

Micrometer

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

Sheet Metal Micrometers SERIES 389, 118

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

- Measures thickness of sheet metal.
- IP65 water/dust protection (series 389).
- Measuring faces: Carbide.

- Profile of measuring faces: Flat-Flat, Spherical-Flat and Spherical-Spherical.
- Equipped with Ratchet Stop for constant measuring force.



389-251-30



118-102

SPECIFICATIONS

Metric					
Order No.	Range (mm)	Resolution (mm)	Accuracy* (µm)	Throat depth (mm)	Measuring surfaces
Digimatic (LCD)					
389-251-30	0 - 25	0.001	±4	150	F-F
389-261-30					S-F
389-271-30					S-S
389-514	25 - 50	0.001	±5	300*1	F-F
389-252-30					S-F
389-262-30					S-S
389-272-30					

* Excluding quantizing error of ±1 count

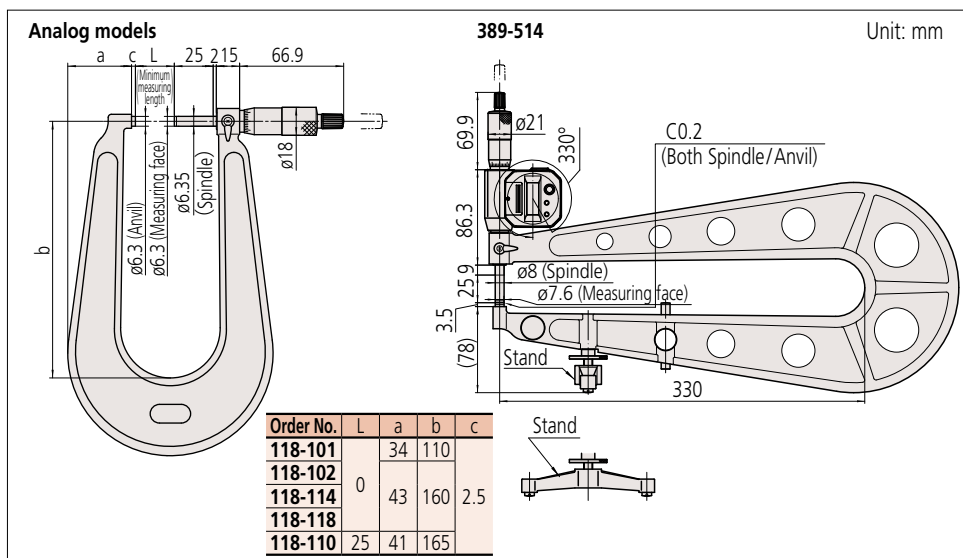
Metric					
Order No.	Range (mm)	Graduation (mm)	Accuracy (µm)	Throat depth (mm)	Measuring surfaces
Analog					
118-101	0 - 25	0.01	±4	100	F-F
118-102					S-F
118-114					S-S
118-118	25 - 50	0.01	±5	300*1	F-F
118-103					S-F
118-110					S-S
118-126					

*1 Models with a 300 mm (12 in) throat are equipped with a stand for convenience of measurement in the horizontal orientation as standard.

Note 1: For functional details of 389-251-30/389-252-30/389-351-30/389-352-30 refer to page B-8.

Note 2: For functional details of 389-514/389-714 refer to page B-9.

DIMENSIONS



MeasurLink[®] ENABLED
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Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink (refer to page A-5 for details).



These marks indicate that a product has successfully passed IP65-level testing, which is carried out by the independent German certification organization TÜV Rheinland.



IP Codes (series 389)

Level 6: Dust-proof.

No ingress of dust allowed.

Level 5: Protected against water jets.

Water projected in jets against the enclosure from any direction shall have no harmful effects.

Technical Data

- Flatness: 0.6 µm/0.000024 in for models with 150 mm/6 in throat
1 µm/0.00004 in for models with 300 mm/12 in throat
- Parallelism: 3 µm/0.00012 in
- Quantizing error (series 389): excluding ±1 count

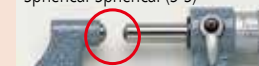
Standard, Flat-Flat (F-F)



Spherical-Flat (S-F)



Spherical-Spherical (S-S)

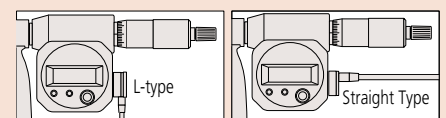


Technical Data

- Battery for series 389
SR44 (1 pc.), **938882**, 2 pcs.:**389-514**, **389-714** for initial operational checks (standard accessory)
- Battery life: Approx. 2.4 years under normal use (for series 389-2XX, 3XX)
Approx. 1.8 years under normal use (for series 389-514, 714)
- Length standard: Electromagnetic rotary sensor (for series 389)
- Standard accessories: Reference bar, 1 pc. (except for measuring range 0-25 mm (0-1 in) models)
Spanner (**200877**), 1 pc. (for series 118-1XX)
Spanner (**301336**), 1 pc. (for series 389-2XX, 3XX)
Spanner (**200154**), 1 pc. (for series 118-103/107, 389-514/714)

Optional Accessories for Series 389

- Connecting cables for **Series 389** (excluding **389-514** and **389-714**)
1 m: **05CZA662**
2 m: **05CZA663**
- USB Input Tool Direct
USB-ITN-B (2 m): **06AFM380B**
- **U-WAVE-T** dedicated connection cable for series 389 (excluding **389-514** and **389-714**)
160 mm: **02AZD790B**
For foot switch: **02AZE140B**
- SPC cables for **U-WAVE**, series 389 (excluding **389-514** and **389-714**)
- Connecting cables for **389-514**, **389-714**
- Recommended cables: L-Type (does not interfere with operating the thimble.)
1 m: **04AZB512**
2 m: **04AZB513**
- Straight type (may interfere with operating the thimble.)
1 m: **959149**
2 m: **959150**



Refer to page B-68 for detailed information about recommended cables.

Wireless Data Output **U-WAVE™**

- **U-WAVE-TM*** **264-622** (IP67 type)
264-623 (Buzzer type)
- Connecting unit for **U-WAVE-TM***
02AZF310 (IP67/buzzer type common specification)
Refer to page A-15 for details.
* Excludes **389-514** and **389-714**.

Sheet Metal Micrometer SERIES 119

- Large diameter dial model enables easy and quick measurement of sheet metal thickness.
- Equipped with Ratchet Stop for constant measuring force.
- Adjustable anvil.
- Measuring faces: Carbide.



Standard Accessories

Spanner (200168), 1 pc.



119-202

SPECIFICATIONS

Metric				
Order No.	Range (mm)	Graduation (mm)	Accuracy (μm)	Throat depth (mm)
119-202	0 - 25	0.01	±4	50

DIMENSIONS

