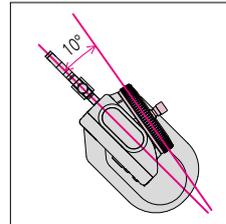


# Height Gauges

## SERIES 192 – Digimatic Double Column Height Gauge

- Double-column structure ensures high measuring accuracy.
- Available in Standard and Multifunctional types.
- Ergonomic base fits comfortably in the hand.
- Bidirectional touch-trigger probe is available as an optional accessory.
- Character height of the display has been increased (10 to 11 mm) and the high-contrast LCD display provides improved readability.
- Inclined handle improves slider ergonomics.
- Allows integration into statistical process control and measurement systems.
- Carbide-tipped long scribe is provided as a standard accessory.

**MeasurLink<sup>®</sup> ENABLED**  
Data Management Software by Mitutoyo



Offset height adjustment wheel improves ergonomics.



- ① Height adjustment wheel
- ② Power ON/OFF button
- ③ Zero set/ABS button
- ④ Preset/probe-tip-diameter compensation mode button
- ⑤ Hold/data button
- ⑥ Inch/metric button
- ⑦ Button used when presetting measuring direction (and compensating for probe-tip diameter on Multifunctional type)

### Specifications

Inch/Metric

Order No.	Range	Accuracy* <sup>1</sup>	Resolution (switchable)	Height	Mass
<b>Standard type</b>					
192-630-10	0-300 mm (0-12")	±0.02 mm (±.001")	0.01/0.005 mm (.0005/.0002")	475 mm	4.7 kg
192-631-10	0-450 mm (0-18")	±0.05 mm (±.002")		649 mm	7.5 kg
192-632-10	0-600 mm (0-24")			802 mm	8.3 kg
192-633-10	0-1000 mm (0-40")	±0.07 mm (±.003")		1228 mm	15.7 kg
<b>Multifunctional type</b>					
192-670-10	0-300 mm (0-12")	±0.02 mm (±.001")	0.01/0.005 mm (.0005/.0002")	510 mm	5.7 kg
192-671-10	0-450 mm (0-18")	±0.04 mm (±.0015")		649 mm	7.5 kg
192-672-10	0-600 mm (0-24")			802 mm	8.3 kg
192-673-10	0-1000 mm (0-40")	±0.06 mm (±.0025")		1228 mm	15.7 kg

\*1 Excluding quantizing error.

### Technical Data

Repeatability: 0.01 mm  
Max. response speed: 500 mm/s  
Battery: SR44 (1 pc.), **938882**  
Battery life: Approx. 3500 hours in continuous use

### 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:

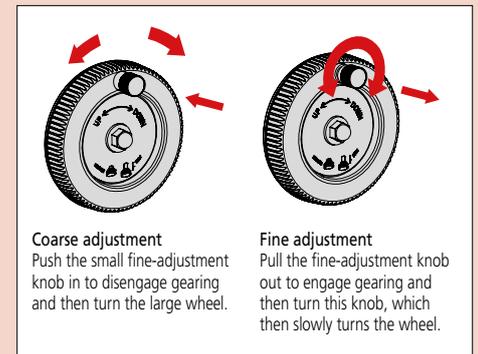
Error message is displayed when overflow or overspeed of displayed value arises and measurement is stopped.

#### Data output:

Allows integration into statistical process control and measurement systems.

#### Fine and coarse height adjustment:

Through knob and wheel combination. Slider height adjustment wheel allows fine and coarse height adjustment.



#### Low-voltage alert:

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

#### Probe-tip diameter compensation\*<sup>2</sup>:

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.

\*<sup>2</sup> Multifunctional type only.

### Standard Accessories

**900258:** Scriber (for Standard type)  
**905201:** Scriber (for Multifunctional type)  
**901385:** Scriber clamp

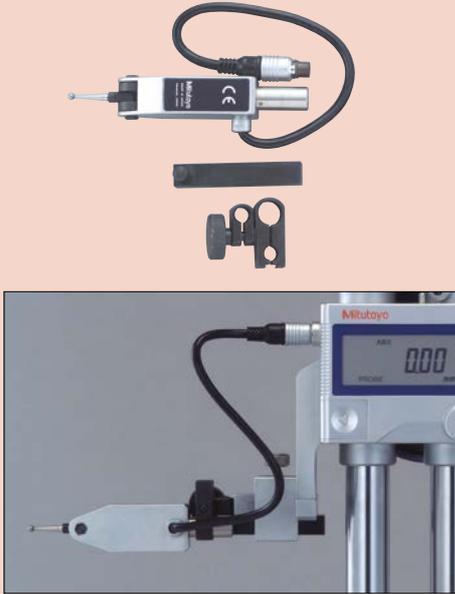
## Optional Accessories

Code No.	Description
905338	SPC data cable (1 m)
905409	SPC data cable (2 m)
02AZD790F	U-WAVE-T data cable (160 mm)
02AZE140F	U-WAVE-T data cable with footswitch (160/500 mm)
06AFM380F	USB input tool direct USB-ITN-C (2 m)
For Multifunctional type only	
192-008	Bidirectional touch-trigger probe*

\* See below for details.

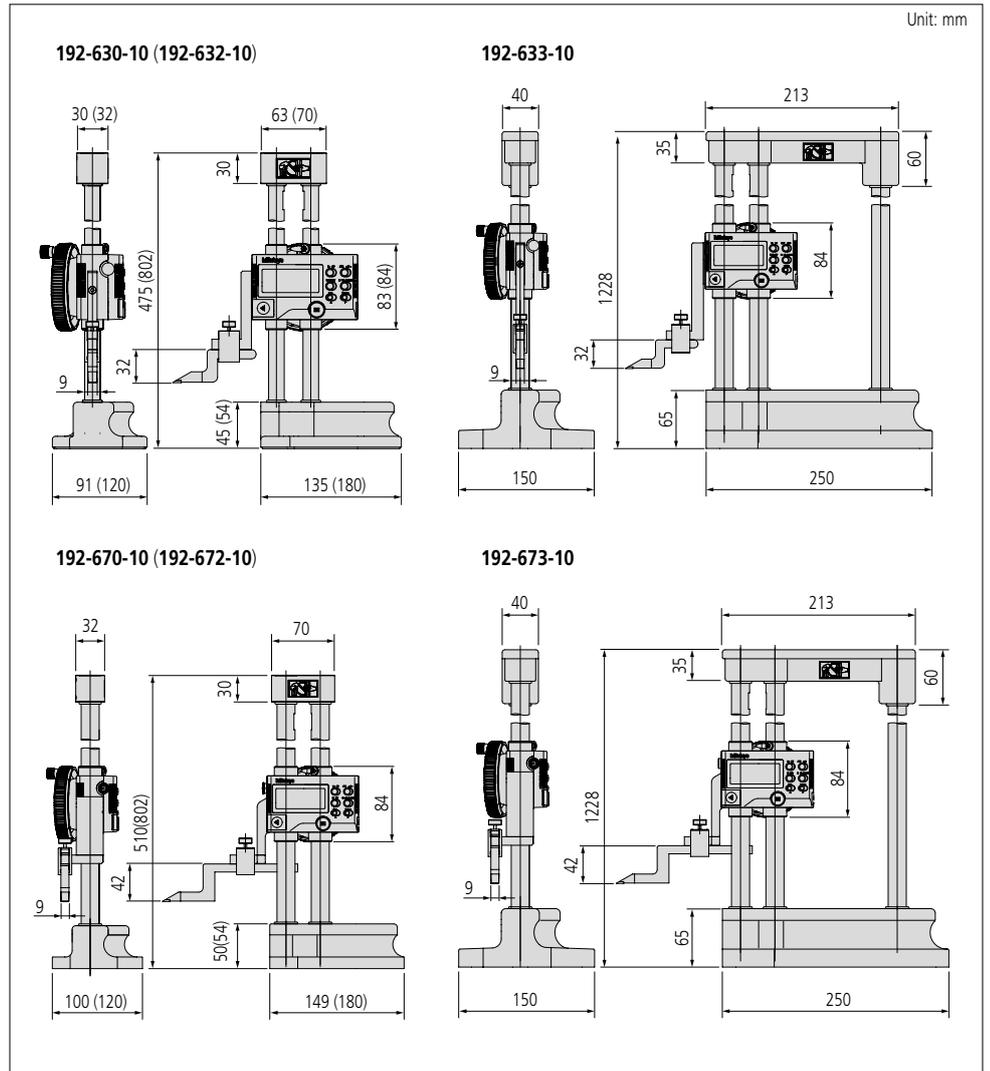
## Bidirectional Touch-Trigger Probe (optional accessory for Multifunctional type only)

Improves accuracy in step, internal thickness, and outside width measurement by minimizing reproducibility error.

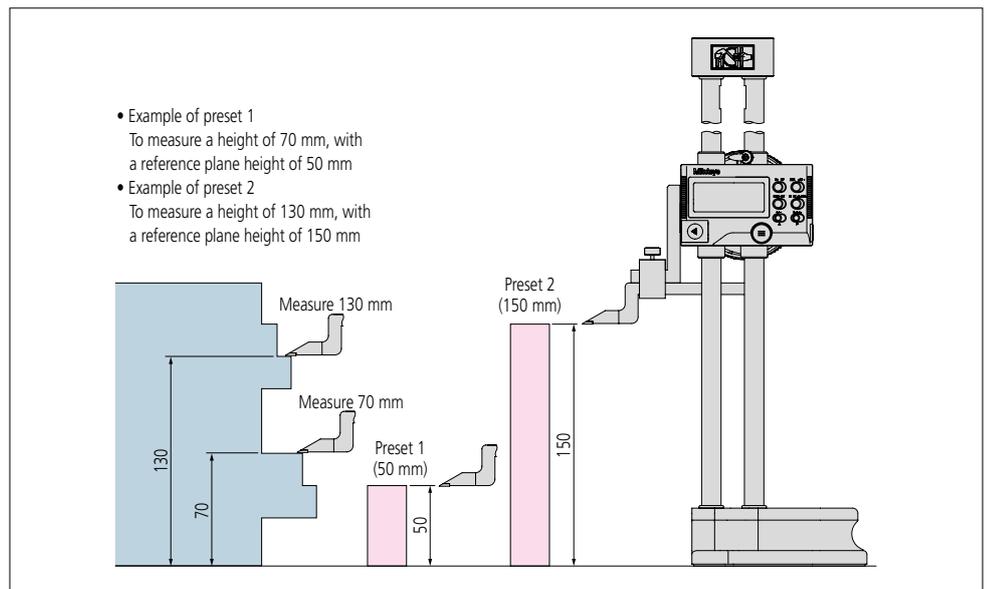


Code No.	192-008
Measuring direction	Bidirectional
Relay contact type	Normally open
Probe overtravel	1.5 mm
Probe tip size	ø3 mm
Repeatability	σ: 2 μm
Measuring force	0.4 N
Standard accessories	Holder arm, clamp

## Dimensions



## Presetting (2 positions)



With two preset functions, two reference heights created by gauge blocks can be used to make repetitive measurements with high accuracy relative to a datum plane (surface plate). This is an example of gaining accuracy from an instrument by taking advantage of its narrow range accuracy.