

Micrometer

Blade Micrometers

SERIES 422 — Non-Rotating Spindle Type

- The anvil and the spindle have a blade for measuring the groove diameter of shafts, keyways and other hard-to-reach areas.
- Carbide-tipped measuring faces are available.
- Non-rotating spindle type.
- Equipped with Ratchet Stop for constant measuring force.



SPECIFICATIONS

Metric						
Code No.	Range (mm)	Resolution (mm)	Maximum permissible error J_{MPE} (μm)	Parallelism (μm)	Remark	
Digimatic (LCD)						
422-230-30	0 - 25	0.001	±3	3	Type A	
422-231-30	25 - 50					
422-232-30	50 - 75					
422-233-30	75 - 100		±4	4	Type B	
422-260-30	0 - 25		±3	3		
422-261-30	25 - 50					
422-270-30	0 - 25			Type C		
422-271-30				Type D		

Inch / Metric						
Code No.	Range (in)	Resolution	Maximum permissible error J_{MPE} (in)	Parallelism (in)	Remark	
Digimatic (LCD)						
422-330-30	0 - 1	0.00005 in/ 0.001 mm	±0.00015	0.00015	Type A	
422-331-30	1 - 2					
422-332-30	2 - 3					
422-333-30	3 - 4		±0.0002	0.0002	Type B	
422-360-30	0 - 1		±0.00015	0.00015		
422-361-30	1 - 2					
422-370-30	0 - 1			Type C		
422-371-30				Type D		

Metric Quickmike type					
Code No.	Range (mm)	Resolution (mm)	Maximum permissible error J_{MPE} (μm)	Parallelism (μm)	Remark
Digimatic (LCD)					
422-411-20	0 - 30	0.001	±3	3	Type A
422-412-20	25 - 55				

Inch / Metric Quickmike type					
Code No.	Range (in)	Resolution	Maximum permissible error J_{MPE} (in)	Parallelism (in)	Remark
Digimatic (LCD)					
422-421-20	0 - 1.2	0.00005 in/ 0.001 mm	±0.00015	0.00015	Type A

- Power source: SR44 battery (1 pc.), **938882** included as standard (for operational checks)
- Battery life: Approx. 2.4 years under normal use (for **422-2XX, 3XX**)
Approx. 5 years under normal use (for **422-4XX**)
- Position detection method: Electromagnetic rotary sensor (for **422-2XX, 3XX**)
Electrostatic capacity absolute sensor (for **422-4XX**)
- Standard accessories: Setting standard, 1 pc. (except for measuring range 0 to 25 mm/0 to 30 mm (0 to 1 in/0 to 1.2 in) models), Spanner (**301336**), 1 pc. (for **422-2XX, 3XX**)

Note 1: For functional details, refer to page 02-7. Please note that these models are not water-proof.

Note 2: A heat shield is provided with Digimatic (LCD) as standard.

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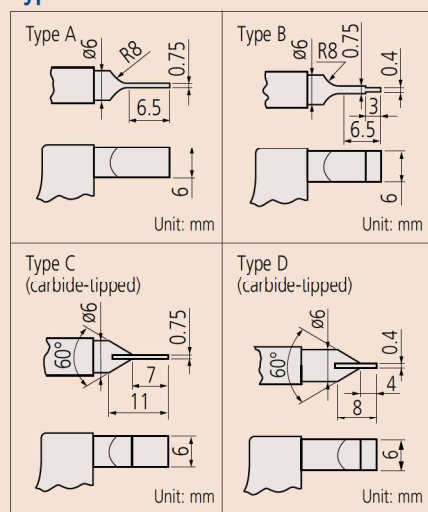
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Applicable models:
series 422 Quickmike type

Measurement example



Type and Dimensions

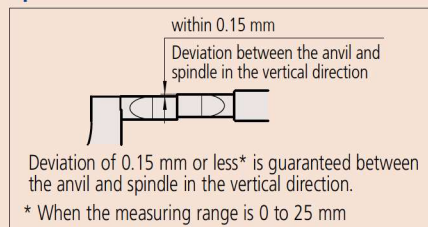


Optional Accessories

Code No.	Type	Description
05CZA662	B	Connection cable (1 m)
05CZA663	B	Connection cable (2 m)
06AFM380B	B	USB Input Tool Direct (2 m)
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*

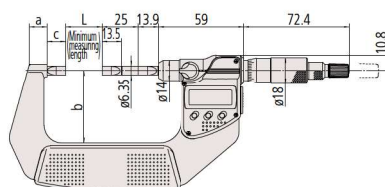
* Only series 422 (except for Quickmike type) can be attached.

Deviation Between the Anvil and Spindle in the Vertical Direction

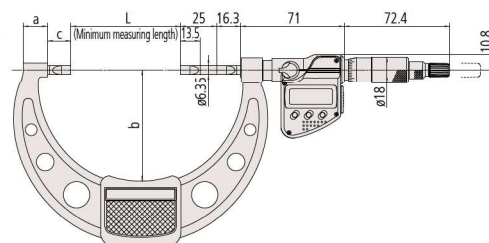


DIMENSIONS

Digimatic models up to 50 mm measuring range

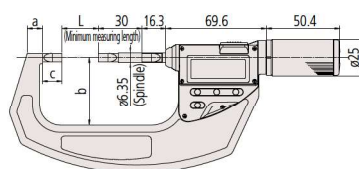


Digimatic models over 50 mm to 100 mm measuring range



Unit: mm

Quickmike type



Code No.	L	a	b	C
422-230-30	0	11	31	12.5
422-231-30	25	12.2	50	12.6
422-232-30	50	14.6	57	13
422-233-30	75	16.7	76	16
422-260-30	0	11	31	12.5
422-261-30	25	12.2	50	12.6
422-270-30	0	11	31	12.5
422-271-30		8.5	36	13.5
422-411-20	25	10.3	47	
422-412-20		10.3	47	13.5

Micrometer

Blade Micrometers
SERIES 122 — Non-Rotating Spindle Type

- The anvil and the spindle have a blade for measuring the groove diameter of shafts, keyways and other hard-to-reach areas.
- Non-rotating spindle type.
- Carbide-tipped measuring faces are available.
- Equipped with Ratchet Stop for constant measuring force.



SPECIFICATIONS

Metric					
Code No.	Range (mm)	Graduation (mm)	Maximum permissible error <i>JMPE</i> (μm)	Parallelism (μm)	Remark
Analog					
122-101-10	0 - 25	0.01	±3	3	Type A
122-102-10	25 - 50			3	
122-103-10	50 - 75		±4	4	
122-104-10	75 - 100			4	
122-105-10	100 - 125		±5	5	
122-106-10	125 - 150			5	
122-107-10	150 - 175		±6	6	
122-108-10	175 - 200			6	
122-109-10	200 - 225		±3	3	Type B
122-110-10	225 - 250			3	
122-115-10	250 - 275	0.01	±3	3	Type C
122-116-10	275 - 300				
122-111-10	0 - 25				
122-112-10	25 - 50				
Analog (With carbide tip)		0.01	±3	3	Type D
122-161-10	0 - 25				
122-162-10	25 - 50				
122-141-10	0 - 25				
122-142-10	25 - 50				
Inch					
Code No.	Range (in)	Graduation (in)	Maximum permissible error <i>JMPE</i> (in)	Parallelism (in)	Remark
Analog					
122-125-10	0 - 1	0.0001	±0.00015	0.00015	Type A
122-126-10	1 - 2			0.00015	
122-127-10	2 - 3		±0.0002	0.0002	
122-128-10	3 - 4			0.0002	
122-135-10	0 - 1		±0.00015	0.00015	Type B
122-151-10		Type D			

• Standard accessories: Setting standard, 1 pc. (except for measuring range 0 to 25 mm (0 to 1 in) models)
Spanner (301336), 1 pc.
Note: A heat shield is provided with 122-125-10, 122-135-10, 122-151-10 as standard.

DIMENSIONS

Unit: mm

Diagram showing dimensions for analog models up to 25 mm measuring range and over 25 mm to 300 mm measuring range.

Diagram labels: a, b, c, L, 25, 14.8, 15, 83.5, ø6.35, ø18.

Code No.	L	a	b	C
122-101-10	0	7.8	32	15
122-102-10	25	12.2	49	14.5
122-103-10	50	14.6	60	17.5
122-104-10	75	16.7	79	17.9
122-105-10	100	18.8	94	18.3
122-106-10	125	19.1	106	18.5
122-107-10	150	18.2	118	18.9
122-108-10	175	16.8	130	17.7
122-109-10	200	18	143	156
122-110-10	225		156	169
122-115-10	250		169	181
122-116-10	275		181	