

卡尺

测量工具行业的标准

ABSOLUTE数显卡尺 500系列 — 采用特有的ABSOLUTE编码器技术 CD-AX/C

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

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附带测量数据输出功能的产品可连接到测量数据网络系统MeasurLink (详细信息参见A-5页)。

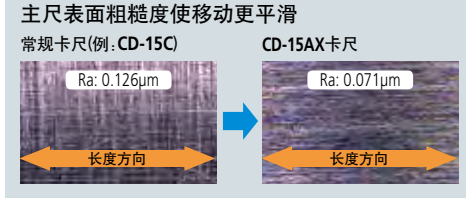
ABSOLUTE[™]



测量仪器附带检查成绩单
详细信息参见U-12页

- 采用ABSOLUTE电磁感应式编码器。
- 新型人体工学设计。
- 内置拥有绝对原点的ABSOLUTE标尺，开启电源后无需重置原点(原点设置)。而且不会发生超速误差，可以提高测量结果的可靠性。
- 大字体的液晶显示易于读数，高对比度液晶显示可以减轻疲劳。

- 尺框平滑移动，操作舒适。



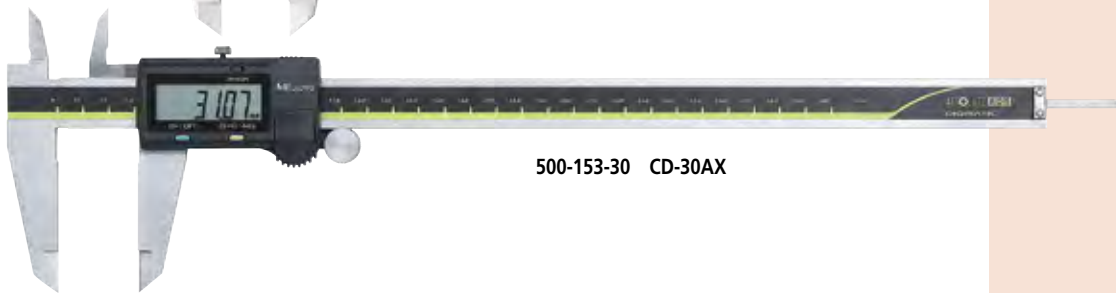
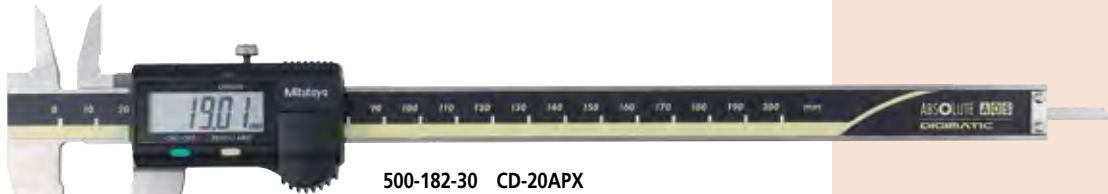
- 低电流集成电路让电池寿命飞越提升至5年。
- 可以进行阶差测量。
- 带有硬质合金量爪的卡尺是测量粗加工产品，铸造件及研磨石等的最佳选择。
- 配有数据输出端口，使其能连入测量网络系统和统计过程控制系统。(详细信息参见A-3页)

通用规格

- 分辨力: 0.01mm
- 重复精度: 0.01mm
- 电源: 纽扣型氧化银电池SR44 (No.938882) 1个 (标准附件, 用于数显显示)
- 位置检出方式*: ABSOLUTE电磁感应式编码器
* CD-30C为ABSOLUTE静电电容线性编码器
- 最大响应速度: 无限制
- 电源寿命: 通常使用情况下约为5年



大字体的液晶显示易于读数



规格

货号	型号	测量范围 (mm)	精度* (mm)	质量 (g)	测量数据输出	拇指调节滚轮	深度测量杆
标准型							
500-150-30	CD-10AX	0 - 100	±0.02	137	有	有	ø1.9 mm杆
500-151-30	CD-15AX	0 - 150		162			薄片
500-158-30	CD-15AXR	0 - 150		162			ø1.9 mm杆
500-152-30	CD-20AX	0 - 200	±0.03	192	有	有	薄片
500-153-30	CD-30AX	0 - 300		350			薄片
500-180-30	CD-10APX	0 - 100	±0.02	137	无	无	ø1.9 mm杆
500-181-30	CD-15APX	0 - 150		162			薄片
500-182-30	CD-20APX	0 - 200		192			薄片
外径量爪为硬质合金							
500-154-30	CD-15AXW	0 - 150	±0.02	162	有	有	薄片
500-156-30	CD-20AXW	0 - 200		192			
内、外径量爪为硬质合金							
500-155-30	CD-15AXWW	0 - 150	±0.02	162	有	有	薄片
500-157-30	CD-20AXWW	0 - 200		192			

* 500-150-30, CD-10AX / 500-158-30, CD-15AXR / 500-180-30, CD-10APX为圆形深度测杆(ø 1.9mm)。

* 500-153-30, CD-30AX的精度为最大精度。 * 不包括量化误差±1。

功能

ABS绝对: 电源打开后, 如之前做过原点设置, 则无需再进行原点设置, 绝对原点可通过原点按钮改变。

INC增量: 显示屏可以在任意位置设置零点用于比较测量。

测长系统
低电压警示: 如电池电压降低, 测量不能再进行, 显示屏上会出现“B”, 提醒用户电量低。在此警报前, 会出现提醒电池更换警报。

数据输出: 配有数据输出端口, 使其能连入测量网络系统和统计过程控制系统。

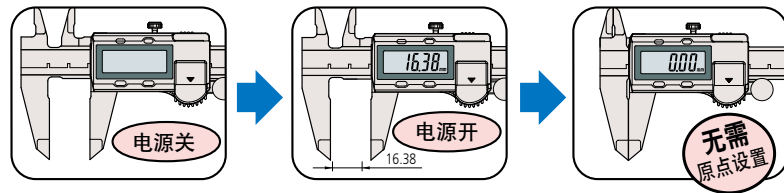
数据保持: 通过使用数据保持装置(选件), 可以保持显示值, 这个功能不可以与数据输出功能一起使用。
* CD-10APX/15APX/20APX除外

尺寸

带拇指调节滚轮		不带拇指调节滚轮		单位: mm				
货号	型号	测量范围 (mm)	A	B	C	D	H	L
500-150-30	CD-10AX	0 - 100	16.5	21	14.5	40	16	182
500-180-30	CD-10APX							233
500-151-30	CD-15AX	0 - 150	20	24.5	18	50	20	290
500-158-30	CD-15AXR							233
500-181-30	CD-15APX							290
500-154-30	CD-15AXW							233
500-155-30	CD-15AXWW	233	20	27.5	19.8	64	20	404
500-152-30	CD-20AX	0 - 200	22	27.5	19.8	64	20	404
500-182-30	CD-20APX							290
500-156-30	CD-20AXW							233
500-157-30	CD-20AXWW							233
500-153-30	CD-30AX	0 - 300	22	27.5	19.8	64	20	404

外径量爪厚度为3.5mm, 500-153-30, CD-30AX型为3.8mm。

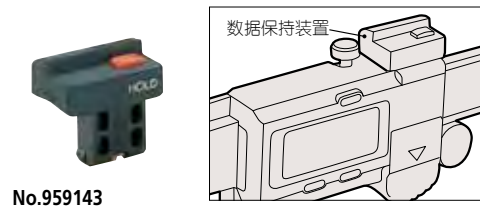
打开电源时无需原点设置



选件

专用于带Digimatic输出功能的型号。
详细信息参见A-25页

●数据保持装置



No.959143

●IT/DP/MUX专用连接线

1m: No.959149
2m: No.959150



●USB直连数据输入工具

USB-ITN-C(2m): No.06AFM380C

●U-WAVE-T专用连接线

标准用(160mm): No.02AZD790C
脚踏开关用: No.02AZE140C

测量数据无线通信系统 U-WAVE

●U-WAVE-TC数据发送装置

264-620 (IP67型)
264-621 (蜂鸣器型)

●U-WAVE-TC连接装置

02AZF300 (蜂鸣器型)

* 在有冷却液、污垢、水等环境下使用时, 请选择IP67型。(蜂鸣器型不是防尘防水规格)
详细信息参见 A-15页。

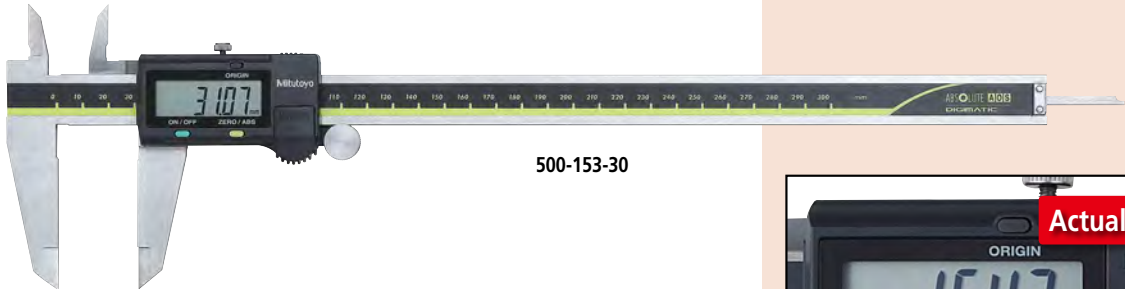
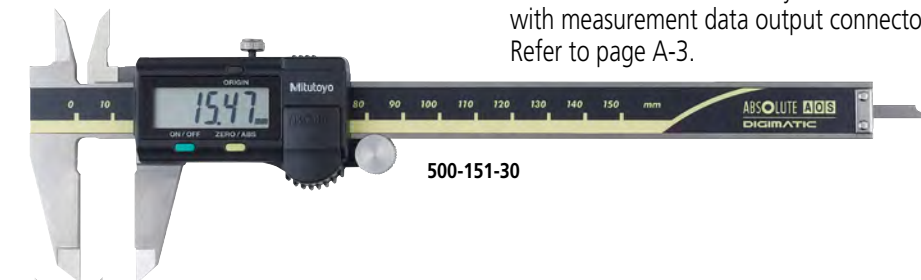
Calipers

An industry standard measuring tool

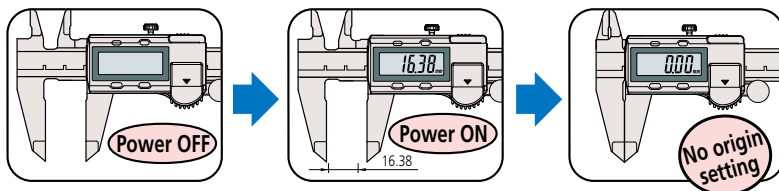
ABSOLUTE Digimatic Caliper 500 Series — with exclusive ABSOLUTE Encoder Technology

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

- An ABSOLUTE electromagnetic induction linear encoder system is incorporated.
- New ergonomic design with finger rest.
- The ZERO/ABS button allows the display to be Zero-Set at any slider position along the scale for comparison measurements. This button will also allow return to the absolute (ABS) mode and display of the true position from the origin (usually jaws closed point).
- Large and clear LCD readout.
- Smooth slider movement makes for comfortable operation.
- Extended battery life of Approx. 5 years due to low current integrated circuit (except for 0 - 300 mm/0 - 12 inch models).
- Allows step measurement.
- Carbide-tipped jaw calipers are optimal for rough finished parts, castings, grinding stones, etc.
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-3.



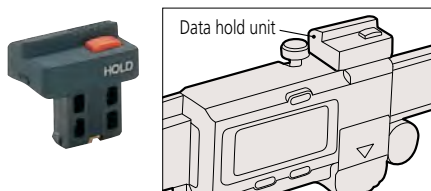
A built-in ABS (absolute) scale means that these calipers are ready to use immediately after power-on without origin resetting – just like using a vernier caliper.



Optional accessories

Dedicated for the models equipped with a digimatic output function. For details, refer to page D-38.

959143: Data hold unit



Connecting cables for IT/DP/MUX

- 959149: SPC cable with data button (1 m)
- 959150: SPC cable with data button (2 m)

USB Input Tool Direct

- 06AFM380C: SPC cable for USB-ITN-C (2 m)

Connecting cables for U-WAVE-T

- 02AZD790C: SPC cable with data button (160 mm)
- 02AZE140C: SPC cable for foot switch

Wireless data output U-WAVE^{fit} Connecting unit for U-WAVE-TC: 02AZF300 (Buzzer type)

- U-WAVE-TC: 264-620 (IP67 type)
- 264-621 (Buzzer type)

Note: IP67 model is water/dust-proofed suitable for the factory floor. Buzzer type is not water/dust-proofed. Refer to page A-15 for details.

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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).

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An inspection certificate is supplied as standard. Refer to page U-11 for details.

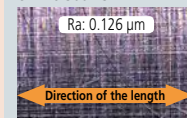
Technical Data

- Accuracy: ± 0.02 mm (≤ 200 mm), ± 0.03 mm (≤ 300 mm) (excluding quantizing error)
- Resolution: 0.01 mm or 0.0005 in/0.01 mm
- Repeatability: 0.01 mm
- Display: LCD
- Scale type: ABSOLUTE electromagnetic induction linear encoder
- Max. response speed: Unlimited
- Battery: SR44 (1 pc), **938882**, for initial operational checks (standard accessory)
- Battery life: Approx. 5 years under normal use

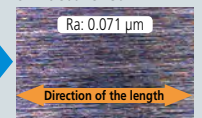
Smooth slider movement makes for comfortable operation.

High quality guide surface finish for smooth slider movement

Conventional ex. No.500-151



ABSOLUTE Digimatic Caliper ex. No.500-151-30



Remarkably easy to read display

Functions

Absolute measurement: After power is turned ON, measurement can be started without zero-setting if origin-setting was previously performed. The Absolute origin position can be changed by the ORIGIN button.

Incremental measurement: Display can be set to zero at any arbitrary position for comparative measurements.

Low-voltage alert: If the battery voltage becomes low, a "B" appears in the display to alert the user before measurement is no longer possible. A battery change advisory alert precedes this alert.

Data output: By using the connecting cable (option), measurement data can be output.

Data hold: By using the data hold unit (option), the displayed value can be held. This cannot be used with the data output function.

SPECIFICATIONS

Metric						
Order No.	Range (mm)	Accuracy (mm)*2	Mass (g)	Depth bar	Fine adjustment	Remarks
500-150-30	0 - 100	±0.02	137	ø1.9 mm rod	with thumb roller	—
500-180-30*1					—	
500-151-30					with thumb roller	
500-154-30	0 - 150	±0.02	162	Blade	with thumb roller	Carbide-tipped jaws for outside measurement
500-155-30					—	Carbide-tipped jaws for outside and inside measurement
500-158-30					ø1.9 mm rod	—
500-181-30*1					—	—
500-152-30	0 - 200	±0.02	192	Blade	with thumb roller	Carbide-tipped jaws for outside measurement
500-156-30					—	Carbide-tipped jaws for outside and inside measurement
500-157-30					—	—
500-182-30*1					—	—
500-153-30	0 - 300	±0.03	350	—	with thumb roller	—

*1 Without SPC data output

*2 Excluding quantizing error of ±1 count in LSD

Inch / Metric							
Order No.	Range (in)	Accuracy*2	Mass (g)	Depth bar	Fine adjustment	Remarks	
500-170-30	0 - 4	±0.001 in/ ±0.02 mm	137	0.075 inch rod	with thumb roller	—	
500-195-30*1							—
500-171-30							Blade
500-174-30	0 - 6	±0.001 in/ ±0.02 mm	162	0.075 inch rod	with thumb roller	Carbide-tipped jaws for outside and inside measurement	
500-175-30						—	—
500-178-30						—	—
500-196-30*1						—	—
500-159-30*1	0 - 8	±0.001 in/ ±0.02 mm	192	Blade	with thumb roller	Carbide-tipped jaws for outside measurement	
500-160-30*1						—	Carbide-tipped jaws for outside and inside measurement
500-172-30						—	—
500-176-30						—	—
500-177-30	0 - 8	±0.001 in/ ±0.02 mm	192	Blade	with thumb roller	Carbide-tipped jaws for outside measurement	
500-197-30*1						—	Carbide-tipped jaws for outside and inside measurement
500-163-30*1						—	—
500-164-30*1						—	—
500-173-30	0 - 12	±0.0015 in/ ±0.03 mm	350	—	with thumb roller	Carbide-tipped jaws for outside measurement	
500-167-30						—	Carbide-tipped jaws for outside and inside measurement
500-168-30						—	—
500-193-30*1						—	—
500-165-30*1	0 - 12	±0.0015 in/ ±0.03 mm	350	—	with thumb roller	Carbide-tipped jaws for outside measurement	
500-166-30*1						—	Carbide-tipped jaws for outside and inside measurement

*1 Without SPC data output

*2 Excluding quantizing error of ±1 count in LSD

DIMENSIONS

