# Micrometer

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

### Sheet Metal Micrometers SERIES 389, 118

- 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.



Resolution Accuracy\*

.00005"/

0.001mm

Graduation Accuracy

.0001

.001"

±.0002" 6"

±.00025

±.0002" 6"

±.0002" 6"

±.00025

±.0002

Range

0 - 1

1"-2

Range

0 - 1

Throat

12"\*

Throat

dept

12'

Measuring

surface

S-F

S-S

F-F

S-F

Measuring

surface

F-F

. S-F S-S

F-F

Inch/Metric

Order No.

389-371-30

389-714

389-352-30

389-362-30

389-372-30

Order No.

118-129

118-116

118-120

118-107

118-112

Inch

Analog

Excluding quantizing error

Digimatic (LCD) 389-351-30 389-361-30

## **SPECIFICATIONS**

Metric	

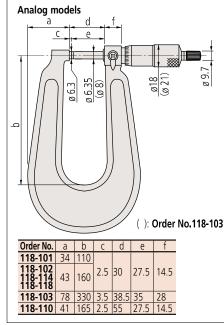
Order No.	Range	Resolution	Accuracy*	Throat depth	Measuring surfaces
Digimatic (LCD) 389-251-30					F-F
389-261-30	0 - 25mm		±4µm	150mm	S-F
389-271-30					S-S
389-514			±5µm	300mm*1	F-F
389-252-30					1-1
389-262-30	25 - 50mm		±4µm	150mm	S-F
389-272-30					S-S

#### \* Excluding quantizing error

Metric							
Order No.	Range	Graduation	Accuracy	Throat depth	Measuring surfaces		
Analog							
118-101				100mm	F-F		
118-102	0 - 25mm	1.4	+ Aum		г-г		
118-114			±4µm	150mm	S-F		
118-118		0.01mm			S-S		
118-103			±5µm	300mm*	F-F		
118-110	25 - 50mm		±4µm	150mm	1-1		
118-126	25 3011111		μm	13011111	S-S		

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

#### DIMENSIONS



- Mitutoyo
- 389-514 Unit: mm ø9.7 C0.2 ø21 330° 20 Both Spindle / Anvil 55.3 3 Ò 282 0 38.5 ø8  $\square$ Ö 330 Stand Stand 71 I F +



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

TÜVRheinland CERTIFIED www.tuv.com

(Refer to page X for details.)

#### 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: 0.6µm/.000024" for models with 150mm/6" throat 1µm/.00004" for models with 300mm/12" throat Parallelism: 3µm/.00012"

Quantizing error (series 389): excluding ±1 count

Standard, Flat-Flat (F-F)





Spherical-Spherical (S-S)

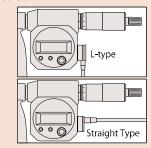
# ON

#### Battery for series 389

SR44 (1pc), 938882, 2pcs: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 0-25mm (0-1") 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**

- Connecting cables for Series 389 (excluding 389-514 and 389-714) 1m: 05CZA662 2m: 05CZA663
- USB Input Tool Direct
- USB-ITN-B (2m): 06ADV380B • SPC cables for U-WAVE, series 389
- (excluding 389-514 and 389-714) w/ data switch (160mm): 02AZD790B For foot switch: 02AZE140B
- Connecting ccables for 389-514, 389-714
  Recommended cables: L-Type (does not interfere with operating the thimble.)
- 1m: 04AZB512 2m: 04AZB513
- Straight type (may interfere with operating the thimble.)
   1m: 959149
   2m: 959150



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