

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 (mm)	Resolution (mm)	Accuracy* (μm)	Remarks
Digimatic (LCD)				
331-251-30	0 - 25	0.001	±2	Type A
331-252-30	25 - 50			
331-253-30	50 - 75			
331-254-30 ⁺²	75 - 100		±3	Type B
331-261-30	0 - 25			
331-262-30	25 - 50			
331-263-30	50 - 75		±2	Type B
331-264-30 ⁺²	75 - 100			

*1 For functional details of **series 331** refer to page B-8.
Optional connecting cable is available only for water-proof type (Digimatic model).

*2 Made to order.

Metric				
Order No.	Range (mm)	Graduation (mm)	Accuracy (μm)	Remarks
Analog				
111-215	0 - 25	0.01	±3	Type B
111-115	0 - 25			Type A
111-116	25 - 50			
111-117	50 - 75			
111-118	75 - 100			
111-119	100 - 125		±4	
111-120	125 - 150		±5	
111-121	150 - 175			
111-122	175 - 200			
111-123	200 - 225			
111-124	225 - 250			
111-125	250 - 275		±6	
111-126	270 - 300			
Mechanical counter model				
131-115	0 - 25		±3	Type A

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

* Excluding quantizing error of ±1 count

Inch				
Order No.	Range (in)	Graduation (in)	Accuracy (in)	Remarks
Analog				
111-166	0 - 1	0.0001	±0.00015	Type A

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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.



IP Codes (series 331)

Level 6: Dust-proof.

No ingress of dust allowed.

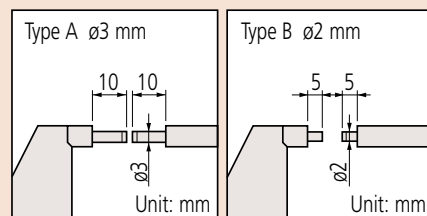
Level 5: Protected against water jets.

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



Technical Data

- 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**
- **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.