

## Technical Data

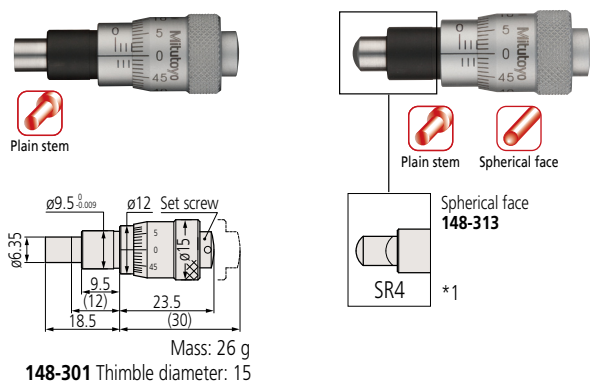
Graduation: 0.01 mm or 0.001 in  
Spindle pitch: 0.5 mm or 0.025 in

## Micrometer Heads SERIES 148 — Short Thimble with Choice of Diameter

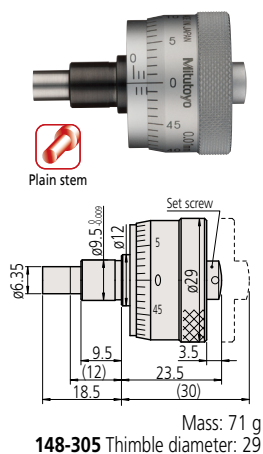
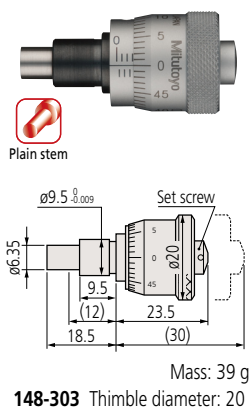
- Short body design maintains measuring stroke for limited space applications.
- Available in three thimble diameters to provide ease-of-reading options.

## DIMENSIONS

### Plain Stem

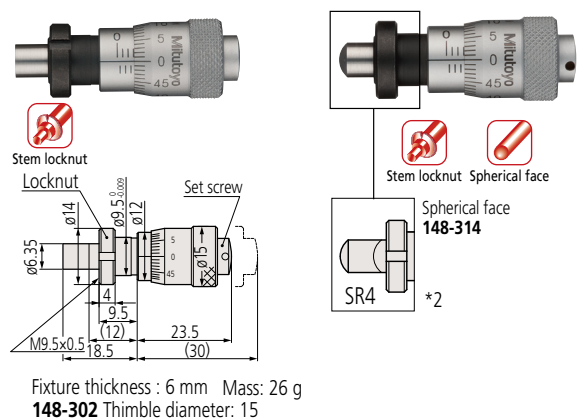


\*1 Other dimensions are the same as 148-301.

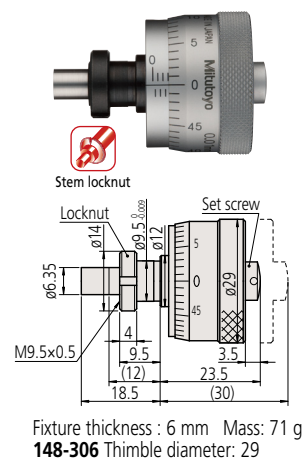
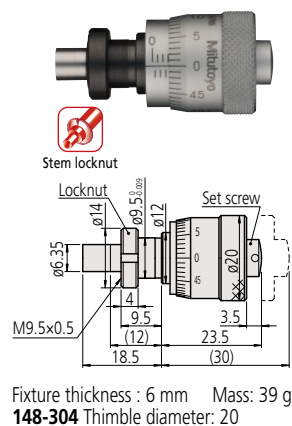


### Stem Locknut

Unit: mm



\*2 Other dimensions are the same as 148-302.



( ): with spindle fully retracted

# Micrometer Head

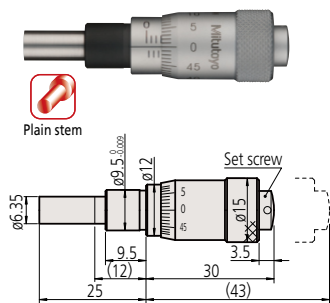
The origin of Mitutoyo's trustworthy brand of small tool instruments

## Micrometer Heads

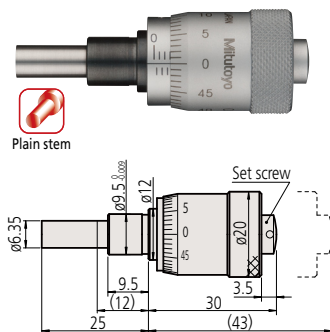
### SERIES 148 — Short Thimble with Choice of Diameter

#### DIMENSIONS

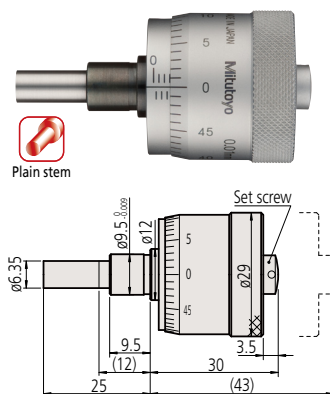
##### Plain Stem



Mass: 35 g  
**148-307** Thimble diameter: 15



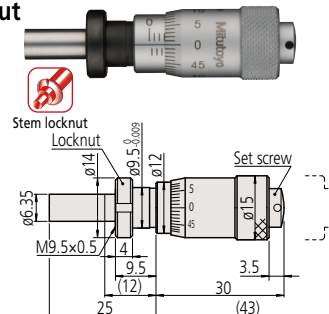
Mass: 55 g  
**148-309** Thimble diameter: 20



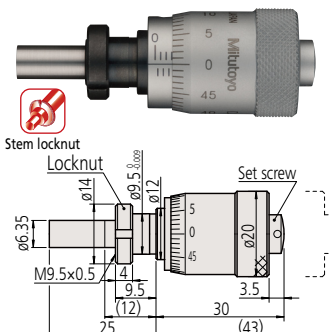
Mass: 103 g  
**148-311** Thimble diameter: 29

##### Stem Locknut

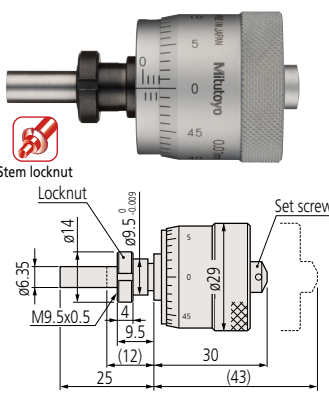
Unit: mm



Fixture thickness : 6 mm Mass: 35 g  
**148-308** Thimble diameter: 15



Fixture thickness : 6 mm Mass: 55 g  
**148-310** Thimble diameter: 20



Fixture thickness : 6 mm Mass: 103 g  
**148-312** Thimble diameter: 29  
( ) : with spindle fully retracted

#### SPECIFICATIONS

| Metric    |        |          |           |              |                 |                    |                    |  |
|-----------|--------|----------|-----------|--------------|-----------------|--------------------|--------------------|--|
| Order No. | Stroke | Accuracy | Stem dia. | Stem         | Spindle end     | Special features   |                    |  |
| 148-301   | 6.5 mm | ±2 μm    | 9.5 mm    | Plain        | Flat            | 15 mm thimble dia. |                    |  |
| 148-302   |        |          |           | W/ clamp nut |                 |                    |                    |  |
| 148-303   |        |          |           | Plain        |                 | 20 mm thimble dia. |                    |  |
| 148-304   |        |          |           | W/ clamp nut |                 | Flat               | 29 mm thimble dia. |  |
| 148-305   |        |          |           | Plain        |                 |                    |                    |  |
| 148-306   |        |          |           | W/ clamp nut |                 |                    |                    |  |
| 148-313   | 13 mm  |          |           | Plain        | Spherical (SR4) | 15 mm thimble dia. |                    |  |
| 148-314   |        |          |           | W/ clamp nut |                 |                    |                    |  |
| 148-307   |        |          |           | Plain        | Flat            | 15 mm thimble dia. |                    |  |
| 148-308   |        |          |           | W/ clamp nut |                 |                    |                    |  |
| 148-309   |        |          |           | Plain        |                 | 20 mm thimble dia. |                    |  |
| 148-310   |        |          |           | W/ clamp nut |                 |                    |                    |  |
| 148-311   |        |          |           | Plain        |                 | 29 mm thimble dia. |                    |  |
| 148-312   |        |          |           | W/ clamp nut |                 |                    |                    |  |

| Inch      |         |            |           |              |             |                      |                      |
|-----------|---------|------------|-----------|--------------|-------------|----------------------|----------------------|
| Order No. | Stroke  | Accuracy   | Stem dia. | Stem         | Spindle end | Special features     |                      |
| 148-351   | 0.25 in | ±0.0001 in | 0.375 in  | Plain        | Flat        | 0.59 in thimble dia. |                      |
| 148-352   |         |            |           | W/ clamp nut |             |                      |                      |
| 148-353   |         |            |           | Plain        |             | 0.79 in thimble dia. |                      |
| 148-354   |         |            |           | W/ clamp nut |             |                      |                      |
| 148-355   |         |            |           | Plain        |             | 1.14 in thimble dia. |                      |
| 148-356   | 0.5 in  |            |           | W/ clamp nut |             | Flat                 | 0.59 in thimble dia. |
| 148-357   |         |            |           | Plain        |             |                      |                      |
| 148-358   |         |            |           | W/ clamp nut |             |                      | 0.79 in thimble dia. |
| 148-359   |         |            |           | Plain        |             |                      |                      |
| 148-360   |         |            |           | W/ clamp nut |             |                      | 1.14 in thimble dia. |
| 148-361   |         |            |           | Plain        |             |                      |                      |
| 148-362   |         |            |           | W/ clamp nut |             |                      |                      |