

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.

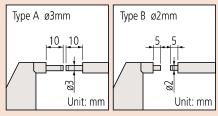
No ingress of dust allowed. Level 5: Protected against water jets.

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

#### **Technical Data**

Flatness: 0.3µm/ .000012" Parallelism: (2+R/100)µm, R = max. range (mm) [.00008" + .00004(R/4)]" 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 0-25mm (0-1") models)
Spanner (301336), 1 pc

#### **Optional accessories**

Connecting cables for series 331 1m: **05CZA662** 2m: 05CZA663 **USB Input Tool Direct** USB-ITN-B (2m): **06ADV380B** 

Connecting cables for **U-WAVE-T** 

**02AZD790B** 160mm For foot switch: 02AZE140B Refer to page B-68 for details.

# **Spline Micrometers SERIES 331, 111, 131**

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





#### **SPECIFICATIONS**

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

Inch/Metric	ı					
Order No.	Range	Resolution	Accuracy*	Remarks		
Digimatic (LCD)	Digimatic (LCD)					
331-351-30	0 -1"					
331-352-30	1" - 2"	.00005"/ 0.001mm	±.0001"	Tuno A		
331-353-30	2" - 3"			Type A		
331-354-30	3" - 4"		±.00015"			
331-361-30	0 -1"					
331-362-30	1" - 2"		±.0001"	Typo P		
331-363-30	2" - 3"			Type B		
331-364-30	3" - 4"		±.00015"			

<sup>\*</sup> Excluding quantizing error

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

Inch	ı			
Order No.	Range	Graduation	Accuracy	Remarks
Analog				
111-166	0 -1"	.0001"	±.00015"	Type A



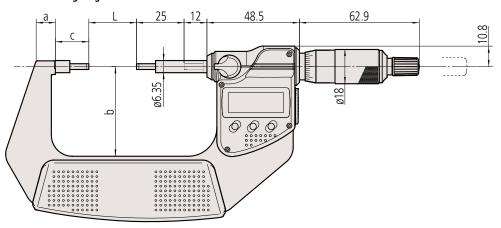
# Micrometer

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

# **DIMENSIONS**

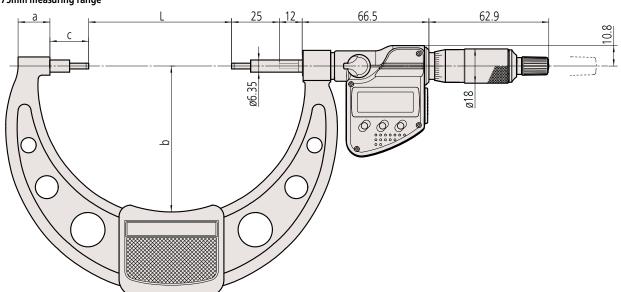


Models up to 75mm measuring range



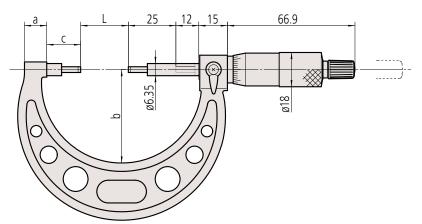
# **Digital Models**

Models over 75mm measuring range



# **Analog Models**

Models up to 300mm measuring range



Order No.		а	b	С
331-251-30	0	u	D	C
	-	7.3	32.5	
331-261-30	0			
331-252-30	25	10.1	47	17.5
331-262-30	25	10.1		
331-253-30	50	11.5	60	
331-263-30	50	11.5	00	
331-254-30	75	16.7	76	20.3
331-264-30	75	10.7		
111-215	0	10	38	17.5
111-115	0	10		
111-116	25	12	49	
111-117	50	14	60	
111-118	75	16.7	79	20.3
111-119	100	18.8	94	20.7
111-120	125	19.1	106	21.1
111-121	150	18.2	118	21.3
111-122	175	16.8	130	21.7
111-123	200	18	143	20.5
111-124	225		156	21.5
111-125	250		169	
111-126	275		181	

