Micrometer Heads

SERIES 148 — Fine Spindle Feeding of 0.1mm/rev

FEATURES

- Fine spindle feeding of just 0.1mm/rev for extra-fine adjustment and positioning.
- External dimensions are compatible with conventional 0.5mm pitch heads.

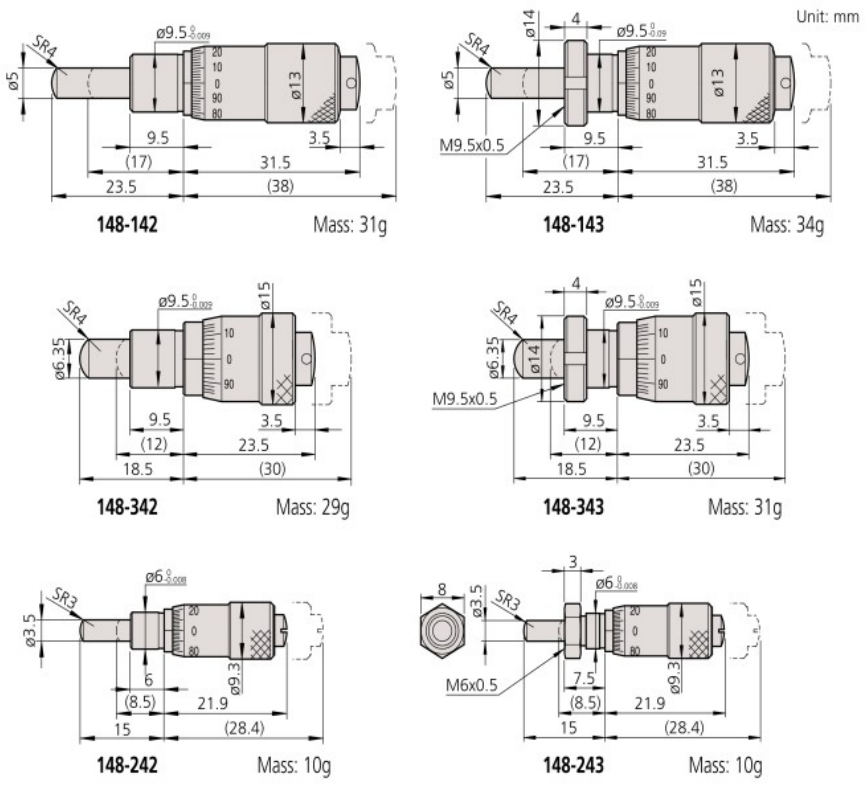
SPECIFICATIONS

Metric

Range	Order No.	Accuracy	Stem dia.	Stem	Spindle face	Remarks
0 - 6.5mm	**148-142**	±2µm	9.5mm	Plain	Spherical (SR4)	—
0 - 6.5mm	**148-143**	±2µm	9.5mm	w/clamp nut	Spherical (SR4)	—
0 - 6.5mm	**148-342**	±2µm	9.5mm	Plain	Spherical (SR4)	Thicker & shorter thimble
0 - 6.5mm	**148-343**	±2µm	9.5mm	w/clamp nut	Spherical (SR4)	Thicker & shorter thimble
0 - 6.5mm	**148-242**	±5µm	6mm	Plain	Spherical (SR3)	Small thimble diameter
0 - 6.5mm	**148-243**	±5µm	6mm	w/clamp nut	Spherical (SR3)	Small thimble diameter

DIMENSIONS AND MASS

Unit: mm

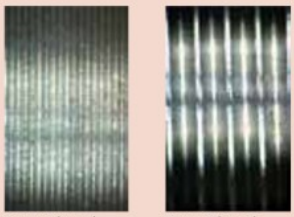


( ): when retracting the spindle until its stroke end.

Technical Data

Graduations: 0.002mm
Spindle pitch: 0.1mm
Spindle face: Spherical of SKS3 (more than HRC60), lapped surface
Scale surface: Hard-chrome plating
Fixture thickness for clamp nut: 6mm (**148-243**: 4mm)

Spindle pitch

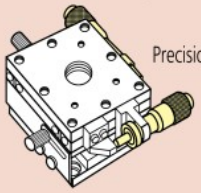


Screw Thread pitch= 0.1mm

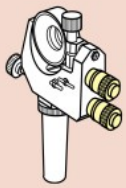
Screw Thread pitch= 0.5mm

Applications

Semiconductor wafer positioning machinery and optical component alignment units, etc.



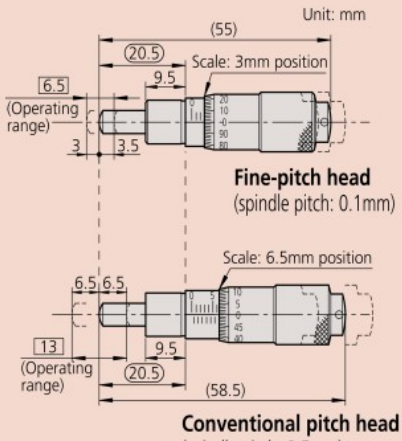
Precision X-Y table positioning



Precision adjustment of mirror in holder

Comparison of mounting dimensions between a standard fine-pitch head and a standard conventional pitch head at the mid-range travel position.

Unit: mm



While the fine-pitch micrometer head has a measuring range of 6.5mm, the conventional head has a larger range of 13mm. When replacing a conventional 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 completely interchangeable.