

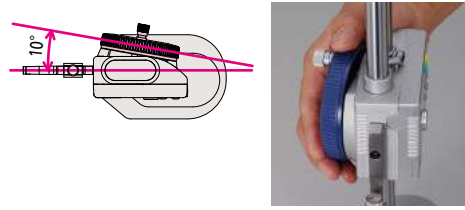
# Height Gage

A standard measuring tool of industry

## Digimatic Height Gage SERIES 192 — Standard Type with SPC Data Output

- Easy-to-use standard type.
- Double-column structure ensures high measuring accuracy.
- Ergonomic base fits comfortably in the hand.
- Character height of the LCD display has been increased (10mm to 11mm) and a high-contrast LCD display unit adopted, so that readability is improved.
- Allows integration into statistical process control and measurement systems. Refer to page A-3.

- Inclined handle improves slider ergonomics.



- Battery: **SR44** (1 pc), **938882**. For initial operational checks (standard accessory)
- Battery life is 3,500 hours in continuous use.
- Carbide-tipped long scriber No. 07GZA000 is provided as a standard accessory. (Standard accessory: scriber clamp No. 05GZA033)
- For precision Black Granite Surface Plates, refer to page E-51.



192-613-10

### SPECIFICATIONS

Metric							
Order No.	Range	Resolution	Accuracy*	Repeatability	Max. response speed	Height	Mass
192-613-10	0 - 300mm	0.01mm (0.005mm)	±0.02mm	0.01mm	500mm/s	475mm	4.7kg
192-614-10	0 - 600mm		±0.05mm			802mm	8.3kg
192-615-10	0 - 1000mm		±0.07mm			1228mm	15.7kg

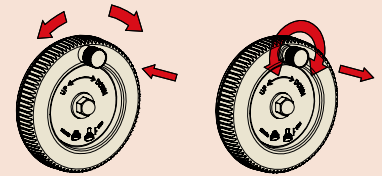
\* Excluding the quantizing error of ±1 count.

Inch/Metric							
Order No.	Range	Resolution	Accuracy*	Repeatability	Max. response speed	Height	Mass
192-630-10	0 - 12"	.0005"/0.01mm (.0002"/0.005mm)	±.001"	0.01mm	500mm/s	475mm	4.7kg
192-631-10	0 - 18"		±.002"			649mm	7.5kg
192-632-10	0 - 24"		±.002"			802mm	8.3kg
192-633-10	0 - 40"		±.003"			1228mm	15.7kg

\* Excluding the quantizing error of ±1 count.

### Functions

- Origin-setting (ABS measurement mode): Any arbitrary value can be stored as the origin point.
- Zero-setting (INC measurement mode): Displayed value can be set to zero at any arbitrary position of the slider.
- Origin restoration: Previously set origin is restored when switching back to ABS mode.
- Presetting (ABS INC measurement mode): Displayed value can be set to any arbitrary value, including negative values.
- Measuring direction: Measuring direction can be switched at the press of a button.
- Data hold: Display value can be held. Reverts to ABS or INC mode when cancelled.
- Alarm: Error message is displayed when overflow or overspeed of displayed value arises and measurement is stopped.
- Data output: Allows integration into statistical process control and measurement systems. (Refer to page A-3.)
- Fine and coarse height adjustment through knob and wheel combination. Slider height adjustment wheel allows fine and coarse height adjustment.



Coarse adjustment

Fine adjustment

Push the small fine-adjustment knob in to disengage gearing and then turn the large wheel.

Pull the fine-adjustment knob out to engage gearing and then turn this knob, which then slowly turns the wheel.

### Low-voltage alert:

When battery voltage becomes low, a warning appears in the display.

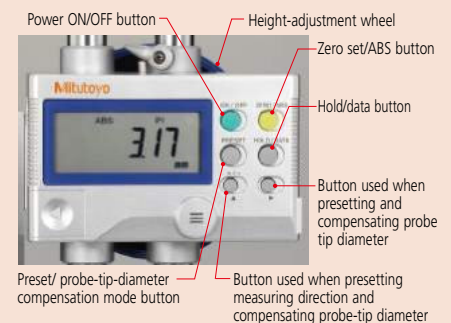
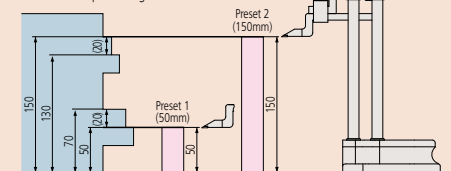
### Probe-tip diameter compensation:

An adjustment is applied to the raw measurement data to compensate for the effect of the size of the spherical contact point used by the bidirectional touch-trigger probe.

### Presetting (2 positions)

With two preset functions, two reference heights can be used relative to a surface plate.

- **Example of preset 1**  
To measure a height of 70mm, with a reference plane height of 50mm
- **Example of preset 2**  
To measure a height of 130mm, with a reference plane height of 150mm

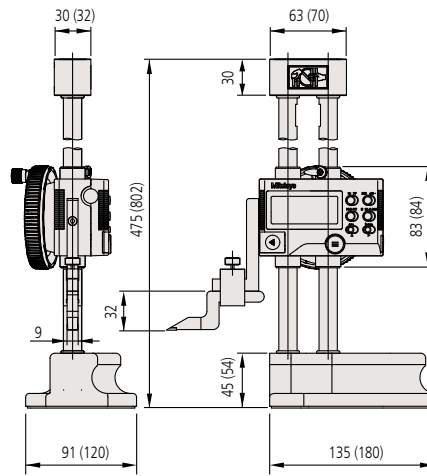


\* Probe-tip-diameter compensation mode is a function provided for Order No. 192-663-10/192-664-10/192-665-10/192-670-10/192-671-10/192-672-10/192-673-10.

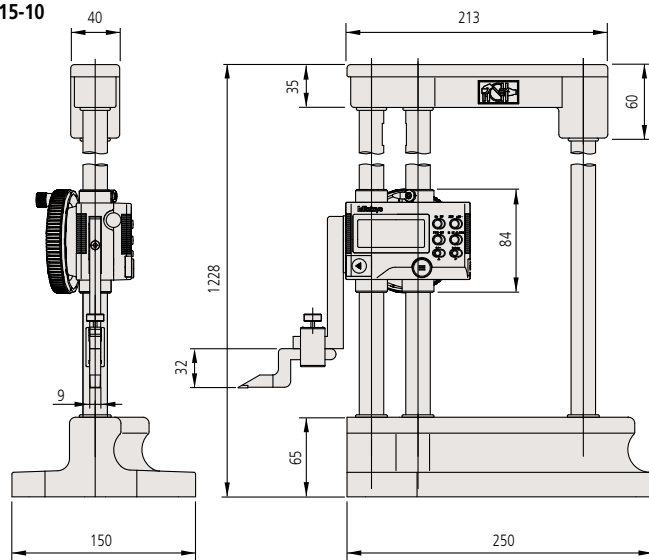
## DIMENSIONS

Unit: mm

Order No. 192-613-10, 192-614-10  
 ( ): No. 192-614-10



Order No. 192-615-10



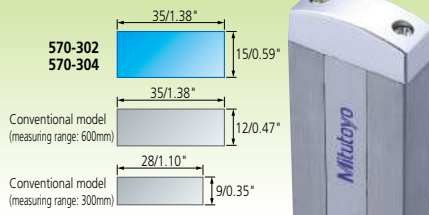
# Height Gage

A standard measuring tool of industry

## ABSOLUTE Digimatic Height Gage SERIES 570 — with ABSOLUTE Linear Encoder

- Allows smooth elevation by the slider adjustment wheel, which is the same as the well-established double-column structure height gage.
- Large slider-clamp lever ensures positive and accurate clamping action.
- High durability and high accuracy are ensured by an improved column design (35x15mm).
- Due to the built-in ABSOLUTE scale function, origin setting is not required each time power is turned ON.
- Allows integration into statistical process control and measurement systems. Refer to page A-3.
- Battery: **SR44** (1 pc, **938882**). For initial operational checks (standard accessory)
- Battery life is 20,000 hours under normal use.
- For precision Black Granite Surface Plates, refer to page E-51.

### Dimensions of column cross section



- Character height of the LCD display is 10mm.
- Ergonomic and stylish base fits comfortably in the hand.



## SPECIFICATIONS

### Metric

Order No.	Range	Resolution	Accuracy*	Repeatability	Max. response speed	Mass
570-302	0 - 300mm	0.01mm	±0.03mm	0.01mm	Unlimited	4.6kg
570-304	0 - 600mm		±0.05mm			6.4kg

\* Excluding quantizing error

### Inch/Metric

Order No.	Range	Resolution	Accuracy*	Repeatability	Max. response speed	Mass
570-312	0 - 12"	.0005"/0.01mm	±.0015"	0.01mm	Unlimited	4.6kg
570-313	0 - 18"		±.002"			5.9kg
570-314	0 - 24"		±.002"			6.4kg

\* Excluding quantizing error

ABSOLUTE™

(Refer to page X for details.)

## Functions

### Origin-setting:

Any convenient reference surface, such as a surface plate, etc., can be stored as the absolute origin point.

### Absolute measurement:

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

Incremental measurement: Allows origin setting at any arbitrary position. In this case, the origin point is not stored after turning off the power.

### Data hold

Display value can be held.

### Data output:

Allows integration into statistical process control and measurement systems. (Refer to page A-3.)

### Low-voltage alert:

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 so that the battery can be changed in good time.

## Standard accessories

For 570-302, 304

No.07GZA000 Scriber

No.05GZA033 Scriber clamp

For 570-312 and 570-313, 570-314

No.900258 Scriber

No.901385 Scriber clamp



## Optional accessories

For details, refer to page D-39.

Connecting cables for IT/DP/MUX

905338: SPC cable with data button (1m)

905409: SPC cable with data button (2m)

USB Input Tool Direct

06ADV380F: SPC cable for USB-ITN-F (2m)

Connecting cables for U-WAVE-T

02AZD790F: SPC cable for U-WAVE with data button (160mm)

02AZE140F: SPC cable for footswitch



Slider height adjustment wheel



Large clamp lever

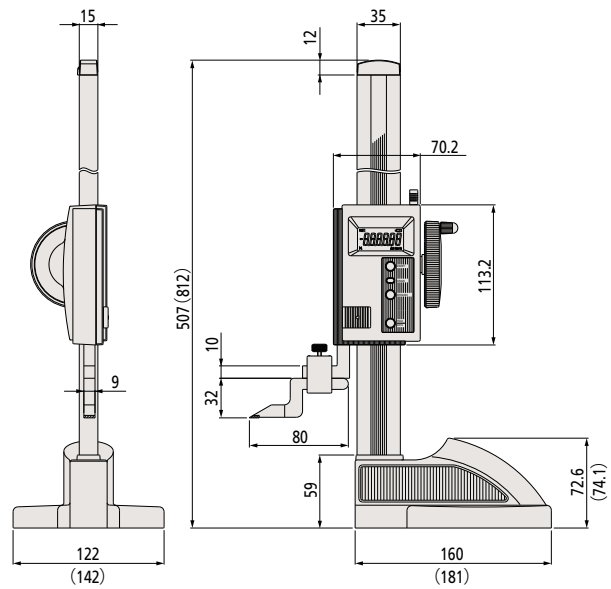


Base that fits the hand comfortably

## DIMENSIONS

( ) : No. 570-304

Unit: mm



# Height Gage

A standard measuring tool of industry

## Vernier Height Gage

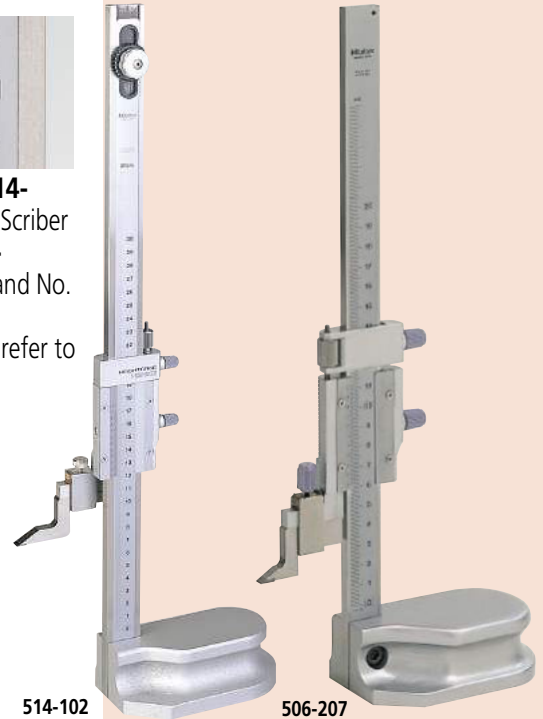
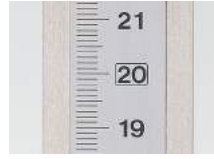
### SERIES 514, 506 — Standard Height Gage with Adjustable Main Scale

- Fits comfortably in the hand and moves easily on the surface plate.
- The main scale slides and clamps within the column for quick and convenient zero-setting.
- Large locking knobs are used both for the slider and fine adjustment clamps to make clamping easy and secure.
- Operability of slider has been improved.
- Large main-scale engraving for fatigue-free



working.

- Carbide-tipped scriber (No. **07GA000** for Nos. **514-102/104/106/103/105/107**, No. **905200** for Nos. **514-108** and **109**, and No. **900390** for No. **514-170**) is provided as a standard accessory. (Scriber clamp No. **05GZA033** for Code No. **514-102/104/106/108/103/105/107/109**, and No. **905008** for No. **514-170**)
- For precision Black Granite Surface Plates, refer to page E-51.

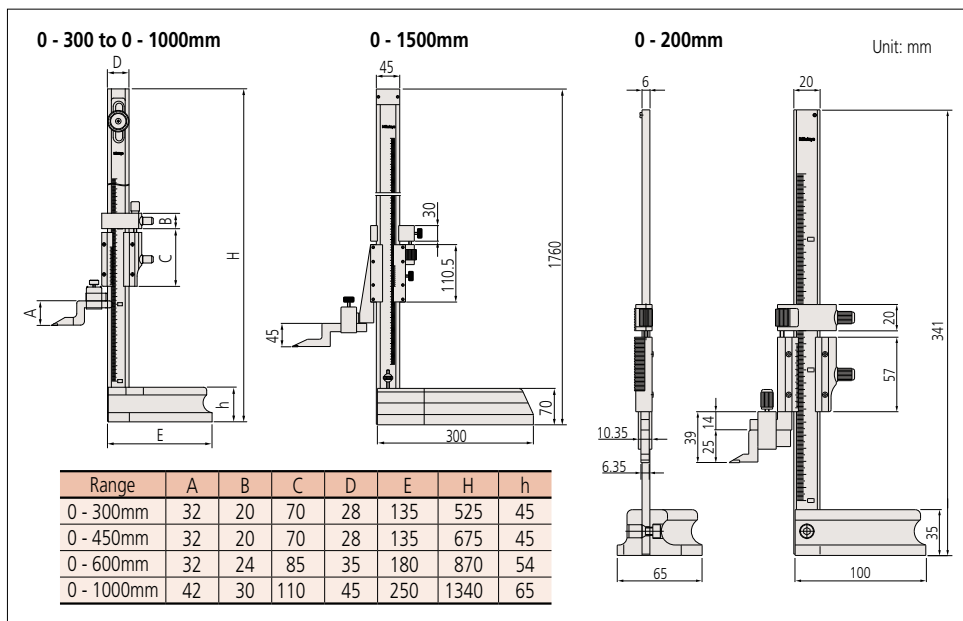


## SPECIFICATIONS

Metric								
Order No.	Range	Graduation	Accuracy	Scale adjustment	Fine feed	Height	Mass	Remarks
<b>506-207</b>	0 - 200mm	0.02mm	±0.03mm	—	4mm	341mm	1.4Kg	—
<b>514-102</b>	0 - 300mm		±0.04mm			525mm	3.1Kg	—
<b>514-104</b>	0 - 450mm		±0.05mm	15mm		675mm	3.4Kg	—
<b>514-106</b>	0 - 600mm		±0.07mm	7mm		870mm	7.4Kg	—
<b>514-108</b>	0 - 1000mm	0.05mm	±0.07mm	25mm	6mm	1340mm	20Kg	—
<b>514-170</b>	0 - 1500mm		±0.18mm		20mm	1760mm	26Kg	with magnifier

Inch/Metric								
Order No.	Range	Graduation	Accuracy	Scale adjustment	Fine feed	Height	Mass	Remarks
<b>506-208</b>	0 - 8"	.001"/0.02mm	±.001"	—	.16"	341mm	1.4Kg	—
<b>514-103</b>	0 - 12"		±.002"			.6"	525mm	3.1Kg
<b>514-105</b>	0 - 18"		±.002"	.6"		675mm	3.4Kg	—
<b>514-107</b>	0 - 24"		±.003"	1"		.27"	870mm	7.4Kg
<b>514-109</b>	0 - 40"	±.003"	1"	.24"	1340mm	20.0 Kg	—	

## DIMENSIONS



## Optional accessories

**07GZA000:** Scriber

**953638:** Holding bar for test indicator (length: 50mm)

**900209:** Holding bar for test indicator (length: 100mm)

**953639:** Holding bar for test indicator (length: 2")

**900306:** Holding bar for test indicator (length: 4")

**900321:** Swivel clamp used with holding bar (metric)

**900322:** Swivel clamp used with holding bar (inch)

**902053:** Clamp (with dovetail groove,  $\varnothing 6$  and  $\varnothing 8$  holes)

Note: A test indicator can be mounted on a height gage using a holding bar and clamp.

## Dial Height Gage SERIES 192 — With digital counter

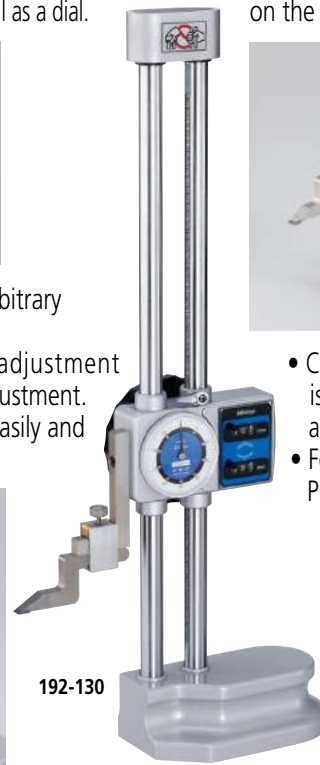
- Easy and error-free reading with both up and down digital counters as well as a dial.

- Fits comfortably in the hand and moves easily on the surface plate.



- Can be zero-set at any arbitrary position.
- Provided with a large adjustment wheel for easy height adjustment.
- Clamp can be operated easily and securely.

- Carbide tipped scriber (**No. 07GZA000**) is attached as standard. (Standard accessory: Scriber clamp **No.05GZA033**)
- For precision Black Granite Surface Plates, refer to page E-51.



192-130

## SPECIFICATIONS

Metric					
Order No.	Range	Accuracy	Graduation	Height	Mass
192-130	0 - 300mm	$\pm 0.03\text{mm}$	0.01mm	470mm	4.2kg
192-131	0 - 450mm	$\pm 0.05\text{mm}$		648mm	9.2kg
192-132	0 - 600mm			798mm	9.8kg
192-133	0 - 1000mm	$\pm 0.07\text{mm}$		1220mm	17.0kg
Inch					
Order No.	Range	Accuracy	Graduation	Height	Mass
192-150	0 - 12"	$\pm 0.0015"$	.001"	470mm	4.2kg
192-151	0 - 18"	$\pm 0.002"$		648mm	9.2kg
192-152	0 - 24"			798mm	9.8kg
192-153	0 - 40"	$\pm 0.003"$		1220mm	17.0kg

## DIMENSIONS

