

# Sheet Metal Micrometers

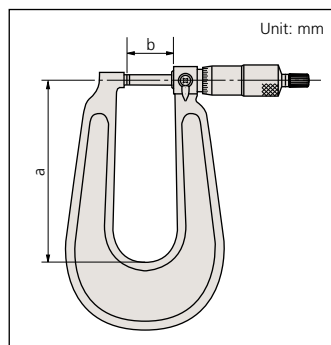
**SERIES 389, 189, 119, 118**

## FEATURES

- Measures thickness of sheet metal, and rubber parts.
- With Ratchet Stop for constant force.
- With a standard except for 25mm model.
- IP65 water/dust protection (389 series\*).
- \*Except for **389-513**
- With digit counter (series 189).



## DIMENSION



## SPECIFICATIONS

Metric Digital model			
Range	Order No.	Accuracy	a/b
0 - 25mm	<b>389-251</b>	±4μm	160/27.5mm
	<b>389-261<sup>S-F</sup></b>	±4μm	160/27.5mm
	<b>389-271<sup>S-S</sup></b>	±4μm	160/27.5mm
	<b>389-513</b>	±5μm	330/35mm
25 - 50mm	<b>389-252</b>	±4μm	165/27.5mm
	<b>389-262<sup>S-F</sup></b>	±4μm	165/27.5mm
	<b>389-272<sup>S-S</sup></b>	±4μm	165/27.5mm

S-F: Spherical anvil and flat spindle  
S-S: Spherical anvil and spherical spindle

Metric Mechanical counter model			
Range	Order No.	Accuracy	a/b
0 - 25mm	<b>189-102</b>	±4μm	160/27.5mm

Metric			
Range	Order No.	Accuracy	a/b
0 - 25mm	<b>118-101</b>	±4μm	110/27.5mm
	<b>118-102</b>	±4μm	160/27.5mm
	<b>118-114<sup>S-F</sup></b>	±4μm	160/27.5mm
	<b>118-118<sup>S-S</sup></b>	±4μm	160/27.5mm
	<b>118-103</b>	±5μm	330/35mm
25 - 50mm	<b>118-110</b>	±4μm	165/27.5mm

S-F: Spherical anvil and flat spindle  
S-S: Spherical anvil and spherical spindle

Metric Dial reading model			
Range	Order No.	Accuracy	Throat
0 - 25mm	<b>119-202<sup>S-F</sup></b>	±4μm	50mm

S-F: Spherical anvil and flat spindle



Inch/Metric Digital model			
Range	Order No.	Accuracy	a/b
0 - 1"	<b>389-351</b>	±.0002"	160/27.5mm
	<b>389-361<sup>S-F</sup></b>	±.0002"	160/27.5mm
	<b>389-371<sup>S-S</sup></b>	±.0002"	160/27.5mm
	<b>389-713</b>	±.00025"	330/35mm
1" - 2"	<b>389-352</b>	±.0002"	165/27.5mm
	<b>389-362<sup>S-F</sup></b>	±.0002"	165/27.5mm
	<b>389-372<sup>S-S</sup></b>	±.0002"	165/27.5mm

S-F: Spherical anvil and flat spindle  
S-S: Spherical anvil and spherical spindle

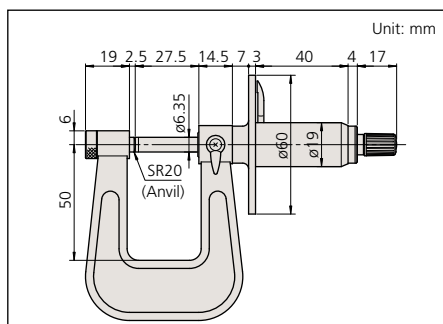
Inch Mechanical counter model			
Range	Order No.	Accuracy	a/b
0 - 1"	<b>189-129*</b>	±.0002"	160/27.5mm

\*.0001" reading is obtained with vernier.

Inch			
Range	Order No.	Accuracy	a/b
0 - 1"	<b>118-129*</b>	±.0002"	160/27.5mm
	<b>118-116<sup>S-F*</sup></b>	±.0002"	160/27.5mm
	<b>118-120<sup>S-S*</sup></b>	±.0002"	160/27.5mm
	<b>118-107</b>	±.00025"	330/35mm
1" - 2"	<b>118-112</b>	±.0002"	165/27.5mm

S-F: Spherical anvil and flat spindle  
S-S: Spherical anvil and spherical spindle  
\*.0001" reading is obtained with vernier.

## DIMENSION



**SPC**



**IP65**

(Refer to the page 9 for details.)

## Anvil-Spindle Combinations



Standard, Flat-Flat



Spherical-Flat (S-F)



Spherical-Spherical (S-S)

## Technical Data

Accuracy: Refer to the list of specifications.  
(excluding quantizing error for digital models)  
Resolution\*: 0.001mm or .00005"/0.001mm  
Graduation\*\*: 0.01mm, .001" or .0001"  
Flatness: 0.6μm for models with 150mm throat  
1μm for models with 300mm throat  
Parallelism: 3μm  
Measuring faces: Carbide tipped  
Display\*: LCD  
Battery\*: SR44 [1 pc. (2 pcs.: **389-513** and **389-713**), **938882**  
Battery life\*: Approx. 1.2 years under normal use  
(1.8 years: **389-513** and **389-713**)

Dust/Water protection level\*: IP65

\*Digital models \*\*Analog models

## Function of Digital Model

Origin-set (Preset\*), Zero-setting, Data hold, Power ON/OFF\*,  
Data output, inch/mm conversion (inch/mm models)  
Preset zero-setting Power ON/OFF Data hold Data output  
inch/mm conversion (inch/mm models) \*Only for **389-513**, **389-713**  
Alarm: Low voltage, Counting value composition error

## Optional Accessory for Digital Model

**05CZA662**: SPC cable with data switch (1m)  
**05CZA663**: SPC cable with data switch (2m)  
**937387**: SPC cable for **389-513/389-713** (1m)  
**965013**: SPC cable for **389-513/389-713** (2m)

The 119 series is provided with a dial for making easy and quick reading.

