

Standard Scales

SERIES 182 — Made of Low Expansion Glass

FEATURES

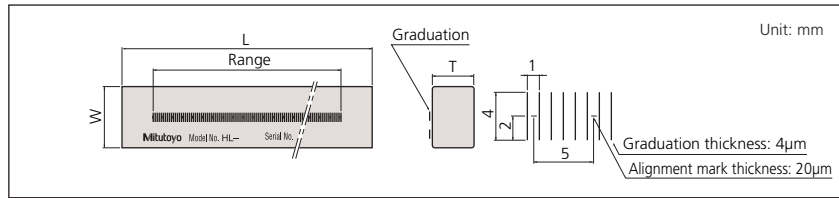
- High precision glass scales manufactured under Mitutoyo's leading-edge Linear Scale production technology.
- High accuracy is guaranteed to be used as a standard for calibrating graduated scales.



182-502-50

182-501-50

DIMENSIONS

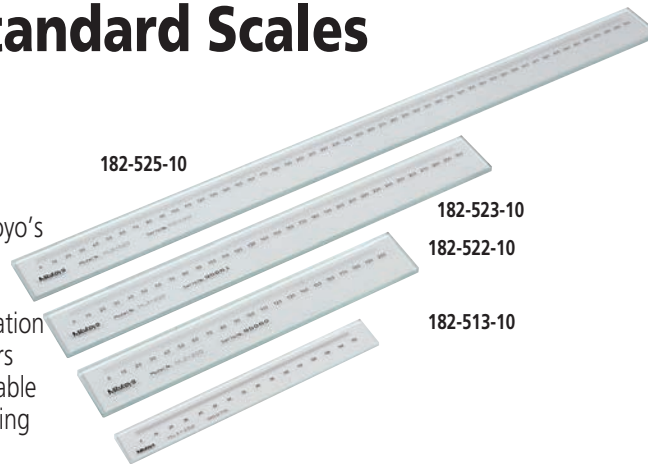


Working Standard Scales

SERIES 182

FEATURES

- High precision glass scales manufactured under Mitutoyo's leading-edge Linear Scale production technology.
- Ideal for checking magnification accuracy of profile projectors and microscopes, and the table feeding accuracy of measuring equipment.



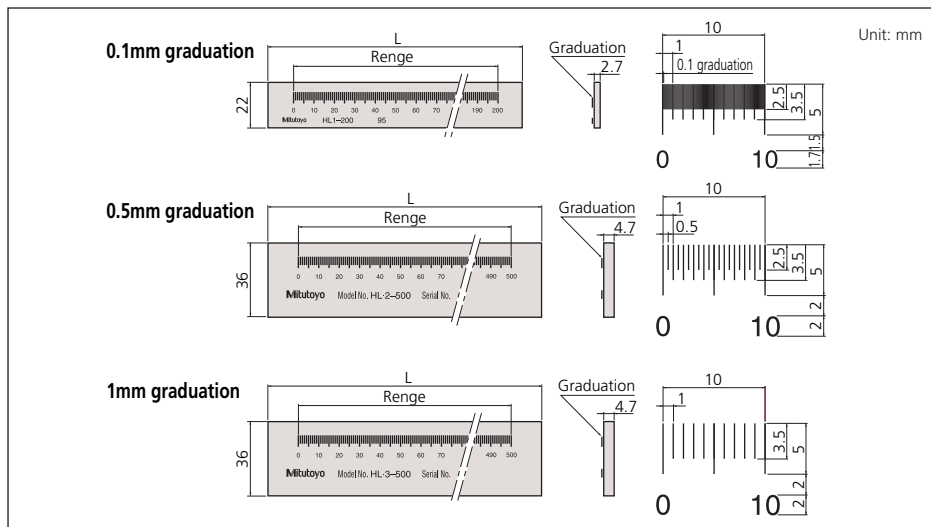
182-525-10

182-523-10

182-522-10

182-513-10

DIMENSIONS



0.1mm graduation

0.5mm graduation

1mm graduation

Graduation 2.7

Graduation 4.7

Graduation 4.7

Unit: mm



Technical Data

Accuracy (at 20°C): $(0.5+L/1000)\mu\text{m}$,
 $L = \text{Measured length (mm)}$
 Glass material: Low expansion glass
 Thermal expansion coefficient: $8 \times 10^{-6}/\text{K}$
 Graduation: 1mm
 Graduation thickness: 4μm
 Mass: 0.75kg (250mm), 1.8kg (500mm)

SPECIFICATIONS

Metric

Range	Order No.	L	W	T
250mm	182-501-50	280mm	20mm	10mm
250mm	182-501-60*	280mm	20mm	10mm
500mm	182-502-50	530mm	30mm	20mm
500mm	182-502-60*	530mm	30mm	20mm

*with English JCSS certificate.



Technical Data

Accuracy (at 20°C): $(1.5+2L/1000)\mu\text{m}$,
 $L = \text{Measured length (mm)}$
 Glass material: Sodium glass
 Thermal expansion coefficient: $8.5 \times 10^{-6}/\text{K}$
 Graduation: 0.1mm (thickness: 20μm)
 0.5mm (thickness: 50μm)
 1mm (thickness: 100μm)

SPECIFICATIONS

Metric

Range	Order No.	Graduation	L	Mass
50mm	182-511-10	0.1mm	75mm	0.23kg
100mm	182-512-10	0.1mm	125mm	0.24kg
150mm	182-513-10	0.1mm	175mm	0.35kg
200mm	182-514-10	0.1mm	225mm	0.36kg
100mm	182-521-10	0.5mm	130mm	0.27kg
200mm	182-522-10	0.5mm	230mm	0.32kg
300mm	182-523-10	0.5mm	330mm	0.57kg
400mm	182-524-10	0.5mm	430mm	0.71kg
500mm	182-525-10	0.5mm	530mm	0.86kg
250mm	182-531-10	1mm	280mm	0.55kg
500mm	182-532-10	1mm	530mm	0.86kg
750mm	182-533-10	1mm	780mm	1.22kg
1000mm	182-534-10	1mm	1030mm	1.54kg