



MICROMETER HEADS AND BENCH MICROMETERS



J.W. DONCHIN CO. • 4841-43 W. Chicago Ave • Chicago, IL 60651-3224
Ph: 773-261-2182 • Fax: 773-261-2867 • sales@jwdonchin.com • www.jwdonchin.com

Micrometer Heads and Bench Micrometers

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The following pages show the full line of Starrett standard micrometer heads and bench micrometers that have been designed and developed over the years working with the needs of our customers. The micrometer heads are invaluable for use on electronic equipment, machine tools, fixtures, special gaging and other equipment where precise movement and adjustment are required.

Special features are described with each tool, but all of these tools have these features that benefit the user.

- ◆ Starrett satin chrome finish – no glare – resists rust on all reading surfaces
- ◆ Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- ◆ Quick-reading figures on all inch reading tools
- ◆ Extremely hard and stable one-piece spindle (the heart of our accuracy and long life)
- ◆ Micro-lapped measuring face for flatness and squareness
- ◆ Quick and easy adjustment
- ◆ Starrett workmanship

Special Heads

In addition to standard micrometer heads, Starrett has also designed and manufactured many special types of micrometer heads for widely diversified applications requiring micrometer accuracy in settings and adjustments. These special heads are designed to exact specifications for specialized usage with wavemeters and other equipment in the electronics industry, machine tools, fixtures, special gages, tools, and all special mountings. They can be furnished to suit your particular requirements in a wide choice of sizes, range and graduations.

We design and build to your special need, so if you don't see what you want, please ask for it.

For quotations or recommendations, write The L.S. Starrett Co. Special Order Department 121 Crescent Street Athol, MA 01331



Standard heads and bench model.



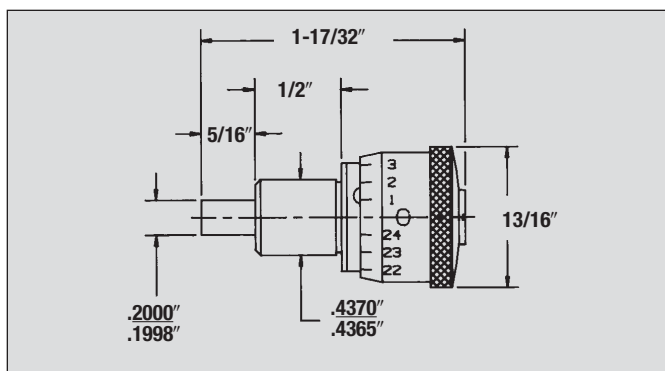
Examples of our special heads.



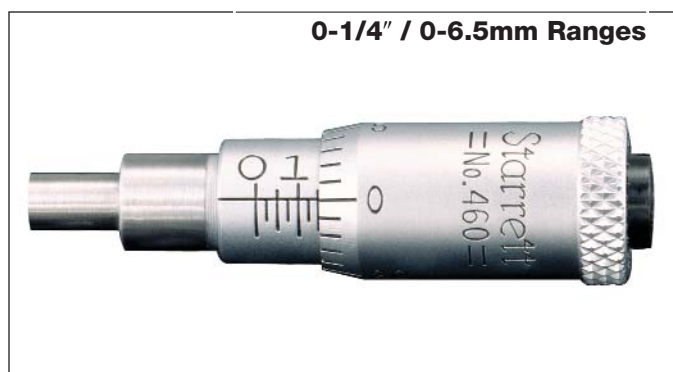
MICROMETER HEADS



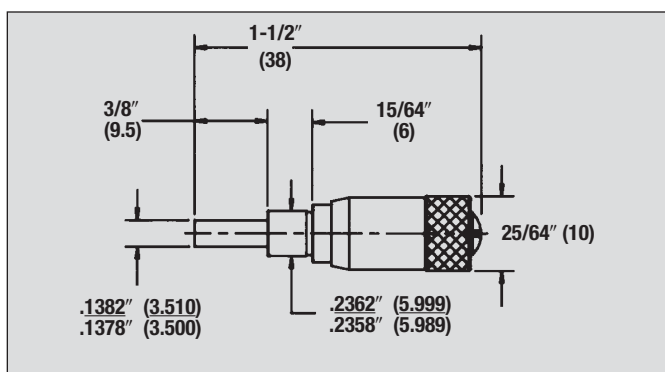
No. 464P.



No. 464P, 0-1/4" dimensions.



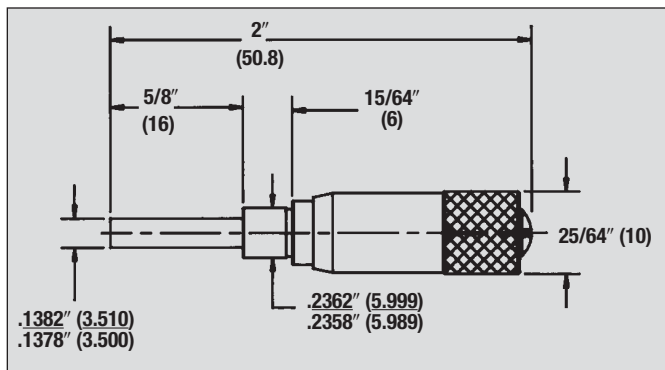
No. 460A (Inch model).



No. 460A, 0-1/4" and No. 460MA (0-6.5mm) dimensions.



No. 460B (Inch model).



No. 460B, 0-1/2" and No. 460MB (0-13mm) dimensions.

No. 464P 0-1/4"

No. 460A 0-1/4"

No. 460MA 0-6.5mm

No. 460B 0-1/2"

No. 460MB 0-13mm

These are plain micrometer heads with no lock nut or ratchet.

| Range | Graduation | Catalog No. | EDP No. | Description |
|---------|------------|-------------|---------|-------------|
| 0-1/4" | .001" | 464P | 56657 | Plain |
| 0-1/4" | .001" | 460A | 64444 | Plain |
| 0-6.5mm | 0.01mm | 460MA | 64445 | Plain |
| 0-1/2" | .001" | 460B | 64446 | Plain |
| 0-13mm | 0.01mm | 460MB | 64447 | Plain |

All tools are packed one in a box.



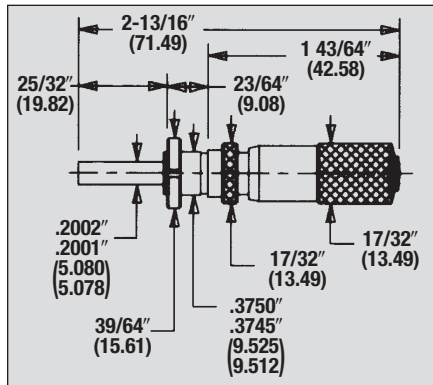
No. 463 Series 0-1/2"/0-13mm

No. 1463 Stainless Steel Series 0-1/2"/0-13mm

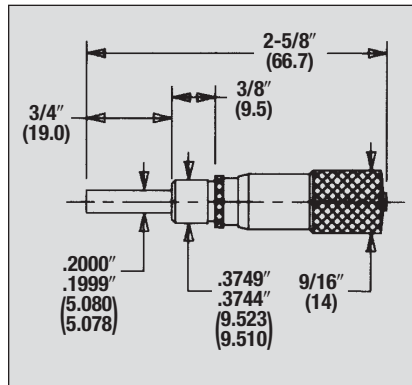
The No. 463 and No. 1463 Series are exactly the same, except that the 1463 Series is made from rust-resistant stainless steel. The reading surfaces are satin finished stainless steel for easy readability. Heads are available with the features below:



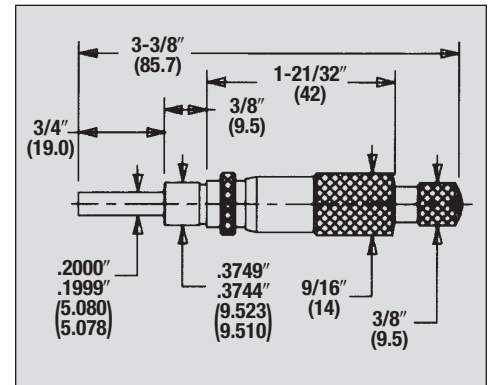
No. 463RL (Inch model).



No. 463L-38TN, 0-1/2" dimensions.



Nos. 463P, 0-1/2" and 463MP (0-13mm) dimensions.



Nos. 463RL, 0-1/2" and 463MRL (0-13mm) dimensions.

- ◆ Either combination ratchet and speeder for uniform pressure and quicker adjustment, or plain micrometer heads that depend on your own feel
- ◆ Ring-type lock nut for quick and sure locking at any setting
- ◆ Reverse reading, if needed
- ◆ Plain or carbide spindle faces

| Range | Graduation | Catalog No. | EDP No. | Description |
|----------------|------------|------------------|---------|---|
| 0-1/2" | .001" | 463P | 52440 | Plain |
| | | 463P-38TN | 67112 | Plain, 3/8" Threaded Hub and Check Nut |
| | | 463L | 52442 | Lock Nut |
| | | 463XL | 52451 | Lock Nut, Carbide Face |
| | | 463L-38TN | 67113 | Lock Nut, 3/8" Threaded Hub and Check Nut |
| | | 463RL | 52443 | Ratchet Stop, Lock Nut |
| | | 463XRL | 64687 | Ratchet Stop, Lock Nut, Carbide Face |
| | | RV463RL | 57073 | Reverse Reading, Ratchet Stop, Lock Nut |
| | | RV463XRL | 64688 | Reverse Reading, Ratchet Stop, Lock Nut, Carbide Face |
| | | 0-13mm | 0.01mm | T463P |
| T463L | 52448 | | | Lock Nut |
| T463XL | 64689 | | | Lock Nut, Carbide Face |
| T463RL | 52449 | | | Ratchet Stop, Lock Nut |
| T463XRL | 65052 | | | Ratchet Stop, Lock Nut, Carbide Face |
| 0-13mm | 0.002mm | | | 463MP |
| | | 463MRL | 52452 | Ratchet Stop, Lock Nut |
| | | 463MXRL | 64691 | Ratchet Stop, Lock Nut, Carbide Face |
| | | V463MRL | 65053 | Ratchet Stop, Lock Nut |
| 0-1/2" | .001" | RV463MRL | 60845 | Reverse Reading, Ratchet Stop, Lock Nut |
| | | 1463RL | 53207 | Ratchet Stop, Lock Nut (Stainless) |
| 0-1/2" | .0001" | T1463RL | 53209 | Ratchet Stop, Lock Nut (Stainless) |
| | | V1463MRL | 64344 | Ratchet Stop, Lock Nut (Stainless) |

Packed one in a box.



Micrometer Heads with non-rotating spindles

No. 261L 0-1/2"

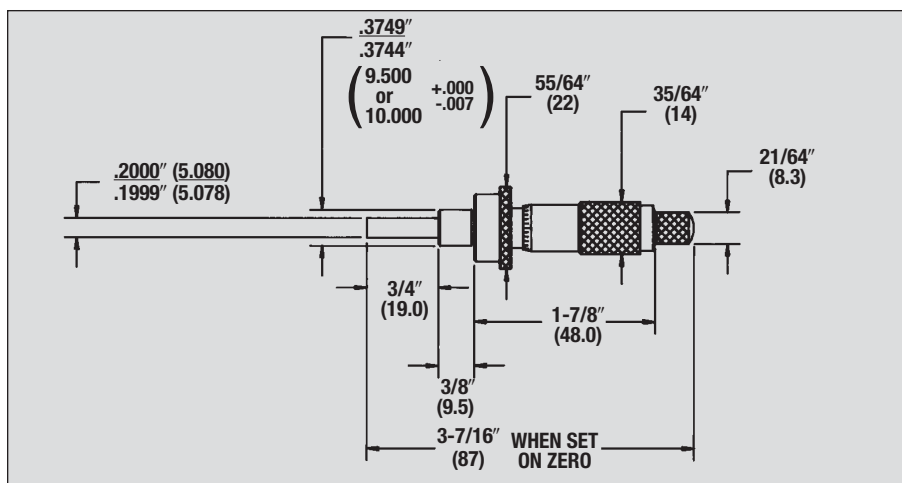
No. 261ML 0-13mm

Because the spindle does not rotate, these tools are useful in driving positioning tables directly without an intermediate connecting device. They are also useful in gaging jobs where scratches on the work surface cannot be tolerated or where there is risk of distortion when spindle meets work – as in measuring soft or elastic materials. Spindle wear is also reduced since there is no rotational friction as its face contacts the work.

- ◆ Ring-type lock nut for quick and sure locking at any setting
- ◆ A speeder for quicker adjustment – this is not a ratchet stop. The tool is dependent on your own “feel”



No. 261L (Inch model).



No. 261L, 0-1/2" and No. 261ML (0-13mm) dimensions.

0-1/2" range

| Catalog No. | EDP No. | Graduation | Description |
|-------------|---------|------------|-------------------|
| 261L | 55944 | .001" | Speeder, Lock Nut |

0-13mm range

| | | | |
|--------|-------|--------|--|
| 261ML* | 64346 | 0.01mm | Speeder, Lock Nut, Specify Clamping Diameter (9.5mm or 10mm) |
|--------|-------|--------|--|

*9.5mm clamping diameter sent unless otherwise specified.



Electronic Micrometer Heads with rotating or non-rotating spindles (with output)

No. 762 Series 0-2" (0-50mm)

Readability Features

- ◆ Large, right-sized, digital readout is easy to read, reducing error
- ◆ Conventional inch or millimeter graduations standard
- ◆ Attractive black wrinkle finish on frame
- ◆ Starrett no-glare satin chrome finish on thimble and sleeve

Ease-of-Handling Features

- ◆ Ring-type knurled lock nut
- ◆ Smooth friction thimble for uniform pressure on regular heads and the combination ratchet and speeder on the non-rotating heads

Accuracy and Long-Life Features

- ◆ Extremely hard and stable one-piece spindle (the heart of our accuracy)
- ◆ Micro-lapped steel or carbide face
- ◆ Starrett designed microprocessor
- ◆ One 3-volt battery furnished for dependable power and over one year's normal usage
- ◆ Auto OFF after 30 minutes of nonuse

Full-Function Action Features

- ◆ Instant inch/millimeter conversion
- ◆ "ME" millimeter models will turn on in the millimeter mode after installation of a new battery
- ◆ Measurement HOLD button
- ◆ Ability to zero tool at any position
- ◆ Ability to retain and return to the true zero reading of the micrometer
- ◆ PRESET button to install any reading at any position
- ◆ Output data to Starrett SPC Plus® hardware, software and PCs
- ◆ Works well with Starrett DataSure® Wireless Data Collection Systems



0-1" / 25mm Range

0-2" / 50mm Range

With Standard Inch Graduations on Shell and Thimble

| Range | Description* | Catalog No. | EDP No. |
|-------------|--|-------------|---------|
| 0-1"/0-25mm | Friction Thimble, Lock Nut, Carbide Face | 762XFL | 65058 |
| | Ratchet Stop, Lock Nut, Carbide Face, Non-rotating Spindle | 762NXRL | 65060 |
| 0-2"/0-50mm | Friction Thimble, Lock Nut, Carbide Face | 762XFL-2 | 65062 |

With Standard Millimeter Graduations on Shell and Thimble

| | | | |
|-------------|--|-------------|-------|
| 0-25mm/0-1" | Friction Thimble, Lock Nut, Carbide Face | 762MEXFL-25 | 66077 |
| 0-50mm/0-2" | Friction Thimble, Lock Nut, Carbide Face | 762MEXFL-50 | 66137 |

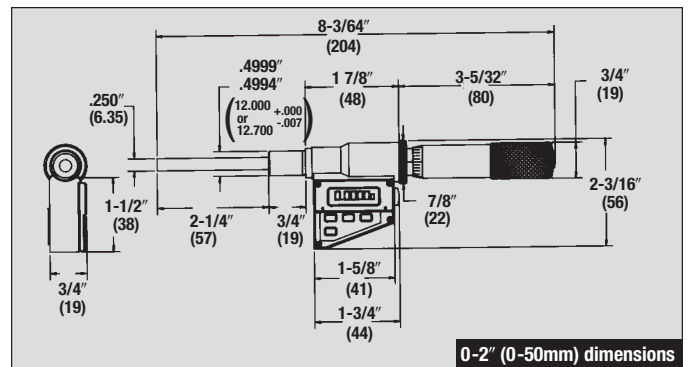
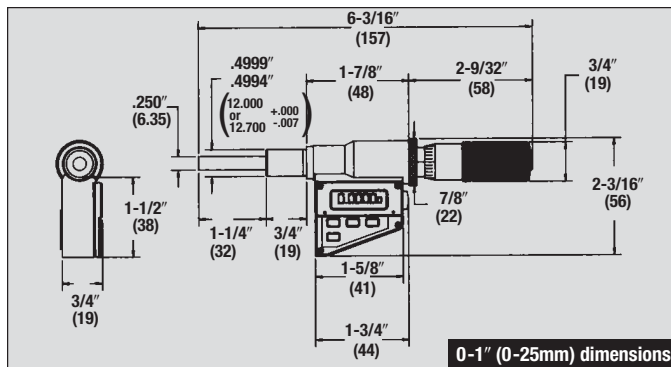
*1/2" (12.7mm) clamping diameter sent unless otherwise specified.

| | | |
|--|---------|-------|
| Computer Interface Cable Complete to PC (RS232C) | PT61963 | 66636 |
| Adaptor from No. PT22938 Cable to PC (RS232C) | PT61768 | 66454 |
| Shielded Cable to Nos. 761/772 Series Starrett Modules and No. PT61768 Adaptor | PT22938 | 64059 |
| One 3-Volt Battery No. CR2450 | PT61120 | 65446 |

| | Inch | Millimeter |
|-------------------|------------------|-------------------|
| Resolution | .00005" | 0.001mm |
| Accuracy | ±.0001" per Inch | ±0.003mm per 25mm |

Packed one per box with instructions.

NOTE: Catalog numbered products made in the U.S.A. except where noted as Global.





Digital Micrometer Heads

0-1" / 0-25mm Ranges

No. 363 Series 0-1"

No. 363M Series 0-25mm

Readability Features

- ◆ Clear, easily read numbers reduce errors
- ◆ No-glare black finish on the frame
- ◆ Starrett no-glare satin chrome finish on thimble and sleeve
- ◆ .001" or 0.01mm is read directly from the counter
- ◆ Reverse reading if needed

Ease-of-Handling Features

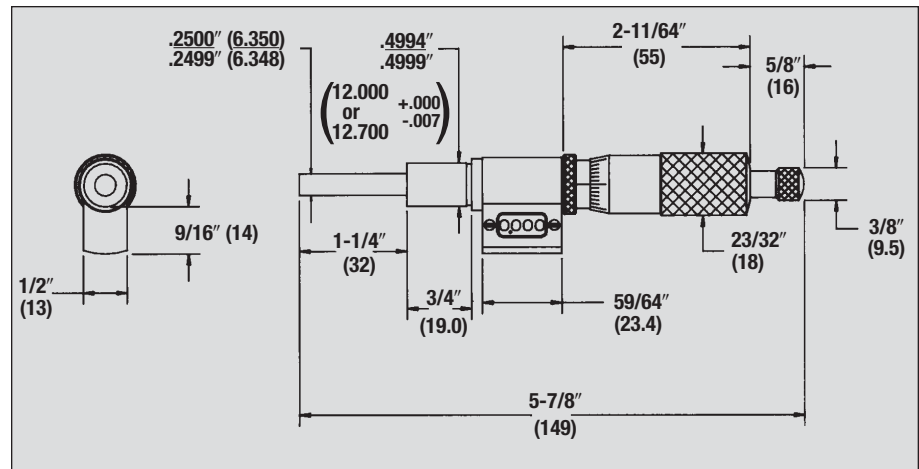
- ◆ Ring-type knurled lock nut for quick and sure locking
- ◆ A choice of smooth friction thimble for uniform pressure or the combination ratchet and speeder for uniform pressure and quicker adjustment

Accuracy and Long-Life Features

- ◆ Extremely hard and stable one-piece spindle (the heart of our accuracy)
- ◆ Micro-lapped measuring face
- ◆ Starrett workmanship



No. 363RL (Inch model).



No. 363RL, 0-1" and No. 363MRL (0-25mm) dimensions.

0-1" range

| Catalog No. | EDP No. | Graduation | Description |
|-------------|---------|------------|---|
| 363L | 56297 | .001" | Lock Nut |
| 363RL | 56298 | | Ratchet Stop, Lock Nut |
| 363FL | 56299 | | Friction Thimble, Lock Nut |
| RV363RL | 57072 | | Reverse Reading, Ratchet Stop, Lock Nut |

0-25mm range

| Catalog No. | EDP No. | Graduation | Description |
|-------------|---------|------------|----------------------------|
| 363ML* | 56302 | 0.01mm | Lock Nut |
| 363MRL* | 56303 | | Ratchet Stop, Lock Nut |
| 363MFL* | 56304 | | Friction Thimble, Lock Nut |

* Specify clamping diameter (12 or 12.7mm). 12.7mm sent unless otherwise ordered.

Packed one in a box.



No. 263 Series 0-1"/0-25mm

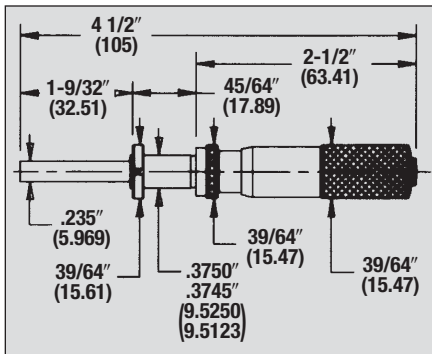
0-1" / 0-25mm Ranges

No. 1263 Stainless Steel Series 0-1"/0-25mm

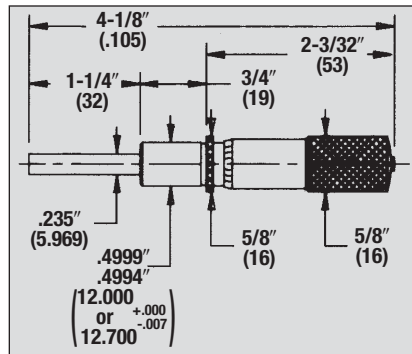
The No. 263 and No. 1263 Series are exactly the same except that the No. 1263 Series is made from rust-resistant stainless steel. The reading surfaces are satin-finished stainless steel for easy readability. These heads have features listed below:



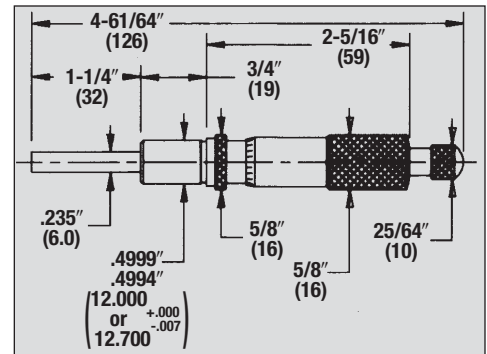
No. 263RL (Inch model).



No. 263L-38TN, 0-1" dimensions.



Nos. 263P, 0-1" and 263MP (0-25mm) dimensions.



Nos. 263RL, 0-1" and 263MRL (0-25mm) dimensions.

- ◆ No-glare, satin chrome finish on No. 263 Series, rust-resistant, stainless steel on No. 1263 Series
- ◆ Available with reverse reading, if needed
- ◆ Ring-type knurled lock nut for quick and sure locking
- ◆ Choice of smooth friction thimble for uniform pressure, combination ratchet and speeder for uniform pressure and quicker adjustment, or a plain micrometer head that depends on your own "feel"
- ◆ Spindle face available plain or with carbide
- ◆ Furnished with 1/2" (12.7mm) diameter clamping surface, but also available with 3/8" (9.5mm) clamping diameter on special order

| Range | Graduation | Catalog No. | EDP No. | Description |
|--------|------------|-------------|---------|---|
| 0-1" | .001" | 263P | 51251 | Plain |
| | | 263P-38 | 67108 | Plain, 3/8" Diameter Hub |
| | | 263P-38TN | 67110 | Plain, 3/8" Threaded Hub and Check Nut |
| | | 263L | 51253 | Lock Nut |
| | | 263XL | 51265 | Lock Nut, Carbide Face |
| | | 263L-38 | 67109 | Lock Nut, 3/8" Diameter Hub |
| | | 263L-38TN | 67111 | Lock Nut, 3/8" Threaded Hub and Check Nut |
| | | 263RL | 51254 | Ratchet Stop, Lock Nut |
| | | 263FL | 51256 | Friction Thimble, Lock Nut |
| | | RV263RL | 57071 | Reverse Reading, Ratchet Stop, Lock Nut |
| 0-25mm | 0.01mm | T263P | 51258 | Plain |
| | | T263L | 51260 | Lock Nut |
| | | T263XL | 65054 | Lock Nut, Carbide Face |
| | | T263RL | 51261 | Ratchet Stop, Lock Nut |
| | | 263MP* | 51275 | Plain |
| | | 263ML* | 51276 | Lock Nut |
| 0-25mm | 0.001mm | 263MRL* | 51257 | Ratchet Stop, Lock Nut |
| | | 263MXL* | 65055 | Lock Nut, Carbide Face |
| | | V263MRL* | 55962 | Ratchet Stop, Lock Nut |
| | | RV263MRL* | 64948 | Reverse Reading, Ratchet Stop, Lock Nut |
| | | V263MXRL* | 65056 | Ratchet Stop, Lock Nut, Carbide Face |

Stainless Steel Models

| | | | | |
|--------|---------|-----------|-------|------------------------|
| 0-1" | .001" | 1263L | 53200 | Lock Nut |
| | | 1263RL | 53201 | Ratchet Stop, Lock Nut |
| | .0001" | T1263RL | 53203 | Ratchet Stop, Lock Nut |
| 0-25mm | 0.001mm | V1263MRL* | 64345 | Ratchet Stop, Lock Nut |

NOTE:* 0-25mm models specify clamping diameter 12 or 12.7mm. 12.7mm sent unless otherwise ordered.

Packed one in a box.



**Heavy Duty
Micrometer Heads**

0-1" / 0-25mm Ranges

No. 663 Series 0-1"

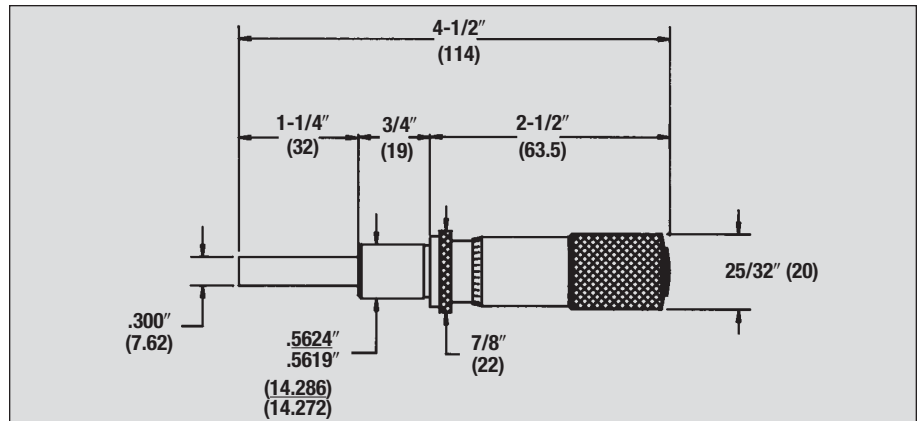
No. 663M Series 0-25mm

The No. 663 is similar to the No. 263 but features heavy duty construction with a larger diameter spindle, clamping surface and thimble.

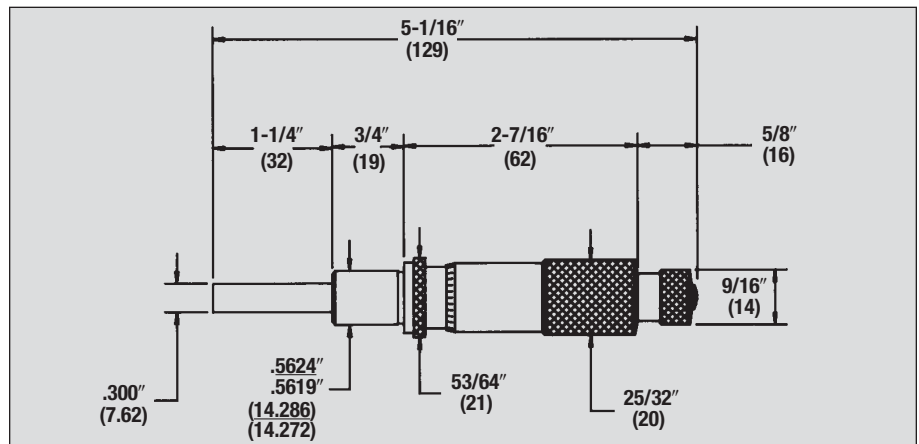
- ◆ Available with lock nut and the combination ratchet and speeder for uniform pressure and quicker adjustment, or a plain micrometer head with lock nut only
- ◆ Ring-type lock nut for quick and sure locking



No. 663RL (Inch model).



No. 663L, 0-1" and No. 663ML (0-25mm) dimensions.



No. 663RL, 0-1" and No. 663MRL (0-25mm) dimensions.

0-1" range

| Catalog No. | EDP No. | Graduation | Description |
|-------------|---------|------------|------------------------|
| 663L | 52772 | .001" | Lock Nut |
| 663RL | 52773 | | Ratchet Stop, Lock Nut |
| T663L | 52777 | .0001" | Lock Nut |
| T663RL | 52778 | | Ratchet Stop, Lock Nut |

0-25mm range

| | | | |
|---------|-------|---------|------------------------|
| 663MRL | 52774 | 0.01mm | Ratchet Stop, Lock Nut |
| V663MRL | 64342 | 0.001mm | Ratchet Stop, Lock Nut |

Packed one in a box.



Micrometer Heads with non-rotating spindles

No. 262 Series 0-1"

No. 262M Series 0-25mm

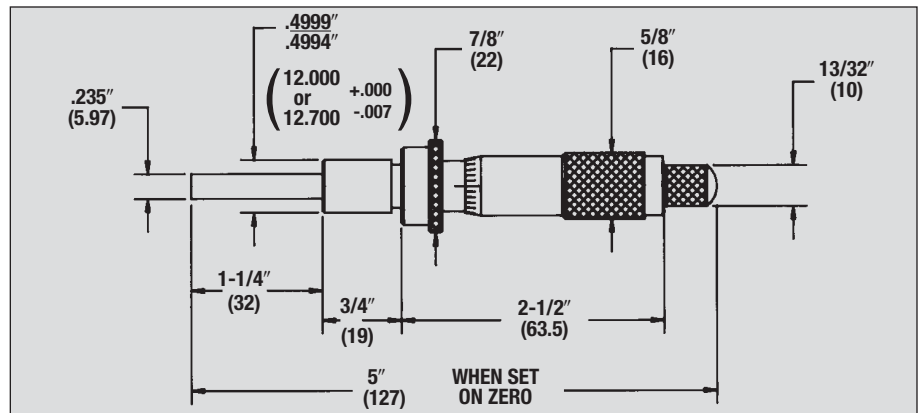
Because the spindle does not rotate, this tool is useful in driving positioning tables directly without an intermediate connecting device. It is also useful in gaging jobs where scratches on the work surface cannot be tolerated, or where there is risk of distortion when spindle meets work – as in measuring soft or elastic materials. Spindle wear is also reduced, since there is no rotational friction when its face contacts the work.

- ◆ Ring-type lock nut for quick and sure locking at any setting
- ◆ Available with or without the combination ratchet and speeder for uniform pressure and quicker adjustment

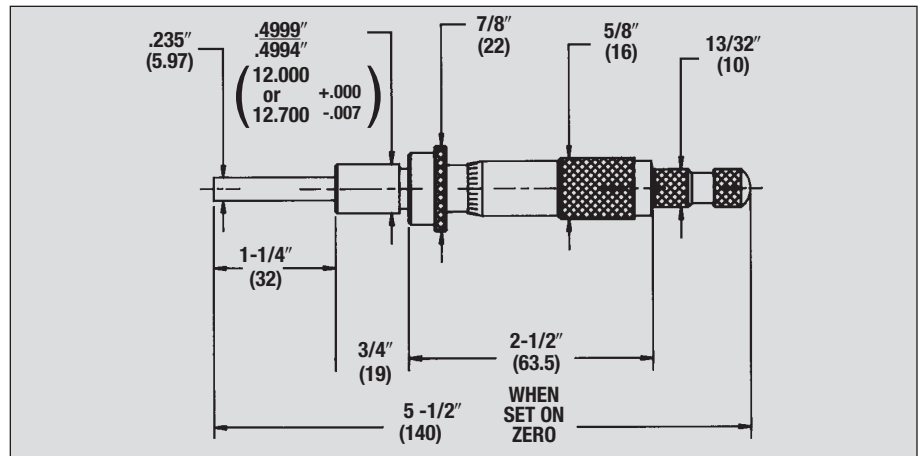
0-1" / 0-25mm Ranges



No. 262L (Inch model).



No. 262L, 0-1" and No. 262ML (0-25mm) dimensions.



No. 262RL, 0-1" and No. 262MRL (0-25mm) dimensions.

0-1" range

| Catalog No. | EDP No. | Graduation | Description |
|-------------|---------|------------|------------------------|
| 262L | 55945 | .001" | Lock Nut |
| 262RL | 55946 | .001" | Ratchet Stop, Lock Nut |

0-25mm range

| | | | |
|---------|-------|--------|------------------------|
| 262ML* | 64347 | 0.01mm | Lock Nut |
| 262MRL* | 65051 | 0.01mm | Ratchet Stop, Lock Nut |

NOTE:* 0-25mm models specify clamping diameter 12mm or 12.7mm. 12.7mm sent unless otherwise ordered.

Packed one in a box.



Long Range Micrometer Heads

0-2" / 0-50mm Ranges

No. 63 Series 0-2"

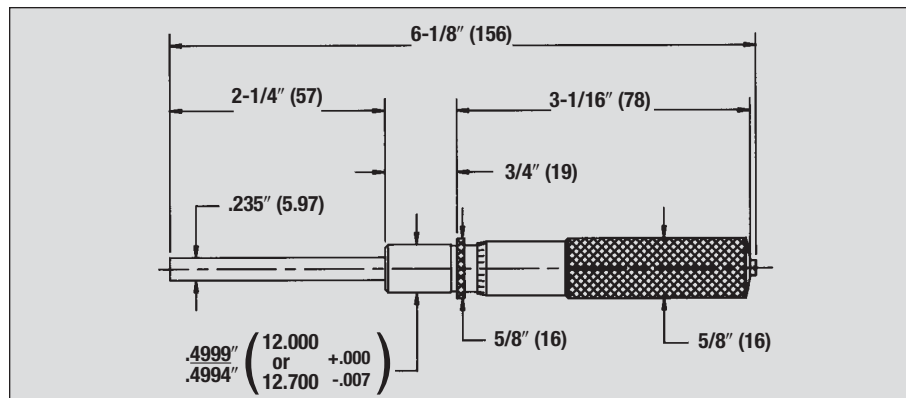
No. 63M Series 0-50mm

When long spindle travel is required, the No. 63 Series micrometer heads provide a range that will handle most applications, such as in electronic equipment, machine tools, special gages, tooling, etc.

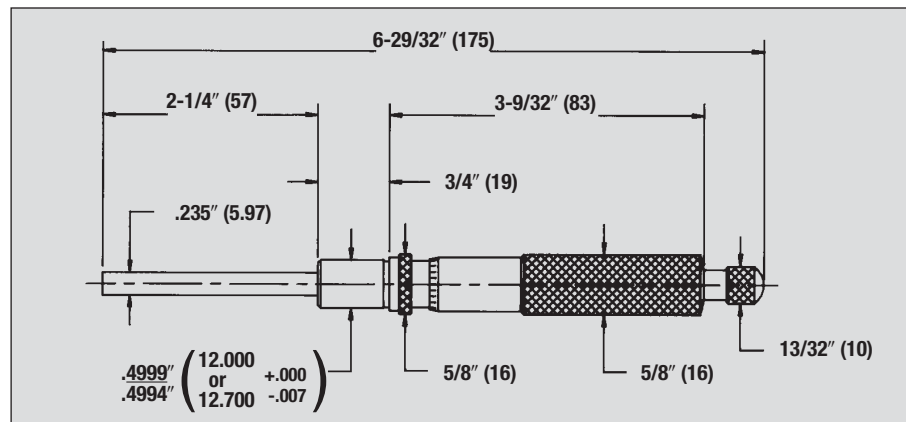
- ◆ With or without ring-type lock nut for quick and sure locking
- ◆ With or without the combination ratchet and speeder for uniform pressure and quicker adjustment



No. 63L (Inch model).



No. 63P, 0-2" and No. 63MP (0-50mm) dimensions.



No. 63RL, 0-2" and No. 63MRL (0-50 mm) dimensions.

0-2" range

| Catalog No. | EDP No. | Graduation | Description |
|-------------|---------|------------|------------------------|
| 63P | 50305 | .001" | Plain |
| 63L | 50306 | .001" | Lock Nut |
| 63RL | 50307 | .001" | Ratchet Stop, Lock Nut |
| T63P | 50308 | .0001" | Plain |
| T63RL | 50309 | .0001" | Ratchet Stop, Lock Nut |

0-50mm range

| | | | |
|---------|-------|---------|------------------------|
| 63MRL* | 55939 | 0.01mm | Ratchet Stop, Lock Nut |
| V63MRL* | 64343 | 0.002mm | Ratchet Stop, Lock Nut |

NOTE:* 0-25mm models specify clamping diameter 12mm or 12.7mm. 12.7mm sent unless otherwise ordered.

Packed one in a box.



Direct-Reading, Large Micrometer Heads

0-1" / 25mm Ranges

0-2" / 50mm Ranges

These large micrometer heads are designed for use with electronic equipment requiring ultra-fine adjustment for machine tools, fixtures, special gages and tools, special mountings, or wherever micrometer accuracy in setting and adjustment is required.

The micrometer heads with 2-1/16" (52mm) thimble diameter have widely spaced .0001" or 0.002mm graduations. The micrometer heads with 4-1/16" (103mm) thimble diameter have graduations up to .000050" or 0.001mm.

Another highly useful feature is the spindle adjustment, which permits adjusting the spindle length approximately $\pm 1/16"$ (1.5mm). If the spindle is to be located against a definite stop and a different zero position is required, first loosen the cap screw in the end of the thimble, position the spindle to the desired location, then holding the spindle in position, rotate the thimble to zero and retighten the cap screw. In achieving this adjustable feature, we have still retained our positive taper-lock large thimble bearing.

Readability, Accuracy and Long-Life Features:

- ◆ All graduations are direct reading – no vernier lines to match
- ◆ All reading surfaces have Starrett satin chrome finish as the no-glare background for the sharp lines and figures
- ◆ All graduations on sleeves and thimbles have advanced styling with staggered graduations for easy reading
- ◆ The spindle is carbide faced for long life
- ◆ Thimble and sleeve are made of aluminum to reduce weight
- ◆ Furnished with a speeder (not a ratchet) for quicker adjustment
- ◆ Extremely hard and stable one-piece spindle for accuracy and long-life
- ◆ Micro-lapped measuring face for flatness and squareness
- ◆ Quick and easy adjustment
- ◆ Starrett workmanship



(Top) No. T465XSP-1 (inch model) and (bottom) No. T468XSP-1 (inch model) with double figures in red and black on sleeve and thimble for reading both ways.

No. 465 Series 0-2"

No. 465M Series 0-50mm

No. 468 Series 0-2"

No. 468M Series 0-50mm

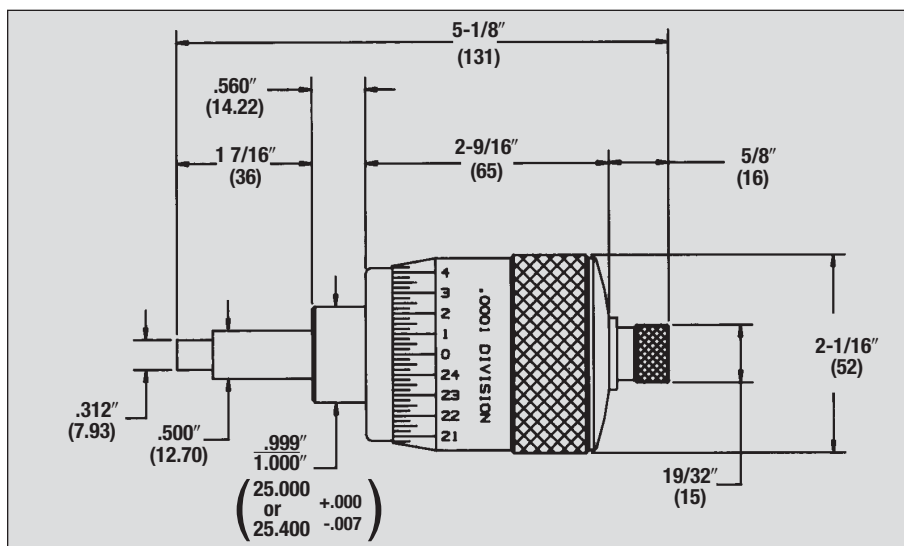
The No. 468 Series micrometer heads are exactly the same as the No. 465 Series, except that they have double figures in red and black on the sleeve and thimble, permitting reading both ways with the spindle moving in either direction. This feature is invaluable on many instruments and microwave applications.

These heads have 2-1/16" (52mm) thimble diameter with widely spaced .0001" or 0.002mm graduations for direct reading.

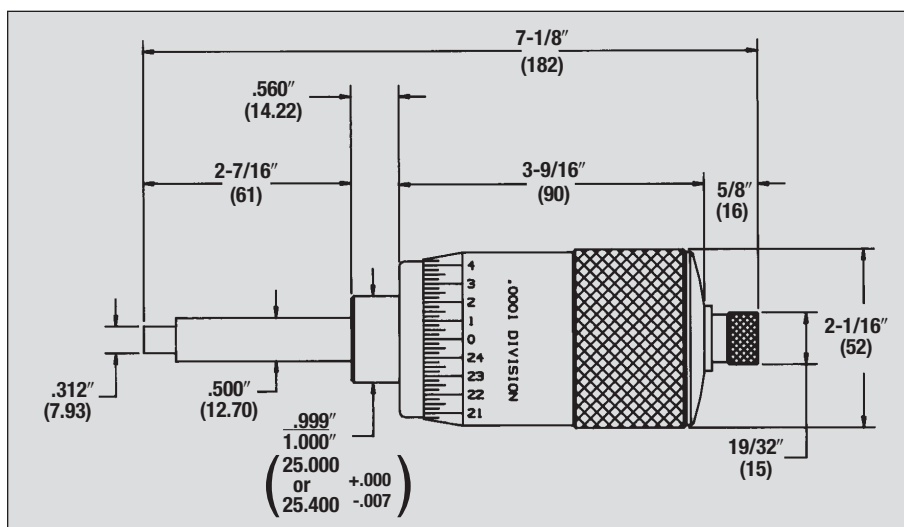
SPECIFICATIONS / NEXT PAGE



Specifications No. 465 Series No. 468 Series



Nos. 465, 468 Series 0-1" (0-25mm) dimensions.



Nos. 465, 468 Series 0-2" (0-50mm) dimensions.

465 Series

| Catalog No. | EDP No. | Range | Graduation | Description |
|-------------|---------|--------|------------|-------------|
| T465XSP-1 | 67121 | 0-1" | .0001" | Speeder |
| T465XSP-2 | 67122 | 0-2" | | |
| 465MXSP-25* | 67123 | 0-25mm | 0.002mm | Speeder |
| 465MXSP-50* | 67124 | 0-50mm | | |

468 Series

| | | | | |
|-------------|-------|--------|---------|---------|
| T468XSP-1 | 67125 | 0-1" | .0001" | Speeder |
| T468XSP-2 | 67126 | 0-2" | | |
| 468MXSP-25* | 67127 | 0-25mm | 0.002mm | Speeder |
| 468MXSP-50* | 67128 | 0-50m | | |

NOTE:* 0-25mm and 0-50mm models specify clamping diameter 25 or 25.4mm. 25.4mm sent unless otherwise ordered.

Packed one in a box.



**Large, Super-Precision
Micrometer Heads**

No. 469 Series 0-1"

No. 469M Series 0-25mm

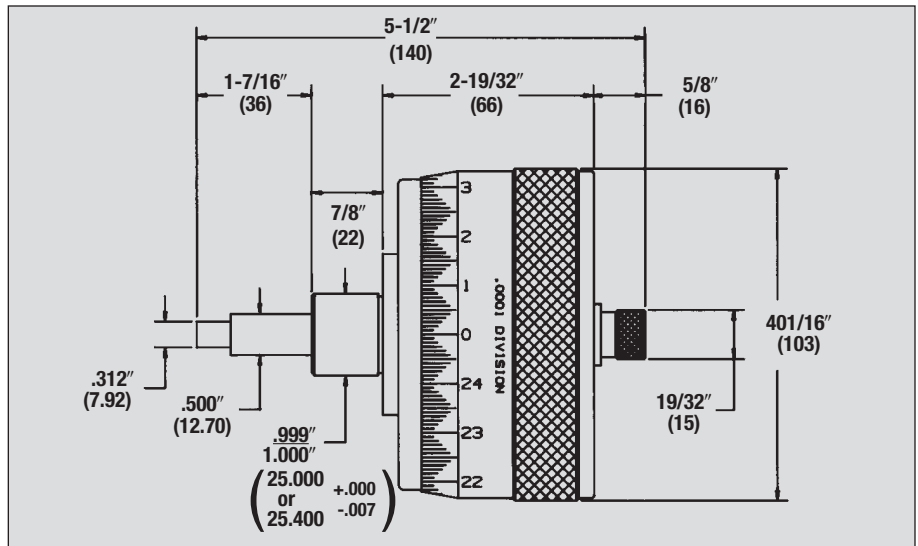
These are our most accurate micrometer heads. They are also available on special order with double graduations in red and black on the sleeve and thimble, permitting readings both ways with the spindle moving in either direction.

These micrometer heads have a 4-1/16" (103mm) thimble diameter and are graduated to .0001", .000050", 0.001mm, or 0.002mm for direct reading. They also have staggered graduations for easy counting and reading of lines. Spindle is carbide faced for long life.

0-1" / 0-25mm Ranges



No.T469HXSP (Inch model).



No. 469, 0-1" and No. 469M (0-25mm) dimensions.

0-1" range

| Catalog No. | EDP No. | Graduation | Description |
|-------------|---------|------------|-------------|
| T469HXSP | 67129 | .000050" | Speeder |
| T469XSP | 67130 | .0001" | |

0-25mm range

| | | | |
|-----------|-------|---------|---------|
| 469MHXSP* | 67131 | 0.001mm | Speeder |
| 469MXSP* | 67132 | 0.002mm | |

NOTE: Also available on special order with double graduations for reading both ways with spindle moving in either direction.

Packed one in a box.

*Specify clamping diameter 25 or 25.4mm. 25.4mm sent unless otherwise ordered.



Electronic Bench Micrometers

(with output)

0-1" / 0-25mm Range

No. 777 0-1" (0-25mm)

The No. 777 electronic bench micrometer is especially suited for precision measurements where the work must be brought to the gage.

Work is staged between the anvil and spindle on an adjustable table, which can be raised to a selected height and locked in position by turning a knurled thumb screw on back of the base. Made of cast iron with black wrinkle finish, the base is heavily proportioned to sustain gage accuracy and assure stability in use. It stands on three machined pads.

Readability Features

- ◆ Large, right-sized, high-contrast LCD digital readout is easy to read and reduces errors
- ◆ Conventional inch or millimeter graduations standard
- ◆ Attractive no-glare black wrinkle finish on the frame

Ease-of-Handling Features

- ◆ Ring-type knurled lock nut for quick and sure locking
- ◆ Smooth friction thimble for uniform pressure

Accuracy and Long-Life Features

- ◆ Extremely hard and stable one-piece spindle
- ◆ The spindle and anvil are carbide faced for long life
- ◆ Starrett designed electronic microprocessor
- ◆ One 3-volt battery furnished for dependable power and over one year's normal usage
- ◆ Automatic OFF after 30 minutes of nonuse
- ◆ Starrett workmanship

Full-Function Action Features

- ◆ Instant inch/millimeter conversion
- ◆ "ME" millimeter model will turn on in the millimeter mode after installation of a new battery



With Standard Inch Graduations on Shell and Thimble

| Catalog No. | EDP No. | Description |
|-------------|---------|---|
| 777XFLZ | 67135 | 0-1"/0-25mm Range, Carbide Faces, with Case |

With Standard Millimeter Graduations on Shell and Thimble

| | | |
|-----------|-------|---|
| 777MEXFLZ | 67136 | 0-25mm/0-1" Range, Carbide Faces, with Case |
|-----------|-------|---|

Cable Information

| Part No. | EDP No. | Description |
|----------|---------|--|
| PT61963 | 66636 | Computer Interface Cable Complete to PC (RS232C) |
| PT61768 | 66454 | Adaptor from No. PT22938 Cable to PC (RS232C) |
| PT22938 | 64059 | Shielded Cable to Nos. 761/772 Series Starrett Modules and No. PT61768 Adaptor |
| PT61120 | 65446 | One 3-Volt Battery No. CR2450 |

- ◆ Measurement HOLD button
- ◆ Ability to zero tool at any position
- ◆ Ability to retain and return to the true zero reading of the micrometer
- ◆ PRESET button to install any reading at any position
- ◆ Ability to install minimum and maximum limits
- ◆ Output data to Starrett SPC Plus® hardware and software and to PCs
- ◆ Works well with Starrett DataSure® Wireless Data Collection Systems

Furnished in a protective case. Packed one per box with instructions.



Direct-Reading Bench Micrometers

0-2" / 0-50mm Ranges

No. 673 0-2"

No. 673M 0-50mm

The Starrett No. 673 bench micrometer is a high precision instrument, ideal for bench use either in a shop environment or inspection laboratory. It can be used as a comparator measuring to fifty-millionths of an inch (.000050") or two-thousandths of a mm (0.002mm) or for direct measuring to .0001" or 0.002mm. Work lengths up to 2" or 50mm can be measured.

- ◆ The base is a heavy, rigid casting, incorporating at the left end a movable anvil which actuates a linear, friction-free motion transfer mechanism between the anvil and the indicator. This assures high accuracy
- ◆ The large thimble diameter, approximately 3" (77mm), makes possible widely spaced graduations that are easy to read without a vernier scale reference
- ◆ Advanced, staggered design and quick reading graduations in combination with Starrett no-glare satin chrome finish on both thimble and sleeve also contribute to easier, faster readings
- ◆ The head is furnished with a speeder and has a special ring-type lock nut which firmly holds the spindle at any setting without distortion
- ◆ Another useful feature is the adjustable work table centered beneath the anvil and spindle. Work can be accurately aligned between the anvil and spindle by adjusting the table to the proper height and locking it in position
- ◆ The spindle and anvil are carbide faced for long life
- ◆ This bench micrometer can also be used with the No. 718 Analog Amplifier or the No. 776 Electronic Gage Amplifier by using the No. 673A Adaptor for the No. 715-2 Cartridge-Type Electronic Gaging Head to read to ten-millionths of an inch (.000010") or 0.0001mm



Starrett No. 673XZ Bench Micrometer (Inch model). Shown here is the No. 673 with the Starrett No. 718 Amplifier.



How to Use for Direct Measure and as a Comparator

For direct measuring, the micrometer head is set to zero and the dial indicator is set to zero by the bezel adjustment. Any workpiece within the 2" (50mm) range can then be measured by the micrometer head in ten-thousandths of an inch (.0001" or 0.002mm). The indicator must read zero for each measurement.

If used as a comparator, first set the head and the indicator to zero as previously explained. Then adjust the micrometer head to the desired dimension to be checked. After retracting the anvil, work is placed on the table between anvil and spindle and the anvil is then released so anvil and spindle contact the work. Plus or minus deviation from the nominal work size is then read from the dial indicator in fifty-millionths of an inch (.000050") or 0.002mm.

| Catalog No. | EDP No. | Range | | Graduation | | Work Table | |
|---------------|---------|---|-------------------|-----------------|----------------|--|--|
| | | Micrometer Head | Dial Indicator | Micrometer Head | Dial Indicator | | |
| 673XZ | 67191 | 0-2" | .006" (0-3-0) | .0001" | .000050" | 2-1/4" dia. and 7/8" Vertical Adjustment | |
| 673MXZ | 67192 | 0-50mm | 0.2mm (0-10-0) | 0.002mm | 0.002mm | 57mm dia. and 22mm Vertical Adjustment | |
| 673A | 52891 | Adaptor for No. 715-2 Cartridge Type Electronic Gaging Head for Use with No. 776 Electronic Gage Amplifier or No. 718 Analog Amplifier. | | | | | |

NOTE: Anvil Pressure Adjustment – 8 oz. to 3 lbs. (0.23 to 1.36kg)

Furnished in a case. Packed one in a box.

Precision Measuring Equipment and Industrial Supplies since 1924.

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