

Common specifications

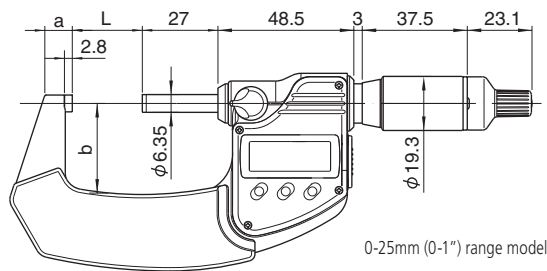
Functions	Origin point setting (ABS length measurement system) Zero setting (INC length measurement system) Hold Function lock Auto power ON/OFF Data output * ¹ Error alarm
Degree of protection	IP65 (IEC60529)* ²
Measuring force	7-12N
Power supply	Button type silver oxide battery (SR44), 1 piece
Position detection system	Electromagnetic rotary sensor * ³
Battery life	Approx. 3 years under normal conditions
Standard accessories	Reference bar, 1 piece (not for 0-25mm models) Button type silver oxide battery (SR44, No. 938882), 1 piece Spanner (No. 301336), 1 piece

*1: Applicable only to 293-140/293-141/293-180/293-181

*2: This product is not waterproof. Rustproofing shall be applied after use.

*3: Patent registered (in USA), Patent pending (in Japan, Europe, and China)

Dimensions



Unit: mm

	L	a	b
0-25mm (0-1")	0	9	25
25-50mm (1-2")*	25 (25.4)*	9.8	32

Selective specifications

	Order No.	Measuring range	Resolution	Instrumental error*	Flatness of measuring faces	Parallelism of measuring faces	Weight
SPC data output	293-140	0-25mm	0.001mm	±1μm	0.3μm or less	1μm or less	265g
	293-141	25-50mm					325g
Without SPC data output	293-145	0-25mm	0.001mm	±1μm	0.3μm or less	1μm or less	265g
	293-146	25-50mm					325g
SPC data output	293-180	0-1"/0-25mm	.00005"/0.001mm	±.00005"/±1μm	0.3μm or less	1μm or less	265g
	293-181	1-2"/25-50mm					325g
Without SPC data output	293-185	0-1"/0-25mm	.00005"/0.001mm	±.00005"/±1μm	0.3μm or less	1μm or less	265g
	293-186	1-2"/25-50mm					325g

*Quantization error of ±1 count excluded

Functions

Origin point setting (ABS length measurement system)	Pressing the ORIGIN button resets the ABS origin at the current spindle position.
Zero setting (INC length measurement system)	A brief press on the ZERO/ABS button sets display to zero at the current spindle position and switches to the incremental (INC) measuring mode. A longer press resets to the ABS measuring mode.
Hold	Pressing the HOLD button freezes the current value in the display. This function is useful for preserving a measurement in situations of poor visibility when the instrument must be moved away from the workpiece before the reading can be recorded. A second press unfreezes the display ready for another measurement.
Function lock	This function allows the ORIGIN (origin point setting) function and the ZERO (zero setting) function to be locked to prevent these points being reset accidentally.
Auto power ON/OFF	The reading on the LCD disappears after this instrument is idle for approx. 20 minutes, but the origin point is retained. Turning the spindle causes the reading on the LCD to reappear.
Data output	Models equipped with this function have an output port for transferring measurement data to a Statistical Process Control (SPC) system.
Error alarm	In case of an overflow on the LCD or a computing error, an error message appears on the LCD, and the measuring function stops. This prevents an instrument from giving an erroneous reading. Also, when the battery voltage drops to a certain level the low-battery-voltage alarm annunciator appears well before the micrometer becomes unusable.