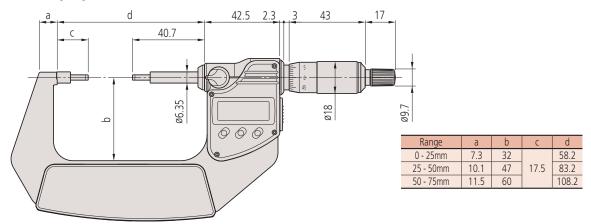
# Micrometer

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

## **DIMENSIONS**

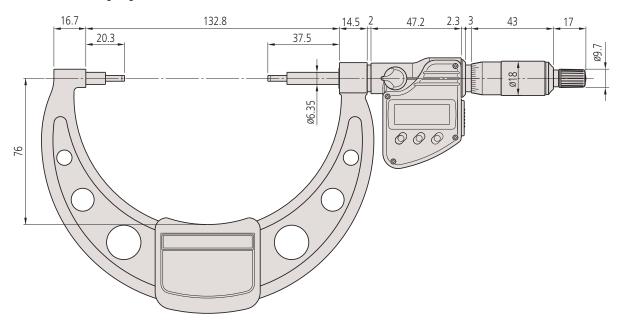
Digital Models Unit: mm

Models up to 75mm measuring range



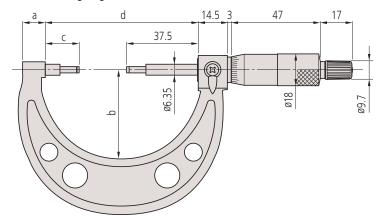
## **Digital Models**

Models over 75mm measuring range



## **Analog Models**

Models up to 300mm measuring range



Range	a	b	С	d
0 - 25mm	10	38		55
25 - 50mm	12	49	17.5	80
50 - 75mm	14	60		105
75 - 100mm	16.7	79	20.3	132.8
100 - 125mm	18.8	94	20.7	158.2
125 - 150mm	19.1	106	21.1	183.6
150 - 175mm	18.2	118	21.3	208.8
175 - 200mm	16.8	130	21.7	234.2
200-225mm	18	181		334
225-250mm		169	21.5	309
250-275mm		156		284
275-300mm		143	20.5	258





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 IX for details.)

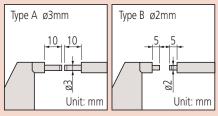
IP Codes (331 series)

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)

#### **Optional accessories**

Connecting cables for **331 series** 

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 A-21 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	ı				
Order No.	Range	Resolution	Accuracy*	Remarks	
Digimatic (LCI	Digimatic (LCD)				
331-251	0 - 25mm				
331-252	25 - 50mm	0.001mm	±2µm	Tuno A	
331-253	50 - 75mm			Type A	
331-254	75 - 100mm		±3µm		
331-261	0 - 25mm				
331-262	25 - 50mm		±2µm	Type B	
331-263	50 - 75mm			Турев	
331-264	75 - 100mm		±3µm		

* Excluding	quantizing	erro
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Inch/Metric				
Order No.	Range	Resolution	Accuracy*	Remarks
Digimatic (LCD)				
331-351	0 -1"			
331-352	1" - 2"		±.0001"	Tuno A
331-353	2" - 3"			Type A
331-354	3" - 4"	.00005"/ 0.001mm	±.00015"	
331-361	0 -1"			
331-362	1" - 2"		±.0001"	Typo P
331-363	2" - 3"			Type B
331-364	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		ı 2um	
111-116	25 - 50mm		±3µm	
111-117	50 - 75mm			
111-118	75 - 100mm			
111-119	100 - 125mm		±4µm	
111-120	125 - 150mm	0.01mm		Type A
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

