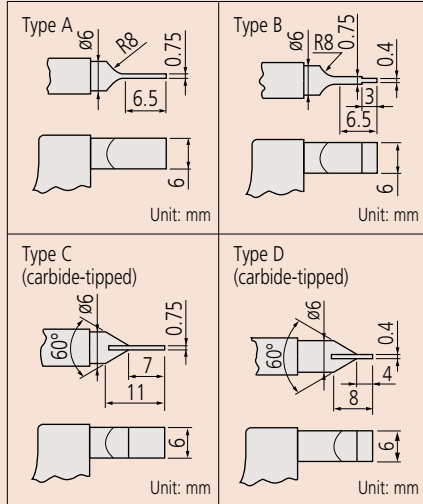


## Technical Data

Parallelism  
 3µm for models up to 75mm  
 .00015" for models up to 3"  
 (3+R/100)µm for models over 75mm  
 .0002" for models over 3"  
 R = max. range (mm)  
 fraction rounded up

## Type and Dimensions



## Battery for series 422

SR44 (1 pc), 938882, for initial operational checks (standard accessory)

Battery life: Approx. 2.4 years under normal use (for series 422-2XX, 3XX)  
 Approx. 1 year under normal use (for series 422-4XX)

Length standard: Electromagnetic rotary sensor (for series 422-2XX, 3XX)  
 Electrostatic capacity absolute sensor (for series 422-4XX)

Standard accessories: Reference bar, 1 pc (except for measuring range 0-25mm/0-30mm (0-1"/0-1.2") models)  
 Spanner (301336), 1 pc (for series 122-1XX, 422-2XX, 3XX)

## Optional accessories

Connecting cables for digital models

1m: **05CZA662**  
 2m: **05CZA663**

### USB Input Tool Direct

USB-ITN-B (2m): **06ADV380B**

Connecting cables for **U-WAVE-T** (digital models)

**02AZD790B** (160mm)

For foot switch: **02AZE140B**

Connecting cables for Quickmike type

1m: **937387**

2m: **965013**

### USB Input Tool Direct

USB-ITN-E (2m): **06ADV380E**

Connecting cables for **U-WAVE-T** (Quickmike type)

**02AZD790E** 160mm

For foot switch: **02AZE140E**

Refer to page B-68 for details.

## Blade Micrometers SERIES 422, 122 — Non-Rotating Spindle Type

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



Digimatic (LCD)  
**422-230-30**



**122-101**



Quickmike Type (LCD)  
**422-411**



**ABSOLUTE™**

## SPECIFICATIONS

Metric				
Order No.	Range	Resolution	Accuracy*	Remark
Digimatic (LCD)				
<b>422-230-30</b>	0 - 25mm	0.001mm	±3µm	Type A
<b>422-231-30</b>	25 - 50mm			
<b>422-232-30</b>	50 - 75mm			
<b>422-233-30</b>	75 - 100mm			
<b>422-260-30</b>	0 - 25mm	±4µm	±3µm	Type B
<b>422-261-30</b>	25 - 50mm			
<b>422-270-30</b>	0 - 25mm			
<b>422-271-30</b>	0 - 25mm			

\* Excluding quantizing error

Metric Quickmike type				
Order No.	Range	Resolution	Accuracy*	Remark
Digimatic (LCD)				
<b>422-411</b>	0 - 30mm	0.001mm	±3µm	Type A
<b>422-412</b>	25 - 55mm			

\* Excluding quantizing error

Metric				
Order No.	Range	Graduation	Accuracy	Remark
Analog				
<b>122-101</b>	0 - 25mm	0.01mm	±3µm	Type A
<b>122-102</b>	25 - 50mm			
<b>122-103</b>	50 - 75mm			
<b>122-104</b>	75 - 100mm			
<b>122-105</b>	100 - 125mm	0.01mm	±4µm	Type A
<b>122-106</b>	125 - 150mm			
<b>122-107</b>	150 - 175mm			
<b>122-108</b>	175 - 200mm			
<b>122-109</b>	200 - 225mm	0.01mm	±5µm	Type A
<b>122-110</b>	225 - 250mm			
<b>122-111</b>	250 - 275mm			
<b>122-112</b>	275 - 300mm			
<b>122-115</b>	250 - 275mm	0.01mm	±6µm	Type A
<b>122-116</b>	275 - 300mm			
<b>122-111</b>	0 - 25mm			
<b>122-112</b>	25 - 50mm			
Analog (With carbide tip)				
<b>122-161</b>	0 - 25mm	0.01mm	±3µm	Type C
<b>122-162</b>	25 - 50mm			
<b>122-141</b>	0 - 25mm	0.01mm	±3µm	Type D
<b>122-142</b>	25 - 50mm			

Notes: 1) A heat shield is provided with Digimatic models and **422-230-30** as standard.

Inch/Metric				
Order No.	Range	Resolution	Accuracy*	Remark
Digimatic (LCD)				
<b>422-330-30</b>	0 - 1"	.0005"/ 0.001mm	±.00015"	Type A
<b>422-331-30</b>	1" - 2"			
<b>422-332-30</b>	2" - 3"			
<b>422-333-30</b>	3" - 4"			
<b>422-360-30</b>	0 - 1"	±.00015"	±.0002"	Type B
<b>422-361-30</b>	1" - 2"			
<b>422-370-30</b>	0 - 1"			
<b>422-371-30</b>	0 - 1"			

\* Excluding quantizing error

Inch/Metric Quickmike type				
Order No.	Range	Resolution	Accuracy*	Remark
Digimatic (LCD)				
<b>422-421</b>	0 - 1.2"	.00005"/ 0.001mm	±.00015"	Type A

\* Excluding quantizing error

Inch				
Order No.	Range	Graduation	Accuracy	Remark
Analog				
<b>122-125</b>	0 - 1"	.0001"	±.00015"	Type A
<b>122-126</b>	1" - 2"			
<b>122-127</b>	2" - 3"			
<b>122-128</b>	3" - 4"			
<b>122-135</b>	0 - 1"	±.00015"	±.0002"	Type B
<b>122-151</b>	0 - 1"			

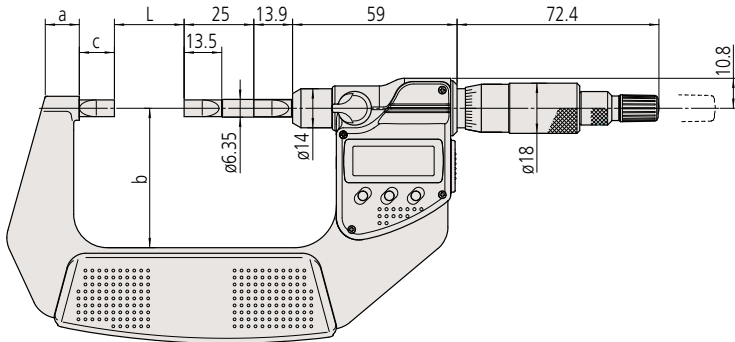
# Micrometer

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

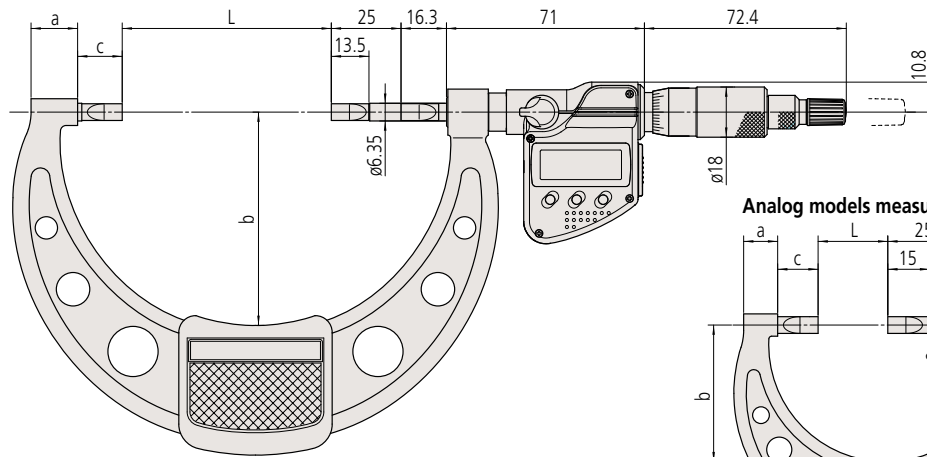
## DIMENSIONS

### Digital models up to 50mm measuring range

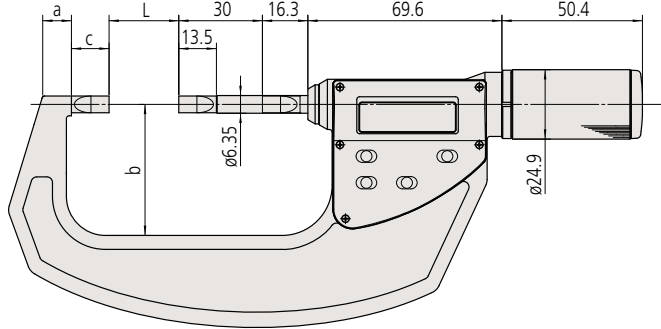
Unit: mm



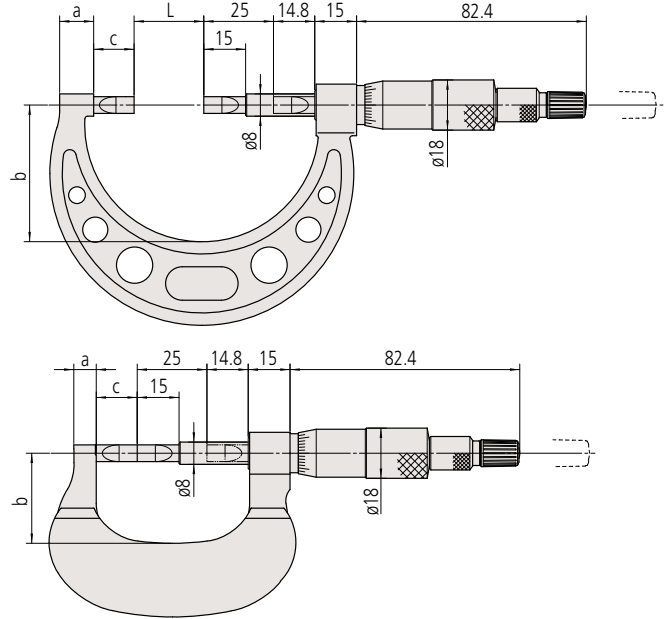
### Digital models over 75mm measuring range



### Quickmike type



### Analog models measuring range



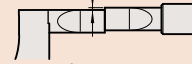
### Quickmike

Provides a speedy spindle feed of 10mm per thimble rotation, which enables widely differently sized features to be measured quickly.

### Deviation between the Anvil and Spindle in the Vertical Direction

within 0.15mm

Deviation between the anvil and spindle in the vertical direction



Deviation of 0.15mm or less is guaranteed between the anvil and spindle in the vertical direction.

\* When the measuring range is 0 - 25mm

Order 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			
422-271-30	0	11	31	12.5
122-101	0	7.8	32	15
122-102	25	12.2	49	
122-103	50	14.6	60	14.5
122-104	75	17	79	17.5
122-105	100	19	94	17.9
122-106	125	20	106	18.3
122-107	150	19	118	18.5
122-108	175	17	130	18.9
122-109	200		143	17.7
122-110	225		156	
122-115	250	18	169	18.7
112-116	275		181	
422-411	0	8.5	36	
422-412	25	10.3	47	13.5