

# Micrometer

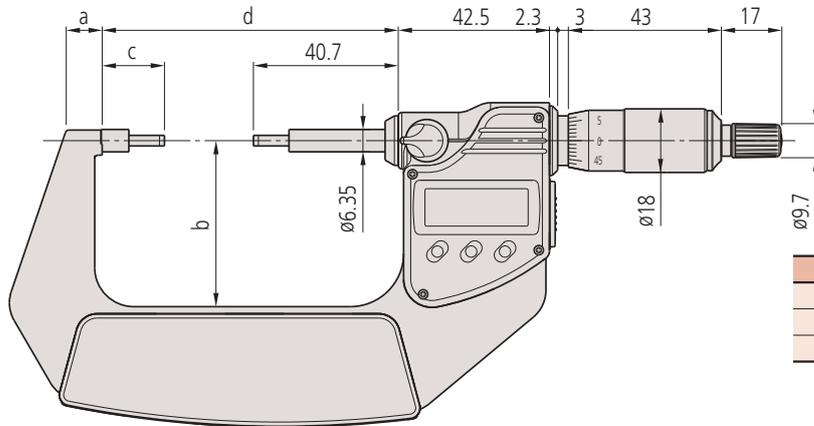
The origin of Mitutoyo's trustworthy brand of small tool instruments

## DIMENSIONS

### Digital Models

Models up to 75mm measuring range

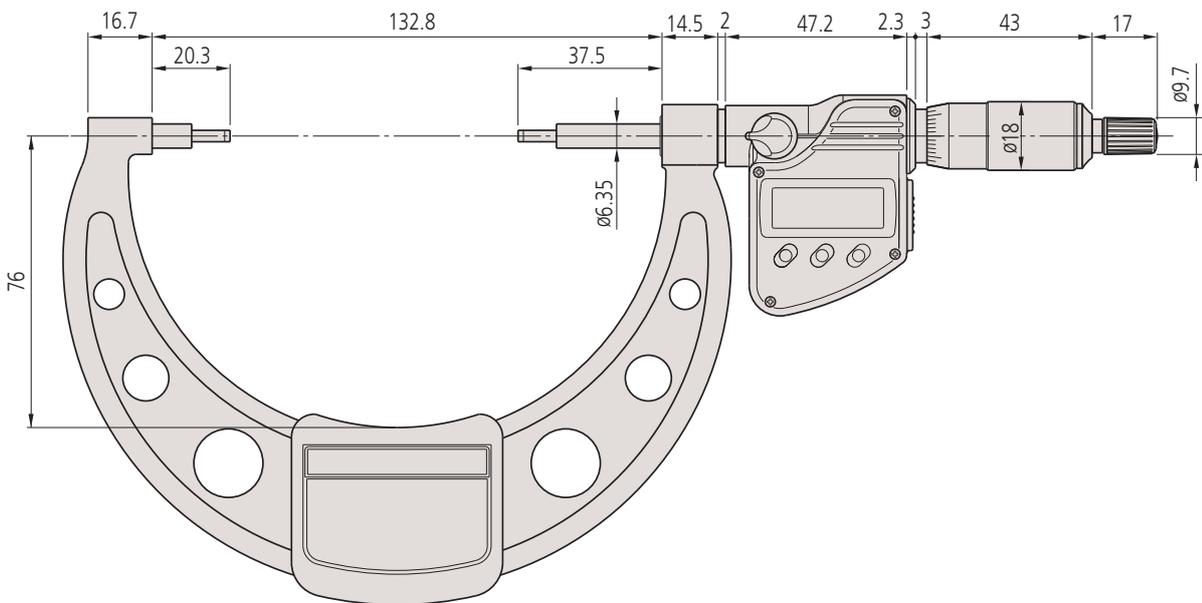
Unit: mm



Range	a	b	c	d
0 - 25mm	7.3	32	17.5	58.2
25 - 50mm	10.1	47		83.2
50 - 75mm	11.5	60		108.2

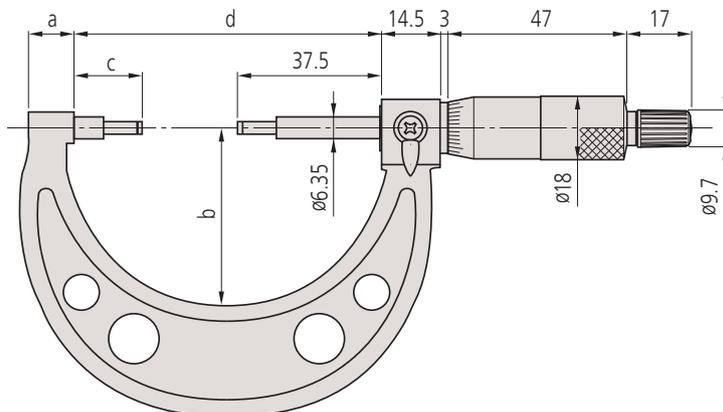
### Digital Models

Models over 75mm measuring range



### Analog Models

Models up to 300mm measuring range



Range	a	b	c	d
0 - 25mm	10	38	17.5	55
25 - 50mm	12	49		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	21.5	334
225-250mm		169		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.

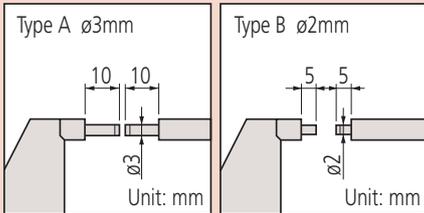
Level 5: Protected against water jets.

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



331-251



111-115

### SPECIFICATIONS

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

\* Excluding quantizing error

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

\* Excluding quantizing error

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

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