

# 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.
- Equipped with Ratchet Stop for constant measuring force.



### SPECIFICATIONS

#### Metric

Order No.	Range (mm)	Resolution (mm)	Maximum permissible error $J_{MPE}$ ( $\mu$ m)	Flatness ( $\mu$ m)	Parallelism ( $\mu$ m)	Remarks	
Digimatic (LCD)							
<b>331-251-30</b>	0 - 25	0.001	$\pm 2$	0.3	2	Type A	
<b>331-252-30</b>	25 - 50						
<b>331-253-30</b>	50 - 75						
<b>331-254-30*</b>	75 - 100		$\pm 3$				
<b>331-261-30</b>	0 - 25		$\pm 2$		2	3	Type B
<b>331-262-30</b>	25 - 50						
<b>331-263-30</b>	50 - 75						
<b>331-264-30*</b>	75 - 100	$\pm 3$					

#### Inch / Metric

Order No.	Range (in)	Resolution	Maximum permissible error $J_{MPE}$ (in)	Flatness (in)	Parallelism (in)	Remarks	
Digimatic (LCD)							
<b>331-351-30</b>	0 - 1	0.00005 in/ 0.001 mm	$\pm 0.0001$	0.000012	0.00008	Type A	
<b>331-352-30</b>	1 - 2						
<b>331-353-30</b>	2 - 3						
<b>331-354-30</b>	3 - 4		$\pm 0.00015$				
<b>331-361-30</b>	0 - 1		$\pm 0.0001$		2	3	Type B
<b>331-362-30</b>	1 - 2						
<b>331-363-30</b>	2 - 3						
<b>331-364-30</b>	3 - 4	$\pm 0.00015$					

- Battery: SR44 (1 pc.), **938882**, for initial operational checks (standard accessory)
- Battery life: Approx. 2.4 years under normal use
- Length standard: 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.

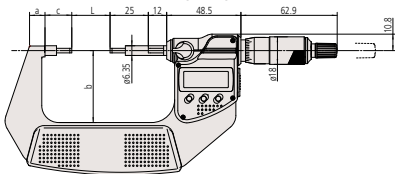
Note: For functional details, refer to page B-7.

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

### DIMENSIONS

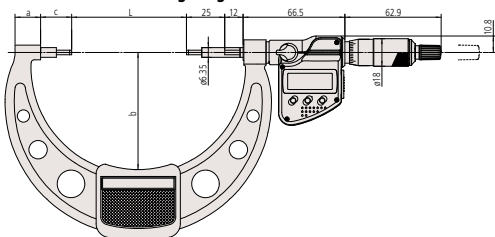
#### Digimatic models

Models up to 75 mm measuring range



#### Digimatic models

Models over 75 mm measuring range



Order No.	L	a	b	c
<b>331-251-30</b>	0	7.3	32.5	17.5
<b>331-261-30</b>	25	10.1	47	
<b>331-252-30</b>	50	11.5	60	20.3
<b>331-253-30</b>	75	16.7	76	

MeasurLink<sup>®</sup> ENABLED  
Data Management Software by Mitutoyo

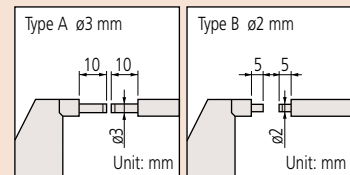
U-WAVE<sup>fit</sup>

IP65

TÜV Rheinland  
CERTIFIED

Dust- and  
Water-  
Protected  
www.tuv.com  
ID 000040791

### Measurement example



### Optional Accessories

Order No.	Type	Description
<b>05CZA662</b>	B	Connecting cable (1 m)
<b>05CZA663</b>	B	Connecting cable (2 m)
<b>06AFM380B</b>	B	USB Input Tool Direct (2 m)
<b>02AZD790B</b>	B	Connecting cables for <b>U-WAVE-T</b> (160 mm)
<b>02AZE140B</b>	B	Connecting cables for <b>U-WAVE-T</b> For foot switch
<b>264-622</b>	IP67	<b>U-WAVE-TM</b>
<b>264-623</b>	Buzzer	<b>U-WAVE-TM</b>
<b>264-626</b>	IP67	<b>U-WAVE-TMB</b>
<b>264-627</b>	Buzzer	<b>U-WAVE-TMB</b>
<b>02AZF310</b>	IP67/ buzzer	Connecting unit for <b>U-WAVE-TM/TMB</b>