**Height Gage**

A standard measuring tool of industry

**Digimatic Height Gage**

**SERIES 192 — Multi-function Type with SPC Data Output**

- Double-column structure ensures high measuring accuracy.
- Ergonomic base fits comfortably in the hand.
- Better readability is provided thanks to display height (11 mm) and high-contrast LCD.

### Specifications

#### Metric

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy$*$</th>
<th>Repeatability</th>
<th>Max. response speed</th>
<th>Height</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>192-663-10</td>
<td>0 - 300 mm</td>
<td>0.01 mm</td>
<td>$\pm 0.02$ mm</td>
<td>0.01 mm</td>
<td>500 mm/s</td>
<td>510 mm</td>
<td>5.7 kg</td>
</tr>
<tr>
<td>192-665-10</td>
<td>0 - 1000 mm</td>
<td>0.06 mm</td>
<td>$\pm 0.06$ mm</td>
<td>1228 mm</td>
<td>15.7 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>192-613-10</td>
<td>0 - 600 mm</td>
<td>0.02 mm</td>
<td>$\pm 0.02$ mm</td>
<td>475 mm</td>
<td>4.7 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>192-615-10</td>
<td>0 - 1000 mm</td>
<td>0.07 mm</td>
<td>$\pm 0.07$ mm</td>
<td>832 mm</td>
<td>8.3 kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Excluding quantizing error of $\pm 1$ count

#### Inch/Metric

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy$*$</th>
<th>Repeatability</th>
<th>Max. response speed</th>
<th>Height</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>192-670-10</td>
<td>0 - 12 in</td>
<td>0.001 in</td>
<td>$\pm 0.001$ in</td>
<td>0.01 mm</td>
<td>510 mm/s</td>
<td>510 mm</td>
<td>5.7 kg</td>
</tr>
<tr>
<td>192-671-10</td>
<td>0 - 18 in</td>
<td>0.0015 in</td>
<td>$\pm 0.0015$ in</td>
<td>1228 mm</td>
<td>15.7 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>192-672-10</td>
<td>0 - 24 in</td>
<td>0.0005 in</td>
<td>$\pm 0.0005$ in</td>
<td>475 mm</td>
<td>4.7 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>192-673-10</td>
<td>0 - 40 in</td>
<td>0.0025 in</td>
<td>$\pm 0.0025$ in</td>
<td>832 mm</td>
<td>8.3 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>192-630-10</td>
<td>0 - 12 in</td>
<td>0.001 in</td>
<td>$\pm 0.001$ in</td>
<td>475 mm</td>
<td>4.7 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>192-631-10</td>
<td>0 - 18 in</td>
<td>0.002 in</td>
<td>$\pm 0.002$ in</td>
<td>832 mm</td>
<td>8.3 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>192-632-10</td>
<td>0 - 40 in</td>
<td>0.003 in</td>
<td>$\pm 0.003$ in</td>
<td>1228 mm</td>
<td>15.7 kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Excluding quantizing error of $\pm 1$ 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.

**Zero-setting (INC measurement mode):**

- Displayed value can be set to any arbitrary value, including negative values.

**Measurement 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.

**Display value can be set to zero at any arbitrary position.**

**Measuring direction**

- Reverts to ABS or INC mode when cancelled.

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

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Optional Accessory
Bidirectional touch-trigger probe
Improves accuracy in step, internal thickness, and outside width measurement by minimizing reproducibility error. A bidirectional touch-trigger probe is available as an optional accessory for 192-663-10, 192-664-10, 192-665-10, 192-670-10, 192-671-10, 192-672-10 and 192-673-10.

Connecting cables for IT/DP/MUX
905338: SPC cable (1 m)
905409: SPC cable (2 m)

USB Input Tool Direct
06AFM380F: SPC cable for USB-ITN-F (2 m)

Connecting cables for U-WAVE-T
02AZD790F: SPC cable for U-WAVE (160 mm)
02AZE140F: SPC cable for footswitch

953638: Holding bar*
902053: Swivel clamp*

* A test indicator can be mounted on a height gage using a holding bar and clamp.
ABSOLUTE Digimatic Height Gage
SERIES 570 — with Ergonomic Base

- 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 (35x15 mm).
- Character height of the LCD display is 10 mm.
- Ergonomic and stylish base fits comfortably in the hand.
- 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-49.

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: 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 570-322, 324
07GZA000 Scriber
05GZA033 Scriber clamp
For 570-312 and 570-313, 570-314
900258 Scriber
901385 Scriber clamp

Optional accessories
- Connecting cables for IT/DP/MUX
  905338: SPC cable with data button (1 m)
  905409: SPC cable with data button (2 m)
- USB Input Tool Direct
  06AFM380F: SPC cable for USB-ITN-F (2 m)
- Connecting cables for U-WAVE-T
  02AZD790F: SPC cable for U-WAVE with data button (160 mm)
  02AZE140F: SPC cable for footswitch

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Metric</th>
<th>Order No.</th>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy*</th>
<th>Repeatability</th>
<th>Max. response speed</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metric</td>
<td>570-322</td>
<td>0 - 300 mm</td>
<td>0.01 mm</td>
<td>±0.03 mm</td>
<td>0.01 mm</td>
<td>Unlimited</td>
<td>4.5 kg</td>
</tr>
<tr>
<td></td>
<td>570-324</td>
<td>0 - 600 mm</td>
<td>0.01 mm</td>
<td>±0.05 mm</td>
<td>0.01 mm</td>
<td>Unlimited</td>
<td>6.4 kg</td>
</tr>
</tbody>
</table>

* Excluding quantizing error of ±1 count

<table>
<thead>
<tr>
<th>Inch/Metric</th>
<th>Order No.</th>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy*</th>
<th>Repeatability</th>
<th>Max. response speed</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inch/Metric</td>
<td>570-312</td>
<td>0 - 12 in</td>
<td>±0.0005 in / 0.01 mm</td>
<td>±0.0015 in</td>
<td>0.01 mm</td>
<td>Unlimited</td>
<td>4.6 kg</td>
</tr>
<tr>
<td></td>
<td>570-313</td>
<td>0 - 18 in</td>
<td>±0.0005 in / 0.01 mm</td>
<td>±0.002 in</td>
<td>0.01 mm</td>
<td>Unlimited</td>
<td>6.9 kg</td>
</tr>
<tr>
<td></td>
<td>570-314</td>
<td>0 - 24 in</td>
<td>±0.0005 in / 0.01 mm</td>
<td>±0.002 in</td>
<td>0.01 mm</td>
<td>Unlimited</td>
<td>6.4 kg</td>
</tr>
</tbody>
</table>

* Excluding quantizing error of ±1 count
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DIMENSIONS

Unit: mm

Slider height adjustment wheel

Large clamp lever

Base that fits the hand comfortably
Height Gage
A standard measuring tool of industry

ABSOLUTE Digimatic Height Gage
SERIES 570 — Standard model

- ABS and INC measurement modes allow efficient operation.
- Rigid structure makes instrument suitable for use in severe work environments.
- The +/- measurement function widens the application range.
- 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 5,000 hours under normal use.
- Carbide-tipped scriber (900173 for 570-227 and 244, and 905200 for 570-230 and 248) is provided as a standard accessory. (Standard accessory: scriber clamp 901338 for 570-227 and 244, and 05GZA033 for 570-230 and 248)
- When a dial indicator or test indicator is used with 570-227, the dedicated holding bar (953639, overall length 50 mm) is recommended for use. However, instrumental error may be larger because the measurement point is further from the beam.
- For precision Black Granite Surface Plates, refer to page E-49.

SPECIFICATIONS

### Metric

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Range</th>
<th>Resolution</th>
<th>Fine feed</th>
<th>Accuracy*</th>
<th>Repeatability</th>
<th>Height</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>570-227</td>
<td>0 - 200 mm</td>
<td>0.01 mm</td>
<td>4 mm</td>
<td>±0.03 mm</td>
<td>0.01 mm</td>
<td>355 mm</td>
<td>1.4 kg</td>
</tr>
<tr>
<td>570-230</td>
<td>0 - 1000 mm</td>
<td>6 mm</td>
<td>±0.07 mm</td>
<td>0.01 mm</td>
<td>1260 mm</td>
<td>16.8 kg</td>
<td></td>
</tr>
</tbody>
</table>

* Excluding quantizing error of ±1 count

### Inch/Metric

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Range</th>
<th>Resolution</th>
<th>Fine feed</th>
<th>Accuracy*</th>
<th>Repeatability</th>
<th>Height</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>570-244</td>
<td>0 - 8 in</td>
<td>0.0005 in / 0.01 mm</td>
<td>0.16 in</td>
<td>±0.002 in</td>
<td>0.01 mm</td>
<td>355 mm</td>
<td>1.4 kg</td>
</tr>
<tr>
<td>570-248</td>
<td>0 - 40 in</td>
<td>0.24 in</td>
<td>±0.003 in</td>
<td>0.01 mm</td>
<td>1260 mm</td>
<td>16.8 kg</td>
<td></td>
</tr>
</tbody>
</table>

* Excluding quantizing error of ±1 count

Optional accessories
For details, refer to page D-39.
- Connecting cables for IT/DP/MUX:
  - 905338: SPC cable with data button (1 m)
  - 905409: SPC cable with data button (2 m)
- USB Input Tool Direct:
  - 06AFM380F: SPC cable for USB-ITN-F (2 m)
  - 02AZD790F: SPC cable for footswitch
  - 02AZE140F: SPC cable for footswitch

ABSOLUTE Digimatic Height Gage
SERIES 570 — Standard model

Data Management Software by Mitutoyo

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).

Functions
Zero-setting
+/- directional measurement
Data hold
Data output
Presetting
inch/mm reading (inch/mm models)
Preset value memory
Origin restoration
Low battery voltage alert
Counting value composition error alert

Battery:
SR44 (1 pc), 938882. For initial operational checks (standard accessory)

Battery life is 5,000 hours under normal use.

Carbide-tipped scriber (900173 for 570-227 and 244, and 905200 for 570-230 and 248) is provided as a standard accessory. (Standard accessory: scriber clamp 901338 for 570-227 and 244, and 05GZA033 for 570-230 and 248)

When a dial indicator or test indicator is used with 570-227, the dedicated holding bar (953639, overall length 50 mm) is recommended for use. However, instrumental error may be larger because the measurement point is further from the beam.

For precision Black Granite Surface Plates, refer to page E-49.

SPECIFICATIONS

### Metric

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<th>Range</th>
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<th>Repeatability</th>
<th>Height</th>
<th>Mass</th>
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<tbody>
<tr>
<td>570-227</td>
<td>0 - 200 mm</td>
<td>0.01 mm</td>
<td>4 mm</td>
<td>±0.03 mm</td>
<td>0.01 mm</td>
<td>355 mm</td>
<td>1.4 kg</td>
</tr>
<tr>
<td>570-230</td>
<td>0 - 1000 mm</td>
<td>6 mm</td>
<td>±0.07 mm</td>
<td>0.01 mm</td>
<td>1260 mm</td>
<td>16.8 kg</td>
<td></td>
</tr>
</tbody>
</table>

* Excluding quantizing error of ±1 count

### Inch/Metric

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<thead>
<tr>
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<th>Repeatability</th>
<th>Height</th>
<th>Mass</th>
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<tbody>
<tr>
<td>570-244</td>
<td>0 - 8 in</td>
<td>0.0005 in / 0.01 mm</td>
<td>0.16 in</td>
<td>±0.002 in</td>
<td>0.01 mm</td>
<td>355 mm</td>
<td>1.4 kg</td>
</tr>
<tr>
<td>570-248</td>
<td>0 - 40 in</td>
<td>0.24 in</td>
<td>±0.003 in</td>
<td>0.01 mm</td>
<td>1260 mm</td>
<td>16.8 kg</td>
<td></td>
</tr>
</tbody>
</table>

* Excluding quantizing error of ±1 count

ABSOLUTE Digimatic Height Gage
SERIES 570 — Standard model

Data Management Software by Mitutoyo

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).

Functions
Zero-setting
+/- directional measurement
Data hold
Data output
Presetting
inch/mm reading (inch/mm models)
Preset value memory
Origin restoration
Low battery voltage alert
Counting value composition error alert

Battery:
SR44 (1 pc), 938882. For initial operational checks (standard accessory)

Battery life is 5,000 hours under normal use.

Carbide-tipped scriber (900173 for 570-227 and 244, and 905200 for 570-230 and 248) is provided as a standard accessory. (Standard accessory: scriber clamp 901338 for 570-227 and 244, and 05GZA033 for 570-230 and 248)

When a dial indicator or test indicator is used with 570-227, the dedicated holding bar (953639, overall length 50 mm) is recommended for use. However, instrumental error may be larger because the measurement point is further from the beam.

For precision Black Granite Surface Plates, refer to page E-49.

SPECIFICATIONS

### Metric

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Range</th>
<th>Resolution</th>
<th>Fine feed</th>
<th>Accuracy*</th>
<th>Repeatability</th>
<th>Height</th>
<th>Mass</th>
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<tbody>
<tr>
<td>570-227</td>
<td>0 - 200 mm</td>
<td>0.01 mm</td>
<td>4 mm</td>
<td>±0.03 mm</td>
<td>0.01 mm</td>
<td>355 mm</td>
<td>1.4 kg</td>
</tr>
<tr>
<td>570-230</td>
<td>0 - 1000 mm</td>
<td>6 mm</td>
<td>±0.07 mm</td>
<td>0.01 mm</td>
<td>1260 mm</td>
<td>16.8 kg</td>
<td></td>
</tr>
</tbody>
</table>

* Excluding quantizing error of ±1 count

### Inch/Metric

<table>
<thead>
<tr>
<th>Order No.</th>
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<th>Height</th>
<th>Mass</th>
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<tbody>
<tr>
<td>570-244</td>
<td>0 - 8 in</td>
<td>0.0005 in / 0.01 mm</td>
<td>0.16 in</td>
<td>±0.002 in</td>
<td>0.01 mm</td>
<td>355 mm</td>
<td>1.4 kg</td>
</tr>
<tr>
<td>570-248</td>
<td>0 - 40 in</td>
<td>0.24 in</td>
<td>±0.003 in</td>
<td>0.01 mm</td>
<td>1260 mm</td>
<td>16.8 kg</td>
<td></td>
</tr>
</tbody>
</table>

* Excluding quantizing error of ±1 count

ABSOLUTE Digimatic Height Gage
SERIES 570 — Standard model

Data Management Software by Mitutoyo

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).

Functions
Zero-setting
+/- directional measurement
Data hold
Data output
Presetting
inch/mm reading (inch/mm models)
Preset value memory
Origin restoration
Low battery voltage alert
Counting value composition error alert

Battery:
SR44 (1 pc), 938882. For initial operational checks (standard accessory)

Battery life is 5,000 hours under normal use.

Carbide-tipped scriber (900173 for 570-227 and 244, and 905200 for 570-230 and 248) is provided as a standard accessory. (Standard accessory: scriber clamp 901338 for 570-227 and 244, and 05GZA033 for 570-230 and 248)

When a dial indicator or test indicator is used with 570-227, the dedicated holding bar (953639, overall length 50 mm) is recommended for use. However, instrumental error may be larger because the measurement point is further from the beam.

For precision Black Granite Surface Plates, refer to page E-49.
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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.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Order No.</th>
<th>Range</th>
<th>Minimum reading</th>
<th>Accuracy</th>
<th>Scale adjustment</th>
<th>Fine feed</th>
<th>Height</th>
<th>Mass</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>506-207</td>
<td>0 - 200 mm</td>
<td>0.02 mm</td>
<td>±0.03 mm</td>
<td>—</td>
<td>4 mm</td>
<td>341 mm</td>
<td>1.4 kg</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>514-102</td>
<td>0 - 300 mm</td>
<td>0.04 mm</td>
<td>±0.04 mm</td>
<td>15 mm</td>
<td>5 mm</td>
<td>525 mm</td>
<td>3.1 kg</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>514-104</td>
<td>0 - 450 mm</td>
<td>0.05 mm</td>
<td>±0.05 mm</td>
<td>—</td>
<td>7 mm</td>
<td>675 mm</td>
<td>3.4 kg</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>514-106</td>
<td>0 - 600 mm</td>
<td>±0.07 mm</td>
<td>±0.05 mm</td>
<td>25 mm</td>
<td>6 mm</td>
<td>870 mm</td>
<td>3.4 kg</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>514-108</td>
<td>0 - 1000 mm</td>
<td>±0.18 mm</td>
<td>±0.18 mm</td>
<td>25 mm</td>
<td>20 mm</td>
<td>1340 mm</td>
<td>20 kg</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>514-170</td>
<td>0 - 1500 mm</td>
<td>0.05 mm</td>
<td>±0.03 mm</td>
<td>1 in</td>
<td>20 mm</td>
<td>1760 mm</td>
<td>26 kg</td>
<td>with magnifier</td>
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<table>
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<th>Inch/Metric</th>
<th>Order No.</th>
<th>Range</th>
<th>Minimum reading</th>
<th>Accuracy</th>
<th>Scale adjustment</th>
<th>Fine feed</th>
<th>Height</th>
<th>Mass</th>
<th>Remarks</th>
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<td></td>
<td>506-208</td>
<td>0 - 8 in</td>
<td>0.001 in</td>
<td>±0.001 in</td>
<td>—</td>
<td>0.16 in</td>
<td>341 mm</td>
<td>1.4 kg</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>514-103</td>
<td>0 - 12 in</td>
<td>0.001 in / 0.02 mm</td>
<td>±0.002 in</td>
<td>0.6 in</td>
<td>0.16 in</td>
<td>525 mm</td>
<td>3.1 kg</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>514-105</td>
<td>0 - 18 in</td>
<td>±0.001 in</td>
<td>±0.001 in</td>
<td>0.6 in</td>
<td>0.16 in</td>
<td>675 mm</td>
<td>3.4 kg</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>514-107</td>
<td>0 - 24 in</td>
<td>±0.003 in</td>
<td>±0.003 in</td>
<td>1 in</td>
<td>0.24 in</td>
<td>870 mm</td>
<td>7.4 kg</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>514-109</td>
<td>0 - 40 in</td>
<td>±0.003 in</td>
<td>±0.003 in</td>
<td>1 in</td>
<td>0.24 in</td>
<td>1340 mm</td>
<td>20.0 kg</td>
<td>—</td>
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**DIMENSIONS**

<table>
<thead>
<tr>
<th>Range</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>H</th>
<th>h</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 300 mm</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>0 - 450 mm</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>0 - 600 mm</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>0 - 1000 mm</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td>33</td>
<td>33</td>
<td>33</td>
</tr>
</tbody>
</table>

Mitutoyo reserves the right to change any or all aspects of any product specification, including prices, designs and service content, without notice.
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 (07GZA000) is attached as standard. (Standard accessory: Scribe clamp 05GZA033)

• For precision Black Granite Surface Plates, refer to page E-49.

Optional accessories

07GZA000: Scribe
953638: Holding bar for test indicator (length: 50 mm)
900209: Holding bar for test indicator (length: 100 mm)
953639: Holding bar for test indicator (length: 2 in)
900306: Holding bar for test indicator (length: 4 in)
900321: Swivel clamp used with holding bar (metric)
900322: Swivel clamp used with holding bar (inch)
902053: Clamp (with dovetail groove, ø6 and ø8 holes)

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

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Range</th>
<th>Accuracy</th>
<th>Graduation</th>
<th>Height</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>192-130</td>
<td>0 - 300 mm</td>
<td>±0.03 mm</td>
<td>0.01 mm</td>
<td>470 mm</td>
<td>4.2 kg</td>
</tr>
<tr>
<td>192-131</td>
<td>0 - 450 mm</td>
<td>±0.05 mm</td>
<td>0.01 mm</td>
<td>648 mm</td>
<td>9.2 kg</td>
</tr>
<tr>
<td>192-132</td>
<td>0 - 600 mm</td>
<td>±0.07 mm</td>
<td>0.01 mm</td>
<td>798 mm</td>
<td>9.8 kg</td>
</tr>
<tr>
<td>192-133</td>
<td>0 - 1000 mm</td>
<td>±0.07 mm</td>
<td>0.01 mm</td>
<td>1220 mm</td>
<td>17.0 kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Range</th>
<th>Accuracy</th>
<th>Graduation</th>
<th>Height</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>192-150</td>
<td>0 - 12 in</td>
<td>±0.0015 in</td>
<td>0.001 in</td>
<td>470 mm</td>
<td>4.2 kg</td>
</tr>
<tr>
<td>192-151</td>
<td>0 - 18 in</td>
<td>±0.002 in</td>
<td>0.001 in</td>
<td>648 mm</td>
<td>9.2 kg</td>
</tr>
<tr>
<td>192-152</td>
<td>0 - 24 in</td>
<td>±0.002 in</td>
<td>0.001 in</td>
<td>798 mm</td>
<td>9.8 kg</td>
</tr>
<tr>
<td>192-153</td>
<td>0 - 40 in</td>
<td>±0.003 in</td>
<td>0.001 in</td>
<td>1220 mm</td>
<td>17.0 kg</td>
</tr>
</tbody>
</table>

DIMENSIONS

0 - 300 mm (0 - 450 mm, 0 - 600 mm)

0 - 1000 mm
Height Gage
A standard measuring tool of industry

CERA Caliper Checker
SERIES 515

• Enables efficient setting and inspection of calipers and height gages.

SPECIFICATIONS

Order No. | Range       | Block pitch accuracy* | Parallelism of blocks* | Mass | Unit: mm
--- | --- | --- | --- | --- | ---
515-555 | 0 - 300 mm | ±5.0 μm | — | 4 kg |
515-556-2 | 0 - 600 mm | ±7.0 μm | 2.0 μm | 4.0 μm | 8.5 kg |

* The block accuracy and the parallelism of blocks are based on the following:
Outside caliper and height gage: lower end reference plane
Inside caliper: inside reference plane

Order No. | Range       | Block pitch accuracy* | Parallelism of blocks* | Mass | Unit: mm
--- | --- | --- | --- | --- | ---
515-555 | 0 - 12 in | ±0.0002 in | 0.00008 in | 4 kg |
515-556-2 | 0 - 600 mm | ±7.0 μm | 4.0 μm | 8.5 kg |

* The block accuracy and the parallelism of blocks are based on the following:
Outside caliper and height gage: lower end reference plane
Inside caliper: inside reference plane

DIMENSIONS

Optional accessories
- 602162: Wooden case for 300 mm, 12 inch model
- 602164: Wooden case for 600 mm model

Alternative solution using a Square Gauge Block Accessories Set
If such an accessories set is available, then an instrument equivalent to the CERA Calibration Checker may be assembled, as shown below, if additional elements are obtained (particularly plain jaws, 619072). For details, refer to pages E-25/26. Note that such an assembly will not have the corrosion resistance of the CERA Calibration Checker and, therefore, more care will be required in use and storage.
### Height Gage

#### Optional accessories for height gages

#### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Metric</th>
<th>Order No.</th>
<th>Applicable Height Gages</th>
</tr>
</thead>
</table>
| **900173** | 07GZA000 | 192 Series Digimatic Height Gages (192-613-10, 192-614-10, 192-615-10)  
570 Series Digimatic Height Gages (570-302, 570-304)  
192 Series Dial Height Gages (192-130, 192-131, 192-132)  
574 Series Heightmatic (574-111-1, 574-111-2, 574-110-1) |
| **905200** | 192 Series Digimatic Height Gages (192-663-10, 192-664-10, 192-665-10)  
570 Series Digimatic Height Gages (570-230)  
514 Series Vernier Height Gages (514-108, 514-109) |
| **900390** | 514 Series Vernier Height Gage (514-170) |

<table>
<thead>
<tr>
<th>Inch</th>
<th>Order No.</th>
<th>Applicable Height Gages</th>
</tr>
</thead>
</table>
| **900173** | 570 Series Digimatic Height Gages (570-227, 570-244)  
506 Series Vernier Height Gages (506-207, 506-208) |
| **900258** | 192 Series Digimatic Height Gages (192-630-10, 192-631-10, 192-632-10, 192-633-10)  
570 Series Digimatic Height Gages (570-312, 570-313, 570-314)  
574 Series Heightmatic (574-212-1, 574-212-2, 574-210-1) |
| **905201** | 192 Series Digimatic Height Gages (192-670-10, 192-671-10, 192-672-10, 192-673-10)  
570 Series Digimatic Height Gages (570-248) |

#### Contact Sensor
- The contact sensor eliminates errors caused by non-contact of the slider with a workpiece while making measurements. When the scriber of a height gage touches a conductive workpiece, an indicator lights up to indicate that a measurement can be taken, which results in consistent results.
- Magnet is incorporated.
- Battery (PR44, 2 pcs required) is not included.
- For precision Black Granite Surface Plates, refer to page E-49.

#### Center Probe
- Allows quick measurement of center-to-center distance between holes.
- Measurable hole diameters: 1 - 38 mm
- Mounting position dimension: 99 mm

#### Depth Gage Attachment
- Attaches to a height gage for measuring groove and hole depth.
- Minimum hole diameter: 5.5 mm
- Maximum distance from the bottom of the holding bar to the contact point: 80 mm (metric type), 2.95 inch (inch type)
- Dial indicator contact points are usable. (Refer to pages F-51.)
- Mounting position dimension: 99 mm
- Holding bar length: 100 mm