Mitutoyo

Mitutoyo Quality

ABS Digimatic Height Gage

Series 570

Small Tool Instruments and Data Management

Mitutoyo

Absolute Digimatic Height Gage

Series 570

A new standard height gage providing reliable and smart measurement

This is an update of the height gage standard type that has gained a strong reputation in the manufacturing field. The DATA button is larger, and the button layout is redesigned to improve operability. In addition, it is now easier to set up the "U-WAVE" wireless measurement data communication system, making the system even easier to use in smart factories and other places where measurement data output is essential. And, to ensure Mitutoyo reliability and quality, these height gages are produced in our own Japanese factories.

The case features accents in Mitutoyo's standard colors.
This gives a harmonized design in spaces where multiple Mitutoyo products are used.

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NEW Products

Main functions and features

Helps transform manufacturing sites into smart factories

The design of the case allows for easy installation of U-WAVE (optional), which enables wireless transmission of measurement data, promoting smarter use of data in manufacturing sites.

Supports smooth and reliable measurement operations

The handle for moving the slider enables smooth vertical movement. In addition, the highly rigid pillars and large clamp levers provide smooth and reliable workability.

Easy to operate for everyone

The LCD is larger to improve the visibility of numbers and other displays. In addition, the number of operation switches have been reduced to a three-button system and have enlarged the DATA/ HOLD button to make it easier to press, ensuring more reliable operability.

Supports high quality manufacturing through efficient measurement

By placing the body and Dial Test Indicator on a flat surface plate, even complex shapes can be measured accurately and easily. In addition, the smooth movement across the surface plate provides excellent workability.

The holder arm and clamp are optional.

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Special features

Supports smart data collection and management

Links with U-WAVE*

We have made it even easier to set up the "U-WAVE" wireless measurement data communication system, which makes measurement data entry easier and more reliable.
The reviewed design makes installation faster and easier.

*The U-WAVE needs to be fixed in place using a double-sided fastener/tape.

Ensures high visibility and improves work efficiency

Large LCD (liquid crystal display)

The 12 mm high character display—20% bigger than the previous model—makes it easier to read the measured values.

Previous model

Actual size

New model

Actual size

The LCD screen has been enlarged and the typeface changed to bold, enhancing visibility over previous models.

Smooth operation and settings

Three-button operation

The 3-button operation makes it consistent with other Mitutoyo devices. And when used together with U-WAVE, it makes data management operations easy.

1 The **Absolute (ABS) origin setting function** memorizes a surface plate, etc. as the absolute origin.

2 The **INC (incremental) measurement function** allows the setting of the origin at any position.

3 The **DATA button** activates data output when the data output option is connected.

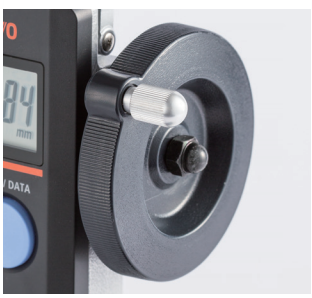
3 The **HOLD function** retains displayed values when no output option is connected.

Other functions

- The **Measurement data output terminal** can be used to build statistical process management systems and measurement systems.

Contributes to reliable, accurate and repeatable measurements

Hardware design with emphasis on operability



Handle for moving the slider

The slider-feed wheel handle enables smooth vertical movement of the slider.

Large clamp lever

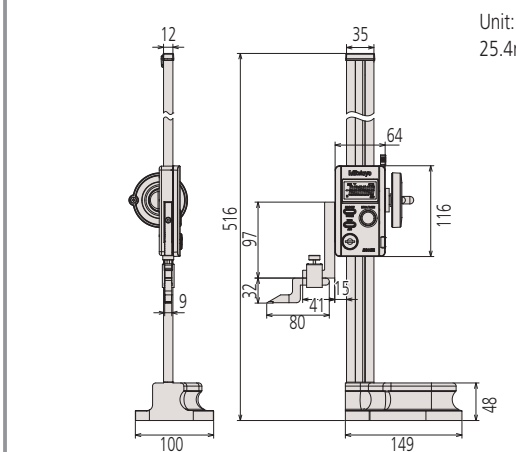
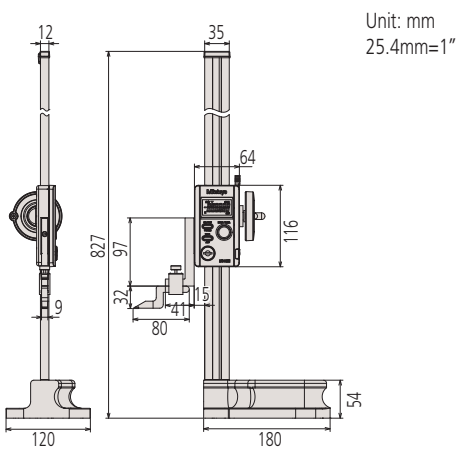
The large, easy-to-grip lever provides secure clamping.

570-412

570-414

Order No.	570-402	570-404	570-412	570-413	570-414
Unit (Display unit)	**Metric**		**Inch/Metric**		
Maximum permissible error E_{MPE}	±0.03 mm	±0.05 mm	±0.0015 in/±0.03 mm	±0.0020 in/±0.05 mm	
Measuring range	0 to 300 mm	0 to 600 mm	0 to 12 in/0 to 300 mm	0 to 18 in/0 to 450 mm	0 to 24 in/0 to 600 mm
Resolution	0.01 mm		0.0005 in/0.01 mm		
Functions	ON/OFF, ORIGIN, ZERO/ABS, HOLD/DATA, inch/mm conversion*				
Drive method	Slider-feed wheel (manual)				
Data output	DIGIMATIC d1				
Max. response speed	Unlimited				
LCD character height	12 mm				
Battery life	Approx. 20,000 hours with continuous use, 5 years under normal use				

*On Inch/Metric models only

Order No.	570-402 / 570-412	570-404 / 570-414
Dimensions		

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Option Lineup

Optional accessories

Contact Sensor

No. 900872

- Attached to both the workpiece*1 and height gage*2 when measuring heights using a height gage with a scriber, the contact sensor is a convenient detector that lights up when the scriber touches the workpiece.
  *1 Conductive workpieces only. *2 Attach to a conductive part.
- Magnet is incorporated.
- Use with a granite surface plate (precision stone surface plate). (For details, refer to our website.)
- Power supply: PR44 (air battery) × 2
  The batteries for monitoring are not included with the product and must be purchased separately.

Depth Gage Attachment

No. 900878: With inch-type holding bar (0.25x0.5 in cross-section)
No. 900764: With metric-type holding bar (9x9 mm cross-section)

- Attaches to a height gage for measuring groove and hole depth.
- Minimum measurable hole diameter: 5.5 mm
- Maximum distance from the bottom of the holding bar to the contact point: 80 mm (metric type), 2.95 in (inch type)
- Dial indicator contact points are usable. (For details, refer to our website.)
- Holding bar length: 100 mm

Center Probe

No. 900581: With inch-type holding bar (0.25x0.5 in cross-section)
No. 951144: With metric-type holding bar (9x9 mm cross-section)

- Allows quick measurement of center-to-center distance between holes.
- Measurable hole diameters: 1 to 38 mm
- Cross-section of mounting bar: 9×9 mm

Swivel clamp (with dovetail groove)*

No. 902053 (metric)
No. 900322 (inch)
*For mounting test indicators, etc.

Holding bar*

No. 953639 (inch)
No. 953638 (metric)
*For mounting test indicators, etc.

Measurement data collection software

USB-ITPAK V2.1

USB-ITPAK further streamlines inspection work. Ideal for recording inspection data of mass-produced products that are repeatedly produced using the same procedure every day!!

USB-ITPAK V2.1 creates a procedure to input data from gages equipped with Digimatic output to Excel sheets via IT-016U or USB-ITN or U-WAVE. Using together with USB-ITPAK V2.1 will further improve the operational efficiency of repetition inspection work. Best suited for keeping track of inspection data of mass-produced products.

- Automatically calls Excel sheet.
- Automates cursor movement after data entry, eliminating the need for line feed and other cell movement operations.
- Input range can be specified per Digimatic gage, which reduces improper input.
- The last data input can be canceled by a single operation (foot switch, function key etc.)
- Data input or cancellation can be performed at once in multiple-point simultaneous measurement.

<TIP> Refer to the USB-ITPAK V2.1 user's manual on the Mitutoyo website.

USB-ITPAK V2.1

USB dongle

A USB dongle must be connected to the PC running the software.

■ Operating environment

Order No.	06AFM386
Compatible OS*	Windows 2000 SP4, Windows XP SP2 or later, Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10
Supported Excel versions	Excel 2002, Excel 2003, Excel 2007, Excel 2010, Excel 2013, Excel 2016
Hard disk	Free space of more than 20 MB
CD-ROM drive	For program installation
USB port	2 ports or more (for USB dongle and USB-ITN)
Monitor resolution	800×600, 256 colors or more

*● 32-bit, 64-bit OS supported
● The OS language must be the same as that of USB-ITPAK V2.1.

Optional accessories for data output

Mini-Printer Equipped with Data Logging Function

Digimatic Mini-Processor DP-1VA LOGGER — Print, Save, or Send Data

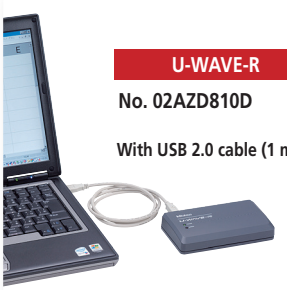
DP-1VA LOGGER
No. 264-505A

Optional Cables
No. 06AFZ050
USB cable (Type A - micro B)
No. 905338
Connection cable (1 m) Type F
No. 905409
Connection cable (2 m) Type F

- The versatile DP-1VA LOGGER printer not only prints measurement data, but performs a variety of statistical analyses, draws histograms and D-charts and also performs complex operations on Xbar-R control charts.
- The data logger function allows storage of up to 1,000 pieces of data in memory and batch transfer stored data to an Excel-format inspection certificate, etc., by connecting to a PC with a USB cable (optional).
- The connection cable to the Height Gage is optional.

Wireless Measurement Data Communication System

U-WAVE



U-WAVE-R
No. 02AZD810D
With USB 2.0 cable (1 m)

U-WAVE-T
No. 02AZD880G

U-WAVE-TCB
No. 264-625

U-WAVE-T connection cable
No. 02AZD790F
U-WAVE-T dedicated connection cable Type F

- Used to import data from Height Gage with Digimatic output function to a computer using wireless communication.
- Easy installation without cables that may get in the way thanks to wireless communication (up to 20 m).

Digimatic Gage/PC Data Input Device

USB Input Tool

USB Direct Input Tool
No. 06AFM380F
USB-ITN-F

USB Keyboard Signal Converter Type
No. 264-016-10
IT-016U

One Required
1m No. 905338
2m No. 905409

Note: One of the cables on the upper right (sold separately) is required to connect the testing machine to the IT-016U.

- Interface used to export calculation results to spreadsheet software on a computer via a USB cable. Calculation results (values) can be exported in one operation.

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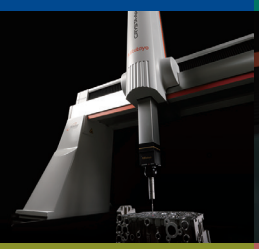
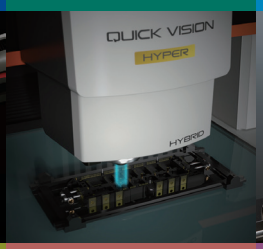
Coordinate Measuring Machines

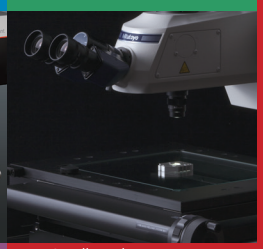


Vision Measuring Systems



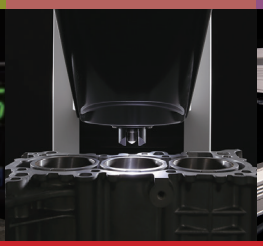
Form Measurement

Optical Measuring



Sensor Systems

Test Equipment



Digital Scale and DRO Systems

Small Tool Instruments and Data Management

Whatever your challenges are, Mitutoyo supports you from start to finish.

Mitutoyo is not only a manufacturer of top quality measuring products but one that also offers qualified support for the lifetime of the equipment, backed by comprehensive services that ensure your staff can make the very best use of the investment.

Apart from the basics of calibration and repair, Mitutoyo offers product and metrology training, as well as IT support for the sophisticated software used in modern measuring technology. We can also design, build, test and deliver measuring solutions and even, if deemed cost-effective, take your critical measurement challenges in-house on a sub-contract basis.

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