

Micrometer

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

Dial Snap Meters SERIES 523

- Suited for the measurement of mass-produced parts.
- Designed for measurement using a stand: produces stable measurement.
- Greatly improved accuracy: indication error and graduation of 1 μm .
- IP protection level: 54, coolant-splash resistant during grinding process.
- Hard-coated crystal: enhanced oil and scratch resistance.
- Indicator scale is large and easy to read.
- All models come with the zero position adjustment feature.
- Equipped with an elevating workpiece stop as standard.
- Measuring faces: Carbide.



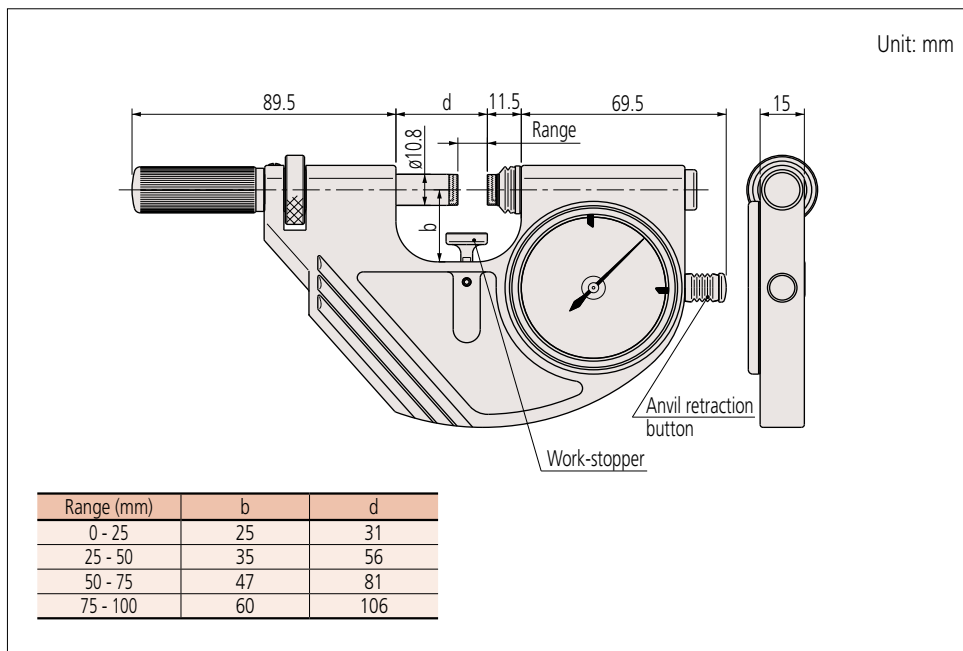
523-121

SPECIFICATIONS

Metric				
Order No.	Range (mm)	Dial graduation (mm)	Measuring force (N)	Mass (g)
523-121	0 - 25	0.001	5 - 10	740
523-122	25 - 50			840
523-123	50 - 75			950
523-124	75 - 100			1080

Inch				
Order No.	Range (in)	Dial graduation (in)	Measuring force (N)	Mass (g)
523-131	0 - 1	0.00005	5 - 10	740
523-132	1 - 2			840
523-133	2 - 3			950
523-134	3 - 4			1080

DIMENSIONS



Technical Data

- Indicator
 - Indicating range: $\pm 0.06 \text{ mm} / \pm 0.0023 \text{ in}$
 - Dispersion of indication: $0.4 \mu\text{m} / 0.00002 \text{ in}$
 - Dial indication accuracy: $1 \mu\text{m} / 0.00005 \text{ in}$
- Flatness: $0.3 \mu\text{m} / 0.000012 \text{ in}$
- Parallelism: $0.6 \mu\text{m} / 0.000024 \text{ in}$ for models up to 50 mm/2 in measuring range
 $1 \mu\text{m} / 0.00004 \text{ in}$ for models over 50 mm/2 in measuring range



Typical Indicators Used with Gage

- ID-C (0.001 mm)/**543-390B**
- LGF-L (0.0001 mm)/**542-181** & Counter **542-015**



ABS Digimatic Indicator



Linear Gage and counter

Snap Meters SERIES 523

- Suited for the measurement of mass-produced parts.
- Various indicators (optional) are available to suit accuracy and resolution requirements.
- Measuring faces: Carbide.



523-141
(Indicator: optional)

SPECIFICATIONS

Metric							
Order No.	Range (mm)	Anvil movement (mm)	Measuring force* (N)	Mass (g)	Repeatability of indication (μm)	Flatness (μm)	Parallelism (μm)
523-141	0 - 25	2	5 - 10	710	0.4	0.3	0.6
523-142	25 - 50			810			
523-143	50 - 75			920			
523-144	75 - 100			1050			1

Inch							
Order No.	Range (in)	Anvil movement (in)	Measuring force* (N)	Mass (g)	Repeatability of indication (in)	Flatness (in)	Parallelism (in)
523-151	0 - 1	0.078	5 - 10	710	0.00002	0.000012	0.000024
523-152	1 - 2			810			
523-153	2 - 3			920			
523-154	3 - 4			1050			0.00004

* Measured at the position where the anvil is retracted by 1 mm from the free position without installing the indicator.

DIMENSIONS

