

# Digimatic Micrometer

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



IP65



• Staubdicht + strahlwassergeschützt IP65



MICROMETERS

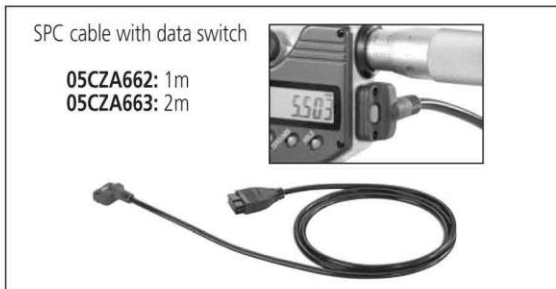
## FEATURES

- 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



## OPTIONAL ACCESSORIES

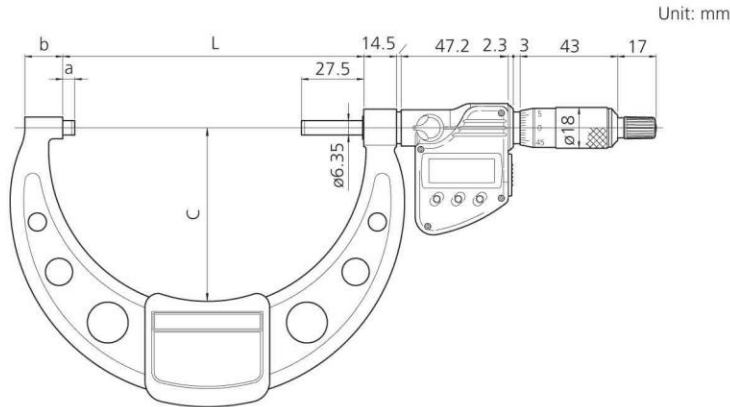
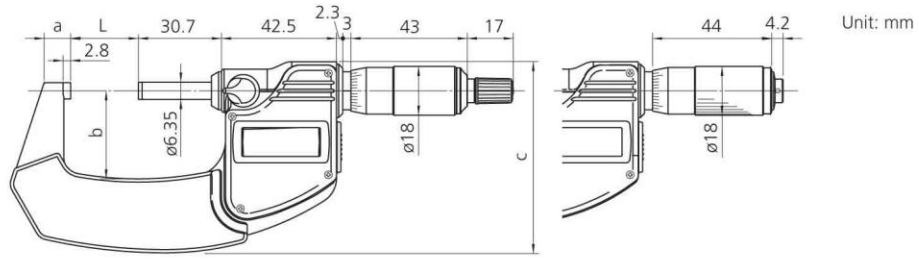
Order No.	Description
05CZA662	SPC cable with data switch (1m)
05CZA663	SPC cable with data switch (2m)
(See page 130.)	Micrometer stands
(See page 276.)	Gauge block set for micrometer inspection

Mitutoyo		CERTIFICATE OF INSPECTION / 検査成績書		Issue No. / 発行No.
1. Item / 対象製品		Digimatic Micrometer		Measuring range / 測定範囲
Model / 型番		MDC-25MJ		Resolution / 分解能
Code No. / 検査標準		293-230		Serial No. / 検出番号
Inspection standard / 検査標準 (JIS)		Standard temperature / 標準温度		20 °C
Performance / 性能				
		Permissible value / 許容値	Measured value / 測定値	
Flatness of measuring face / 平面度		Angle / 角度	0.3	0
Parallelism of measuring faces / 平行度		Skewness / 傾斜	0.3	0
			1	0.3
Measuring length / 測定長さ (mm)		Instrumental error / 器具誤差	Uncertainty of measurement / 測定の不確かさ	
0.0		0	U <sub>95</sub> = 1.3 (k=2)	
7.7		0		
12.9		0		
17.8		+1		
22.8		+1		
25.0		0		
1. Based on: JIS B 1501 (1994), ISO 3711 (1998) Traceable to: NMI/AIST by JCSS No.0030/NIST via No.821/263114-00, No.821/262133-99, PTB via No.4599 PTB 00 2. Judgment / 判定: Passed / 合格 3. QC Manager / 検査責任者: E. Ohtsuka / 大塚 英 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)

MICROMETERS



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