

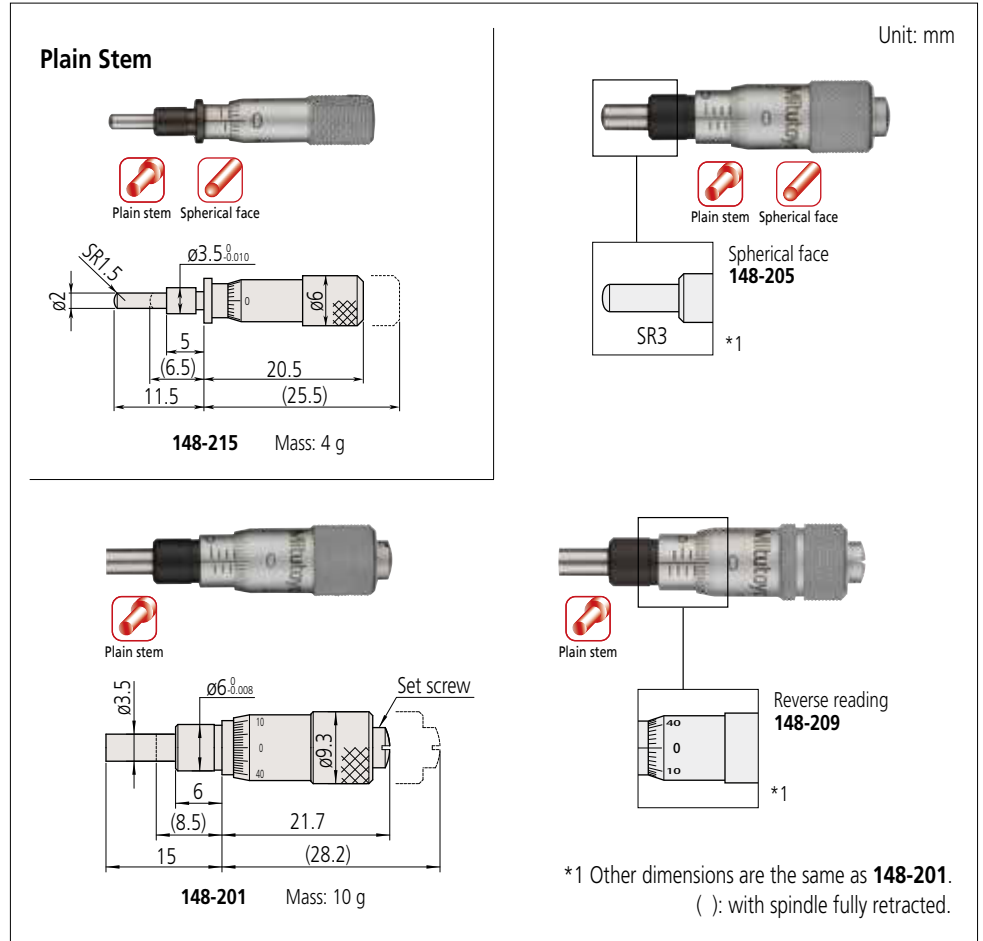
Technical Data

- Graduation: 0.02 mm (**148-215, 148-216**),
0.01 mm or .001 in
- Measuring face
Material: Alloy tool steel
Hardness: 60 HRC or more
Lapped
- Scale finishing:
Satin-chrome plated

Micrometer Heads SERIES 148 — Small/Ultra-small Type

- Miniature micrometer heads for ease of incorporating into machines.

DIMENSIONS



SPECIFICATIONS

Metric						
Order No.	Stroke (mm)	Stem dia. (mm)	Stem	Spindle end	Graduation	Accuracy (µm)
148-215	5	3.5	Plain	Spherical (SR1.5)	Standard	±5
148-216			W/clamp nut			
148-201	6.5	6	Plain	Flat		
148-203			W/clamp nut			
148-205			Plain	Spherical (SR3)		
148-207			W/clamp nut			
148-209	Plain	Flat	Reverse reading			
148-211	W/clamp nut					
Inch						
Order No.	Stroke (in)	Stem dia. (in)	Stem	Spindle end	Graduation	Accuracy (in)
148-217	0.2	0.156	Plain	Spherical (SR1.5)	Standard	±0.00025
148-218			W/clamp nut			
148-202	0.25	0.25	Plain	Flat		
148-204			W/clamp nut			
148-206			Plain	Spherical (SR3)		
148-208			W/clamp nut			
148-210*1	Plain	Flat	Reverse reading			
148-212*1	W/clamp nut					

*1 Made-to-order models

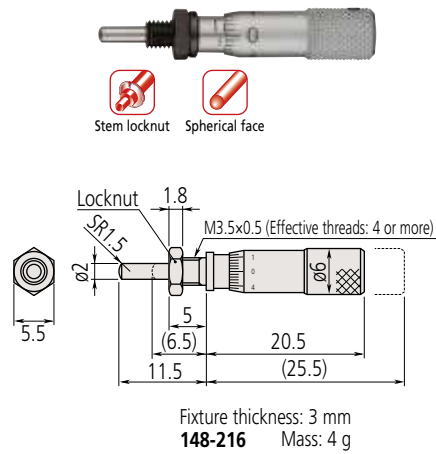
Micrometer Head

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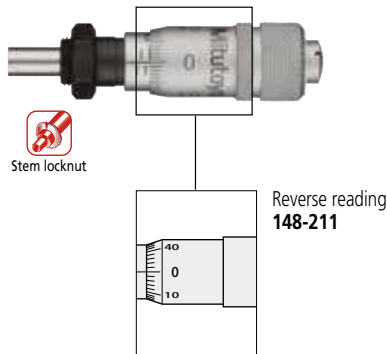
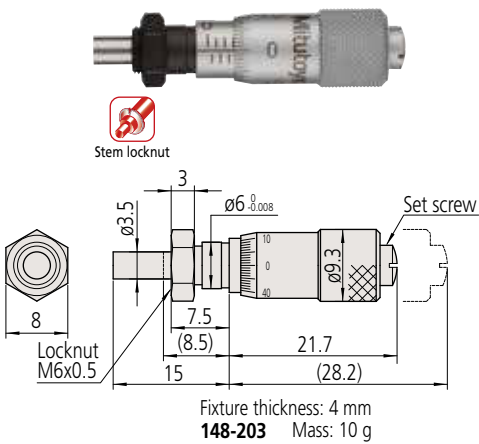
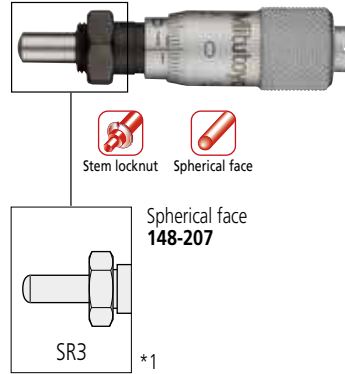
Micrometer Heads SERIES 148 — Small Standard Type

DIMENSIONS

Stem Locknut



Unit: mm



*1 Other dimensions are the same as **148-203**.
(): with spindle fully retracted.

Micrometer Heads SERIES 148 — Short Thimble with Choice of Diameter

Technical Data

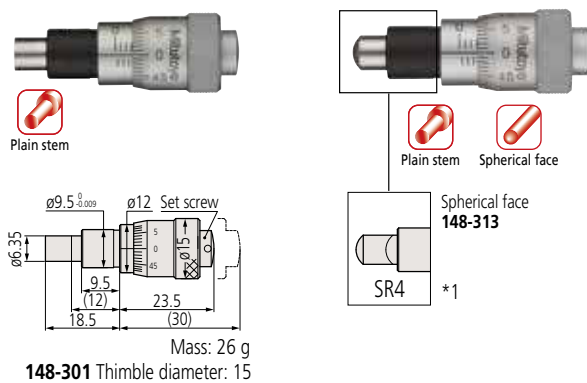
- Graduation: 0.01 mm or 0.001 in
- Spindle pitch: 0.5 mm or 0.025 in
- Measuring face
Material: Alloy tool steel
Hardness: 60 HRC or more
Lapped
- Scale finishing:
Satin-chrome plated

- Short body design maintains measuring stroke for limited space applications.

- Available in three thimble diameters to provide ease-of-reading options.

DIMENSIONS

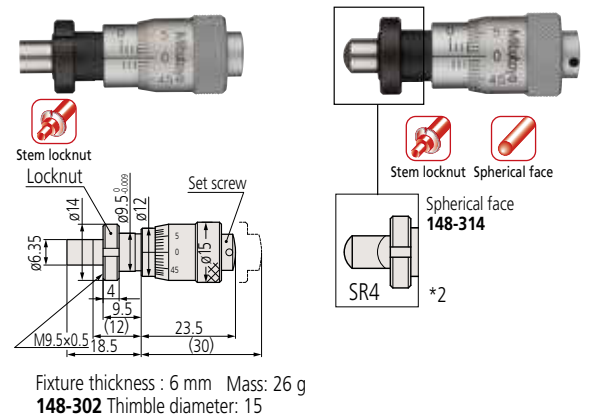
Plain Stem



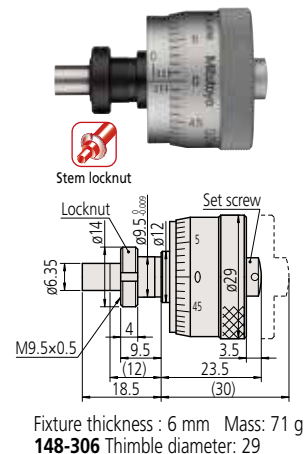
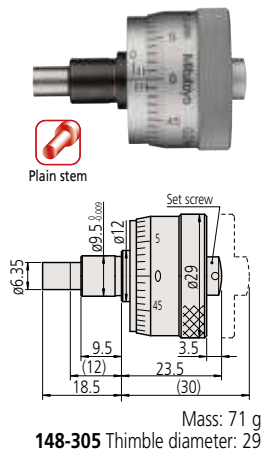
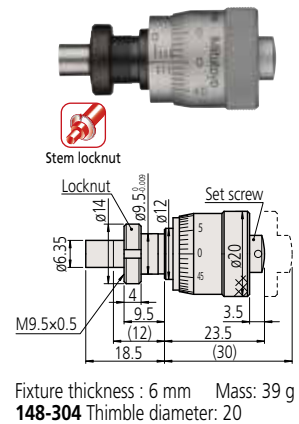
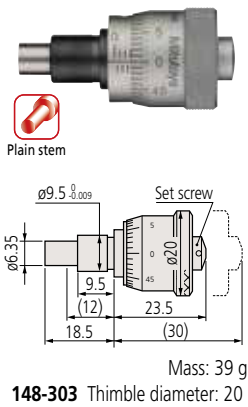
*1 Other dimensions are the same as 148-301.

Stem Locknut

Unit: mm



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



(): with spindle fully retracted.

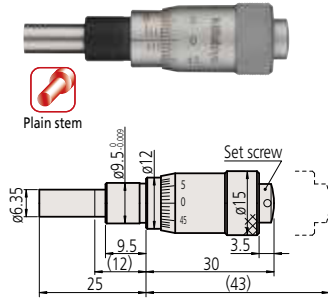
Micrometer Head

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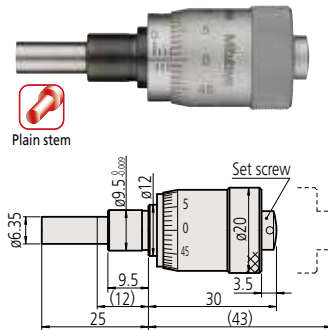
Micrometer Heads SERIES 148 — Short Thimble with Choice of Diameter

DIMENSIONS

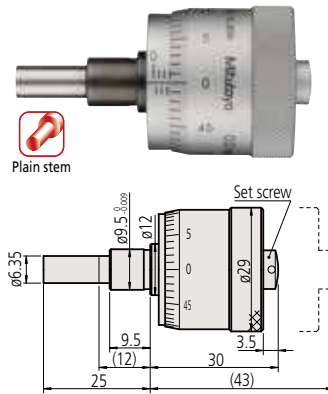
Plain Stem



Mass: 35 g
148-307 Thimble diameter: 15



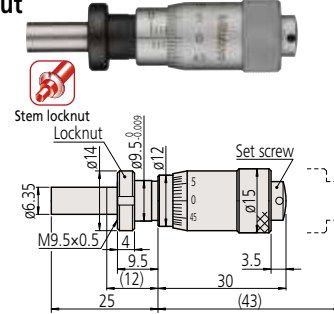
Mass: 55 g
148-309 Thimble diameter: 20



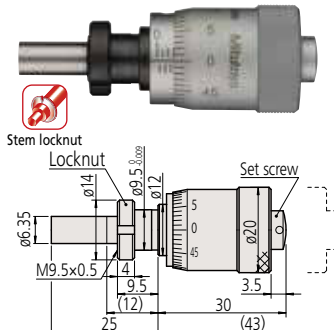
Mass: 103 g
148-311 Thimble diameter: 29

Stem Locknut

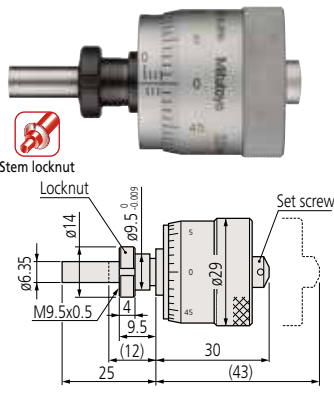
Unit: mm



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 (mm)	Accuracy (μm)	Stem dia. (mm)	Stem	Spindle end	Special features	
148-301	6.5	±2	9.5	Plain	Flat	15 mm thimble dia.	
148-302				W/clamp nut		20 mm thimble dia.	
148-303				Plain		29 mm thimble dia.	
148-304				W/clamp nut		15 mm thimble dia.	
148-305				Plain		15 mm thimble dia.	
148-306				W/clamp nut		15 mm thimble dia.	
148-313	13	±2	9.5	Plain	Spherical (SR4)	15 mm thimble dia.	
148-314				W/clamp nut		15 mm thimble dia.	
148-307				Plain		Flat	15 mm thimble dia.
148-308				W/clamp nut			20 mm thimble dia.
148-309				Plain			20 mm thimble dia.
148-310				W/clamp nut			29 mm thimble dia.
148-311	Plain	29 mm thimble dia.					
148-312	W/clamp nut	29 mm thimble dia.					

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

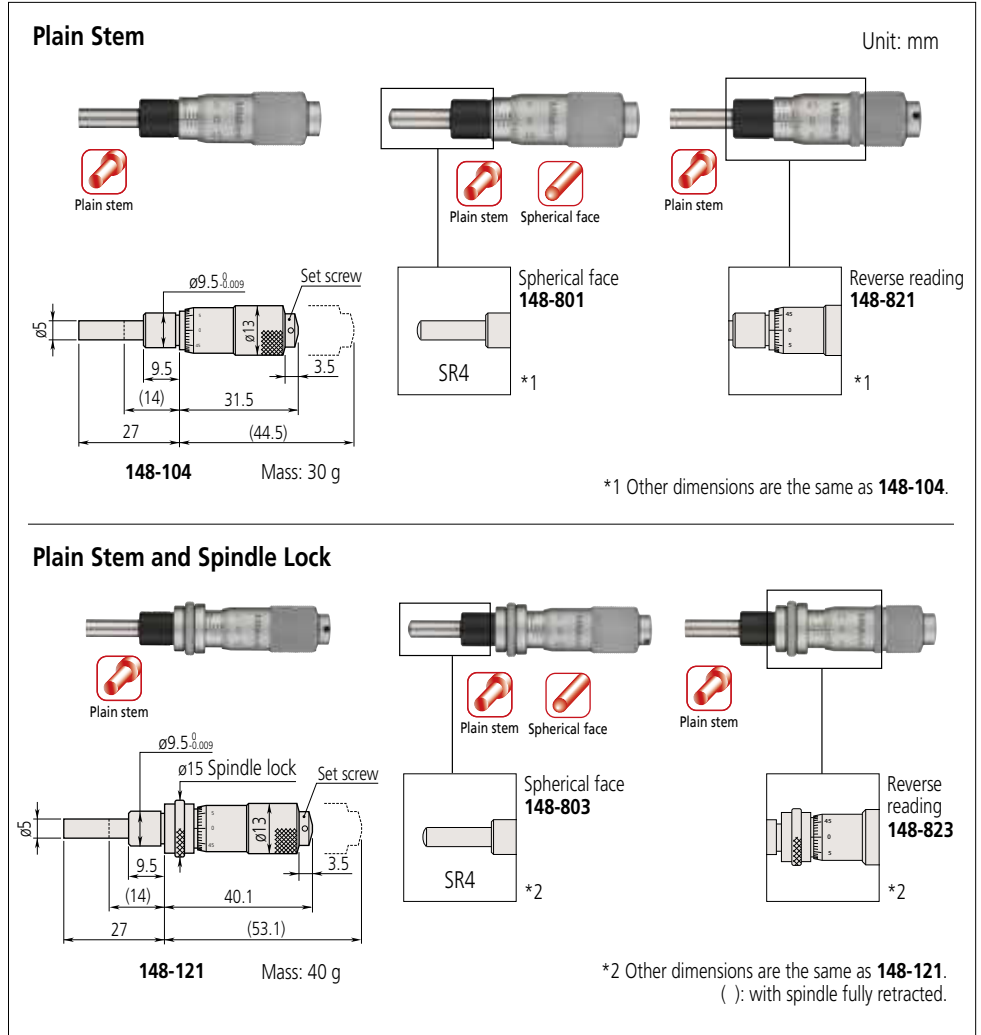
Technical Data

- Graduation: 0.01 mm or 0.001 in
- Spindle pitch: 0.5 mm or 0.025 in
- Measuring face
Material: Alloy tool steel
Hardness: 60 HRC or more
Lapped
- Scale finishing:
Satin-chrome plated

Micrometer Heads SERIES 148 — Small Standard Type

- Measuring stroke of 13 mm.

DIMENSIONS



SPECIFICATIONS

Metric							
Order No.	Stroke (mm)	Accuracy (μm)	Stem dia. (mm)	Stem	Spindle end	Graduation features	
148-104	13	±2	9.5	Plain	Flat	Standard	
148-103				W/clamp nut			
148-121				Plain*1			
148-120				W/clamp nut*1			
148-801				Plain			
148-802				W/clamp nut			
148-803				Plain*1	Spherical (SR4)		
148-804				W/clamp nut*1			
148-821				Plain			
148-822				W/clamp nut			Flat
148-823				Plain*1			
148-824				W/clamp nut*1			

*1 With spindle lock

Inch							
Order No.	Stroke (in)	Accuracy (in)	Stem dia. (in)	Stem	Spindle end	Graduation features	
148-112	0.5	±0.0001	0.375	Plain	Flat	Standard	
148-111 *2				W/clamp nut			
148-123				Plain*1			
148-122				W/clamp nut*1			
148-811				Plain			
148-812				W/clamp nut			
148-813				Plain*1	Spherical (SR4)		
148-814				W/clamp nut*1			
148-831				Plain			
148-832				W/clamp nut			Flat
148-833				Plain*1			
148-834				W/clamp nut*1			

*1 With spindle lock

*2 Made-to-order models

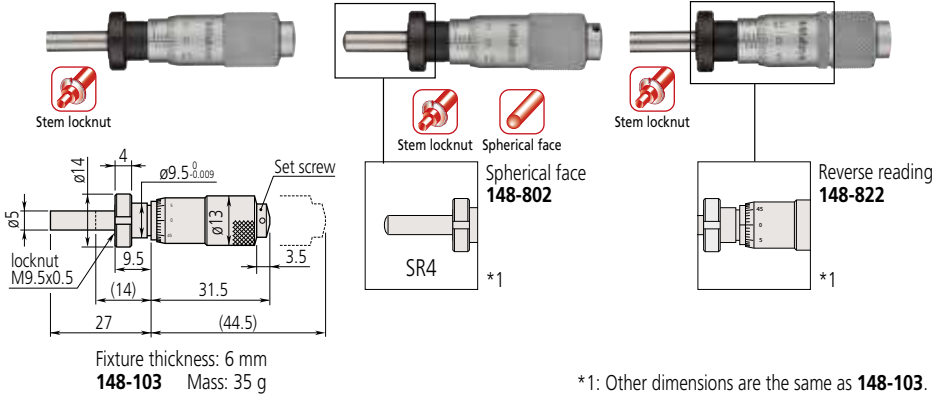
Micrometer Head

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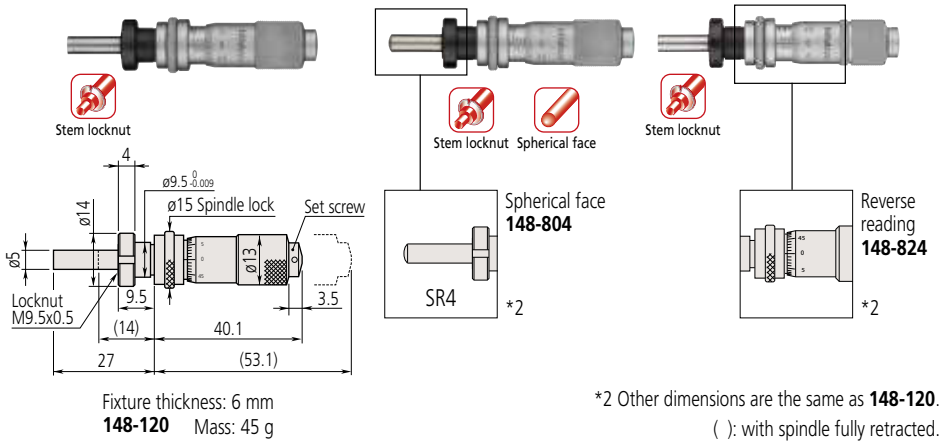
Micrometer Heads SERIES 148 — Small Standard Type

DIMENSIONS

Stem Locknut



Stem Locknut and Spindle Lock



Technical Data

- Graduation: 0.01 mm or 0.001 in
- Spindle pitch: 0.5 mm or 0.025 in
- Measuring face
Material: Alloy tool steel
Hardness: 60 HRC or more
Lapped
- Scale finishing:
Satin-chrome plated

Micrometer Heads SERIES 148 — Small Thimble Diameter Standard Type

- Measuring stroke of 13 mm.
- The thimble can be set to zero at any position by loosening the setscrew.

DIMENSIONS

Unit: mm

Plain Stem

All stainless steel model

Plain stem

Plain stem Spherical face

Plain stem

Spherical face
148-853

Reverse reading
148-863

SR4 *1

148-503 148-513 All stainless steel model Mass: 35 g *1 Other dimensions are the same as **148-503**.

Plain Stem and Spindle Lock

Plain stem

Plain stem Spherical face

Plain stem

Spherical face
148-856

Reverse reading
148-866

SR4 *2

148-506 MHA1-13L Mass: 35 g *2 Other dimensions are the same as **148-506**.
(): with spindle fully retracted.

SPECIFICATIONS

Metric						
Order No.	Stroke (mm)	Accuracy (μm)	Stem dia. (mm)	Stem	Spindle end	Special features
148-503	13	±2	9.5	Plain	Flat	Standard
148-513						Stainless steel throughout
148-508				W/clamp nut Plain*1	Spherical (SR4)	Standard
148-506						
148-504				W/clamp nut*1	Flat	Reverse reading
148-853						
148-854				W/clamp nut*1	Spherical (SR4)	Standard
148-863						
148-864				W/clamp nut*1	Flat	Reverse reading
148-518 *2						
148-858 *2				W/clamp nut	Spherical (SR4)	Standard
148-866 *2						
148-856 *2				Plain*1	Flat	Reverse reading
148-868 *2						
148-856 *2				Plain*1	Spherical (SR4)	Standard
148-868 *2						
148-868 *2	W/clamp nut	Flat	Reverse reading			

*1 With spindle lock *2 Made-to-order models

Inch						
Order No.	Stroke (in)	Accuracy (in)	Stem dia. (in)	Stem	Spindle end	Special features
148-501	0.5	±0.0001	0.375	Plain	Flat	Standard
148-511 *2						Stainless steel throughout
148-507 *2				W/clamp nut Plain*1	Spherical (SR4)	Standard
148-505						
148-502				W/clamp nut*1	Flat	Reverse reading
148-851						
148-852				W/clamp nut*1	Spherical (SR4)	Standard
148-861						
148-861				Plain	Flat	Reverse reading
148-862						
148-862				W/clamp nut*1	Flat	Reverse reading

*1 With spindle lock *2 Made-to-order models

Micrometer Head

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Micrometer Heads SERIES 148 — Small Thimble Diameter Standard Type

DIMENSIONS

Stem Locknut

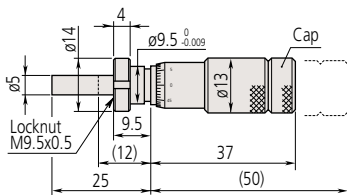
Unit: mm



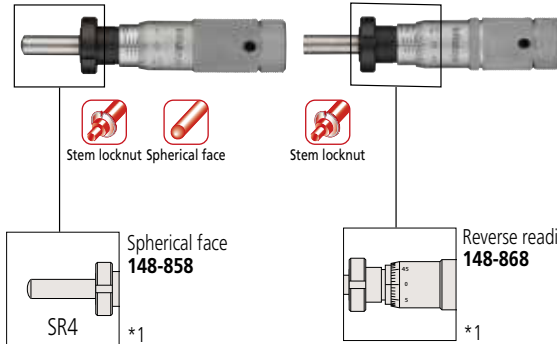
All stainless steel model



Stem locknut



Fixture thickness: 6 mm Mass: 40 g
148-508 148-518 All stainless steel model



Stem locknut Spherical face

Stem locknut

Spherical face
148-858

Reverse reading
148-868

*1

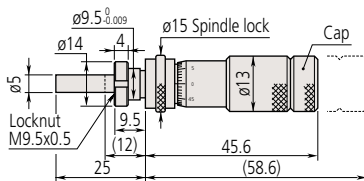
*1

*1 Other dimensions are the same as **148-508**.

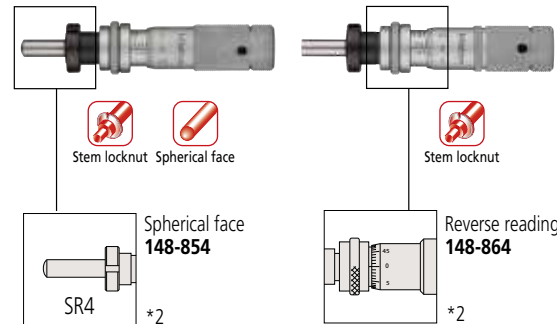
Stem Locknut and Spindle Lock



Stem locknut



Fixture thickness: 6 mm Mass: 40 g
148-504



Stem locknut Spherical face

Stem locknut

Spherical face
148-854

Reverse reading
148-864

*2

*2

*2 Other dimensions are the same as **148-504**.
() : with spindle fully retracted.