

Micrometer

Spline Micrometers SERIES 331

- The anvil and spindle have a small diameter for measuring splined shafts, slots and keyways.
- IP65 water/dust protection.
- Measuring faces: Carbide tipped
- Equipped with Ratchet Stop for constant measuring force.



331-251-30

SPECIFICATIONS

Metric							
Code No.	Range (mm)	Resolution (mm)	Maximum permissible error J/MPe (μm)	Flatness (μm)	Parallelism (μm)	Measuring face	
Digimatic (LCD)							
331-251-30	0 - 25	0.001	±2	0.3	2	Type A	
331-252-30	25 - 50						
331-253-30	50 - 75		±3		3	Type B	
331-254-30*	75 - 100						
331-261-30	0 - 25		±2		2	Type B	
331-262-30	25 - 50						
331-263-30	50 - 75		±3		3		
331-264-30*	75 - 100						

Inch / Metric							
Code No.	Range (in)	Resolution	Maximum permissible error <i>J_{MPE}</i> (in)	Flatness (in)	Parallelism (in)	Measuring face	
Digimatic (LCD)							
331-351-30	0 - 1	0.00005 in/ 0.001 mm	±0.0001	0.000012	0.00008	Type A	
331-352-30	1 - 2						
331-353-30	2 - 3		±0.00015		0.00012	Type B	
331-354-30	3 - 4						
331-361-30	0 - 1		±0.0001		0.00008	Type B	
331-362-30	1 - 2						
331-363-30	2 - 3		±0.00015		0.00012		
331-364-30	3 - 4						

- Power source: SR44 battery (1 pc.), **938882** included as standard (for operational checks)
- Battery life: Approx. 2.4 years under normal use
- Position detection method: Electromagnetic rotary sensor
- Standard accessories: Setting standard, 1 pc. (except for measuring range 0 to 25 mm (0 to 1 in) models), Spanner (**301336**), 1 pc.
- * Made to order.

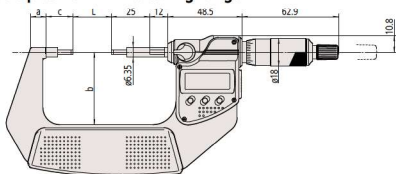
Note: For functional details, refer to page 02-7.

Optional connection cable is available only for water-proof type (Digimatic model).

DIMENSIONS

Digimatic models

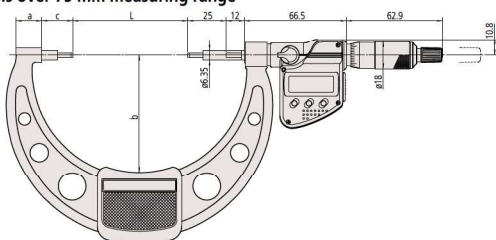
Models up to 75 mm measuring range



Unit: mm

Digimatic models

Models over 75 mm measuring range



Code 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	
331-253-30	75	16.7	76	
331-262-30				
331-263-30				
331-254-30				
331-264-30				

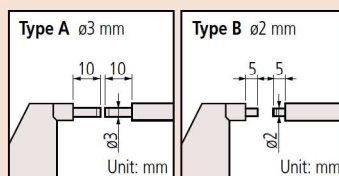
MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

U-WAVE^{fit}



Dust- and
Water-
Protected
www.tuv.com
ID 000040191

Measurement example



Optional Accessories

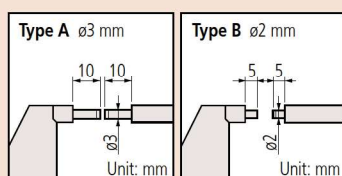
Code No.	Type	Description
264-020	—	USB Input Tool Series USB Keyboard Signal Conversion Type IT-020U
05CZA662	B	Connection cable (1 m)
05CZA663	B	Connection cable (2 m)
06AFM380B	B	USB Input Tool Direct (2 m)
02AZD730G	IP67	U-WAVE-T
02AZD880G	Buzzer	U-WAVE-T
02AZE200	—	U-WAVE-T mounting bracket
02AZD790B	B	Connection cable for U-WAVE-T (160 mm)
02AZE140B	B	Connection cable for U-WAVE-T For foot switch
264-622	IP67	U-WAVE-TM
264-623	Buzzer	U-WAVE-TM
264-626	IP67	U-WAVE-TMB
264-627	Buzzer	U-WAVE-TMB
02AZF310	IP67	Connecting unit for U-WAVE-TM/TMB

Spline Micrometers SERIES 111, 131

- The anvil and spindle have a small diameter for measuring splined shafts, slots and keyways.
- Measuring faces: Carbide tipped
- Equipped with Ratchet Stop for constant measuring force.



111-115



SPECIFICATIONS

Metric								
Code No.	Range (mm)	Graduation (mm)	Maximum permissible error J_{MPE} (μm)	Flatness (μm)	Parallelism (μm)	Measuring face		
Analog								
111-215	0 - 25	0.01	±3	0.3	2	Type B		
111-115	0 - 25					Type A		
111-116	25 - 50							
111-117	50 - 75							
111-118	75 - 100		±4		3			
111-119	100 - 125							
111-120	125 - 150		±5		4			
111-121	150 - 175							
111-122	175 - 200		±6		5			
111-123	200 - 225							
111-124	225 - 250							
111-125	250 - 275							
111-126	270 - 300							
Mechanical counter model								
131-115	0 - 25	0.01	±3	0.3	2	Type A		
Inch								
Code No.	Range (in)	Graduation (in)	Maximum permissible error J_{MPE} (in)	Flatness (in)	Parallelism (in)	Measuring face		
Analog								
111-166	0 - 1	0.0001	±0.00015	0.000012	0.00008	Type A		

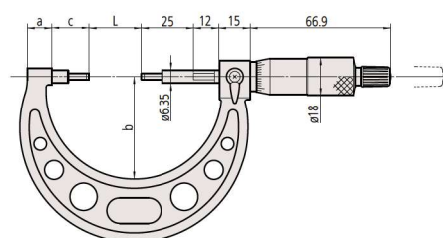
• Standard accessories: Setting standard, 1 pc. (except for measuring range 0 to 25 mm (0 to 1 in) models), Spanner (301336), 1 pc.

DIMENSIONS

Analog models

Unit: mm

Models up to 300 mm measuring range



Code No.	L	a	b	c
111-215	0	10	38	17.5
111-115				
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	