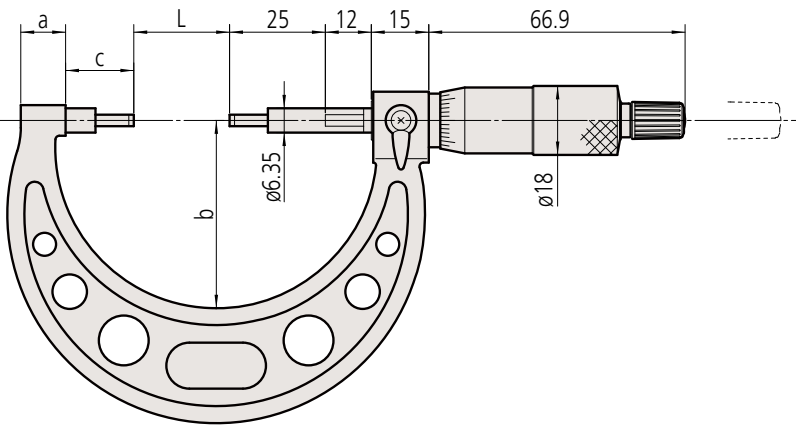
Digital Models

Models over 75 mm measuring range



Analog Models

Models up to 300 mm measuring range



Order No.	L	a	b	c
331-251-30	0	7.3	32.5	17.5
331-261-30	25	10.1	47	
331-252-30	50	11.5	60	
331-262-30	75	16.7	76	
331-253-30	0	10	38	17.5
331-263-30	25	12	49	
331-254-30	50	14	60	
331-264-30	75	16.7	76	
111-215	0	10	38	17.5
111-115	25	12	49	
111-116	50	14	60	
111-117	75	16.7	79	
111-118	100	18.8	94	20.7
111-119	125	19.1	106	21.1
111-120	150	18.2	118	21.3
111-121	175	16.8	130	21.7
111-122	200	18	143	20.5
111-123	225		156	21.5
111-124	250		169	
111-125	275		181	