Micrometer

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

Tube Micrometers SERIES 395, 115, 295

MeasurLink® ENABLED Data Management Software by Mitutoyo

• Measuring faces: Carbide. (115-101: only the spindle is carbide tipped.)

• series 395: IP65 digital spherical-flat anvil type micrometer.

• Equipped with Ratchet Stop for constant measuring force.



SPECIFICATIONS

Metric	ı			
Order No.	Range (mm)	Resolution (mm)	Maximum permissible error JMPE (µm)	øD
Digimatic (LCI				
395-251-30	0 - 25			ø15
395-252-30	25 - 50	0.001	±2	כוש
395-253-30	50 - 75			ø19
395-254-30	75 - 100		±3	ø20

Metric	ı			
Order No.	Range (mm)	Graduation (mm)	Maximum permissible error JMPE (µm)	øD
Analog				
115-101	0 - 15			ø5.5
115-115	0 - 25		±3	ø10
115-116	25 - 50			ø11
115-117	50 - 75	0.01		ø17
115-118	75 - 100		±4	ø18
Mechanical counter model				
295-115	0 - 25		±3	ø10

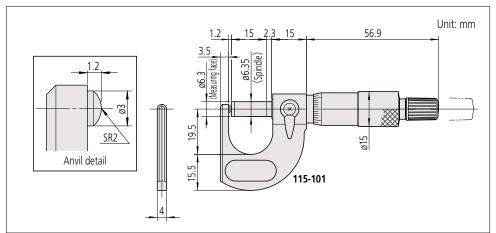
Inch/Metric				
Order No.	Range (in)	Resolution	Maximum permissible error JMPE (in)	øD (in)
Digimatic (LCD)				
395-351-30	0 - 1			ø0.59
395-352-30	1 - 2	0.00005 in/	±0.0001	Ø0.59
395-353-30	2 - 3	0.001 mm		ø0.75
395-354-30	3 - 4		±0.00015	ø0.79

Inch	ı			
Order No.	Range (in)	Graduation (in)	Maximum permissible error JMPE (in)	øD (in)
Analog				
115-153	0 - 1	0.0001	±0.00015	ø0.40
Mechanical count	er model			
295-153	0 - 1	0.0001	±0.00015	ø0.40

Note: For functional details of series 395 refer to page B-8.

Optional connecting cable is available only for water-proof type (Digimatic model).

DIMENSIONS



MeasurLink® ENABLED

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 395)

Level 6: Dust-proof.

No ingress of dust allowed.

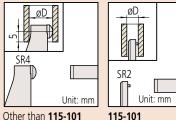
Level 5: Protected against water jets.

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

Technical Data

• Flatness: 0.6 µm/0.000024 in (series 115 & 295) 0.3 µm/0.000012 in (series 395)





Other than 115-101

Technical Data

 Battery for series 395 SR44 (1 pc.), 938882, for initial operational checks (standard accessory)

- Battery life: Approx. 2.4 years under normal use (for series 395)
- Length standard: Electromagnetic rotary sensor (for series 395)
- Standard accessories: Reference bar, 1 pc.

(except for measuring range 0 to 15 mm/0 to 25 mm (0 to 1 in) models) Spanner (**200168**), 1 pc. (for **series 115-101**)

Spanner (301336), 1 pc. (for models other than series 115-101)

Optional Accessories

- Connecting cables for series 395 1 m: 05CZA662
 - 2 m: 05CZA663
- USB Input Tool Direct
- USB-ITN-B (2 m): 06AFM380B
- U-WAVE-T dedicated connection cable 160 mm: 02AZD790B For foot switch: 02AZE140B Refer to page A-27 for details.

Wireless Data Output u-wavefff

- U-WAVE-TM 264-622 (IP67 type) 264-623 (Buzzer type)
- U-WAVE-TMB Transmitter Mitutoyo Bluetooth® U-WAVE 264-626 (IP type)
- 264-627 (Buzzer type)
 Refer to page A-16 for details.

 Connecting unit for U-WAVE-TM/TMB

 02AZF310 (IP67/buzzer type common specification) Refer to pages A-16 and A-18 for details.



Micrometer

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

Tube Micrometers SERIES 395, 115, 295 — Spherical and Cylindrical Anvil Type

MeasurLink® ENABLED Data Management Software by Mitutoyo

Spindle face: Carbide.

• Series 395: IP65 spherical and cylindrical anvil type digital micrometers.

• Equipped with Ratchet Stop for constant measuring force.





SPECIFICATIONS

_				
Range (mm)	Resolution (mm)	Maximum permissible error J _{MPE} (μm)	Remarks	
Digimatic (LCD)				
			Type A	
0 25	0.001	13	Type B	
0 - 25	0.001	ΞĴ	Type C	
			Type D	
		(mm) (mm)	(mm) (mm) permissible error JMPE (µm)	

Range (in)	Resolution	Maximum permissible error JMPE (in)	Remarks
	0.0000E in/		Type B
0 - 1		±0.00015	Type C
	0.001 111111		Type D
	(in)	(in) Resolution	Resolution permissible error JMPE (in)

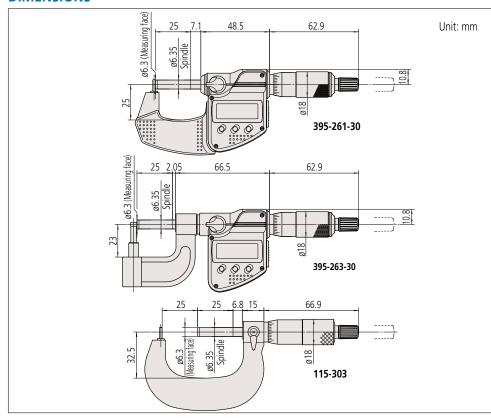
Metric				
Order No.	Range (mm)	Graduation (mm)	Maximum permissible error JMPE (µm)	Remarks
Analog				
115-302	0 - 25			Type A
115-308				Type B
115-303	25 - 50	0.01	±3	Type A
115-309	25 - 50	0.01	1 3	Type B
115-315	0 - 25			Type C
115-316	0 - 25			Type D

Inch	ı			
Order No.	Range (in)	Graduation (in)	Maximum permissible error JMPE (in)	Remarks
Analog				
115-305		0.001		Type A
115-313	0 - 1	0.0001	±0.00015	Type C
115-314		0.0001		Type D
		•		

Note: For functional details of series 395 refer to page B-8.

Optional connecting cable is available only for water-proof type (Digimatic model).

DIMENSIONS



MeasurLink® ENABLED

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 395)

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.







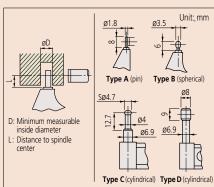


Type C (cylindrical)



Type D (cylindrical)





Anvil	øD	L
Type A	ø2.0	1
Type B	ø3.6	4
Type C	ø4.8	12
Type D	ø8.2	22

Technical Data

- Battery for series 395 SR44 (1 pc.), 938882, for initial operational checks (standard accessory)
- Battery life: Approx. 2.4 years under normal use (for series 395)
- Length standard: Electromagnetic rotary sensor (for series 395)
- Standard accessories: Reference bar, 1 pc. (except for measuring range 0 to 25 mm (0 to 1 in) models) Spanner (**301336**), 1 pc.

Optional Accessories

- Connecting cables for series 395 1 m: **05CZA662** 2 m: **05CZA663**
- USB Input Tool Direct
- **USB-ITN-B** (2 m): **06AFM380B**
- U-WAVE-T dedicated connection cable 160 mm: 02AZD790B For foot switch: 02AZE140B

Refer to page A-27 for details.

Wireless Data Output u-wavefit

- U-WAVE-TM 264-622 (IP67 type) 264-623 (Buzzer type)
- U-WAVE-TMB Transmitter Mitutoyo Bluetooth® U-WAVE 264-626 (IP type) 264-627 (Buzzer type)
- Refer to page A-16 for details Connecting unit for U-WAVE-TM/TMB **02AZF310** (IP67/buzzer type common specification) Refer to pages A-16 and A-18 for details.



MeasurLink ENABLED

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.



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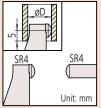
IP Codes (series 395)

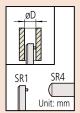
Level 6: Dust-proof.

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.







Other than **115-201**

115-201

Technical Data

- Battery for series 395 SR44 (1 pc.), 938882, for initial operational checks (standard accessory)
- Battery life: Approx. 2.4 years under normal use (for series 395)
- Length standard: Electromagnetic rotary sensor (for series 395)
- Standard accessories: Reference bar, 1 pc. (except for measuring range 0 to 15 mm/0 to 25 mm (0 to 1 in) models) Spanner (200168), 1 pc. (for series 115-201) Spanner (301336), 1 pc. (for models other than series 115-201)

Optional Accessories

- Connecting cables for series 395 1 m: 05CZA662
- 2 m: **05CZA663**
- USB Input Tool Direct
 USB-ITN-B (2 m): 06AFM380B
- U-WAVE-T dedicated connection cable 160 mm: 02AZD790B

For foot switch: **02AZE140B** Refer to page A-27 for details.

Wireless Data Output U-WAVE THE

- U-WAVE-TM 264-622 (IP67 type) 264-623 (Buzzer type)
- U-WAVE-TMB Transmitter Mitutoyo Bluetooth® U-WAVE 264-626 (IP type) 264-627 (Buzzer type)
- Refer to page A-16 for details.

 Connecting unit for **U-WAVE-TM/TMB 02AZF310** (IP67/buzzer type common specification)

 Refer to pages A-16 and A-18 for details.

Tube Micrometers SERIES 395, 115, 295 — Spherical Anvil and Spindle Type

MeasurLink° **ENABLED**Data Management Software by Mitutoyo

and Spindle

- Measuring faces: Carbide.
 (115-201: only the spindle is carbide tipped.)
- **series 395**: IP65 spherical anvil and spindle type digital micrometer.

• Equipped with Ratchet Stop for constant measuring force.



Inch / Metric

Order No.

Digimatic (LCD)

395-371-30

395-372-30

395-373-30

395-374-30

Range

(in)

1 - 2

2 - 3

3 - 4

SPECIFICATIONS

Metric	ı			
Order No.	Range (mm)	Resolution (mm)	Maximum permissible error JMPE (µm)	øD
Digimatic (LCD)				
395-271-30	0 - 25			ø15
395-272-30	25 - 50	0.001	±2	כוש
395-273-30	50 - 75	0.001		ø19
395-274-30	75 - 100		±3	ø20

393-274-30	75-100		±Σ	ØZU	
Metric	ı			_	
Order No.	Range (mm)	Graduation (mm)	Maximum permissible error J _{MPE} (µm)	øD	
Analog					
115-201	0 - 15			ø5.5	
115-215	0 - 25		±3	ø10	
115-216	25 - 50	0.01	0.01 ±3	ø11	
115-217	50 - 75			ø17	
115-218	75 - 100		±4	ø18	
Mechanical counter model					

Inch					
Order No.	Range (in)	Graduation (in)	Maximum permissible error JMPE (in)	øD (in)	
Analog					
115-253	0 - 1	0.0001		ø0.40	
115-242	1 - 2	0.001	±0.00015	ø0.44	
115-243	2 - 3	0.001		ø0.67	
Mechanical counter model					
295-253	0 - 1	0.0001	±0.00015	ø0.40	

Resolution

0.00005 in/

0.001 mm

Maximum

permissible

error JMPE (in)

±0.0001

±0.00015

øD

(in)

ø0.59

ø0.75

ø0.79

 295-215
 0 - 25
 0.01
 ±3
 ø10

 Note: For functional details of series 395 refer to page B-8.

Optional connecting cable is available only for water-proof type (Digimatic model).

DIMENSIONS

