# **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.



#### **Technical Data**

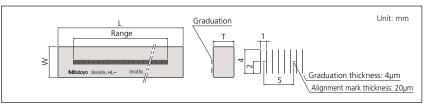
Accuracy (at 20°C):  $(0.5+L/1000)\mu m$ , L = Measured length (mm)Glass material: Low expansion glass

Thermal expansion coefficient: 8x10-8/K
Graduation: 1mm

Graduation thickness: 4µm

Mass: 0.75kg (250mm), 1.8kg (500mm)

# **DIMENSIONS**



**Working Standard Scales** 

**SERIES 182** 

# **FEATURES**

 High precision glass scales manufactured under Mitutoyo's leading-edge Linear Scale production technology.

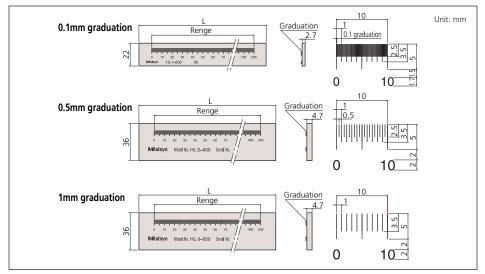
 Ideal for checking magnification accuracy of profile projectors and microscopes, and the table feeding accuracy of measuring equipment.

# 182-525-10 182-523-10 182-522-10 182-513-10

182-502-50

182-501-50

### **DIMENSIONS**



# **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)µm, L = Measured length (mm) Glass material: Sodium glass Thermal expansion coefficient: 8.5x10°8/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

