

Mitutoyo

Soft Touch Micro

with constant & adjustable fine-loading device

0.5N!

**Constant and adjustable
Measuring Force!!**



Soft Touch Micro makes sense of micrometer!

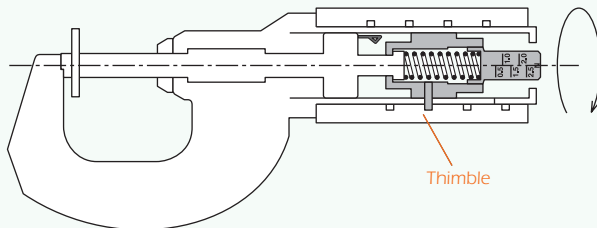
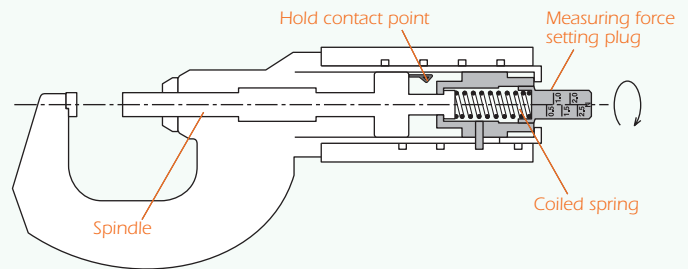
Mitutoyo proudly introduces the Soft Touch Micro, the world's first micrometer to offer adjustable measuring force and a constant-measurement-pressure mechanism. With the Soft Touch Micro, measurement force is fully adjustable, all the way down to an incredible 0.5N! Whereas a conventional micrometer might have difficulties measuring soft specimens—such as enameled wire, rubber, films and other sheet materials—the Soft Touch Micro handles them with ease. And since data hold is automatically performed at the specified measurement power, extremely high precision is assured. Even a beginner can use the Soft Touch Micro!



Principle of the constant-measuring-force mechanism

Setting measuring force

- By rotating a measuring-force setting plug, the length of a coil spring is changed and the desired measuring force is obtained.

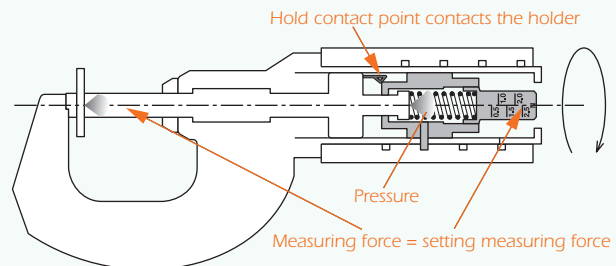


Approach to the workpiece

- Through the rotation of a thimble, a coil-spring holder moves simultaneously with the thimble until a spindle contacts the workpiece.

Generation of measuring force

- Measuring force occurs at the coil spring once it contacts the workpiece.
- A count value is held when the holder reaches a "hold" contact point, where upon the setting measuring force is generated.



Applications



Rubber Switch



Enameled wire



Soft film



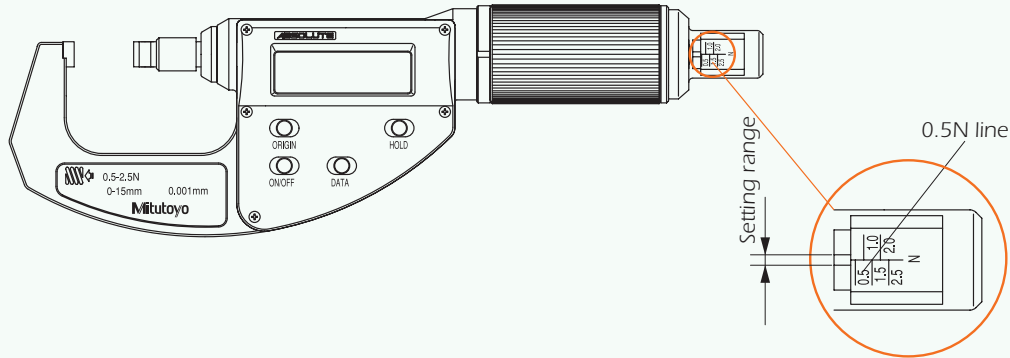
Rubber sheet

FEATURE

- Constant and low measuring force function are built in the thimble.
- Available in 0.5-2.5N and 2-10N types.
- Adjustable measuring force accommodates various kind of work materials.
- The measurement-value hold function automatically retains the data at a specified measuring force, ensuring accuracy. Now, even a beginner can measure at high accuracy (± 2 instrumental error).
- Measuring force is stable, thanks to a non-rotating spindle.
- The absolute scale, which features an absolute origin, eliminates the zero setting each time the Soft Touch Micro is activated.
- The Soft Touch Micro features a data output, allowing you to configure a statistical operation control system and a measurement system mechanism of the indication value.
- A single rotation of the spindle feeds it 10 mm/.4".
- The LCD offers a digit height of 7.5 mm for easy visibility.



How to set the measuring force



1. Retract the spindle by turning the thimble slowly until it stops.
2. When turning the measuring force selector with the supplied screwdriver, be sure that the reference line at the center of the measuring-force selector falls within the measuring-force determination range (the range between the two lines) on the cover of the measuring-force selector. Two rotations of the measuring-force selector produce a change in force equal to one graduation.

Note:

1. When selecting the measuring force, be sure to retract the spindle until the thimble stops turning. Measuring force cannot be set correctly if the spindle is not fully retracted.
2. Turn the thimble slowly when retracting the spindle. The instrument may be damaged if the stroke end bushing is subjected to shock or impact.
3. If the measuring force setting is changed, be sure to set the *origin* (zero point). If this is neglected, measurement error due to an incorrect measuring-force setting may occur.



Plastic pipe



Urethane



Rubber ring (O ring)

SPECIFICATIONS

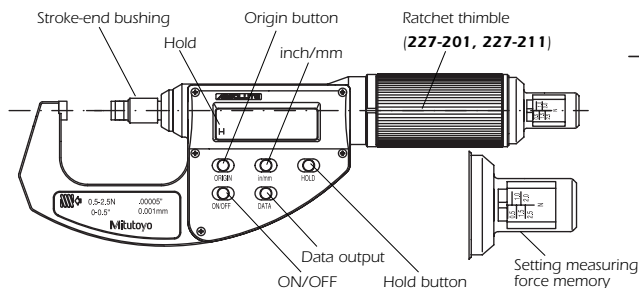
Order No.	227-201	227-202*	227-211	227-212*
Range	0-15mm		0-.6"/0-15mm	
Resolution	0.001mm		.00005"/0.001mm	
Instrumental error	±2µm (Excluding the quantization error)		±.0001"/±2µm (Excluding the quantization error)	
Flatness	0.3µm or less		.000012" or less	
Parallelism	2µm or less		.00008" or less	
Accuracy of measuring force*	±(0.1+selected measuring force/10)N	±(0.4+selected measuring force/10)N	±(0.1+selected measuring force/10)N	±(0.4+selected measuring force/10)N
Measuring force*	0.5 to 2.5N	2 to 10N	0.5 to 2.5N	2 to 10N
Measuring-force graduation*	0.5, 1.0, 1.5, 2.0, 2.5	2, 4, 6, 8, 10	0.5, 1.0, 1.5, 2.0, 2.5	2, 4, 6, 8, 10
Variations in measuring force*	0.1N or less	0.4N or less	0.1N or less	0.4N or less
Quantization error	±1 count			
Operating temperature	5°C to 40°C			
Storage temperature	-10°C to 60°C			
Power supply	SR44 battery cell X 1pc.			
Battery life	Approx. 3 years (under normal use)			
Mass	320g/0.70lbs.			
Standard accessories	Screwdriver(210183), Storage box, Battery(938882)			
Optional accessories	Connecting cable 1m(937387), 2m(965013)			

* A measuring force is affected by a measuring position. The above mentioned value for an error against selected measuring force and the variations in measuring force are only guaranteed when in a horizontal orientation (within ±3°).

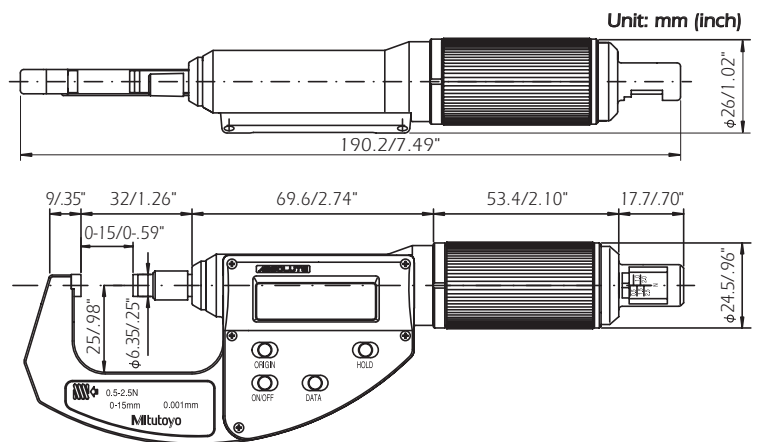
FUNCTIONS

- Adjustable measuring force function*
- Data hold function
- Origin setting function
- Absolute measuring function
- Low-battery alarm function
- Data output function

* Patent pending



DIMENSIONS



Mitutoyo

PRECISION IS OUR PROFESSION

Mitutoyo Scandinavia AB

Släntv. 6 • Box 712

SE-194 27 Upplands Väsby

Tel 08-594 109 50 • Fax 08-590 924 10

info@mitutoyo.se • www.mitutoyo.se

Specifications are subject to change without notice.

Printed in Japan
25.000204 (1) CFJ