

Height gage

Move to other products

- 1 SPC
- 2 Caliper
- 3 Depth gage
- Height gage
- 5 Micrometer
- 6 Inside micrometer
- 7 Micrometer head
- 8 Indicator
- 9 Test indicator
- 10 Gage head
- 11 Gauge Block
- 12 Reference gage
- 13 Surface plate
- 14 Miscellaneous
- 15 Linear scale
- 16 Digimatic scale unit
- 17 Profile projector
- 18 Microscope
- 19 Contracer
- 20 Surftest
- 21 Formtracer
- 22 Roundtest
- 23 Hardness tester
- 24 CMM
- 25 Flexible measuring gage
- 26 Vision measuring system
- 27 Detailed shape measuring system
- 28 Laser scan micrometer
- 29 DIY tools

List of products

Linear Height
SERIES 518



QM-Hite
SERIES 518



Heightmatic
SERIES 574



Digimatic Height Gages
SERIES 192



Digimatic Height Gages
SERIES 192



Digimatic Height Gages
SERIES 570



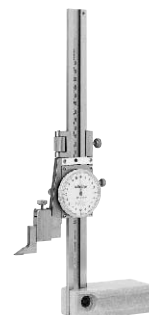
Digimatic Height Gages
SERIES 570



Digit Counter Type Dial Height Gages
SERIES 192



Dial Height Gages
SERIES 509



Vernier Height Gages
SERIES 506



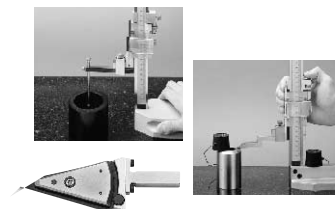
Vernier Height Gages
SERIES 514



Scribers for Height Gages



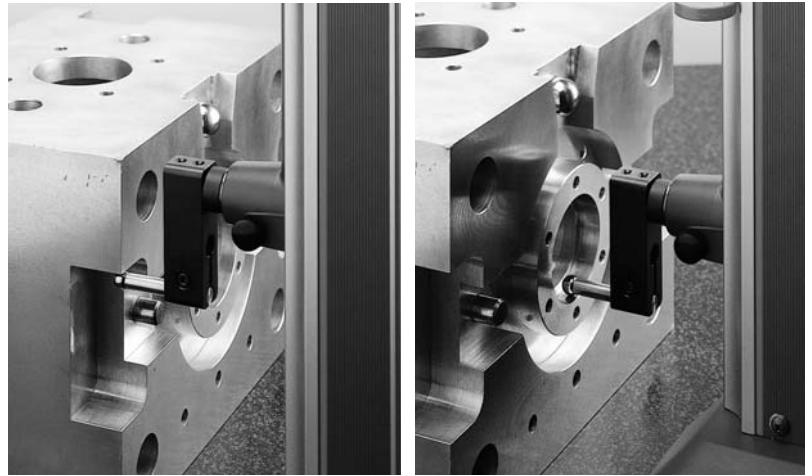
Accessories for Height Gages



Linear Height

SERIES 518 — 2D Measurement System

HEIGHT GAGES



SPECIFICATIONS

| Metric/Inch | |
|-------------------------|--|
| Order No.* | 518-321A-21 (120V with English manual) 518-321A-22 (120V with Spanish manual) 518-321D-21 (220V with English manual) 518-321D-22 (220V with Spanish manual) 518-321D-23 (220V with German manual) 518-321D-24 (220V with French manual) 518-321D-25 (220V with Italian manual) 518-321E-21 (240V with English manual) |
| Range | 0 - 972mm (0 - 38") |
| Slider travel | 600mm (34") |
| Resolution (switchable) | 0.0001mm/0.001mm/0.01mm/0.1mm/ .000001"/.00001"/.0001"/.001" |
| Accuracy** | (2+L/600)µm |
| Repeatability (2σ) | Plane: 0.5µm Bore: 1µm |
| Perpendicularity | 6µm |
| Straightness | 4µm |
| Drive method | Manual/Motor (5 - 40mm, 7 steps) |
| Measuring force | 1N |
| Balancing method | Counterweight (Auxiliary weights available.) |
| Floating method | Air bearings with built-in air compressor |
| Display | Graphic LCD (320x240 dot, with backlight) |
| Language for display | English/German/French/Spanish/Italian/Japanese |
| Data output | RS-232C |
| Power supply | Built-in rechargeable battery or AC adapter (100-240V AC, 50/60Hz) |
| Dimensions (WxDxH) | 240x287x1013mm |
| Mass | 24kg |

*Power grip preinstalled models are available.
518-322A-21 (120V with English manual)
518-322A-22 (120V with Spanish manual)
518-322D-21 (220V with English manual)
518-322D-22 (220V with Spanish manual)
518-322D-23 (220V with German manual)
518-322D-24 (220V with French manual)
518-322D-25 (220V with Italian manual)
518-322E-21 (240V with English manual)

**L = Measured length (mm), excluding quantizing error.

FEATURES

- Excellent accuracy of (2+L/600)µm with 0.1µm/0.5µm resolution/repeatability.
- Unique pneumatic full/semi-floating system achieves rapid inspection speed while maintaining the accuracy.
- One-key operation for semiautomatic measuring run.
- Employs Icon display for informative GUI.
- Automatic stand-by in the repeat measurement.
- Immediate GO/NG judgment at each measurement.
- Complete stand-alone design with rechargeable battery pack and self-contained pneumatic system.
- 24kg smart body for high mobility.
- Large memory capacity for 50 measuring programs and 60,000 measured data.
- Off-line part programming.
- RS-232C data output.
- Data entry from a digital indicator for straightness measurement.
- Optional external battery charger and spare battery pack for continuous operation.

OPTIONAL ACCESSORIES

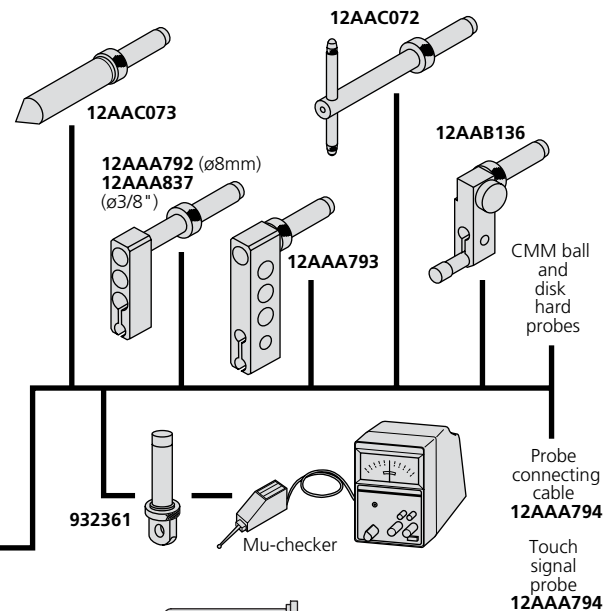
| Order No. | Description |
|-----------|--|
| 12AAA787 | Setting block for taper probe |
| 957261 | ø2 ball probe |
| 957262 | ø3 ball probe |
| 957263 | ø4 ball probe |
| 12AAB552 | ø10 carbide ball probe |
| 12AAA788 | ø4 ball offset probe |
| 12AAA789 | ø6 ball offset probe |
| 957264 | ø14 disk probe |
| 957265 | ø20 disk probe |
| 226116 | Test indicator (ø6 stem) adapter |
| 226117 | M2 CMM stylus adapter |
| 226118 | M3 CMM stylus adapter |
| 12AAC072 | Depth probe |
| 12AAC073 | ø20 taper probe |
| 12AAB136 | ø10 cylindrical probe |
| 12AAA793 | Probe extension holder (199mm) |
| 12AAA792 | Dial indicator (ø8 stem) holder |
| 12AAA837 | Dial indicator (ø3/8" stem) holder |
| 932361 | Mu-checker lever head holder |
| 06AAN066 | Touch signal probe |
| 12AAA794 | Probe connecting cable |
| ----- | CMM ball and disk hard probes are available |
| 12AAA798 | Auxiliary weight |
| 12AAA796 | Thermal-receipt printer (230V) |
| 12AAA797 | Thermal-receipt printer (120V) |
| 12AAA802 | Thermal print paper (10 pcs.) |
| 12AAA804 | Cable for page printer (EPSON LQ-300 or LX-300) (2m) |
| 12AAA805 | Cable for page printer (EPSON LQ-300 or LX-300) (4m) |
| 12AAA799 | Floppy disk drive |
| 12AAA800 | Battery charger |
| 12AAA807 | RS-232C cable (2m/80") |
| 12AAA808 | RS-232C cable (4m/160") |
| 936937 | SPC cable for Digimatic data entry (1m) |
| 965014 | SPC cable for Digimatic data entry (2m) |
| 12AAA879 | Model workpiece for training |

Consumables

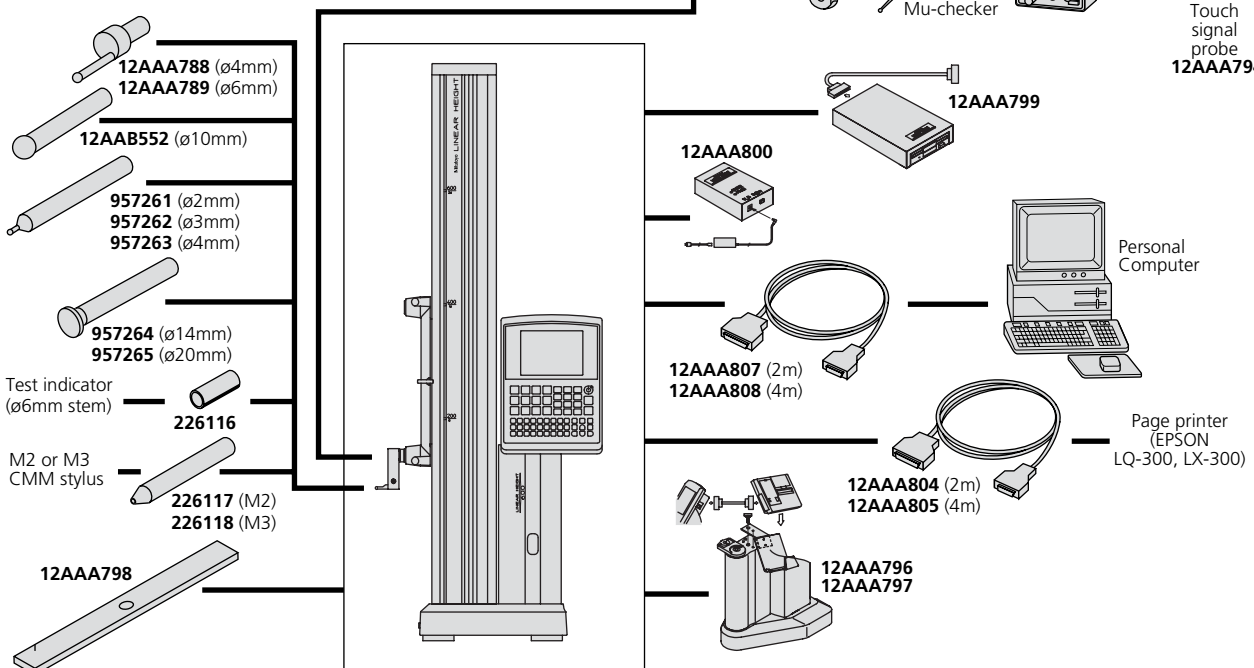
| Order No. | Description | Qty. |
|-----------|---------------------|--------|
| 12AAA802 | Thermal print paper | 10pcs. |



HEIGHT GAGES



SYSTEM DIAGRAM



QM-Hite

SERIES 518 — High Precision Digital Height Gage

HEIGHT GAGES



518-222

FEATURES

- Newly developed high accuracy and high resolution Absolute Type linear encoder for position detection.
- Easy reference icon keys.
- Possible to measure inside/outside diameter via a unique process (detect the circle apex and process by tracing measurement).
- Various types of probes (optional).
- Large size LCD.
- GO/±NG judgment is performed by setting the upper and lower tolerances. If a judgment result is out of tolerance, the display backlighting changes from green to red, so tolerance judgment can be made at a glance.
- Slider elevation knob/wheel.
- Digimatic and RS-232C output.

SPECIFICATIONS

| Metric | | |
|---------------|------------------|------------------|
| Order No.* | 518-220 | 518-222 |
| Range | 0 - 350mm | 0 - 600mm |
| Resolution | 0.001mm, 0.005mm | 0.001mm, 0.005mm |
| Accuracy** | ±(2.8+5L/1000)μm | ±(2.8+5L/1000)μm |
| Repeatability | 2σ≤1.8μm | 2σ≤1.8μm |

| Inch/Metric | | |
|---------------|---|-------------------|
| Order No.* | 518-221 | 518-223 |
| Range | 0 - 14"/0 - 350mm | 0 - 24"/0 - 600mm |
| Resolution | .00005", .0001", .0002", 0.001mm, 0.005mm | |
| Accuracy | ±(2.8+5L/1000)μm | ±(2.8+5L/1000)μm |
| Repeatability | 2σ≤1.8μm | 2σ≤1.8μm |

| | | |
|--------------------|---|----------------|
| Display | LCD | |
| Functions | Zero-setting, +/- switching, Presetting, Data hold, Probe tip diameter compensation, inch/mm conversion (Inch/Metric model only), Data output | |
| Perpendicularity | 0.008mm | 0.013mm |
| Measuring force | 1.6±0.5N | 1.6±0.5N |
| Data output | SPC, RS-232C | SPC, RS-232C |
| Power supply | Via AC adapter (optional accessory) | |
| Dimensions (WxDxH) | 210x350x772mm | 210x350x1022mm |
| Mass | 22kg | 27kg |

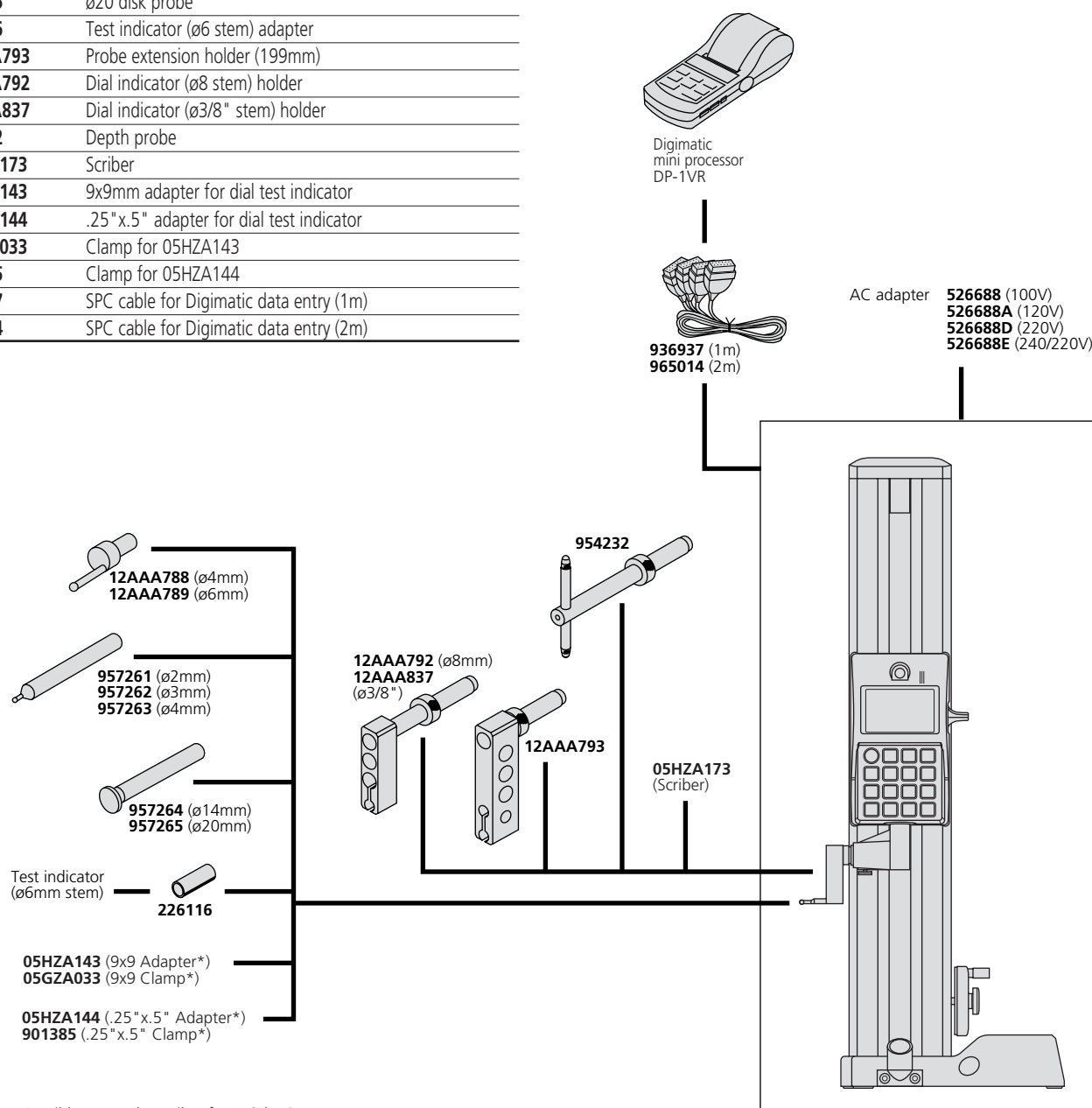
*Model with setting block for ball probe (12AAA715)
518-224 (350mm)
518-226 (600mm)
518-225 (14"/350mm)
518-227 (24"/600mm)

**L=Measured length (mm), excluding quantizing error.



OPTIONAL ACCESSORIES

| Order No. | Description |
|-----------|--|
| 958261 | ø2 ball probe |
| 957262 | ø3 ball probe |
| 957263 | ø4 ball prob |
| 12AAA788 | ø4 ball offset probe |
| 12AAA789 | ø6 ball offset probe |
| 12AAA715 | Setting block for ball probe |
| 957264 | ø14 disk probe |
| 957265 | ø20 disk probe |
| 226116 | Test indicator (ø6 stem) adapter |
| 12AAA793 | Probe extension holder (199mm) |
| 12AAA792 | Dial indicator (ø8 stem) holder |
| 12AAA837 | Dial indicator (ø3/8" stem) holder |
| 954232 | Depth probe |
| 05HZA173 | Scriber |
| 05HZA143 | 9x9mm adapter for dial test indicator |
| 05HZA144 | .25"x.5" adapter for dial test indicator |
| 05GZA033 | Clamp for 05HZA143 |
| 901385 | Clamp for 05HZA144 |
| 936937 | SPC cable for Digimatic data entry (1m) |
| 965014 | SPC cable for Digimatic data entry (2m) |



* Possible to use the scriber for Height Gage.

Heightmatic

SERIES 574 — High Precision Height Gage

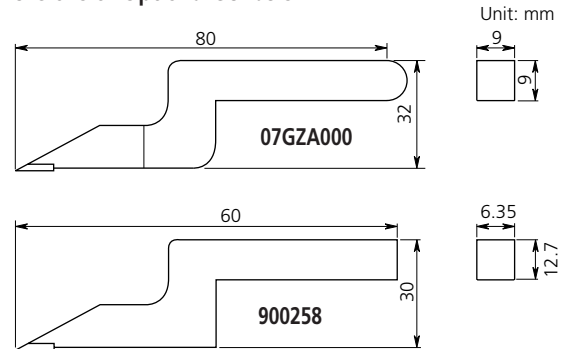
HEIGHT GAGES



FEATURES

- Provides resolution of 0.001mm on the bright fluorescent-tube readout for accurate measurements.
- Excellent functionality and easy operation.
- The standard Two-directional Touch-Signal Probe provides improved efficiency and reliability of measurement for the Heightmatic.
- Optional carbide-tipped scriber.
07GZA000 (metric) or **900258** (inch/metric)

Dimensions of Optional Scribers



SPECIFICATIONS

Metric

| Order No. | 574-112-1 | 574-111-1 | 574-110-1 |
|---------------|-----------|-----------|-----------|
| Range | 0 - 300mm | 0 - 450mm | 0 - 600mm |
| Resolution | 0.001mm | 0.001mm | 0.001mm |
| Accuracy* | ±0.004mm | ±0.004mm | ±0.005mm |
| Repeatability | 0.001mm | 0.001mm | 0.001mm |

Inch/Metric

| Order No. | 574-212-1 | 574-211-1 | 574-210-1 |
|---------------|-------------------|-------------------|-------------------|
| Range | 0 - 12"/0 - 300mm | 0 - 18"/0 - 450mm | 0 - 24"/0 - 600mm |
| Resolution | .0001"/0.001mm | .0001"/0.001mm | .0001"/0.001mm |
| Accuracy* | ±.0002" | ±.0002" | ±.0002" |
| Repeatability | .0001" | .0001" | .0001" |

Note: To denote your AC line voltage fill the blank of order number with the following suffixes (e.g. **574-111A**): **A** for 120V, **D** for 220V, **E** for 240/220V, **K** for Korea, **DC** for China. No suffix is required for 100V.

*Excluding quantizing error.

| | 6-digit LCD | 6-digit LCD | 6-digit LCD |
|--------------------|--|---------------|---------------|
| Display | 6-digit LCD | 6-digit LCD | 6-digit LCD |
| Functions | Zero-setting, +/- switching, Presetting, Data hold, Probe tip diameter compensation, inch/mm conversion (Inch/Metric model only), Data output, Error alarm | | |
| Data output | SPC | SPC | SPC |
| Power supply | Via AD adapter (standard accessory) | | |
| Dimensions (WxDxH) | 150x250x574mm | 150x250x724mm | 150x250x874mm |
| Mass | 13.6kg | 14.9kg | 16.2kg |

Touch-Signal Probe (Standard accessory)



- Two-directional type
- ø3mm ball contact point
- Measuring force 0.4N

OPTIONAL ACCESSORIES

| Order No. | Description |
|-----------------|---|
| 936937 | SPC cable (1m) |
| 965014 | SPC cable (2m) |
| 900321 | Swivel clamp for Dial Test Indicator (metric) |
| 900322 | Swivel clamp for Dial Test Indicator (inch) |
| 953638 | Holding bar (metric) for swivel clamp |
| 953639 | Holding bar (inch) for swivel clamp |
| 07GZA000 | Scriber (metric) |
| 900258 | Scriber (inch/metric) |
| 145250 | ø1mm contact point for Touch-Signal Probe |
| 145251 | ø2mm contact point for Touch-Signal Probe |

Digimatic Height Gages

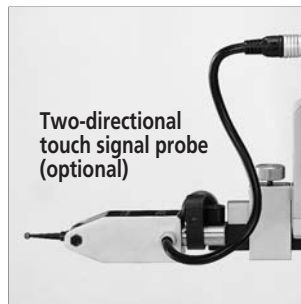
SERIES 192 — Multi-function Type with SPC Data Output



SPC



SPC cable (optional)



Two-directional touch signal probe (optional)

192-663

FEATURES

- Highly versatile multi-function type.
- A carbide-tipped long scriber is provided.
- Rigid construction ensures repeatable measurement.
- Coarse/Fine Feed switching.
- Two-directional touch signal probe is an optional accessory. It can quickly and accurately measure steps, inside width, and outside width.
- With SPC data output.

SPECIFICATIONS

Metric

| Range | Order No. | Resolution | Accuracy | Mass | Remarks |
|------------|----------------|------------|----------|--------|-----------------------------------|
| 0 - 300mm | 192-663 | 0.01mm | ±0.02mm | 6.5kg | Standard accessories: |
| 0 - 600mm | 192-664 | 0.01mm | ±0.04mm | 9.5kg | Scriber (905200) and |
| 0 - 1000mm | 192-665 | 0.01mm | ±0.06mm | 19.8kg | scriber clamp (05GZA033) |

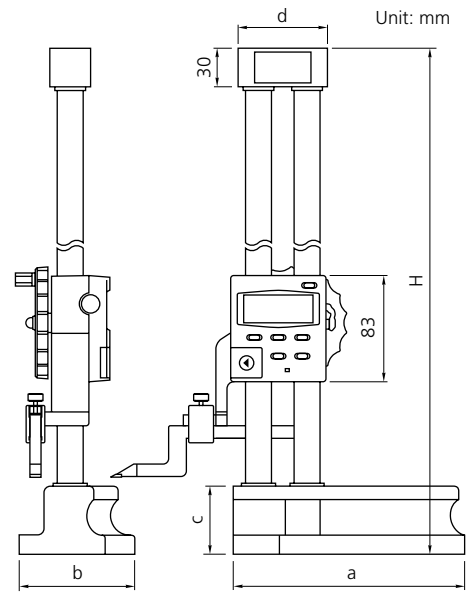
Excluding quantizing error

Inch/Metric

| Range | Order No. | Resolution | Accuracy | Mass | Remarks |
|----------------------|----------------|---------------|----------|-----------|---------------------------------|
| 0 - 12" (0 - 300mm) | 192-670 | .0005"/0.01mm | ±.001" | 14.3 lbs. | Standard accessories: |
| 0 - 18" (0 - 450mm) | 192-671 | .0005"/0.01mm | ±.0015" | 19.1 lbs. | Scriber (905201) and |
| 0 - 24" (0 - 600mm) | 192-672 | .0005"/0.01mm | ±.0015" | 20.9 lbs. | scriber clamp (901385) |
| 0 - 40" (0 - 1000mm) | 192-673 | .0005"/0.01mm | ±.0015" | 43.6 lbs. | |

Excluding quantizing error

Dimensions



| Range | H | a | b | c | d |
|-----------|-----|-----|-----|----|----|
| 0 - 300mm | 510 | 149 | 100 | 48 | 70 |
| 0 - 600mm | 802 | 180 | 120 | 54 | 70 |

Note: Please contact Mitutoyo Corporation directly for the dimensions of Digimatic Height Gage with a measuring range of 1000mm.

Technical Data

- Display:** LCD
- Functions:** Zero-Set, presetting, preset value recalling, ABS/INC measurement mode switching, SPC data output, data hold, two-directional touch signal probe, counting direction switching, power on/off, inch/mm conversion (inch/mm type only)
- Battery:** CR2032 lithium battery (1 pc.) (**055AA217**)
- Battery life:** Approx. 2000 hours in continuous use
- Maximum response speed:** Approx. 500mm/s
- Alarm:** Low battery voltage, counting error
- Operating temperature:** 0°C to 40°C

OPTIONAL ACCESSORIES

| Order No. | Description |
|----------------|--|
| 192-007 | Two-directional touch signal probe (mm type) |
| 192-008 | Two-directional touch signal probe (mm type) |
| 905338 | SPC cable (1m) |
| 905409 | SPC cable (2m) |
| 905691 | SPC cable (1m), L-shape type |
| 905692 | SPC cable (2m), L-shape type |



Digimatic Height Gages

SERIES 192 — Standard Type

HEIGHT GAGES



192-613

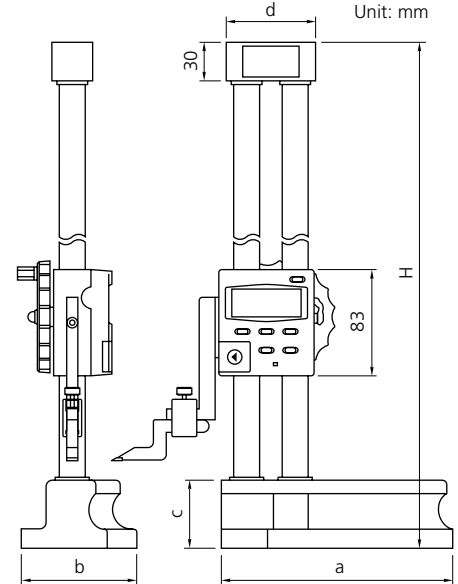


Easy-to-operate key arrangement



Coarse/
Fine Feed Wheel

Dimensions



| Range | H | a | b | c | d |
|-----------|-----|-----|-----|----|----|
| 0 - 300mm | 475 | 135 | 91 | 45 | 63 |
| 0 - 600mm | 802 | 180 | 120 | 54 | 70 |

Note: Please contact Mitutoyo Corporation directly for the dimensions of Digimatic Height Gage with a measuring range of 1000mm.

FEATURES

- Easy-to-use standard type.
- Double-column structure ensures high measuring accuracy.
- Carbide-tipped scriber.
- Coarse/Fine Feed switching.
- Without SPC data output.

Technical Data

- Display:** LCD
- Functions:** Zero-Set, presetting, preset value recalling, ABS/INC measurement mode switching, data hold, counting direction switching, power on/off, inch/mm conversion (inch/mm type only)
- Battery:** CR2032 lithium battery (1 pc.) (055AA217)
- Battery life:** Approx. 2000 hours in continuous use
- Maximum response speed:** Approx. 500mm/s
- Alarm:** Low battery voltage, counting error
- Operating temperature:** 0°C to 40°C

SPECIFICATIONS

Metric

| Range | Order No. | Resolution | Accuracy | Mass | Remarks |
|------------|-----------|------------|----------|--------|--------------------------|
| 0 - 300mm | 192-613 | 0.01mm | ±0.02mm | 4.7kg | Standard accessories: |
| 0 - 600mm | 192-614 | 0.01mm | ±0.05mm | 9.5kg | Scriber (07GZA000) and |
| 0 - 1000mm | 192-615 | 0.01mm | ±0.07mm | 19.8kg | scriber clamp (05GZA033) |

Excluding quantizing error

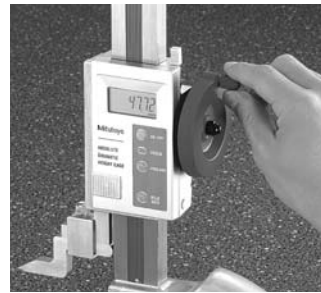
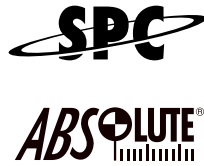
Inch/Metric

| Range | Order No. | Resolution | Accuracy | Mass | Remarks |
|----------------------|-----------|---------------|----------|-----------|------------------------|
| 0 - 12" (0 - 300mm) | 192-630 | .0005"/0.01mm | ±.001" | 10.3 lbs. | Standard accessories: |
| 0 - 18" (0 - 450mm) | 192-631 | .0005"/0.01mm | ±.002" | 19.1 lbs. | Scriber (900258) and |
| 0 - 24" (0 - 600mm) | 192-632 | .0005"/0.01mm | ±.002" | 20.9 lbs. | scriber clamp (901385) |
| 0 - 40" (0 - 1000mm) | 192-633 | .0005"/0.01mm | ±.003" | 43.6 lbs. | |

Excluding quantizing error

Digimatic Height Gages

SERIES 570 — with Absolute Scale

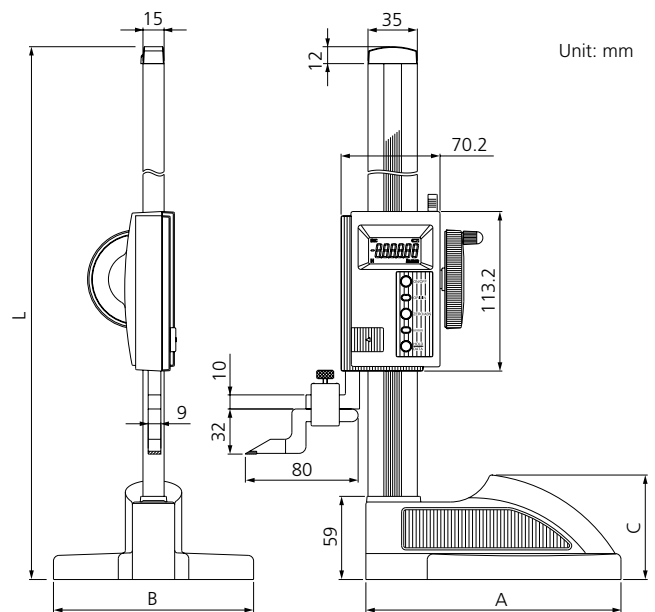


Smooth slider feed wheel



Large clamp lever

Dimensions



Unit: mm

FEATURES

- Built-in absolute scale
This encoder eliminates the necessity of setting the reference point at every power-on.
It has improved reliability because no over-speed error will occur.
- Rigid column structure ensures high measuring accuracy.
- Carbide-tipped scribe.
- Large LCD display.
- With SPC data output.

SPECIFICATIONS

Metric

| Range | Order No. | Resolution | Accuracy | Mass | Remarks |
|-----------|----------------|------------|----------|-------|-----------------------------|
| 0 - 300mm | 570-302 | 0.01mm | ±0.03mm | 4.6kg | Standard accessories: |
| 0 - 600mm | 570-304 | 0.01mm | ±0.05mm | 6.4kg | Scriber (07GZA000) |

Excluding quantizing error

Inch/Metric

| Range | Order No. | Resolution | Accuracy | Mass | Remarks |
|---------------------|----------------|---------------|----------|-----------|---------------------------|
| 0 - 12" (0 - 300mm) | 570-312 | .0005"/0.01mm | ±.0015" | 10.1 lbs. | Standard accessories: |
| 0 - 18" (0 - 450mm) | 570-313 | .0005"/0.01mm | ±.002" | 13.0 lbs. | Scriber (900258) |
| 0 - 24" (0 - 600mm) | 570-314 | .0005"/0.01mm | ±.002" | 14.1 lbs. | |

Excluding quantizing error

Technical Data

- Display:** LCD
Functions: Origin setting, ABS/INC measurement mode switching, data hold, power on/off, inch/mm conversion (inch/mm type only)
Battery: SR44 battery (1 pc.) (**938882**)
Battery life: Approx. 20,000 hours in continuous use
Maximum response speed: Un limited
Alarm: Low battery voltage
Operating temperature: 0°C to 40°C



Digimatic Height Gages

SERIES 570 — with SPC Output

HEIGHT GAGES



SPC

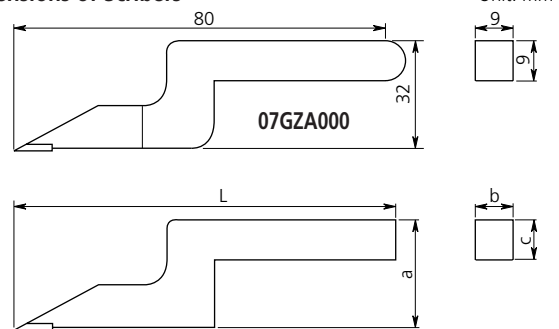
ABSOLUTE

570-227

FEATURES

- Can easily measure the height of small parts.
- The clear LCD screen provides digital readout to 0.01mm for error-free reading.
- The robust construction with a thick column provides highly repeatable measurements.
- Fine-adjustment carriage to feed the slider finely.
- Carbide-tipped scriber.
- Functions include: Zero-setting, Presetting, Data hold, Data output, +/- switching, inch/mm conversion (Inch/Metric model only), Error alarm, Low battery alarm.
- Power supply: One SR44 battery (938882)

Dimensions of Scribes



Unit: mm

| Parts No. | L | a | b | c |
|-----------|-----|------|------|------|
| 900173 | 47 | 25 | 6.35 | 12.7 |
| 905200 | 150 | 42 | 9 | 9 |
| 905201 | 150 | 45.7 | 6.35 | 12.7 |

OPTIONAL ACCESSORIES

| Order No. | Description |
|-----------|----------------|
| 905338 | SPC cable (1m) |
| 905409 | SPC cable (2m) |

SPECIFICATIONS

Metric

| Range | Order No. | Resolution | Accuracy | Repeatability | Remarks |
|------------|-----------|------------|----------|---------------|-----------------------|
| 0 - 200mm | 570-227 | 0.01mm | ±0.03mm | 0.01mm | with Scriber (900173) |
| 0 - 1000mm | 570-230 | 0.01mm | ±0.07mm | 0.01mm | with Scriber (905200) |

Excluding quantizing error

Inch/Metric

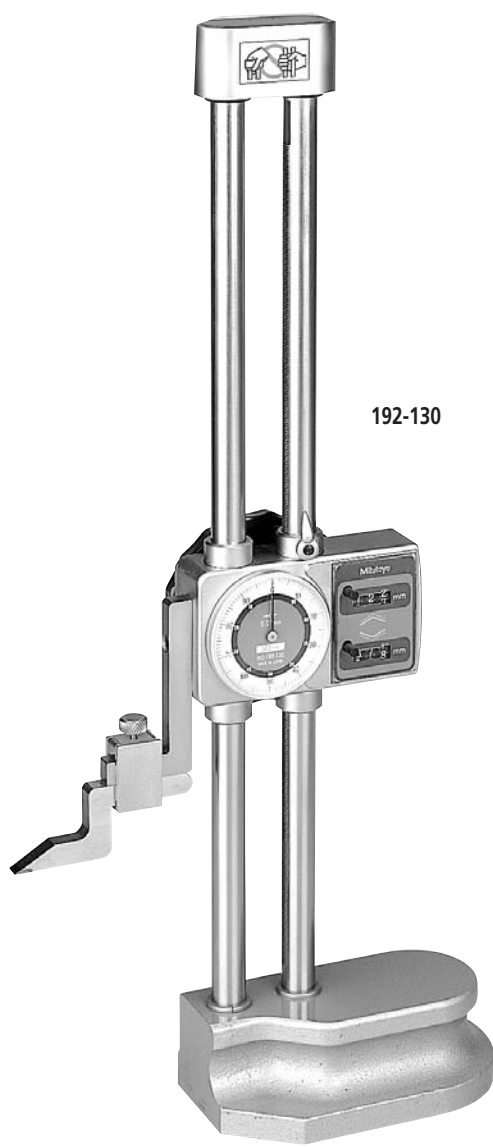
| Range | Order No. | Resolution | Accuracy | Repeatability | Remarks |
|----------------------|-----------|---------------|----------|---------------|-----------------------|
| 0 - 8" (0 - 200mm) | 570-244 | .0005"/0.01mm | ±.001" | .0005" | with Scriber (900173) |
| 0 - 40" (0 - 1000mm) | 570-248 | .0005"/0.01mm | ±.003" | .0005" | with Scriber (905201) |

Excluding quantizing error

Digital Counter Type Dial Height Gages

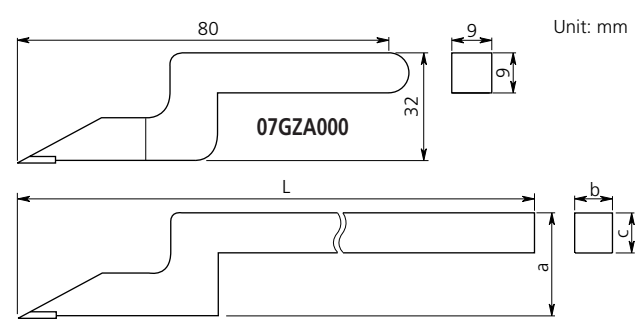
SERIES 192

HEIGHT GAGES



192-130

Dimensions of Scribers



Unit: mm

| Parts No. | L | a | b | c |
|-----------|----|----|------|------|
| 900258 | 60 | 30 | 6.35 | 12.7 |

FEATURES

- Easy and error-free reading with both up and down digital counters as well as a dial.
- Provided with a feed wheel for easy coarse feeding.
- Carbide-tipped scriber: **07GZA000** (metric) or **900258** (inch).

SPECIFICATIONS

| Metric | | | |
|------------|----------------|-----------------|----------|
| Range | Order No. | Vernier reading | Accuracy |
| 0 - 300mm | 192-130 | 0.01mm | ±0.03mm |
| 0 - 450mm | 192-131 | 0.01mm | ±0.05mm |
| 0 - 600mm | 192-132 | 0.01mm | ±0.05mm |
| 0 - 1000mm | 192-133 | 0.01mm | ±0.07mm |

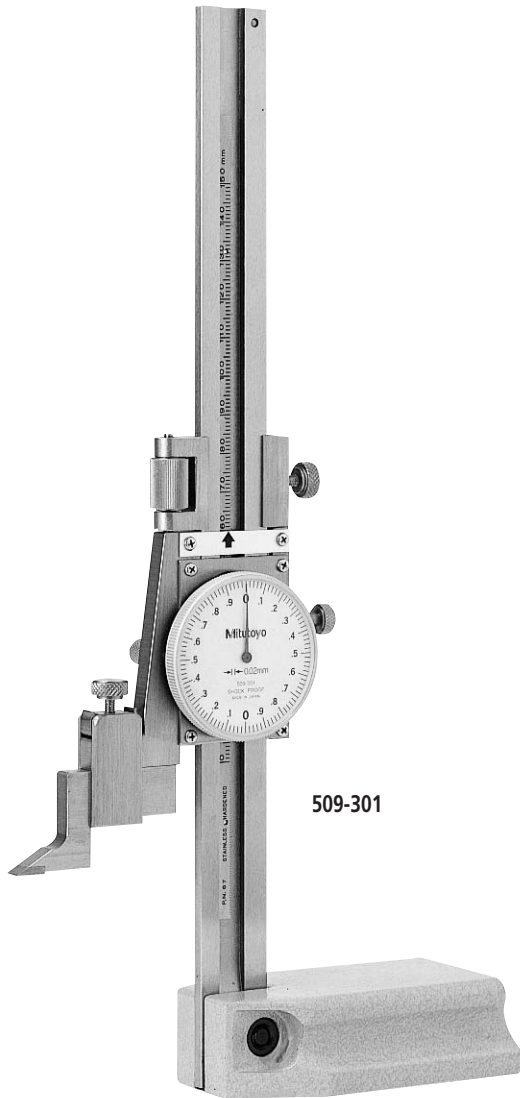
*Heavy duty type with a long scriber (**900167**)

| Inch | | | |
|---------|----------------|--------------|----------|
| Range | Order No. | Dial reading | Accuracy |
| 0 - 12" | 192-140 | .001" | ±.0015" |
| 0 - 18" | 192-141 | .001" | ±.002" |
| 0 - 24" | 192-142 | .001" | ±.002" |
| 0 - 40" | 192-143 | .001" | ±.003" |

Dial Height Gages

SERIES 509

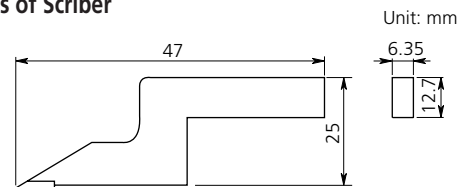
HEIGHT GAGES



FEATURES

- Easy and error-free reading with a dial.
- Made of stainless steel throughout.
- Provided with a carbide-tipped scriber (**900173**).

Dimensions of Scriber



SPECIFICATIONS

Metric

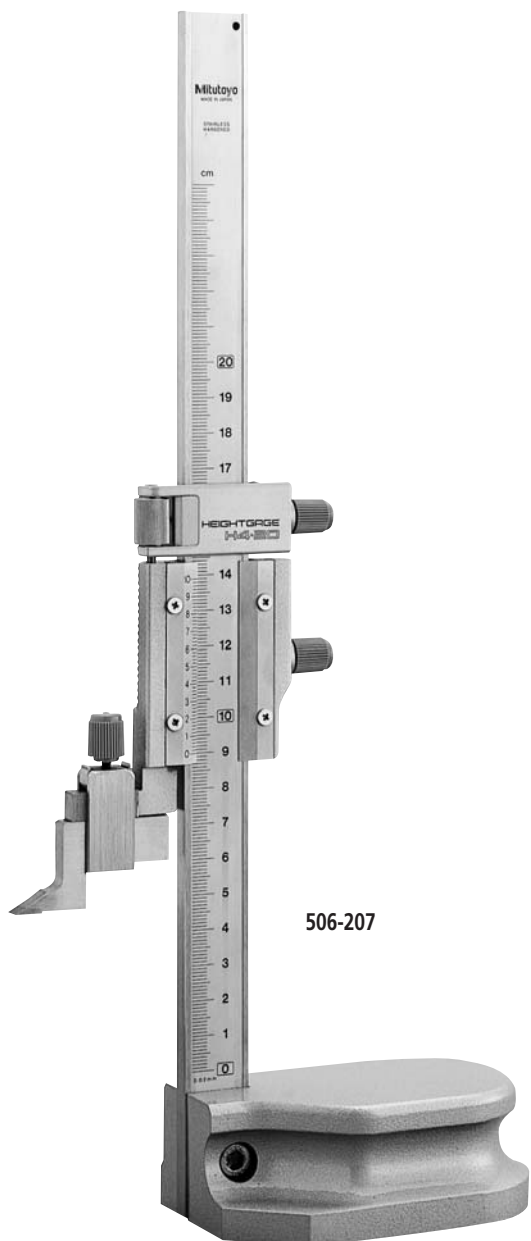
| Range | Order No. | Dial reading | Accuracy |
|-----------|----------------|--------------|----------|
| 0 - 150mm | 509-301 | 0.02mm | ±0.03mm |
| 0 - 250mm | 509-302 | 0.02mm | ±0.04mm |

Inch

| Range | Order No. | Dial reading | Accuracy |
|---------|----------------|--------------|----------|
| 0 - 6" | 509-313 | .001" | ±.001" |
| 0 - 10" | 509-314 | .001" | ±.0015" |

Vernier Height Gages

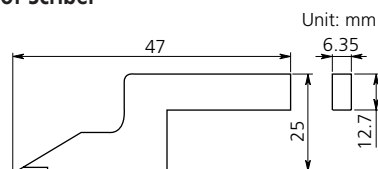
SERIES 506



FEATURES

- Light weight type can measure easily the height of small parts.
- Beam and slider are made of stainless steel.
- Right hand type for easy use.
- Clear, crisp black graduations on a satin-chrome finish for easy reading.
- Provided with a carbide-tipped scriber (**900173**).

Dimensions of Scriber



SPECIFICATIONS

Metric

| Range Left scale | Range Right scale | Order No. | Vernier reading Left scale | Vernier reading Right scale | Accuracy |
|---------------------|----------------------|----------------|-------------------------------|--------------------------------|----------|
| — | 0 - 150mm | 506-201 | — | 0.02mm | ±0.03mm |
| 0 - 200mm | — | 506-207 | 0.02mm | — | ±0.03mm |
| — | 0 - 250mm | 506-204 | — | 0.02mm | ±0.04mm |

Metric/Inch

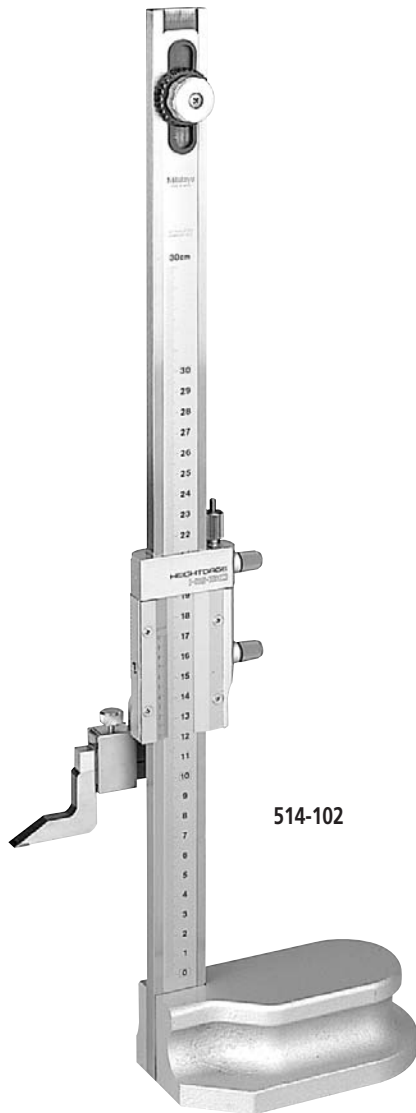
| Range Left scale | Range Right scale | Order No. | Vernier reading Left scale | Vernier reading Right scale | Accuracy |
|---------------------|----------------------|----------------|-------------------------------|--------------------------------|----------|
| 0 - 6" | 0 - 150mm | 506-202 | .001" | 0.02mm | ±.001" |
| 0 - 8" | 0 - 200mm | 506-208 | .001" | 0.02mm | ±.001" |
| 0 - 10" | 0 - 250mm | 506-205 | .001" | 0.02mm | ±.0015" |



Vernier Height Gages

SERIES 514 — with Adjustable Main Scale

HEIGHT GAGES



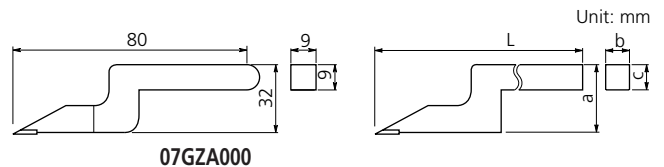
FEATURES

- Zero reference point can be adjusted (15mm/.59", 0-1000mm/0-24" model: 25mm/.98", 0-1500mm model: ±10mm).
- Satin chrome finished scales for glare-free reading.
- Final vernier readings can be assisted by the dedicated magnifier (optional, standard for **514-170**).
- Provided with carbide-tipped scriber (**107GZA000**, 0-1000mm/0-24" model: **905200**, 0-1500mm model: **900390**).
- Extra-large base for rigidity.

OPTIONAL ACCESSORIES

| Order No. | Description |
|-----------------|--------------------------------------|
| 07GZA003 | Magnifier for 300, 450, 600mm models |
| 07GZA015 | Magnifier for 1000mm model |

Dimensions of Scribers



| Parts No. | L | a | b | c |
|-----------|-----|----|----|----|
| 905200 | 150 | 42 | 9 | 9 |
| 900390 | 144 | 45 | 45 | 16 |

SPECIFICATIONS

Metric

| Range Left scale | Range Right scale | Order No. | Vernier reading Left scale | Vernier reading Right scale | Accuracy |
|------------------|-------------------|----------------|----------------------------|-----------------------------|----------|
| 0 - 300mm | — | 514-102 | 0.02mm | — | ±0.04mm |
| 0 - 450mm | — | 514-104 | 0.02mm | — | ±0.05mm |
| 0 - 600mm | — | 514-106 | 0.02mm | — | ±0.05mm |
| 0 - 1000mm | — | 514-108 | 0.02mm | — | ±0.07mm |
| — | 0 - 1500mm | 514-170 | — | 0.05mm | ±0.18mm |

Metric/Inch

| Range Left scale | Range Right scale | Order No. | Vernier reading Left scale | Vernier reading Right scale | Accuracy |
|------------------|-------------------|----------------|----------------------------|-----------------------------|----------|
| 0 - 12" | 0 - 300mm | 514-103 | .001" | 0.02mm | ±.002" |
| 0 - 18" | 0 - 450mm | 514-105 | .001" | 0.02mm | ±.002" |
| 0 - 24" | 0 - 600mm | 514-107 | .001" | 0.02mm | ±.002" |
| 0 - 40" | 0 - 1000mm | 514-109 | .001" | 0.02mm | ±.003" |

Scribers for Height Gages



FEATURES

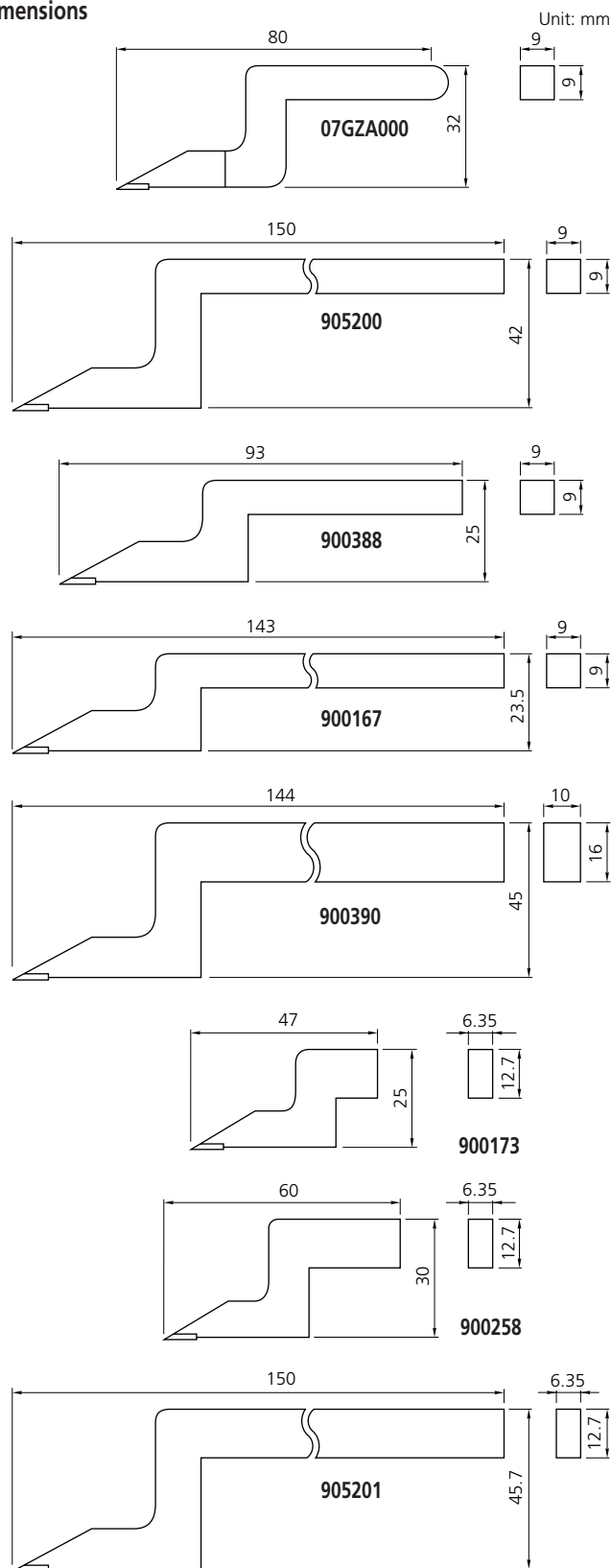
- Carbide-tipped.
- Use the appropriate scriber and clamp for each height gage.

SPECIFICATIONS

| Metric | |
|-----------|---|
| Order No. | Height gages to be fitted |
| 07GZA000 | 192 Series Digimatic Height Gages (192-613, 192-614, 192-615) |
| | 570 Series Digimatic Height Gages (570-302, 570-304) |
| | 192 Series Dial Height Gages (192-130, 192-131, 192-132, 192-133) |
| | 514 Series Vernier Height Gages (514-102, 514-104, 514-106, 514-103, 514-105, 514-107) |
| | 574 Series Heightmatic (574-112-1, 574-111-1, 574-110-1) |
| 905200 | 192 Series Digimatic Height Gages (192-663, 192-664, 192-665) |
| | 570 Series Digimatic Height Gages (570-230) |
| | 514 Series Vernier Height Gages (514-108, 514-109) |
| 900167 | 192 Series Dial Height Gage (192-201) |
| 900390 | 514 Series Vernier Height Gage (514-170) |

| Inch | |
|-----------|---|
| Order No. | Height gages to be fitted |
| 900173 | 570 Series Digimatic Height Gages (570-202, 570-212) |
| | 506 Series Vernier Height Gages (506-201, 506-202, 506-204, 506-205, 506-207, 506-208) |
| | 509 Series Vernier Height Gages (509-301, 509-302, 509-313, 509-314) |
| 900258 | 192 Series Digimatic Height Gages (192-630, 192-631, 192-632, 192-633) |
| | 570 Series Digimatic Height Gages (570-312, 570-313, 570-314) |
| | 192 Series Dial Height Gages (192-140, 192-141, 192-142, 192-143) |
| | 574 Series Heightmatic (574-212-1, 574-211-1, 574-210-1) |
| 905201 | 192 Series Digimatic Height Gages (192-670, 192-671, 192-672, 192-673) |
| | 570 Series Digimatic Height Gages (570-248) |

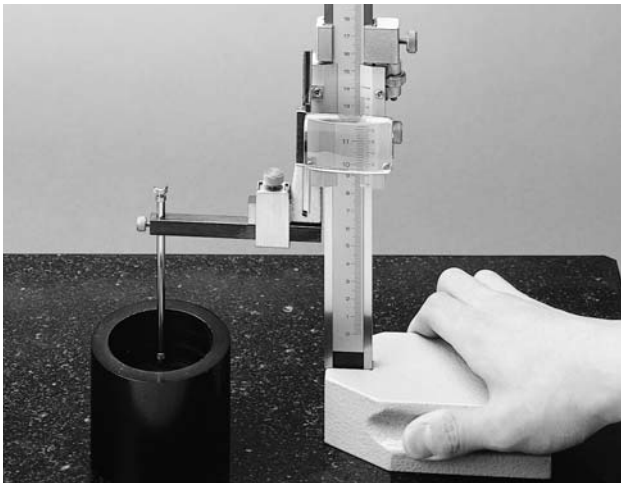
Dimensions



Accessories for Height Gages

HEIGHT GAGES

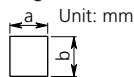
Depth Gage Attachment



FEATURES

- Attached to a height gage to measure groove and hole depth.
- Minimum hole diameter: 5.5mm
- Maximum distance from the bottom of the holding bar to the contact point: 80mm (900764) or 2.95" (900878)
- Contact points for dial indicators can be used.

Dimensions of Holding Bar

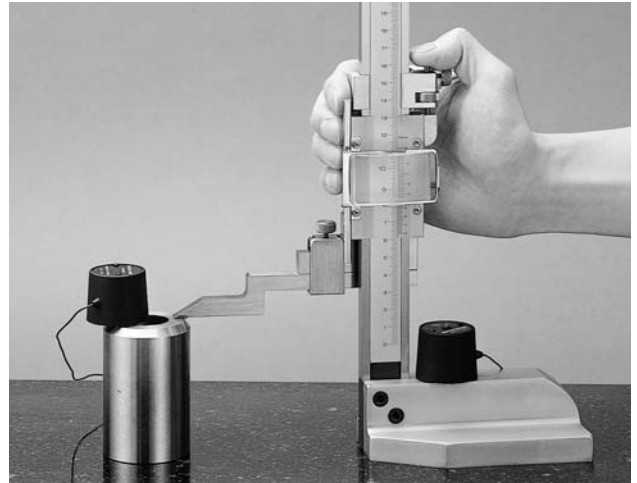


| Order No. | a | b |
|-----------|------|------|
| 900764 | 9 | 9 |
| 900878 | 6.35 | 12.7 |

SPECIFICATIONS

| Order No. | Remarks |
|-----------|--|
| 900764 | with Metric (Metric/Inch) type holding bar |
| 900878 | with Inch (Inch/Metric) type holding bar |

Contact Sensor



FEATURES

- The Contact Sensor eliminates errors caused by jacking-up the height gage while taking measurements. When the scribe of a height gage touches a conductive workpiece, an indicator will light up to indicate that measurement can be taken, which will result in consistent height measurements.
- Incorporates magnets for easy attachment.
- Measurements should be taken on a granite surface plate or other non-conductive surface.

SPECIFICATIONS

| Order No. | Remarks |
|-----------|----------------------------------|
| 900872 | Two MR44 batteries are optional. |

Center Probe



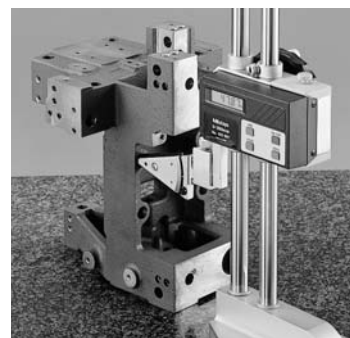
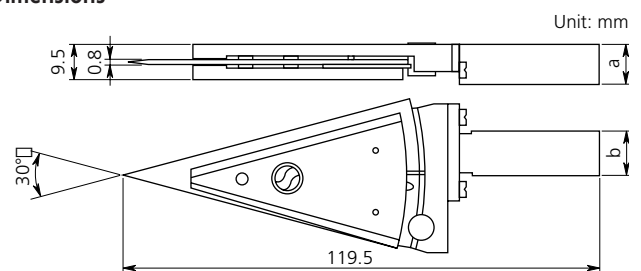
FEATURES

- Allows quick measurement of center-to-center distance between holes.
- Measurable hole diameters: 1mm to 38mm

SPECIFICATIONS

| Order No. | Remarks |
|-----------|--|
| 951144 | with Metric (Metric/Inch) type holding bar |
| 900581 | with Inch (Inch/Metric) type holding bar |

Dimensions



| Order No. | a | b |
|-----------|------|------|
| 951144 | 9 | 9 |
| 900581 | 6.35 | 12.7 |