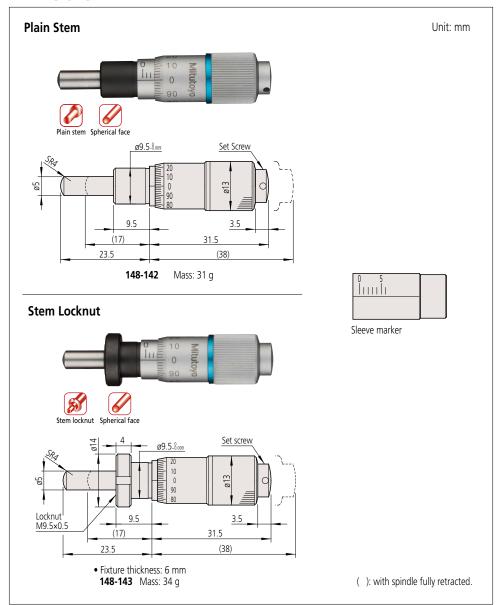
Micrometer Head

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

Micrometer Heads SERIES 148 — Fine Spindle Feed of 0.1 mm/rev

- Highly accurate 0.1 mm pitch thread is only one-fifth of that used for a standard-pitch head (0.5 mm).
- External dimensions are compatible with standard 0.5 mm pitch heads.

DIMENSIONS



SPECIFICATIONS

SI ECITICATIONS								
Metric —								
Order No.	Range (mm)	Graduation (mm)	Stem dia. (mm)	Stem	Spindle end	Spindle pitch (mm)	Maximum permissible error JMPE (µm)	Special features
148-142 148-143		0.002	9.5	Plain W/clamp nut	(SR4) Spherical	0.1	±2	_
148-342 148-343	0 - 6.5			Plain W/clamp nut				Thicker & shorter thimble
148-242 148-243			6	Plain W/clamp nut			±5	Small thimble diameter
148-244 148-245	0 - 5	0.004	3.5	Plain W/clamp nut	Spherical (SR1.5)		±J	Small trilinible diameter

Technical Data

- Measuring face
 Material: Alloy tool steel
 Hardness: 60 HRC or more
 Lapped
- Scale finishing: Satin-chrome plated

Spindle Pitch





Pitch=0.1 mm

Pitch=0.5 mm

Typical Applications

- Semiconductor-wafer positioning machinery and optical component alignment units, etc.
- Precision X-Y table positioning

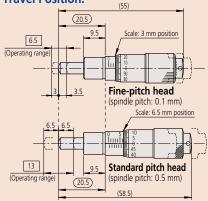


• Precision adjustment of mirror in holder





Comparison of Mounting Dimensions Between a Fine-pitch Head and a Standard-pitch Head at the Mid-range Travel Position.



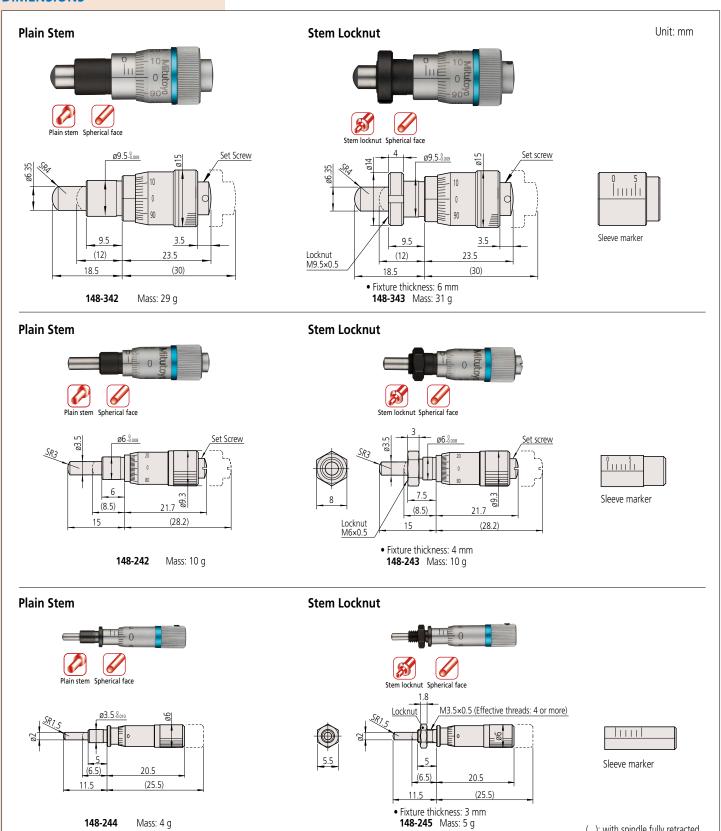
Note: While the fine-pitch micrometer head has a measuring range of 6.5 mm, the standard head has a larger range of 13 mm.

When replacing a standard head, the fine-pitch type can use the common range in the middle of the spindle travel. The standard and compact types of fine-pitch head are otherwise completely interchangeable.



Micrometer Heads SERIES 148 — Fine Spindle Feed of 0.1 mm/rev

DIMENSIONS





(): with spindle fully retracted.