

# Digimatic Micrometer

SERIES 293 — with Dust/Water Protection Conforming to IP65 Level



• Staubdicht + strahlwassergeschützt IP65



MICROMETERS

## FEATURES

- IP65 protection level, enabling use in environments exposed to cutting oil, etc\*. \*Anti-corrosion treatment is required after use.
- Measurement data output function is available with a water-resistant connection cable.
- Oil-resistance materials are used in all plastic components.
- $\pm 1 \mu\text{m}$  instrumental error (75 mm/3" or less range models)
- Auto power ON/OFF function.
- Certificate of inspection\* is included. (50mm/2" or less range models) \*It is not the type used to obtain calibration certificates.



## Technical Data

**Display:** LCD  
**Functions:** Origin-Set, Zero-Setting, Data hold, Automatic power on/off, inch/mm conversion (inch/mm type only), Data output  
**Battery:** SR44 (1 pc.) (938882)  
**Battery life:** Approx. 1.2 years under normal use  
**Maximum response speed:** Unlimited  
**Dust/Water protection level:** Conforming to IP65  
**Alarm:** Low voltage, counting value composition error  
**Operating temperature:** 0°C to 40°C



SPC cable with data switch

05CZA662: 1m  
05CZA663: 2m

## OPTIONAL ACCESSORIES

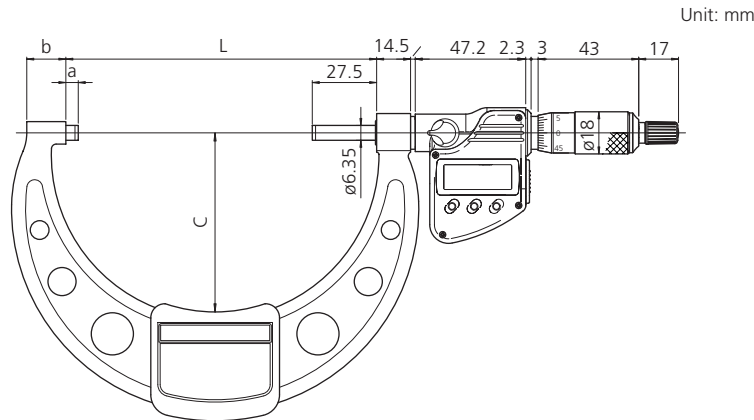
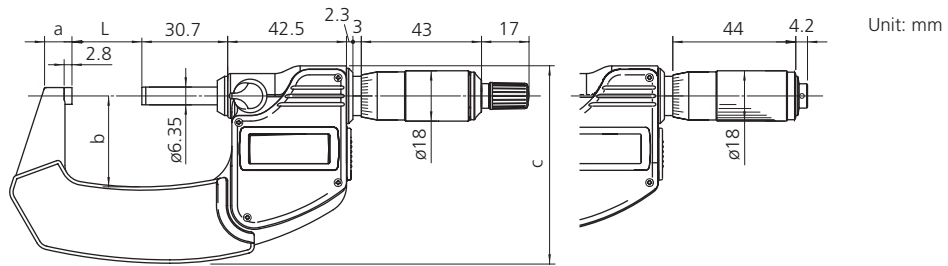
Order No.	Description
05CZA662	SPC cable with data switch (1m)
05CZA663	SPC cable with data switch (2m)
(See page 130.)	Micrometer stands
(See page 276.)	Gauge block set for micrometer inspection

Mitutoyo		CERTIFICATE OF INSPECTION / 検査成績書		Issue No. / 発行No. 030404D	
1. Item / 対象製品	Digimatic Micrometer	Measuring range	0-25mm		
Product name	Digimatic Micrometer	Resolution	0.001mm		
Model	MDC-25MJ	Serial No.	35026925		
Code No.	293-230				
2. Result of Inspection / 検査結果	Performance / 性能	Standard temperature	20 °C		
Inspection standard / 検査標準	Mitutoyo standard <sup>1)</sup>				
Flatness of measuring face / 平面度	Permissible value / 許容値	Measured value / 実測値			
Arvil / 刀尖半径	0.3	0			
Spindle / 軸ノド	0.3	0			
Parallelism of measuring faces / 平行度	1	0.3			
Measuring length / 測定長(mm)	Permissible value / 許容値	Instrumental error / 器差	Uncertainty of measurement / 測定の不確かさ		
0.0	0	0	U <sub>95</sub> = 1.3 (k=2)		
7.7	± 1	0			
12.9	0	0			
17.6	+1	0			
22.8	+1	0			
25.0	0	0			
<sup>1)</sup> Based on: JISB 5021 (1994), ISO 3611 (1978)					
Traceable to: NMI/AIST by JCSS No.0030, NIST via No.821/263174-00, No.821/262133-99, PTB via No.4599 PTE 00					
3. Judgment / 総合判定 Passed / 合格					
4. QC Manager E. Otsuka / E. Otsuka					
Mitutoyo Corporation					

Certificate of inspection



## Dimensions



Range	L	a	b	c
0 - 25mm	0	9	25	(59.8)
25 - 50mm	25	9.8	32	(70.3)
50 - 75mm	50	12.6	47	(91.6)
75 - 100mm	75	14	60	(112.9)
100 - 125mm	132.8	5.3	16.7	(76.5)
125 - 150mm	158.2	5.7	18.8	(91)
150 - 175mm	183.6	6.1	19.1	(103.1)
175 - 200mm	208.8	6.3	18.2	(115.3)
200 - 225mm	234.2	6.7	16.8	(126.8)
225 - 250mm	258	5.5	18	(139.8)
250 - 275mm	284	6.5	18	(152.3)
275 - 300mm	309	6.5	18	(166)

## SPECIFICATIONS

Metric With ratchet stop			
Range	Order No.	Resolution	Accuracy
0 - 25mm	293-230 / 293-240*	0.001mm	±1μm
25 - 50mm	293-231 / 293-241*	0.001mm	±1μm
50 - 75mm	293-232 / 293-242*	0.001mm	±1μm
75 - 100mm	293-233 / 293-243*	0.001mm	±2μm
100 - 125mm	293-250	0.001mm	±2μm
125 - 150mm	293-251	0.001mm	±2μm
150 - 175mm	293-252	0.001mm	±3μm
175 - 200mm	293-253	0.001mm	±3μm
200 - 225mm	293-254	0.001mm	±3μm
225 - 250mm	293-255	0.001mm	±4μm
250 - 275mm	293-256	0.001mm	±4μm
275 - 300mm	293-257	0.001mm	±4μm

Inch/Metric With ratchet stop			
Range	Order No.	Resolution	Accuracy
0 - 1"	293-330 / 293-340*	.00005"/0.001mm	±.00005"
1" - 2"	293-331 / 293-341*	.00005"/0.001mm	±.00005"
2" - 3"	293-332 / 293-342*	.00005"/0.001mm	±.00005"
3" - 4"	293-333 / 293-343*	.00005"/0.001mm	±.0001"
4" - 5"	293-350	.00005"/0.001mm	±.0001"
5" - 6"	293-351	.00005"/0.001mm	±.0001"
6" - 7"	293-352	.00005"/0.001mm	±.00015"
7" - 8"	293-353	.00005"/0.001mm	±.00015"
8" - 9"	293-354	.00005"/0.001mm	±.00015"
9" - 10"	293-355	.00005"/0.001mm	±.0002"
10" - 11"	293-356	.00005"/0.001mm	±.0002"
11" - 12"	293-357	.00005"/0.001mm	±.0002"

Metric With ratchet thimble			
Range	Order No.	Resolution	Accuracy
0 - 25mm	293-234 / 293-244*	0.001mm	±1μm
25 - 50mm	293-235 / 293-245*	0.001mm	±1μm
50 - 75mm	293-236 / 293-246*	0.001mm	±1μm
75 - 100mm	293-237 / 293-247*	0.001mm	±2μm

Inch/Metric With ratchet thimble			
Range	Order No.	Resolution	Accuracy
0 - 1"	293-334 / 293-344*	.00005"/0.001mm	±.00005"
1" - 2"	293-345*	.00005"/0.001mm	±.00005"
2" - 3"	293-346*	.00005"/0.001mm	±.00005"
3" - 4"	293-347*	.00005"/0.001mm	±.0001"

Metric With friction thimble			
Range	Order No.	Resolution	Accuracy
0 - 25mm	293-238 / 293-248*	0.001mm	±1μm

Inch/Metric With friction thimble			
Range	Order No.	Resolution	Accuracy
0 - 1"	293-335 / 293-348*	.00005"/0.001mm	±.00005"
1" - 2"	293-336	.00005"/0.001mm	±.00005"

\*without SPC data output

\*without SPC data output

