

Height Gage

Linear Height SERIES 518 — High-performance 2D Measurement System

- This is a precision height gage featuring high accuracy and outstanding ease of use. It is useful not only in height measurement but also in a wide range of applications such as inspection of moulds and precision parts.
- Easy operation using keypad and touch screen navigation allows intuitive operation that is suitable even for beginners.
- The built-in scale is dirt-resistant and can be reliably used on shop floors.
- Various interfaces are available, including connection to a printer, a PC, and our wired or wireless communication system.
- Pneumatic full/semi-floating suspension system allows adjustment of air-cushion height.
- It is easily expandable to support various types of optional probes to meet your different measurement needs.



518-361-11

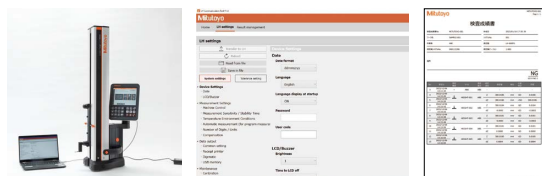
SPECIFICATIONS

Model	LH-600F		LH-600FG
Code No.	mm	518-360-11	518-361-11
	inch/mm	518-360-13	518-361-13
Power grip		Without power grip	With power grip
Measuring range (Stroke)		0 to 977 mm (600 mm) 0 to 38 in (24 in)	
Resolution		0.0001/0.001/0.01/0.1 mm (selectable) 0.000001/0.00001/0.0001/0.001 in (selectable)	
Accuracy	Indication accuracy*1	$\pm (1.1 + 0.6L/600) \mu\text{m}$, L = Arbitrary measuring height (mm)	
	Repeatability*1	Plane: 0.4 μm (2 σ), Hole: 0.9 μm (2 σ)	
	Perpendicularity (forward and backward)*2	5 μm	
	Straightness (forward and backward)*2	4 μm	
Driving method (speed)		Motor-driven (5, 10, 15, 20, 25, 30, 40 mm/s: 7 steps)/Manual	
Scale unit		Photoelectric incremental encoder STVC-20Z	
Measuring force		1 N (automatic constant-force function)	
Main unit moving mode		Full-floating (moving)/Semi-floating (measuring) Air bearing (built-in compressor)	
Display unit		8.4 inch touch-screen, LCD	
Adjustment of display unit		Stepless tilt adjustment: 0 to 40° Stepless swivel adjustment: -30 to 180°	
Preventive maintenance		Scale status notification, calibration schedule notification	
Probe diameter compensation		Semi-automatic compensation using the probe diameter calibration block (standard accessory) Compensation by inputting the probe diameter	
Power source		AC adapter 100-240 V \pm 10% 50/60 Hz/Battery (NiMH)	
Battery operation time*3		Battery powered (standard): 4 hours*4, Powered by 2 batteries: 8 hours	
Battery charging time*5		Approx. 3.5 hours (can be used while charging)	
Dimensions (WxDxH)		238x492x996 mm	
Mass		26.1 kg	26.6 kg
Operating temperature/humidity ranges		5 to 40 °C/20 to 80% RH (non-condensing)	
Data output		Digimatic D1/D2/S1 (bi-directional communication)	

- Use in an environment that is as close as possible to 20 °C, and subject to minimal temperature change over time.
- *1: Indication accuracy and repeatability represent the values obtained when the standard ϕ 5 stepped probe is used.
- *2: Guaranteed when using the Lever Head (519-521) and Mu-Checker (519-561).
- *3: 25% operation of vertical movement by suspension and motor
- *4: One battery pack (12AAF712) is provided as standard.
- *5: When ambient temperature is 30 °C or higher, the battery may not charge sufficiently.

LH Communication-Tool V1.0 software for creating inspection reports and configuring system settings

You can easily create and save inspection reports and configure device parameters.



- * Available at Mitutoyo website for free download.
- * To connect to a PC, use a USB cable (type A-B).

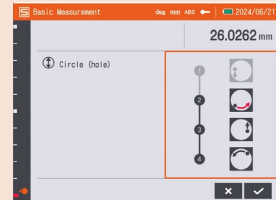


DIGIMATIC S1

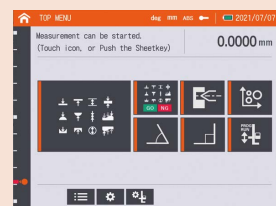
Adjustable to easy-to-see angle



Measurement guidance

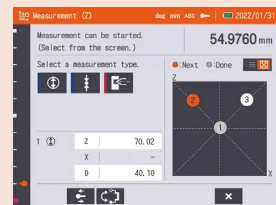


Intuitive operation thanks to guidance

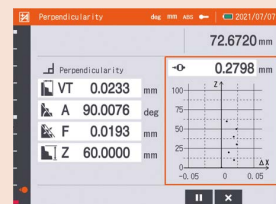


Home screen

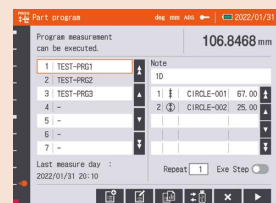
Measurement menu display is easy to understand visually. The guidance makes it easy for first-time users to operate the system.



2D measurement - Pre-placement - This function allows the user to register the hole position of the workpiece before measurement.



Perpendicular/straightness measurement - Graph creation - You can check the measurement results of perpendicularity and straightness in real time during measurement.



Part program measurement

You can easily create, execute, edit, and even display the results of part programs.

