

New Outside Micrometer Ratchet Thimble Micrometer

Bulletin No. 1808



A new generation of mechanical micrometers.

The Ratchet Thimble outside micrometer uses a new constant measuring force device* that ensures consistent and reliable measurements – even for users inexperienced in operating a micrometer with only one hand.

* Patented: USA, China, Germany, UK, France
Patent pending: Japan

Mitutoyo

101/102 Series Outside Micrometer Ratchet Thimble Micrometer

ONE-HANDED

New Style Ratchet Thimble with a new mechanism

- Ratchet function works both from the thimble and the speeder, allowing easy one-handed operation.

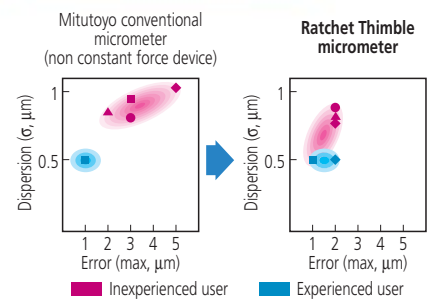


- Speeder is available for quick rotation of spindle.
- Clearly audible ratchet operation assures that measurement is being performed at a constant, preset force.



One-handed Operation

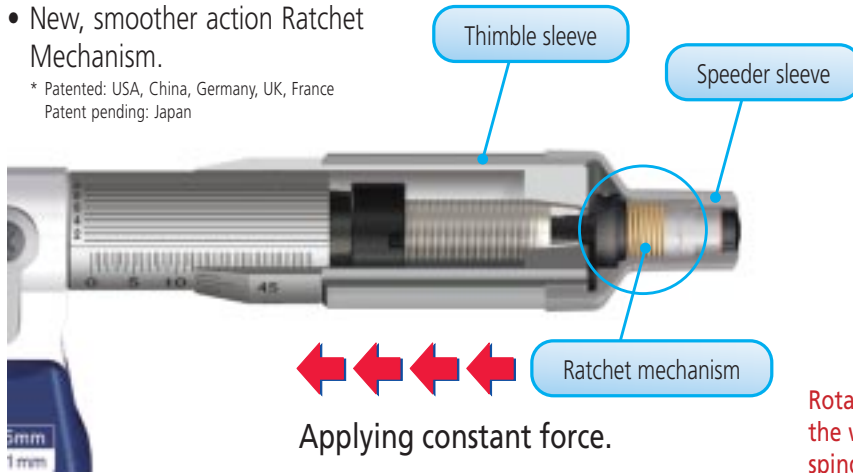
- More accurate one-handed operation: test results show inexperienced users measure significantly more accurately with the new micrometer.



OPERATION

- New, smoother action Ratchet Mechanism.

* Patented: USA, China, Germany, UK, France
Patent pending: Japan



Rotating the thimble/speeder sleeve when the workpiece is between the anvil and spindle causes the ratchet mechanism to engage and apply a constant measuring force to the spindle.

Inspection certificate

- Every ratchet thimble micrometer is provided with a Certificate of Inspection* that shows the result of the quality control inspection conducted at time of shipping.

*This is not a calibration certificate.

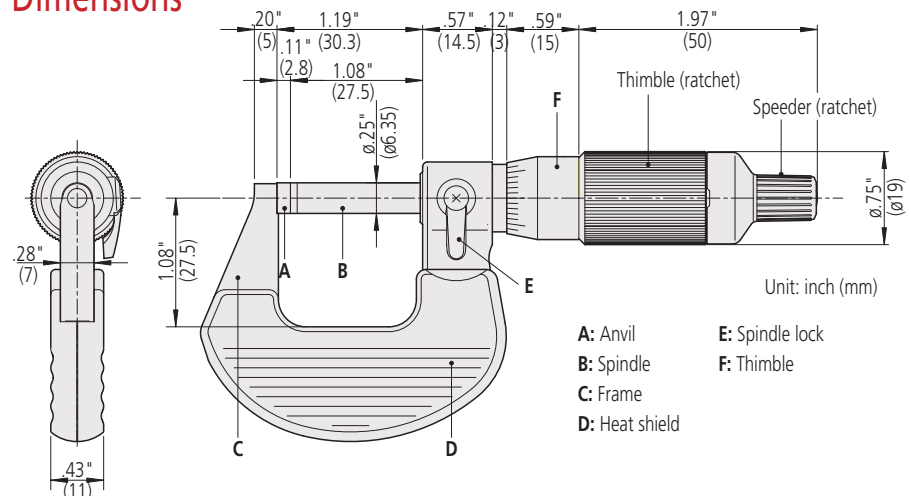


Mitutoyo		CERTIFICATE OF INSPECTION / 検査成績書	
1. Item / 品名: Outside Micrometer		Measuring range: 0 - 25mm	
Model: M31-25		Graduation: 0.01mm	
Code No.: 952-281		Serial No.: 49121688	
2. Scope of inspection: 寸法検査		Standard temperature: 20 °C	
Inspection standard: Mitutoyo standard JJ		Inspection date: / /	
Inspection place: /		Lot No. /	
Pattern of measuring face / 測定面パターン	Axis / 軸	Pre-measured value / 測定前値	Measured value / 測定値
Function of measuring face / 測定面機能			
Measuring length / 測定長さ	Pre-measured value / 測定前値	Inspection result / 検査結果	Uncertainty of measurement / 測定不確かさ
0.0	0		U = 1.1
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0.2	0		
0.3	0		
0.4	0		
0.5	0		
0.6	0		
0.7	0		
0.8	0		
0.9	0		
1.0	0		
1.1	0		
1.2	0		
1.3	0		
1.4	0		
1.5	0		
1.6	0		
1.7	0		
1.8	0		
1.9	0		
2.0	0		
2.1	0		
2.2	0		
2.3	0		
2.4	0		
2.5	0		
2.6	0		
2.7	0		
2.8	0		
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3.1	0		
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6.9	0		
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8.8	0		
8.9	0		
9.0	0		
9.1	0		
9.2	0		
9.3	0		
9.4	0		
9.5	0		
9.6	0		
9.7	0		
9.8	0		
9.9	0		
10.0	0		

Specifications

- Measuring range: 0 - 1" (0 - 25mm)
- Graduation: .001", .0001" (0.01mm, 0.001mm)
- Instrument error: ±.0001" (±2μm)
- Flatness of measuring faces: .000024" (0.6μm)
- Parallelism of measuring faces: .0001" (2μm)
- Measuring force: 5N - 10N

Dimensions





No. 101-711
0 - 1"/.001"



No. 101-717
0 - 1"/.0001"



No. 102-701
0-25mm/0.01mm



No. 102-707
0-25mm/0.001mm



No. 102-711
0 - 1"/.001"



No. 102-717
0 - 1"/.0001"



Note:

All our product details, in particular the illustrations, drawings, dimension and performance details and other technical specifications contained in this publication are to be considered to be approximate average values. To this extent, we reserve the right to make changes in design, technical data, dimensions and weight. Our specified standards, similar technical rules and technical specifications, descriptions and illustrations of the products are correct at the time of printing. The current version of our general terms and conditions also apply. Only offers which we have submitted can be considered to be definitive.

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