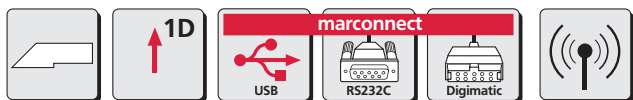


Height Measuring and Scribing Instrument Digimar 814 S



Applications

- Scribing and marking of work pieces
- Measuring heights and distances

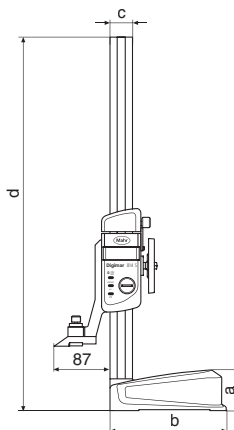


Features

Functions:

- ON/OFF
- RESET (Zero setting)
- mm/inch
- Reversal of counting direction
- DATA (data transmission)
- PRESET (for entering a numerical value)
- Capacitive measuring system, life of battery approx. 2 years
- Max. measuring speed 1.5 m/s (60"/s)
- MarConnect Data output: choose either
 - USB
 - OPTO RS232C
 - Digimatic
- High contrast Liquid Crystal Display with 12 mm high digits

- Sturdy heavy-duty base, easy to handle
- Hardened and lapped contact surface which produce both a smooth and even movement
- Slide and beam made of hardened stainless steel
- Hand crank for positioning and measuring
- Fine adjustment
- Locking screw
- Interchangeable scriber point, carbide tipped
- Scope of supply:
 - Scriber point, cardboard box, battery and operating instructions



Dimensions

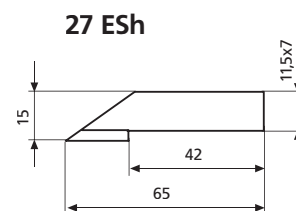
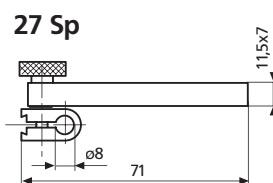
mm	a	b	c	d
350	62	180 x 98	35 x 15	580
600	62	180 x 98	35 x 15	835

Technical Data

Measuring range	Resolution	Error limit	Weight	Order no.
mm (inch)	schrittwert mm/inch	mm/inch	kg	
350 (14")	0.01 / .0005"	0.04 / .0016"	7	4123800
600 (24")	0.01 / .0005"	0.05 / .0016"	8	4123801

Accessories

	Order no.
Scriber Point , carbide tipped	27 ESh 4123710
Holder for test indicators	27 Sp 4123041
Battery 3V, type CR 2032	4102520
Data Connection Cable USB (2 m)	16 EXu 4102357
Data Connection Cable Opto RS232C (2 m), with SUB-D jack 9-pin	16 EXr 4102410
Data Connection Cable Digimatic (2 m), Flat plug 10-pin	16 EXd 4102411





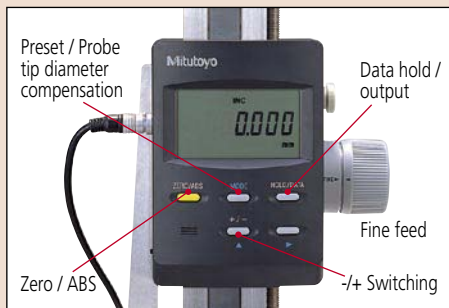
(Refer to the page 9 for details.)

Technical Data

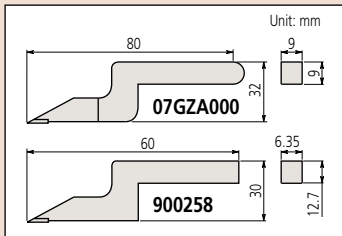
Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Repeatability: 0.001mm
Resolution: 0.001mm or .0001"/0.001mm
Display: LCD, 6-digit
Power supply: Via AC adapter

Function

Zero-setting, Presetting, Probe tip diameter compensation, +/- switching, Data hold, Data output, inch/mm conversion (inch/mm models)
Alarm: Counting value composition error



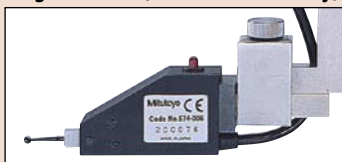
Dimensions of Optional Scribers



Optional Accessory

- 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 for swivel clamp (metric)
- 953639: Holding bar for swivel clamp (inch)
- 07GZA000: Carbide-tipped scriber (metric)
- 900258: Carbide-tipped scriber (inch)
- 145250: \varnothing 1mm contact point for touch-signal probe
- 145251: \varnothing 2mm contact point for touch-signal probe

Touch-Signal Probe (Standard accessory)



Order No.: 574-006

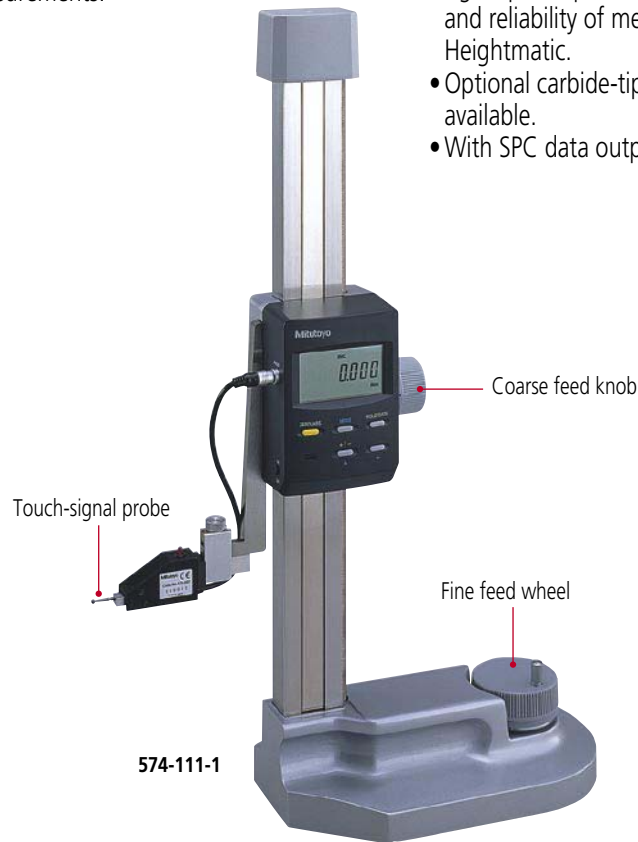
- Two-directional type
- Over travel: Less than 3mm
- Contact point: \varnothing 3mm ball
- Repeatability: 0.0015mm
- Measuring force: 0.4N

Heightmatic

SERIES 574 — High Precision Height Gage

FEATURES

- Provides resolution of 0.001mm on the large LCD 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 scribers are available.
- With SPC data output.



SPECIFICATIONS

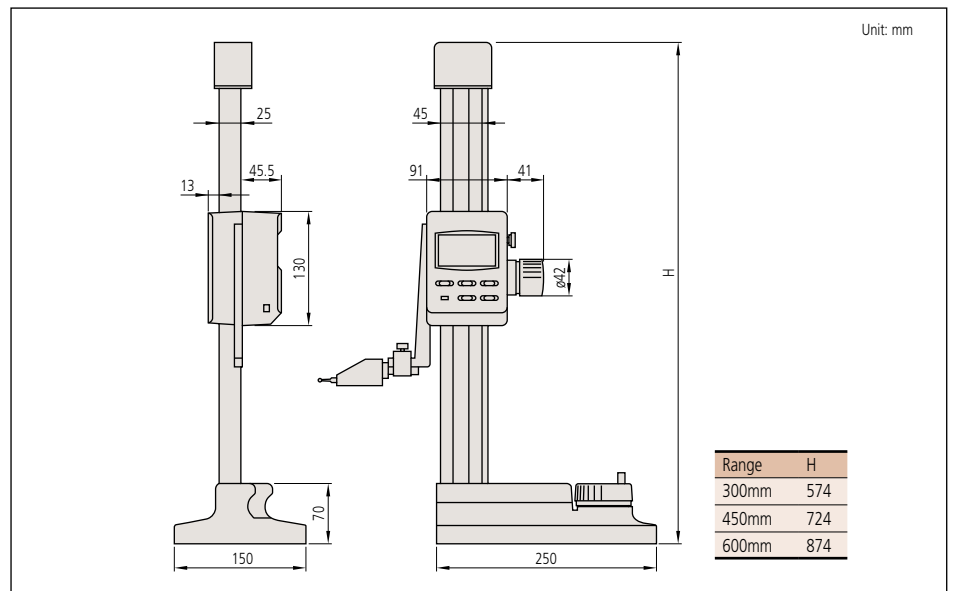
Metric		
Range	Order No.*	Accuracy
0 - 300mm	574-112-1	\pm 0.004mm
0 - 450mm	574-111-1	\pm 0.004mm
0 - 600mm	574-110-1	\pm 0.005mm

* To denote your AC line voltage add the following suffixes to the order No. **A** for 120V **D** for 220V **E** for 240/220V **K** for Korea **DC** for China
No suffix is required for 100V

Inch/Metric		
Range	Order No.*	Accuracy
0 - 12"	574-212-1	\pm .0002"
0 - 18"	574-211-1	\pm .0002"
0 - 24"	574-210-1	\pm .0002"

* To denote your AC line voltage add the following suffixes to the order No. **A** for 120V **D** for 220V **E** for 240/220V **K** for Korea **DC** for China
No suffix is required for 100V

DIMENSION



Digimatic Height Gage

SERIES 192 — Multi-function Type with SPC Data Output

FEATURES

- Highly versatile multi-function type.
- Carbide-tipped long scriber is provided.
- Rigid construction ensures repeatable measurement.
- 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.



192-663-10

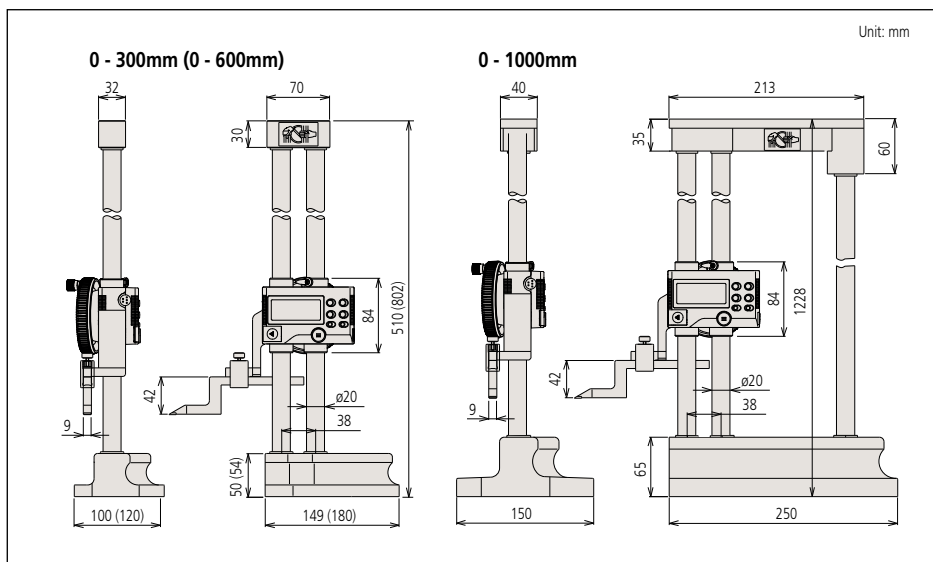


SPECIFICATIONS

Metric		
Range	Order No.	Accuracy
0 - 300mm	192-663-10	±0.02mm
0 - 600mm	192-664-10	±0.04mm
0 - 1000mm	192-665-10	±0.06mm

Inch/Metric		
Range	Order No.	Accuracy
0 - 12"	192-670-10	±.001"
0 - 18"	192-671-10	±.0015"
0 - 24"	192-672-10	±.0015"
0 - 40"	192-673-10	±.0025"

DIMENSION



Technical Data

Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Resolution: 0.01mm (0.005mm) or
.0005"/0.01mm (.0002"/0.005mm)
Display: LCD, 6-digit
Max. response speed: 500mm/s
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 3,500 hours under normal use

Function

Zero-setting, ABS/INC switching, Presetting (2 positions),
Probe tip diameter compensation, +/- switching, Power ON/
OFF, Data hold, Data output, inch/mm conversion (inch/mm
models)
Alarm: Low voltage, Counting value composition error

Standard Scriber Provided

Metric models: Carbide-tipped scriber (**905200**) and
scriber clamp (**05GZA033**)
Inch/Metric models: Carbide-tipped scriber (**905201**) and
scriber clamp (**901385**)

Optional Accessory

905338: SPC cable (1m)
905409: SPC cable (2m)
905691: SPC cable (L-shape, 1m)
905692: SPC cable (L-shape, 2m)
192-007: Two-directional touch-signal probe (metric)
192-008: Two-directional touch-signal probe (inch)
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)





Digimatic Height Gage

SERIES 192 — Standard Type with SPC Data Output

Technical Data

Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Resolution: 0.01mm (0.005mm) or
.0005" / 0.01mm (.0002" / 0.005mm)
Display: LCD, 6-digit
Max. response speed: 500mm/s
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 3.500 hours under normal use

Function

Zero-setting, ABS/INC switching, Presetting (2 positions),
Probe tip diameter compensation, +/- switching, Power ON/
OFF, Data hold, Data output, inch/mm conversion (inch/mm
models)
Alarm: Low voltage, Counting value composition error

Standard Scriber Provided

Metric models: Carbide-tipped scriber (**07GZA000**) and
scriber clamp (**05GZA033**)
Inch/Metric models: Carbide-tipped scriber (**900258**) and
scriber clamp (**901385**)

Optional Accessory

905338: SPC cable (1m)
905409: SPC cable (2m)
905691: SPC cable (L-shape, 1m)
905692: SPC cable (L-shape, 2m)
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)

FEATURES

- Easy-to-use standard type.
- Carbide-tipped scriber is provided.
- Double-column structure ensures high measuring accuracy.
- With SPC data output.



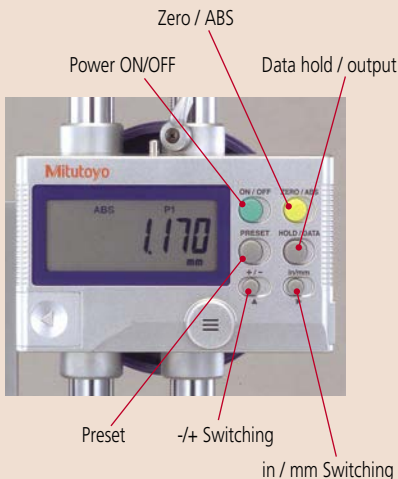
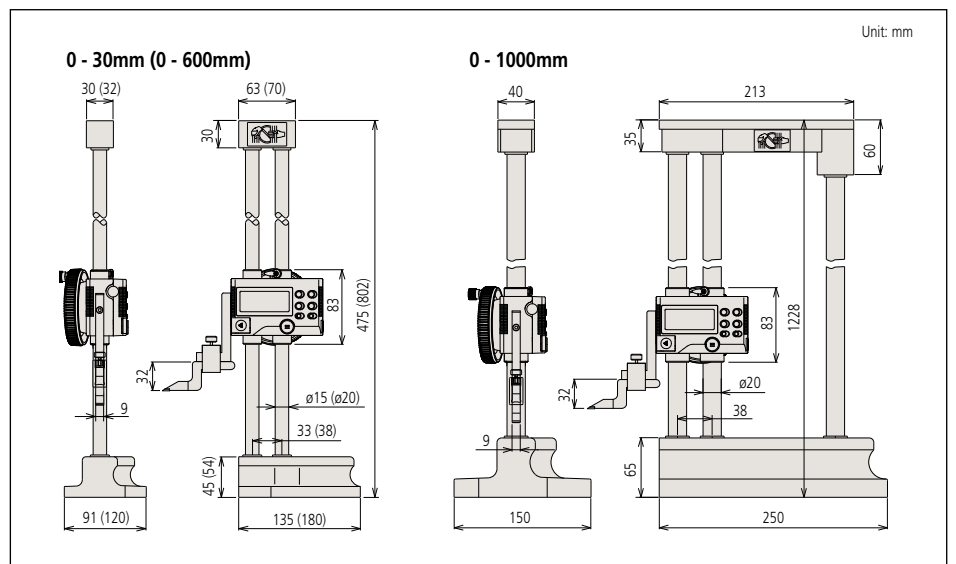
192-613-10

SPECIFICATIONS

Metric		
Range	Order No.	Accuracy
0 - 300mm	192-613-10	±0.02mm
0 - 600mm	192-614-10	±0.05mm
0 - 1000mm	192-615-10	±0.07mm

Inch/Metric		
Range	Order No.	Accuracy
0 - 12"	192-630-10	±.001"
0 - 18"	192-631-10	±.002"
0 - 24"	192-632-10	±.002"
0 - 40"	192-633-10	±.003"

DIMENSION



ABSOLUTE Digimatic Height Gage

SERIES 570 — with ABSOLUTE Linear Encoder

FEATURES

- Built-in ABSOLUTE linear encoder
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.
- Fine-adjustment carriage to feed the slider finely.
- Carbide-tipped scriber is provided.
- With SPC data output.



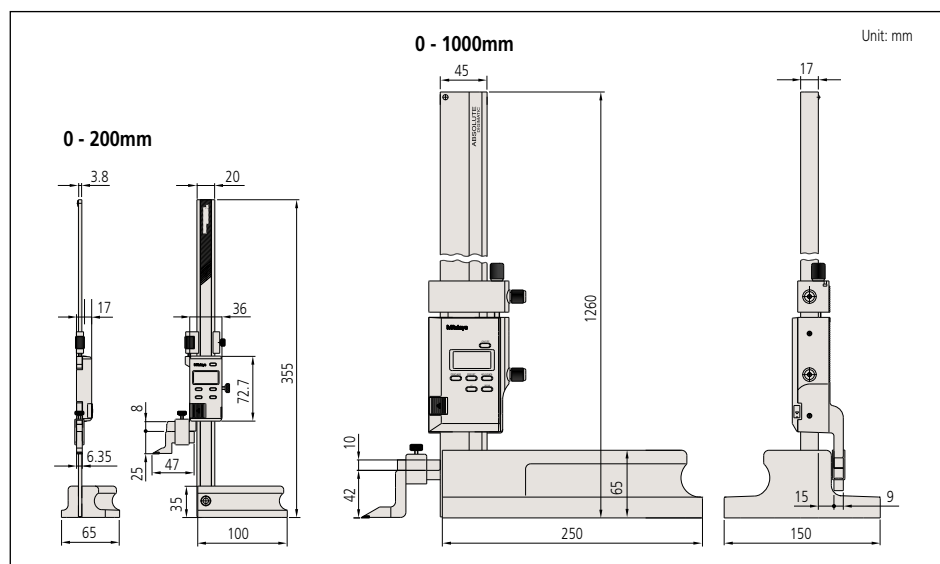
570-227

SPECIFICATIONS

Metric		
Range	Order No.	Accuracy
0 - 200mm	570-227	±0.03mm
0 - 1000mm	570-230	±0.07mm

Inch/Metric		
Range	Order No.	Accuracy
0 - 8"	570-244	±.001"
0 - 40"	570-248	±.003"

DIMENSION



(Refer to the page 9 for details.)

Technical Data

Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Resolution: 0.01mm or .0005"/0.01mm
Display: LCD, 6-digit
Length standard: ABSOLUTE electrostatic capacitance type linear encoder
Max. response speed: Unlimited
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 5000 hours under normal use

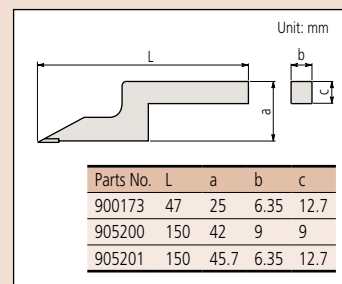
Function

Origin setting, ABS/INC switching, Presetting, +/- switching, Data hold, Data output, inch/mm conversion (inch/mm models)
Alarm: Low voltage, Counting value composition error

Standard Scriber Provided

Metric models: Carbide-tipped scriber
(900173/905200*) and scriber clamp
(901338/05GZA033*)
*0 - 1000mm model
Inch/Metric models: Carbide-tipped scriber
(900173/905201*) and scriber clamp
(901338/901385*)
*0 - 40" model

Dimension of scriber



Optional Accessory

- 905338:** SPC cable (1m)
- 905409:** SPC cable (2m)
- 953638:** Holding bar for test indicator (length: 50mm)
- 953639:** Holding bar for test indicator (length: 2")
- 902053:** Swivel clamp used with holding bar (metric)
- 900322:** Swivel clamp used with holding bar (inch)



Technical Data

Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Resolution: 0.01mm or .0005"/0.01mm
Display: LCD, 6-digit
Length standard: ABSOLUTE electrostatic capacitance type linear encoder
Max. response speed: Unlimited
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 20000 hours under normal use

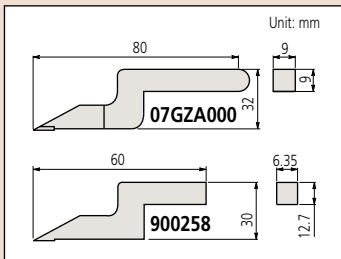
Function

Origin setting, ABS/INC switching, Power ON/OFF, Data hold, Data output, inch/mm conversion (inch/mm models)
Alarm: Low voltage, Counting value composition error

Standard Scriber Provided

Metric models: Carbide-tipped scriber (**07GZA000**), scriber clamp (**05GZA033**)
Inch/Metric models: Carbide-tipped scriber (**900258**), scriber clamp (**901385**)

Dimension of scriber



Optional Accessory

905338: SPC cable (1m)
905409: SPC cable (2m)
953638: Holding bar for test indicator (length: 50mm)
953639: Holding bar for test indicator (length: 2")
902053: Swivel clamp used with holding bar (metric)
900322: Swivel clamp used with holding bar (inch)



Large smooth slider feed wheel



Large clamp lever



Fitted in your hand

ABSOLUTE Digimatic Height Gage

SERIES 570 — with ABSOLUTE Linear Encoder

FEATURES

- Built-in ABSOLUTE linear encoder
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.
- With large smooth slider feed wheel.
- Carbide-tipped scriber is provided.
- With SPC data output.

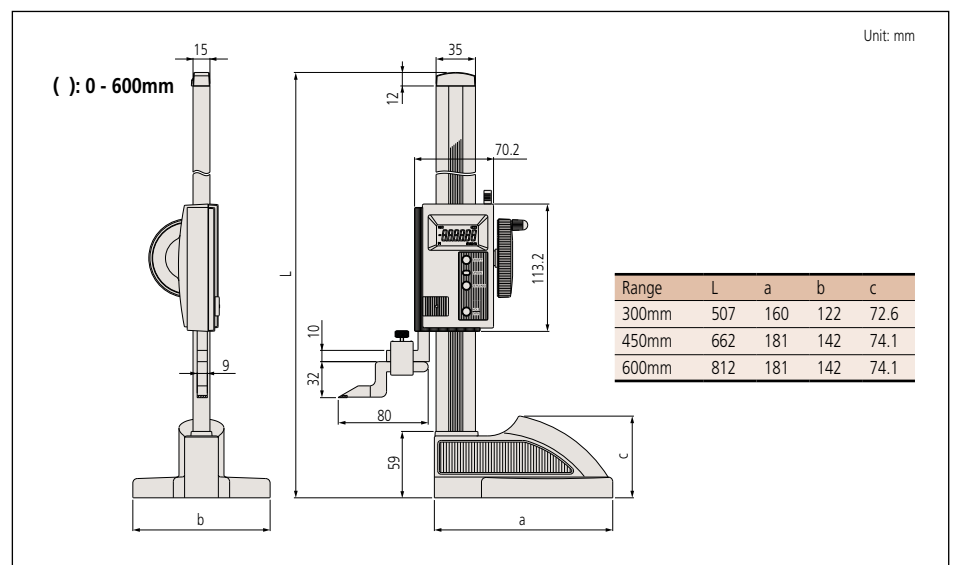


SPECIFICATIONS

Metric		
Range	Order No.	Accuracy
0 - 300mm	570-302	±0.03mm
0 - 600mm	570-304	±0.05mm

Inch/Metric		
Range	Order No.	Accuracy
0 - 12"	570-312	±.0015"
0 - 18"	570-313	±.002"
0 - 24"	570-314	±.002"

DIMENSION



Dial Height Gage

SERIES 192 — with Digital Counter

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 is provided.



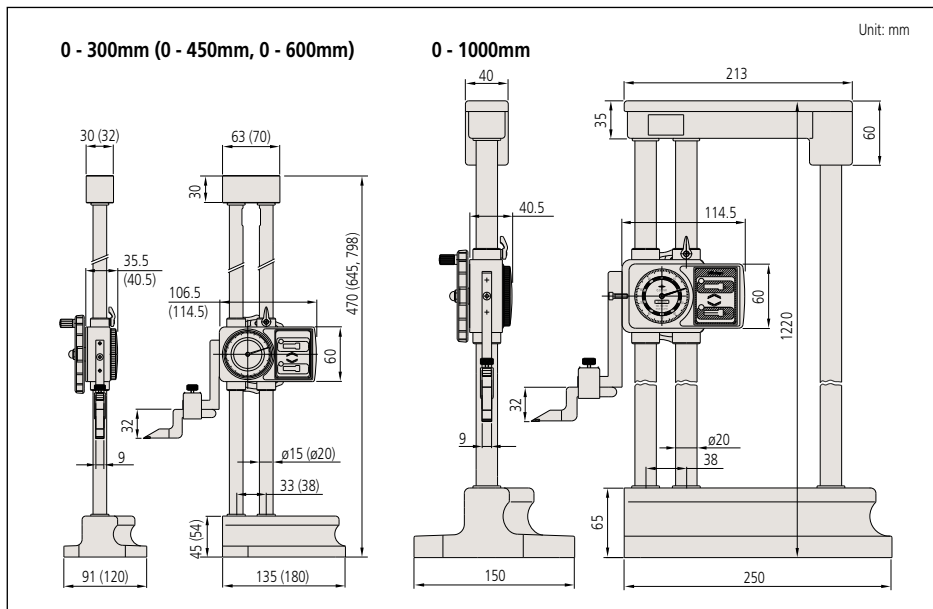
192-130

SPECIFICATIONS

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

Inch		
Range	Order No.	Accuracy
0 - 12"	192-150	±.0015"
0 - 18"	192-151	±.002"
0 - 24"	192-152	±.002"
0 - 40"	192-153	±.003"

DIMENSION



Technical Data

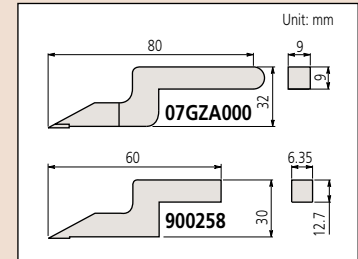
Accuracy: Refer to the list of specifications.
Dial reading: 0.01mm or .001"

Standard Scriber Provided

Metric models: Carbide-tipped scriber (07GZA000) and scriber clamp (05GZA033)

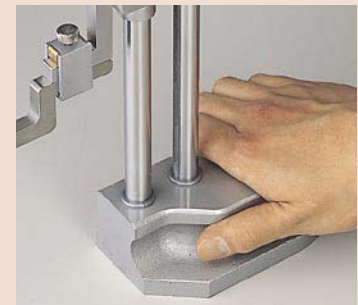
Inch/Metric models: Carbide-tipped scriber (900258) and scriber clamp (901385)

Dimension of scriber



Optional Accessory

- 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)



Fitted in your arm



Easy and secure clamping



Easy and error free reading

Dial Height Gage

SERIES 509

FEATURES

- Easy and error-free reading with a dial.
- Made of stainless steel throughout.
- Provided with a feed wheel for easy coarse feeding.
- Carbide-tipped scriber is provided.



509-301

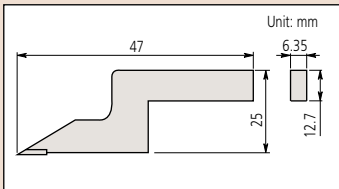
Technical Data

Accuracy: Refer to the list of specifications.
Dial reading: 0.02mm or .001"

Standard Scriber Provided

Carbide-tipped scriber (900173) and scriber clamp (901338)

Dimension of scriber



Optional Accessory

953639: Holding bar for test indicator (length: 50mm)
900322: Swivel clamp used with holding bar

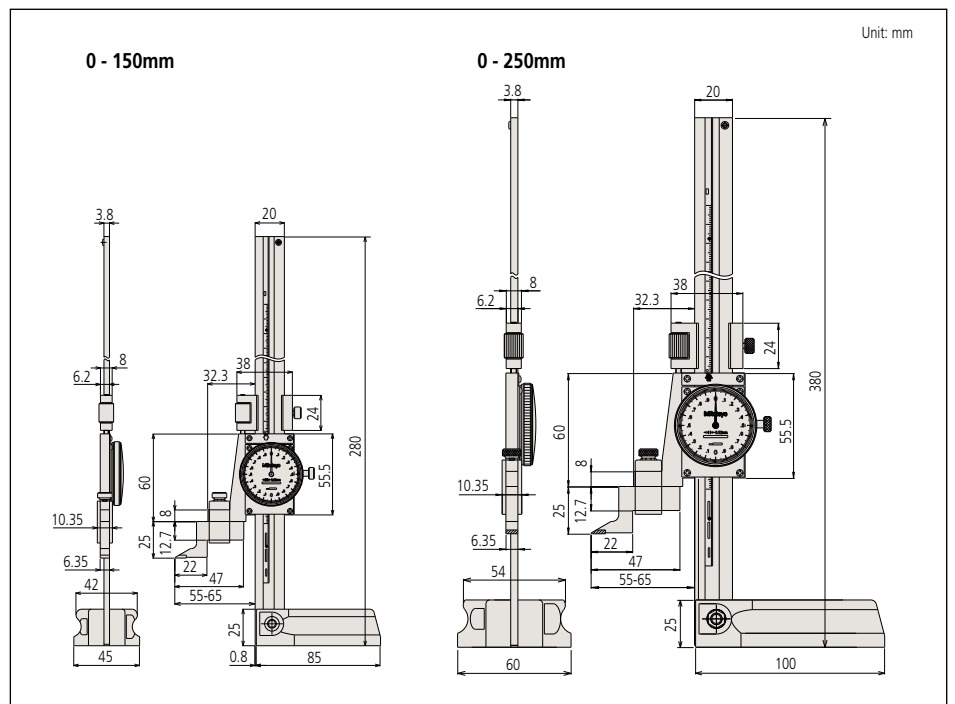


SPECIFICATIONS

Metric		
Range	Order No.	Accuracy
0 - 150mm	509-301	±0.03mm
0 - 250mm	509-302	±0.04mm

Inch/Metric		
Range	Order No.	Accuracy
0 - 6"	509-313	±.001"
0 - 10"	509-314	±.0015"

DIMENSION



Vernier Height Gage

SERIES 514 — Standard Height Gage with adjustable Main Scale

FEATURES

- Zero reference point can be adjusted.
- Stain chrome finished scales for glare-free reading.
- Extra-large base for rigidity.
- Final vernier readings can be assisted by an optional magnifier.
- Carbide-tipped scriber is provided.



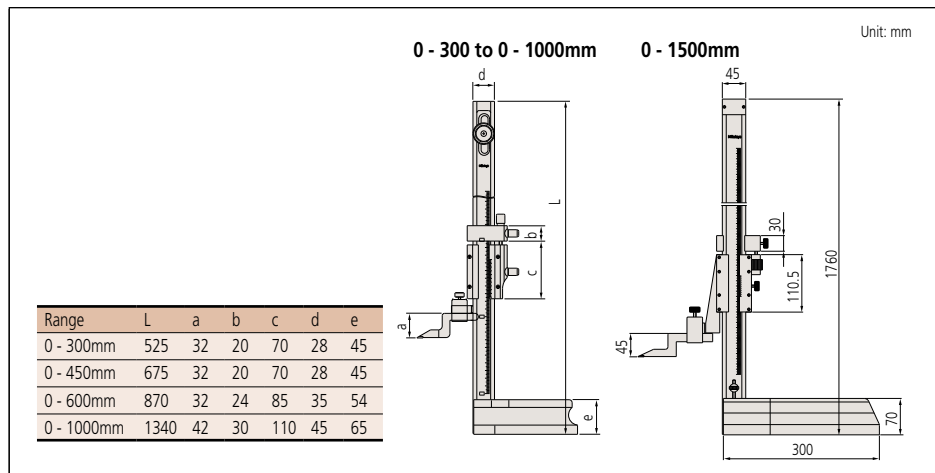
514-102

SPECIFICATIONS

Metric							
Range	Order No.	Accuracy	Remarks (R / L scale graduations / scale adjustment / slider fine feed / others)				
0 - 300mm	514-102	±0.04mm	0.02mm	—	15mm	4mm	—
0 - 450mm	514-104	±0.05mm	0.02mm	—	15mm	4mm	—
0 - 600mm	514-106	±0.05mm	0.02mm	—	15mm	7mm	—
0 - 1000mm	514-108	±0.07mm	0.02mm	—	25mm	6mm	—
0 - 1500mm	514-170	±0.18mm	0.02mm	—	25mm	20mm	Provided with magnifier

Inch/Metric							
Inch model with inch/metric double scale							
Range	Order No.	Accuracy	Remarks (R / L scale graduations / scale adjustment / slider fine feed / others)				
0 - 12"	514-103	±.002"	.001"	0.02mm	.6"	.16"	—
0 - 18"	514-105	±.002"	.001"	0.02mm	.6"	.16"	—
0 - 24"	514-107	±.002"	.001"	0.02mm	.6"	.27"	—
0 - 40"	514-109	±.003"	.001"	0.02mm	1"	.24"	—

DIMENSION



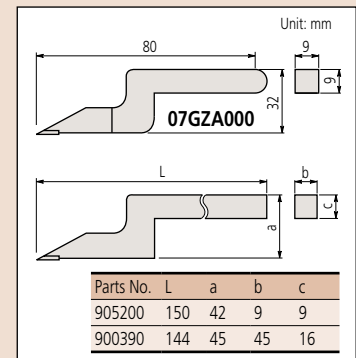
Technical Data

Accuracy: ±0.04mm (≤300mm), ±0.05mm (≤600mm), ±0.07mm (≤1000mm), ±0.18mm (≤1500mm)
 Graduation: 0.02mm or .001" (0.02mm)
 Main scale adjustment: 15mm or 25mm
 Slider fine feed: 4mm, 6mm, 7mm or 20mm

Standard Scriber Provided

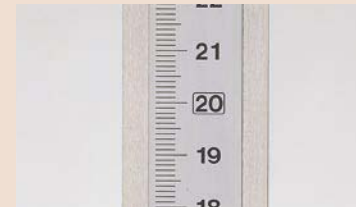
Up to 600mm: Carbide-tipped scriber (**07GZA000**) and scriber clamp (**05GZA033**)
 0 - 1000mm: Carbide-tipped scriber (**905200**) and scriber clamp (**05GZA033**)
 0 - 1500mm: Carbide-tipped scriber (**900390**) and scriber clamp (**905008**)

Dimension of scriber



Optional Accessory

07GZA003: Magnifier for 300, 450mm, 600mm models
07GZA015: Magnifier for 1000mm models
953638: Holding bar for test indicator (length: 50mm)
902053: Swivel clamp used with holding bar



Vernier Height Gage

SERIES 506 — Light Weight Height Gage

FEATURES

- Light weight type can measure easily the height of small parts.
- Stain chrome finished scales for glare-free reading.
- Beam and slider are made of stainless steel.
- Carbide-tipped scriber is provided.



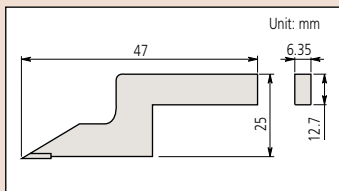
Technical Data

Accuracy: $\pm 0.03\text{mm}$ ($\leq 200\text{mm}$), $\pm 0.04\text{mm}$ ($\leq 250\text{mm}$),
 Graduation: 0.02mm or .001" (0.02mm)

Standard Scriber Provided

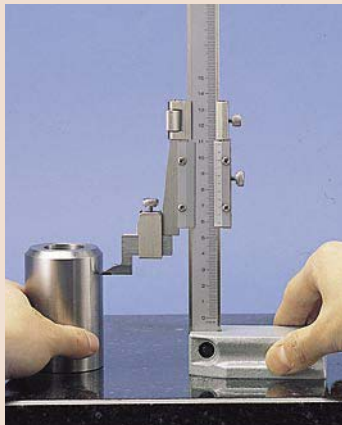
Carbide-tipped scriber (900173) and scriber clamp (901338)

Dimension of scriber



Optional Accessory

953639: Holding bar for test indicator (length: 50mm)
 900322: Swivel clamp used with holding bar



SPECIFICATIONS

Metric

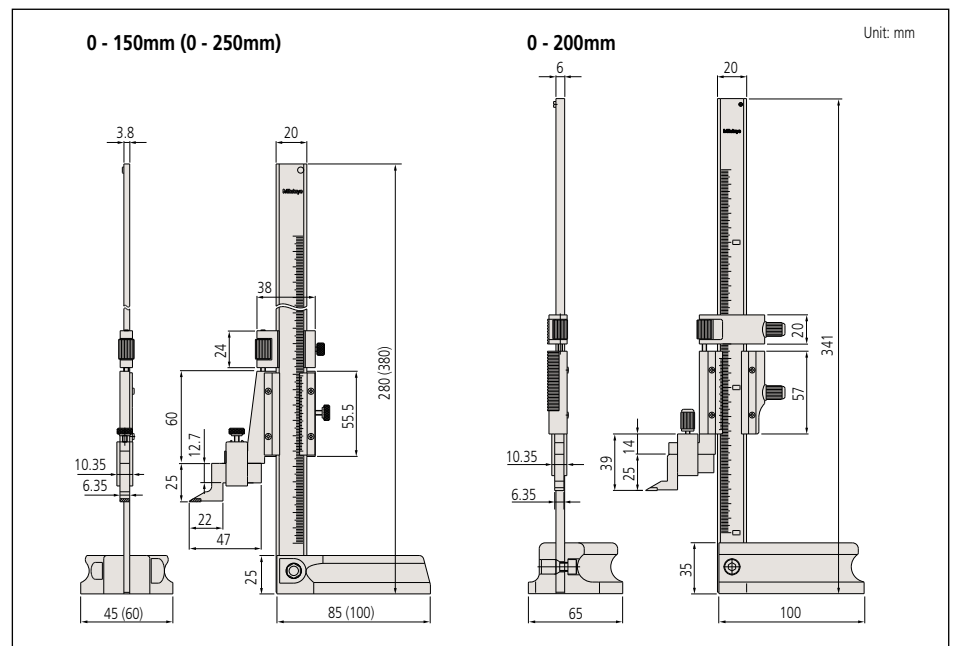
Range	Order No.	Accuracy	Remarks (R / L scale graduations)
0 - 150mm	506-201	$\pm 0.03\text{mm}$	0.02mm —
0 - 200mm	506-207	$\pm 0.03\text{mm}$	0.02mm —
0 - 250mm	506-204	$\pm 0.04\text{mm}$	0.02mm —

Inch/Metric

Inch model with inch/metric double scale

Range	Order No.	Accuracy	Remarks (R / L scale graduations)
0 - 6"	506-202	$\pm .001"$.001" 0.02mm
0 - 8"	506-208	$\pm .001"$.001" 0.02mm
0 - 10"	506-205	$\pm .0015"$.001" 0.02mm

DIMENSION



CERA Caliper Checker

SERIES 515

FEATURES

- The CERA Caliper Checker is designed to inspect vernier, dial and Digimatic calipers of various types. It is comprised of permanently wrung, high-grade CERA gauge blocks in a protective casting.
- The CERA Caliper Checker also stands perpendicular to a surface for height gage inspection.
- Each measuring block (CERA block) is made of zirconia-based ceramic and it free from deterioration and dimensional change over time.

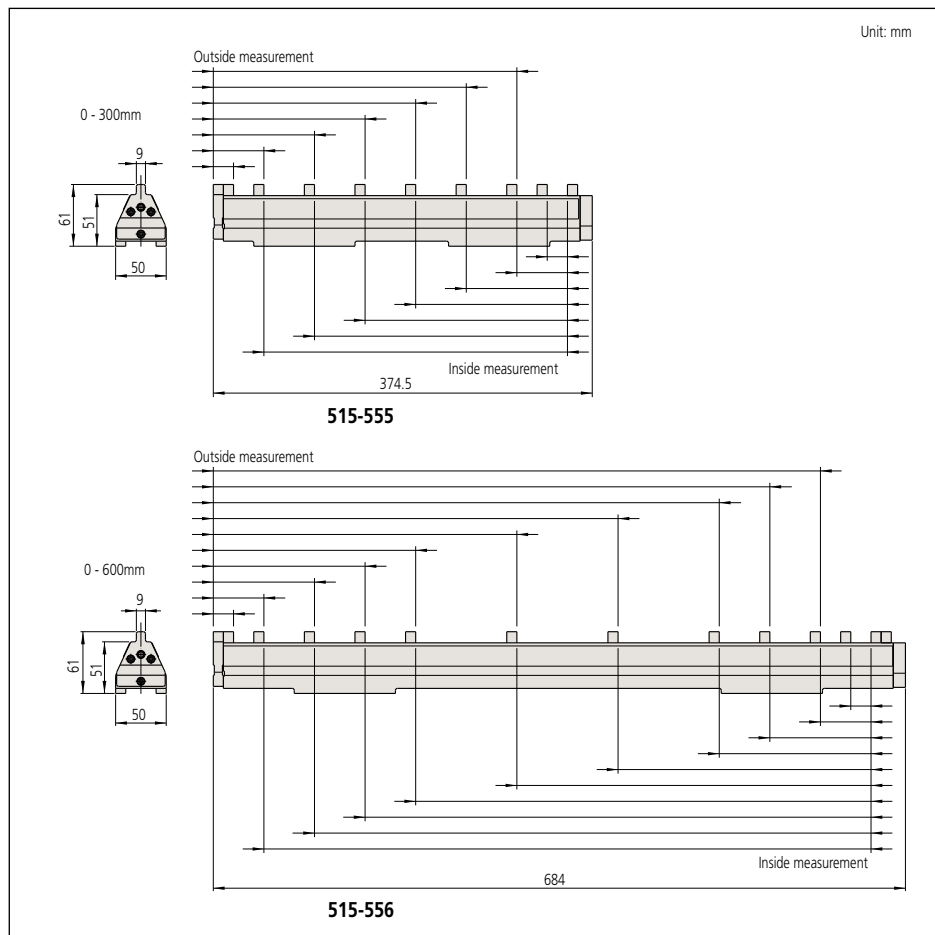


SPECIFICATIONS

Metric		
Range	Order No.	Remarks (length to check)
0 - 300mm	515-555	Outside measurement: 20, 50, 100, 150, 200, 250, 300mm Inside measurement: 20, 50, 100, 150, 200, 250, 300mm
0 - 600mm	515-556	Outside measurement: 20, 50, 100, 150, 200, 300, 400, 500, 550, 600mm Inside measurement: 20, 50, 100, 150, 250, 350, 450, 500, 550, 600mm

Inch		
Range	Order No.	Remarks (length to check)
0 - 12"	515-565	Outside measurement: 1", 2", 4", 6", 8", 10", 12" Inside measurement: 1", 2", 4", 6", 8", 10", 12"

DIMENSION



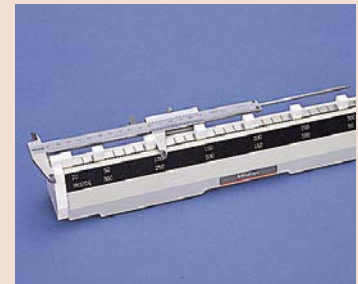
(Refer to the page 9 for details.)

Technical Data

Block pitch accuracy: $\pm 0.005\text{mm}$ for range up to 300mm
 $\pm 0.007\text{mm}$ for range up to 600mm
 Parallelism of blocks: 0.002mm for range up to 300mm
 0.004mm for range up to 600mm

Optional Accessory

602162: Wooden case for 300mm model
602164: Wooden case for 600mm model



Used for caliper

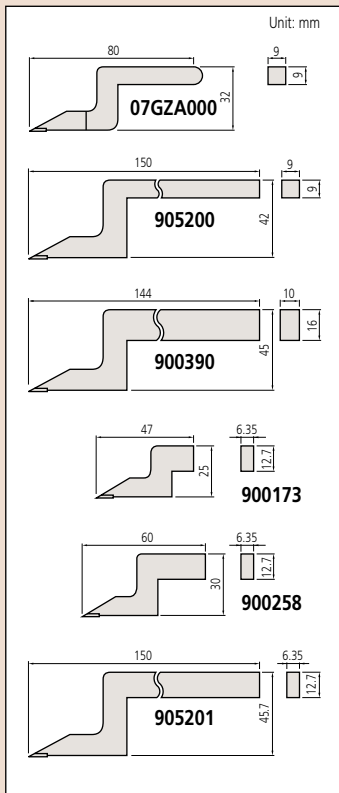


Used for height gage

Carbide-tipped Scriber

Optional Accessory for Height Gage

Dimension of scriber



FEATURES

- Used the appropriate scriber and clamp for each height gage.

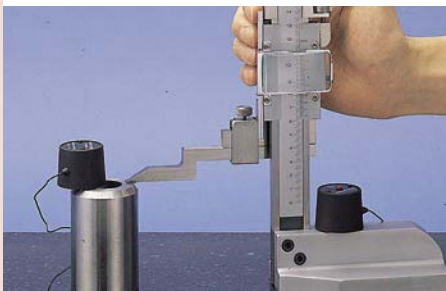
SPECIFICATIONS

Metric	
Order No.	Remarks (applicable height gage)
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)
905200	574 Series Heightmatic (574-112-1, 574-111-1, 574-110-1)
	192 Series Digimatic Height Gages (192-663, 192-664, 192-665)
	570 Series Digimatic Height Gages (570-230)
900390	514 Series Vernier Height Gages (514-108, 514-109)
	514 Series Vernier Height Gage (514-170)

Inch	
Order No.	Remarks (applicable height gage)
900173	570 series Digimatic height gages (570-227, 570-244)
	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)
	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)

Optional Accessories

Optional Accessory for Height Gage



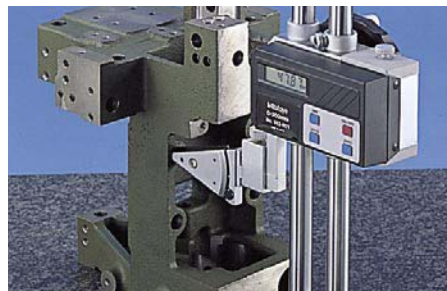
Contact Sensor

FEATURES

- The contact sensor eliminates errors caused by jacking-up the height gage while taking measurements. When the scriber 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 measurement.
- Battery (2 pcs. PR44 required) is not included.

SPECIFICATIONS

Order No.: 900872



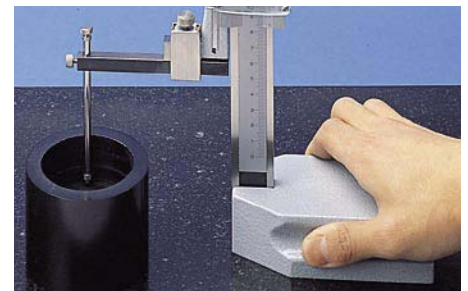
Center Probe

FEATURES

- Allows quick measurement of center-to-center distance between holes.
- Measurable hole diameters: $\varnothing 1 - \varnothing 38\text{mm}$

SPECIFICATIONS

Order No.: 951144 (with metric type holding bar)
900581 (with inch type holding bar)



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 (metric type), 2.95" (inch type)
- Contact points for dial indicator is available.

SPECIFICATIONS

Order No.: 900878 (with metric type holding bar)
900764 (with inch type holding bar)

Linear Height

SERIES 518 — High Performance 2D Measurement System

FEATURES

- Excellent accuracy of $(1.3+0.6L/600)\mu\text{m}$ with $0.1\mu\text{m}/0.5\mu\text{m}$ resolution / repeatability.
- Perpendicularity (frontal) of $6\mu\text{m}$ and straightness of $4\mu\text{m}$ are guaranteed.
- Pneumatic full / semi-floating system allows adjustment of air-cushion height.
- Basic statistical functions are provided and, additionally, RS-232C data output provides the option of evaluating measurement data externally with SPC software on a PC.
- One-key operation for running a semi-automatic measurement.
- Data entry from a Digimatic tool.
- Choice of message language in English, German, French, Spanish, Italian, Dutch, Portuguese, Swedish, Czech, Hungarian, Slovenian, Polish, Traditional Chinese*, Korean** and Japanese for user-friendly operation.

*Optional **518-341K and 518-342K only



518-341A-21



518-342A-21
(with power grip)



SPECIFICATIONS

Inch/Metric	
Order No.	Remarks
518-341A-21 / 518-342A-21*	120V w/ English manual
518-341A-22 / 518-342A-22*	120V w/ Spanish manual
518-341D-21 / 518-342D-21*	220V w/ English manual
518-341D-22 / 518-342D-22*	220V w/ Spanish manual
518-341D-23 / 518-342D-23*	220V w/ German manual
518-341D-24 / 518-342D-24*	220V w/ French manual
518-341D-25 / 518-342D-25*	220V w/ Italian manual
518-341E-21 / 518-342E-21*	220V w/ English manual
518-341DC / 518-342DC*	220V w/ Chinese manual
518-341K / 518-342K*	220V w/ Korea manual

*Power grip pre installed models



(Refer to the page 9 for details.)

Technical Data

- Measuring range: 0 - 972mm
 Slider stroke: 600mm
 Resolution: 0.0001 / 0.001 / 0.01 / 0.1mm or (switchable) 0.0001" / 0.001" / 0.01" / 0.1mm / .00001" / .00001" / .0001" / .001"
 Accuracy at 20°C: $(1.3+0.6L/600)\mu\text{m}$
 L = Measuring length (mm)
 Repeatability (2σ): Plane: 0.5μm, Bore: 1μm
 Perpendicularity*: 6μm
 Straightness: 4μm
 Drive method: Manual / motor (5 - 40mm/s, 7 steps)
 Measuring force: 1N
 Balancing method: Counter balance
 Floating method: Full / semi-floating with built-in air compressor
 Display: Graphic LCD (320 x 240 dot, with back light)
 Language for display: English / German / French / Spanish / Italian / Dutch / Portuguese / Swedish / Czech / Hungarian / Slovenian / Polish / Traditional Chinese (optional) / Korean (518-341K and 518-342K) / Japanese
 No. of stored programs: 50 programs (max.)
 No. of stored data: 60,000 data (max.)
 Power supply: AC adapter / battery (Ni-MH)
 Battery operation time: Approx. 5 hours (air floating & slider elevation : 25%)

*It is guaranteed when using the standard eccentric φ5 probe.

Perpendicularity measurement
 88.9774 [mm]
 Perpendicularity [-0.10, 9.00, 50.00]
 V = 0.4100 [mm]
 A = 89.5254 [mm]
 F = 0.0029 [mm]

Circle measurement
 76.6408 [mm]
 Circle (hole)
 Z = 69.9991 [mm]
 D = 40.0125 [mm]

Histogram
 SPC results
 Histogram
 Element [] 11- [500]
 No. 102 ABCDEFGHIJKLMNOPQRSTU
 51
 0
 From [CANCEL] to return to the previous state. [PRINT]:Printing.

Optional Accessory

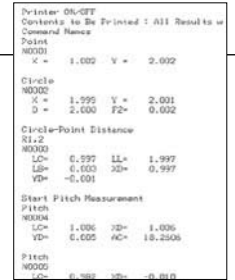
- 12AAC072:** Depth probe
- 12AAC073:** $\phi 20$ mm taper probe
- 12AAA787:** Block for calibrating probe diameter (applicable to taper probe)
- 12AAA792:** Dial indicator ($\phi 8$ mm stem) holder
- 12AAA837:** Dial indicator ($\phi 3/8$ " stem) holder
- 12AAA793:** Probe extension holder (85mm/3.3")
- 12AAB136:** $\phi 10$ mm cylindrical probe
- 932361:** Mu-checker lever head holder
- 12AAF666:** $\phi 1$ mm ball probe
- 12AAF667:** $\phi 2$ mm ruby ball probe
- 957261:** $\phi 2$ mm ball probe
- 957262:** $\phi 3$ mm ball probe
- 957263:** $\phi 4$ mm ball probe
- 12AAB552:** $\phi 10$ mm ball probe, L = 55mm
- 12AAF668:** $\phi 10$ mm ball probe, L = 82mm
- 12AAF669:** $\phi 10$ mm ball probe, L = 120mm
- 12AAF670:** $\phi 5$ mm disk probe
- 12AAF671:** $\phi 10$ mm disk probe
- 957264:** $\phi 14$ mm disk probe
- 957265:** $\phi 20$ mm disk probe
- 12AAF672:** $\phi 1$ mm ball offset probe
- 12AAF673:** $\phi 2$ mm ball offset probe
- 12AAA788:** $\phi 4$ mm ball offset probe
- 12AAA789:** $\phi 6$ mm ball offset probe
- 226116:** Test indicator ($\phi 6$ mm stem) adapter
- 226117:** M2 CMM stylus adapter
- 226118:** M3 CMM stylus adapter
- _____ : CMM ball and disk hard probes are available.
- 12AAF712:** Battery pack
- 12AAG245:** Large capacity battery pack
- 12AAF675:** Large capacity battery set
- 12AAA796:** Thermal receipt printer (220V)
- 12AAA797:** Thermal receipt printer (120V)
- 12AAA802:** Thermal receipt printing paper (10 pcs.)
- 12AAA804:** Cable for page printer (2m)
- 12AAA807:** RS-232C cable (2m/80")
- 12AAG920:** RS-232C cable (3m/118")
- 12AAH035:** USB-FDD unit



USB-FDD unit

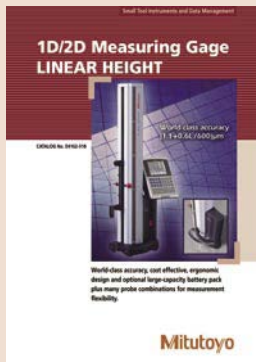
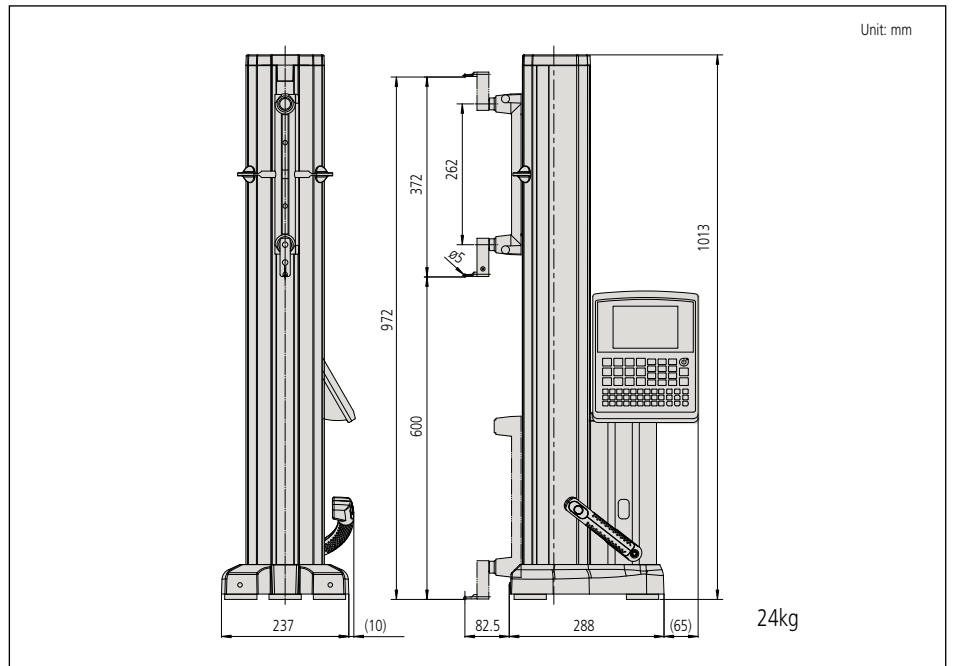


Thermal receipt printer

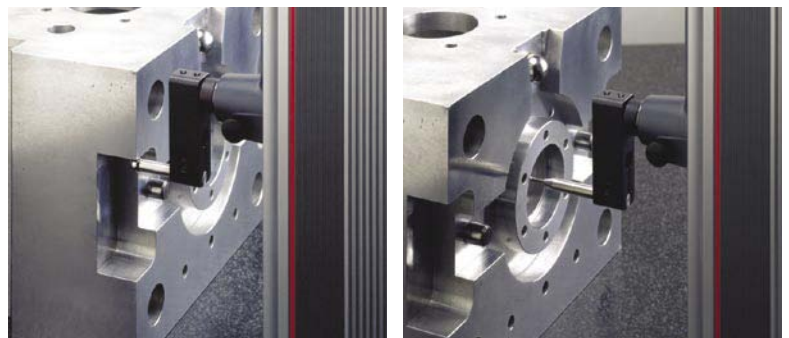
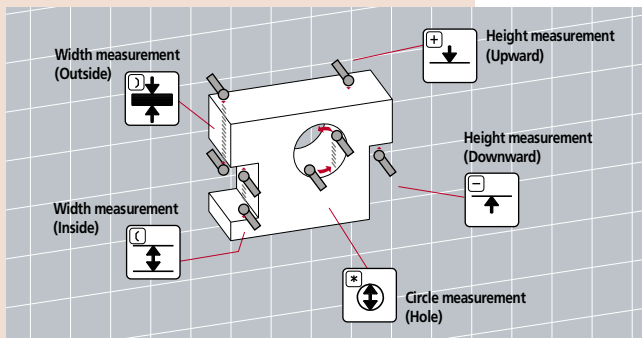


Sample of printout

DIMENSION AND MASS



Refer to the Linear Height leaflet (E4162) for more details.



QM-Height

SERIES 518 — High Precision ABSOLUTE Digital Height Gage

FEATURES

- Newly developed high accuracy and high resolution ABSOLUTE linear encoder for position detection.
- Easy reference icon keys.
- Possible to measure inside / outside diameter via unique process (detect the circle apex and process by tracing measurement).
- Various types of optional probes are available.
- Large size LCD with back light.

- GO/±NG judgment is performed by setting the upper and lower tolerances. If a judgement result is out of tolerance, the display backlighting changes from green to red, so tolerance judgment can be made at a glance.



518-224



- Slider elevation knob (for travel) / wheel (for measurement).
- With SPC and RS-232C output.



(Refer to the page 9 for details.)

Technical Data

Measuring range: 0 - 465mm or 0 - 715mm
 Slider stroke: 350mm or 600mm
 Resolution: 0.001 / 0.005mm or 0.001 / 0.005mm / .00005" / .0001" / .0002"
 Accuracy at 20°C*: $\pm(2.8+5L/1000)\mu\text{m}$
 L = Measuring length (mm)
 Repeatability (2 σ): 1.8 μm
 Perpendicularity**: 6 μm (0 - 350mm), 13 μm (0 - 600mm)
 Guiding method: Roller bearing
 Drive method: Manual
 Length standard: ABSOLUTE electrostatic capacitance type linear encoder
 Measuring force: 1.6 \pm 0.5N
 Display: LCD
 Power supply: AC adapter (optional) / battery (LR6 x 4)
 Battery operation time: Approx. 260 hours***
 (approx. 6 hours when using back light)

* It is guaranteed when using the standard eccentric $\phi 5$ probe.
 ** It is guaranteed when using a lever head (MLH-321) or Mu-Checker (M-411)
 *** 260 hours (using back light in the power saving mode)
 6 hours (using back light in the full-time turn-on mode)

SPECIFICATIONS

Metric	
Range	Order No.
0 - 350mm	518-220 / 518-224*
0 - 600mm	518-222 / 518-226*

Inch/Metric	
Range	Order No.
0 - 14"	518-221 / 518-225*
0 - 24"	518-223 / 518-227*

*Model with setting block for ball probe (12AAA715)

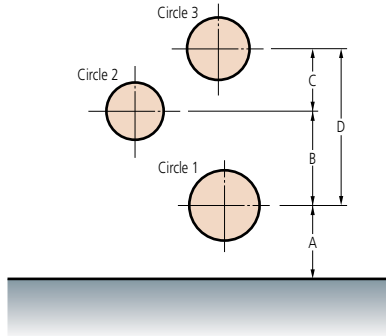
*Model with setting block for ball probe (12AAA715)

Optional Accessory

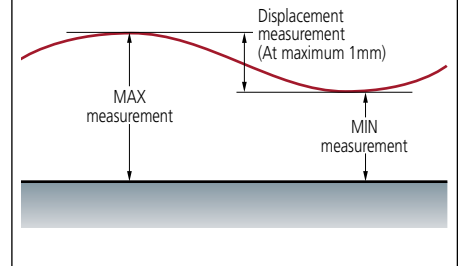
- 12AAC072:** Depth probe
- 12AAA792:** Dial indicator (ø8mm stem) holder
- 12AAA837:** Dial indicator (ø3/8" stem) holder
- 12AAA793:** Probe extension holder (85mm/3.3")
- 12AAF667:** ø2mm ruby ball probe
- 957261:** ø2mm ball probe
- 957262:** ø3mm ball probe
- 957263:** ø4mm ball probe
- 12AAB552:** ø10mm ball probe, L = 55mm
- 12AAF670:** ø5mm disk probe
- 12AAF671:** ø10mm disk probe
- 957264:** ø14mm disk probe
- 957265:** ø20mm disk probe
- 12AAA788:** ø4mm ball offset probe
- 12AAF394:** ø5mm ball offset probe
- 12AAA789:** ø6mm ball offset probe
- 226116:** Test indicator (ø6mm stem) adapter
- 05HZA173:** Scriber
- 264-504:** DP-1VR
- 936937:** SPC cable (1m)
- 965014:** SPC cable (2m)
- 526688:** AC adapter (100V)
- 526688A:** AC adapter (120V)
- 526688D:** AC adapter (220V)
- 526688E:** AC adapter (240V/220V)

Circle pitch measurement

The length A, B, C and D can be determined by measuring circles 1 to 3 once each, using the memory of measuring data together with the calculation function. (A maximum of nine circle measurement data can be saved.)



Maximum / minimum and displacement measurement



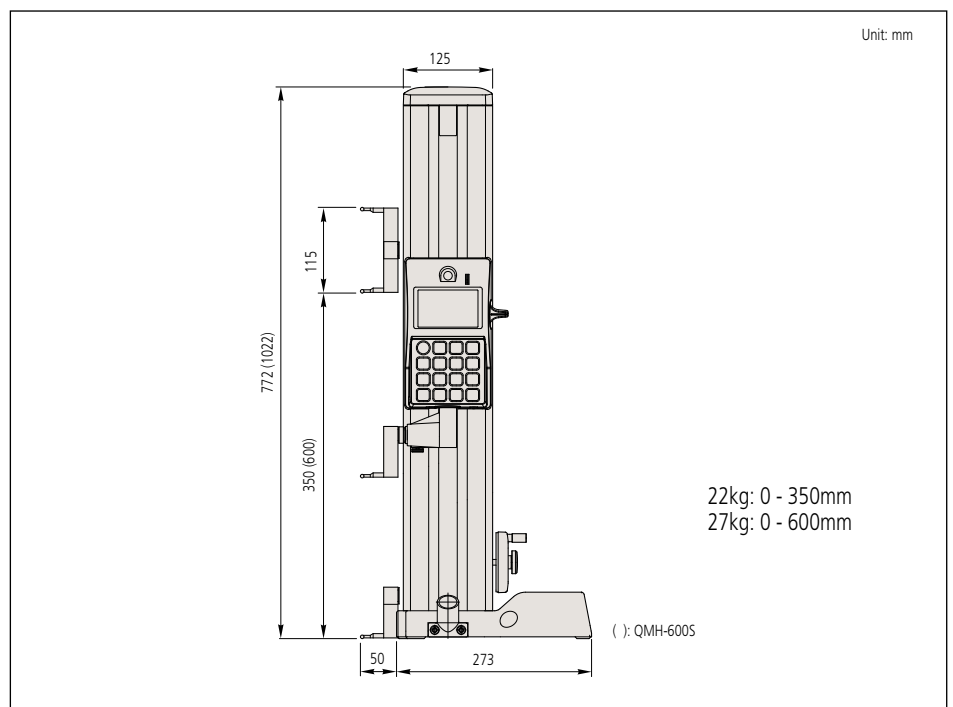
Height measurement



Inside diameter measurement



DIMENSION AND MASS



Depth Micrometer

SERIES 329, 129, 229 — Interchangeable Rod Type

FEATURES

- $\varnothing 4$ mm interchangeable rods, with lapped measuring end, provide a wide measuring range.
- The rod length can be adjusted in 25mm increments.
- With ratchet stop for constant force.
- With measuring rod clamp.
- With SPC output (series 329).
- With digit counter (series 229).



SPECIFICATIONS

Metric Digital model		
Range	Order No.	Remarks (base / rod)
0 - 150mm	329-250	101.6 x 16mm w/ 6 rods
0 - 300mm	329-251	101.6 x 16mm w/ 12 rods

Metric Digit counter model		
Range	Order No.	Remarks (base / rod)
0 - 25mm	229-101	63.5 x 16mm w/ 1 rod
0 - 25mm	229-102	101.6 x 16mm w/ 1 rod
0 - 50mm	229-109	63.5 x 16mm w/ 2 rods
0 - 50mm	229-113	101.6 x 16mm w/ 2 rods

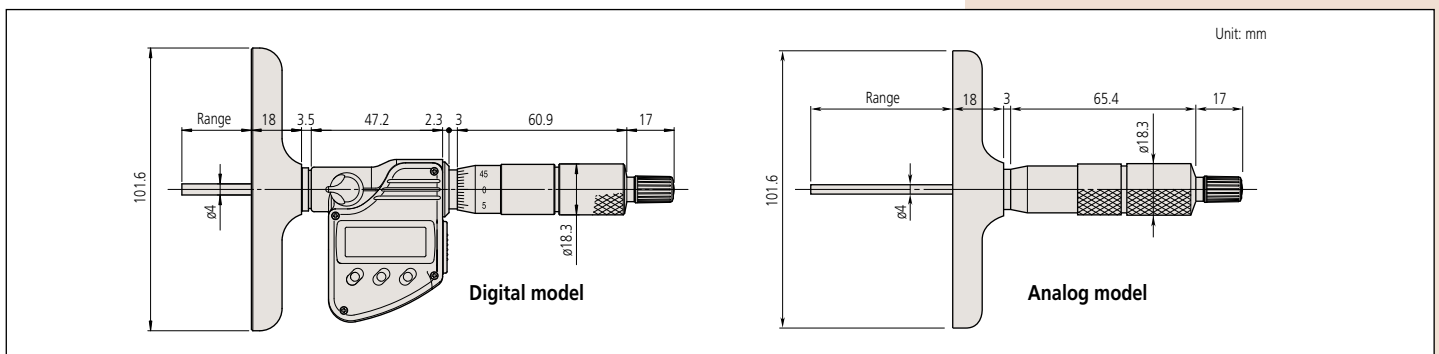
Metric		
Range	Order No.	Remarks (base / rod)
0 - 50mm	129-109	63.5 x 16mm w/ 2 rods
0 - 50mm	129-113	101.6 x 16mm w/ 2 rods
0 - 75mm	129-110	63.5 x 16mm w/ 3 rods
0 - 75mm	129-114	101.6 x 16mm w/ 3 rods
0 - 100mm	129-111	63.5 x 16mm w/ 4 rods
0 - 100mm	129-115	101.6 x 16mm w/ 4 rods
0 - 150mm	129-112	63.5 x 16mm w/ 6 rods
0 - 150mm	129-116	101.6 x 16mm w/ 6 rods

Inch/Metric Digital model		
Range	Order No.	Remarks (base / rod)
0 - 6"	329-350	4" x .63" w/ 6 rods
0 - 12"	329-351	4" x .63" w/ 12 rods

Inch Digit counter model		
Range	Order No.	Remarks (base / rod)
0 - 4"	229-127	2.5" x .63" w/ 4 rods
0 - 4"	229-131	4" x .63" w/ 4 rods
0 - 6"	229-128	2.5" x .63" w/ 6 rods
0 - 6"	229-132	4" x .63" w/ 6 rods

Inch		
Range	Order No.	Remarks (base / rod)
0 - 3"	129-126	2.5" x .63" w/ 3 rods
0 - 3"	129-130	4" x .63" w/ 3 rods
0 - 4"	129-127	2.5" x .63" w/ 4 rods
0 - 4"	129-131	4" x .63" w/ 4 rods
0 - 6"	129-128	2.5" x .63" w/ 6 rods
0 - 6"	129-132	4" x .63" w/ 6 rods
0 - 12"	129-149	2.5" x .63" w/ 12 rods
0 - 12"	129-150	4" x .63" w/ 12 rods

DIMENSION



Technical Data

Accuracy: $\pm 3\mu\text{m}$ for micrometer head feed (excluding quantizing error for digital models)
 $\pm(2+L/75)\mu\text{m}$ for interchangeable rod, L = Max. measuring length (mm)
 Fraction rounded up
 Resolution*: 0.001mm or .00005"/0.001mm (.0001"/0.001mm: **329-351**)
 Graduation**: 0.01mm or .001"
 Flatness of reference face: 1.3 μm for 63.5mm width base, 2 μm for 101.6mm width base
 Flatness of measuring rod face: 0.3 μm
 Parallelism between reference face and measuring rod face: (4+L/50) μm , L = Max. measuring length (mm)
 Fraction rounded up
 Measuring rod diameter: 4mm
 Display*: LCD
 Battery*: SR44 (1 pc.), **938882**
 Battery life*: Approx. 8 months under normal use
 *Digital models **Analog models

Function of Digital Model

Preset, Zero-setting, Data hold, Automatic power ON/OFF, Data output, Preset inch/mm conversion (inch/mm models)
 Alarm: Low voltage, Counting value composition error

Optional Accessory for Digital Model

05CZA662: SPC cable with data switch (1m)
05CZA663: SPC cable with data switch (2m)



Depth Micrometer

SERIES 128

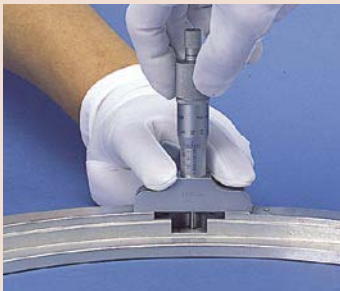
FEATURES

- $\phi 4$ mm measuring face.
- With spindle clamp.
- With carbide-tipped measuring face model is available.
- With ratchet stop for constant force.



Technical Data

Accuracy: $\pm 3\mu\text{m}$ for micrometer head feed
 Graduation: 0.01mm or .001"
 Flatness of reference face: 1.3 μm for 63.5mm width base,
 2 μm for 101.6mm width base
 Flatness of measuring rod face: 0.3 μm



SPECIFICATIONS

Metric		
Range	Order No.	Remarks (base)
0 - 25mm	128-101	63.5 x 16mm
0 - 25mm	128-103*	63.5 x 16mm
0 - 25mm	128-102	101.6 x 16mm
0 - 25mm	128-104*	101.6 x 16mm

Inch		
Range	Order No.	Remarks (base)
0 - 1"	128-105	2.5" x .63"
0 - 1"	128-106	4" x .63"

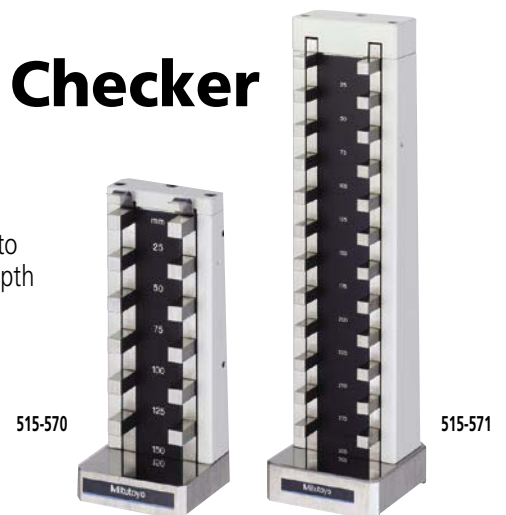
*with carbide-tipped measuring rod

Depth Micro Checker

SERIES 515

FEATURES

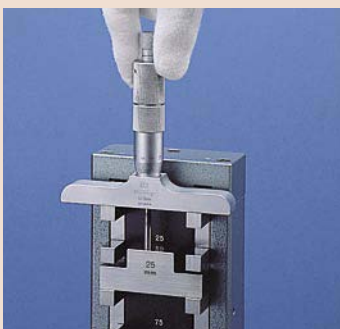
- The Depth Micro Checker is designed to efficiently check the zero point of a depth micrometer.



(Refer to the page 9 for details.)

Technical Data

Block pitch accuracy: $\pm(1+L/150)\mu\text{m}$,
 L = Length to check (mm)
 Anvil block accuracy: $\pm 0.5\mu\text{m}$

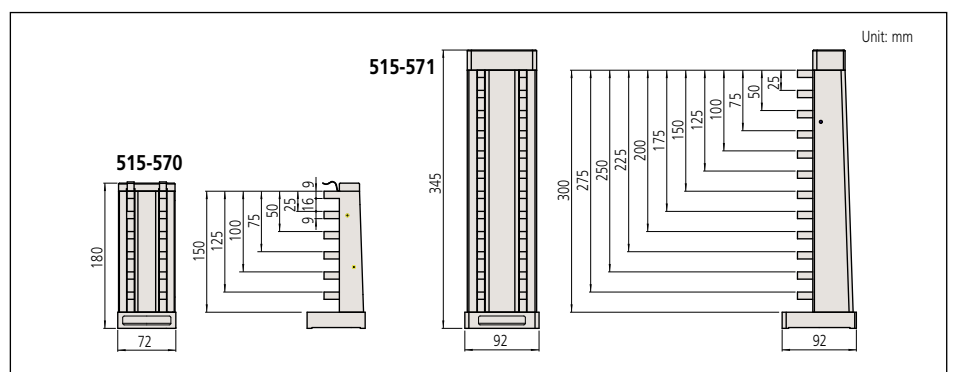


SPECIFICATIONS

Metric		
Range	Order No.	Remarks (length to check)
0 - 150mm	515-570	25, 50, 75, 100, 125, 150mm
0 - 300mm	515-571	25, 50, 75, 100, 125, 150, 175, 200, 225, 250, 275, 300mm

Inch		
Range	Order No.	Remarks (length to check)
0 - 6"	515-575	1", 2", 3", 4", 5", 6"

DIMENSION



ABSOLUTE Digimatic Depth Gage

SERIES 571

FEATURES

- ABSOLUTE Digimatic Depth Gage can keep track of the origin point once set for the entire life of the battery.
- Base and measuring faces are hardened and micro-lapped.
- Optional wider extension base are available. (up to 450mm range models)
- With SPC data output.



SPECIFICATIONS

Metric		
Range	Order No.	Base (W x T)
0 - 150mm	571-201-20 / 571-251-10*	100 x 6mm
0 - 200mm	571-202-20 / 571-252-10*	100 x 6mm
0 - 300mm	571-203-20	100 x 6mm
0 - 450mm	571-204-10	250 x 10mm
0 - 600mm	571-205-10	250 x 10mm
0 - 750mm	571-206-10	250 x 10mm
0 - 1000mm	571-207-10	250 x 10mm

*IP67 Coolant Proof model

Inch/Metric		
Range	Order No.	Base (W x T)
0 - 6"	571-211-20 / 571-261-10*	3.93" x .23"
0 - 8"	571-212-20 / 571-262-10*	3.93" x .23"
0 - 12"	571-213-10	3.93" x .23"
0 - 18"	571-214-10	9.8" x .39"
0 - 24"	571-215-10	9.8" x .39"
0 - 30"	571-216-10	9.8" x .39"
0 - 40"	571-217-10	9.8" x .39"

*IP67 Coolant Proof model

DIMENSION

Unit: mm

Up to 300mm range models
() : Coolant Proof models

Over 300mm range models

Range	L	Base thickness
0 - 150mm	237	6
0 - 200mm	287	6
0 - 300mm	403	6
0 - 450mm	635	10
0 - 600mm	785	10
0 - 750mm	935	10
0 - 1000mm	1200	10



(Refer to the page 9 for details.)



(Refer to the page 9 for details.)

Technical Data

Accuracy: $\pm 0.02\text{mm}$ ($\leq 200\text{mm}$), $\pm 0.03\text{mm}$ ($\leq 300\text{mm}$), $\pm 0.05\text{mm}$ ($\leq 600\text{mm}$), $\pm 0.06\text{mm}$ ($\leq 750\text{mm}$), $\pm 0.07\text{mm}$ ($\leq 1000\text{mm}$) (excluding quantizing error)

Resolution: 0.01mm or .0005"/0.01mm

Repeatability: 0.01mm

Display: LCD

Length standard: ABSOLUTE electrostatic capacitance (electromagnetic induction)* type linear encoder

Max. response speed: Unlimited

Battery: SR44 (1 pc.), **938882**

Battery life: Approx. 20,000 hours (3 years)* under normal use

Dust/Water protection level: IP67*

*Coolant Proof models

Function

Origin-set, Zero-setting, Automatic power on/off, Data output, inch/mm conversion (inch/mm models)

Alarm: Low voltage, Counting value composition error

Optional Accessory

- 959143:** Data hold unit
 - 959149:** SPC cable with data switch (1m)
 - 959150:** SPC cable with data switch (2m)
 - 05CZA624:** SPC cable with data switch (1m)*
 - 05CZA625:** SPC cable with data switch (2m)*
- : Extension base (see page 179.)

*For Coolant Proof models



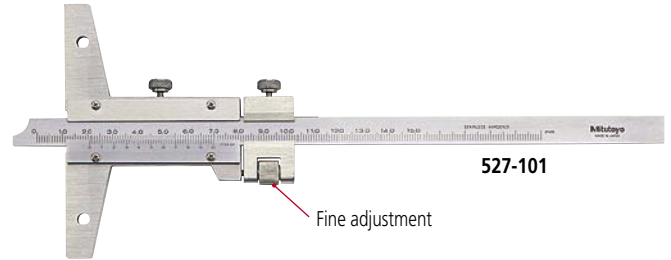
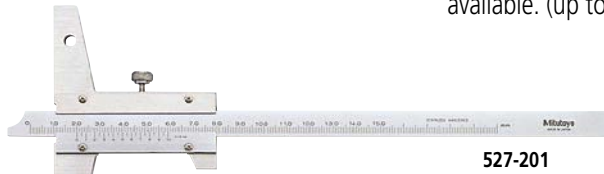
Measurement data output function is available with a water-resistant SPC cable.

Vernier Depth Gage

SERIES 527

FEATURES

- Base and measuring faces are hardened and micro-lapped.
- Made of hardened stainless steel.
- Optional wider extension base are available. (up to 450mm range models)



Technical Data

Accuracy: Refer to the list of specifications.
Graduation: 0.05mm, 0.02mm or .001"

Optional Accessory

—: Extension base (see page 179.)

SPECIFICATIONS

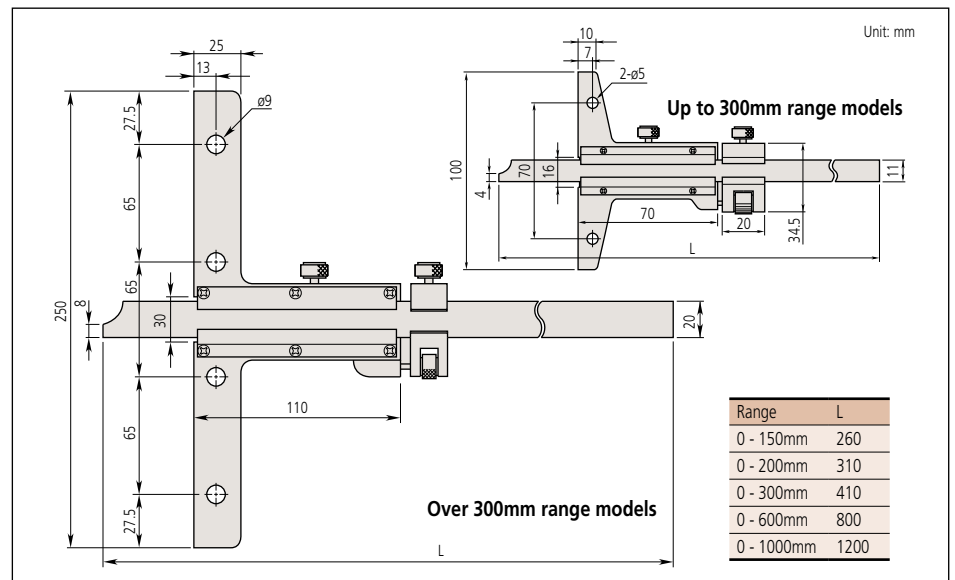
Metric

Range	Order No.	Vernier reading	Accuracy	Remarks [base (W x T) / others]
0 - 150mm	527-201	0.05mm	±0.05mm	100 x 6.5mm —
0 - 150mm	527-121	0.02mm	±0.03mm	100 x 6.5mm —
0 - 150mm	527-101	0.02mm	±0.03mm	100 x 6.5mm with fine adjustment
0 - 200mm	527-202	0.05mm	±0.05mm	100 x 6.5mm —
0 - 200mm	527-122	0.02mm	±0.03mm	100 x 6.5mm —
0 - 200mm	527-102	0.02mm	±0.03mm	100 x 6.5mm with fine adjustment
0 - 300mm	527-203	0.05mm	±0.08mm	100 x 6.5mm —
0 - 300mm	527-123	0.02mm	±0.04mm	100 x 6.5mm —
0 - 300mm	527-103	0.02mm	±0.04mm	100 x 6.5mm with fine adjustment
0 - 600mm	527-204	0.05mm	±0.10mm	250 x 10mm —
0 - 600mm	527-104	0.02mm	±0.05mm	250 x 10mm with fine adjustment
0 - 1000mm	527-205	0.05mm	±0.15mm	250 x 10mm —
0 - 1000mm	527-105	0.02mm	±0.07mm	250 x 10mm with fine adjustment

Inch

Range	Order No.	Vernier reading	Accuracy	Remarks [base (W x T) / others]
0 - 6"	527-111	.001"	±.001"	3.93" x .25" with fine adjustment
0 - 8"	527-112	.001"	±.001"	3.93" x .25" with fine adjustment
0 - 12"	527-113	.001"	±.0015"	9.8" x .39" with fine adjustment
0 - 24"	527-114	.001"	±.002"	9.8" x .39" with fine adjustment
0 - 40"	527-115	.001"	±.003"	9.8" x .39" with fine adjustment

DIMENSION

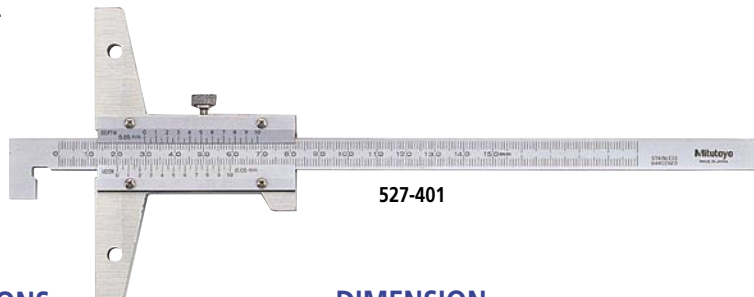


Vernier Depth Gage

SERIES 527 — Hook End Type

FEATURES

- The end of the main scale is hook-shaped to allow depth and thickness measurements of a projected portion or lip in a hole, in addition to standard depth measurement.
- With fine adjustment models are available.
- Optional wider extension base are available.

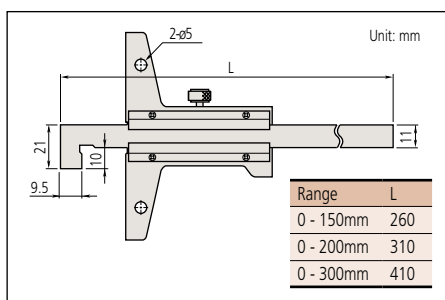


SPECIFICATIONS

Metric			
Range	Order No.	Vernier reading	Accuracy
0 - 150mm	527-401	0.05mm	±0.05mm
0 - 200mm	527-402	0.05mm	±0.05mm
0 - 300mm	527-403	0.05mm	±0.08mm

Metric with fine adjustment			
Range	Order No.	Vernier reading	Accuracy
0 - 150mm	527-411	0.02mm	±0.03mm
0 - 200mm	527-412	0.02mm	±0.03mm
0 - 300mm	527-413	0.02mm	±0.04mm

DIMENSION

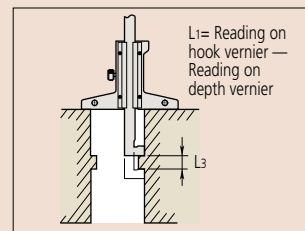
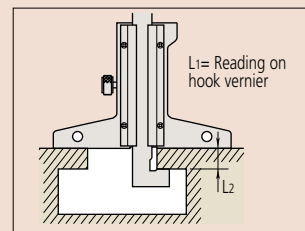
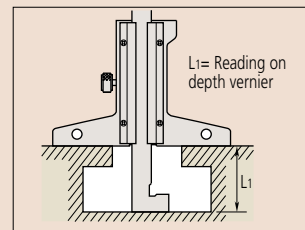


Technical Data

Accuracy: Refer to the list of specifications.
 Graduation: 0.05mm or 0.02mm
 Base size: 100 x 6.5mm (W x T)

Optional Accessory

—: Extension base (see page 179.)



Dial Depth Gage

SERIES 527 — with Fine Adjustment

FEATURES

- Easier and faster reading of dial.
- Made of hardened stainless steel.
- Base and measuring faces are hardened and micro-lapped.
- Optional wider extension base are available.

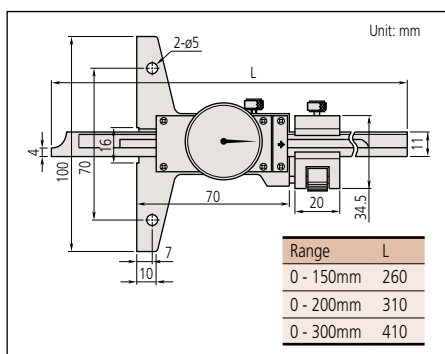


SPECIFICATIONS

Metric			
Range	Order No.	Dial reading	Accuracy
0 - 150mm	527-301-50	0.05mm	±0.05mm
0 - 200mm	527-302-50	0.05mm	±0.05mm
0 - 300mm	527-303-50	0.05mm	±0.08mm

Inch			
Range	Order No.	Dial reading	Accuracy
0 - 6"	527-311-50	.001"	±.001"
0 - 8"	527-312-50	.001"	±.001"
0 - 12"	527-313-50	.001"	±.0015"

DIMENSION

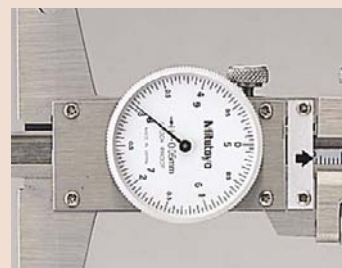


Technical Data

Accuracy: Refer to the list of specifications.
 Dial reading: 0.05mm or .001"
 Base size: 100 x 6.5mm (W x T)

Optional Accessory

—: Extension base (see page 179.)

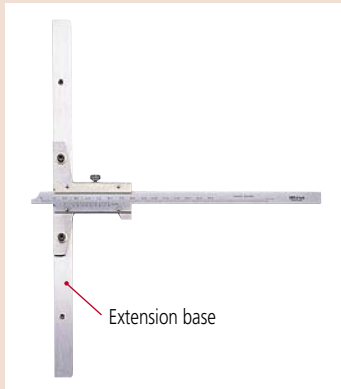


Extension Bases

Optional Accessory for Depth Gage

FEATURES

- Attached to the base (reference face) plate of a depth gage to extend its span.
- These extension base cannot be attached to 0 - 600mm, 0 - 1000mm, 0-24" and 0-40" range models.



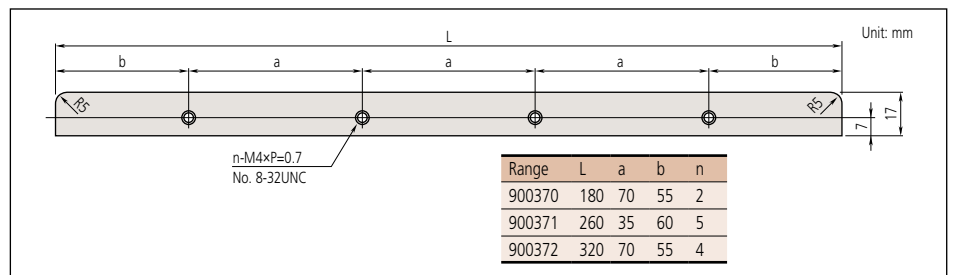
900372

SPECIFICATIONS

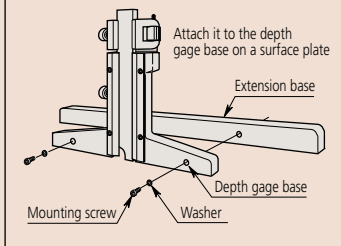
Metric			
Size	Order No.	Remarks (dimension A, B / n)	
180mm	900370	70mm, 55mm	2
260mm	900371	35mm, 60mm	5
320mm	900372	70mm, 55mm	4

Inch			
Size	Order No.	Remarks (dimension A, B / n)	
7"	900367	2.76", 2.17"	2
10"	900368	1.38", 2.36"	5
12"	900369	2.76", 2.17"	4

DIMENSION



Attaching the extension base

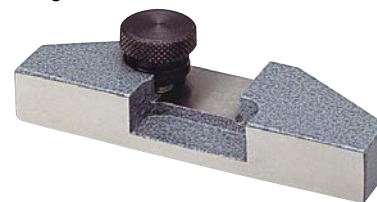
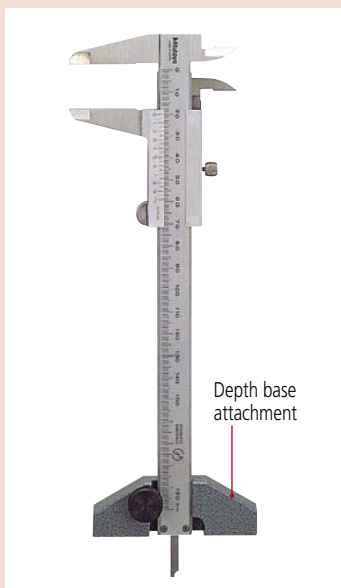


Depth Base Attachment

Optional Accessory for Caliper

FEATURES

- For 100mm, 150mm, 200mm, 300mm, 4", 6", 8" and 12" vernier and dial calipers which have a depth measuring bar.
- Finely grounded base surface and secure locking clamp.

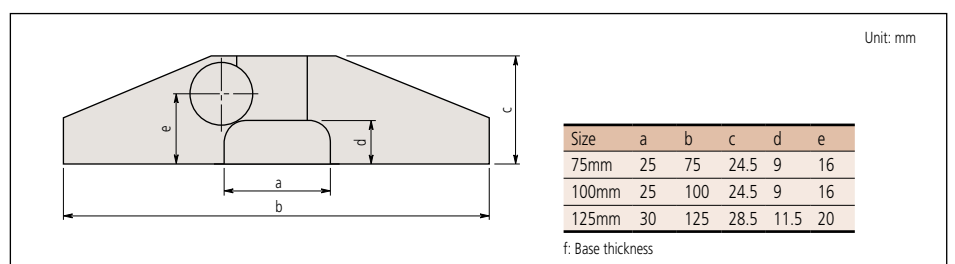


050084

SPECIFICATIONS

Metric		
Size	Order No.	Remarks (applicable measuring range of caliper)
75mm	050083	100mm, 15mm, 200mm, 4", 6" and 8"
100mm	050084	100mm, 15mm, 200mm, 4", 6" and 8"
125mm	050085	300mm and 12"

DIMENSION



ABSOLUTE Digimatic/Dial Depth Gage

SERIES 547, 7

FEATURES

- ABSOLUTE Digimatic Depth Gage can keep track of the origin point once set for the entire life of the battery. (series 547)
- Wide probing range is available with the supplied extension rod.
- Bottom surface of the base is hardened, ground and lapped for highest degree of flatness.
- Designed with a back plunger type dial indicator for upward facing readings. (**7231, 7237, 7238**)
- With SPC data output. (series 547)



SPECIFICATIONS

Metric		Digital Type			
Range	Order No.	Stroke	Accuracy	Extension rod	Base (W x T, flatness)
0 - 200mm	547-211	12mm	±20µm	5 pcs. (10, 20, 30, 30, 100mm)	63.5 x 16mm, 5µm
0 - 200mm	547-212	12mm	±20µm	5 pcs. (10, 20, 30, 30, 100mm)	101.6 x 16mm, 5µm
0 - 200mm	547-251	12mm	±5µm	5 pcs. (10, 20, 30, 30, 100mm)	63.5 x 16mm, 2µm
0 - 200mm	547-252	12mm	±5µm	5 pcs. (10, 20, 30, 30, 100mm)	101.6 x 16mm, 2µm

0.01mm graduation
 0.001mm graduation

Inch/Metric		Digital Type			
Range	Order No.	Stroke	Accuracy	Extension rod	Base (W x T, flatness)
0 - 8"	547-217	.5"	±.001"	4 pcs. (.5", 1", 2", 4")	2.5" x .63", .0002"
0 - 8"	547-218	.5"	±.001"	4 pcs. (.5", 1", 2", 4")	4" x .63", .0002"
0 - 8"	547-257	.5"	±.0003"	4 pcs. (.5", 1", 2", 4")	2.5" x .63", .00008"
0 - 8"	547-258	.5"	±.0003"	4 pcs. (.5", 1", 2", 4")	4" x .63", .00008"

.005"/0.01mm graduation
 .00005"/0.001mm graduation

Metric		Dial Type			
Range	Order No.	Stroke	Accuracy	Extension rod	Base (W x T, flatness)
0 - 10mm	7210*	10mm	±15µm	—	40 x 16mm, 5µm
0 - 200mm	7211	10mm	±15µm	5 pcs. (10, 20, 30, 30, 100mm)	63.5 x 16mm, 5µm
0 - 200mm	7212	10mm	±15µm	5 pcs. (10, 20, 30, 30, 100mm)	101.6 x 16mm, 5µm
0 - 210mm	7213	30mm	±30µm	3 pcs. (30, 60, 90mm)	63.5 x 16mm, 5µm
0 - 210mm	7214	30mm	±30µm	3 pcs. (30, 60, 90mm)	101.6 x 16mm, 5µm
0 - 200mm	7220	10mm	±15µm	5 pcs. (10, 20, 30, 30, 100mm)	100 x 18mm, 5µm
0 - 200mm	7221	10mm	±15µm	5 pcs. (10, 20, 30, 30, 100mm)	150 x 18mm, 5µm
0 - 10mm	7222*	10mm	±15µm	5 pcs. (10, 20, 30, 30, 100mm)	ø16mm, 5µm
0 - 10mm	7223	10mm	±15µm	5 pcs. (10, 20, 30, 30, 100mm)	ø25mm, 5µm
0 - 10mm	7224	10mm	±15µm	5 pcs. (10, 20, 30, 30, 100mm)	ø40mm, 5µm
0 - 200mm	7231	5mm	±15µm	5 pcs. (10, 20, 30, 30, 100mm)	63.5 x 16mm, 5µm

*with needle probe

Inch		Dial Type			
Range	Order No.	Stroke	Accuracy	Extension rod	Base (W x T, flatness)
0 - .4"	7217S	1"	±.002"	4 pcs. (.5", 1", 2", 4")	2.5" x .63", .0002"
0 - .4"	7218S	1"	±.002"	4 pcs. (.5", 1", 2", 4")	4" x .63", .0002"
0 - 8"	7217	1"	±.002"	3 pcs. (1", 2", 4")	2.5" x .63", .0002"
0 - 8"	7218	1"	±.002"	3 pcs. (1", 2", 4")	4" x .63", .0002"
0 - 8"	7237	.2"	±.002"	4 pcs. (.5", 1", 2", 4")	2.5" x .63", .0002"
0 - 8"	7238	.2"	±.002"	4 pcs. (.5", 1", 2", 4")	4" x .63", .0002"



(Refer to the page 9 for details.)

Technical Data of Digital Mode

Accuracy: Refer to the list of specifications.
 (excluding quantizing error for digital models)
 Resolution: 0.001mm, 0.01mm, .00005"/0.001mm or
 .0005"/0.01mm
 Flatness of base face: 5µm or 2µm
 Contact point: Carbide-tipped ball point or needle
 Measuring force: 1.5N
 Display: LCD
 Battery: SR44 (1 pc.), **938882**
 Battery life: Approx. 5000 hours under normal use

Technical Data of Dial Mode

Accuracy: Refer to the list of specifications.
 (excluding quantizing error for digital models)
 Dial reading: 0.01mm or .001"
 Flatness of base face: 5µm or 2µm
 Contact point: Carbide-tipped ball point
 (needle point: **7210, 7222**)
 Measuring force: 1.4N (2.5N: **7213, 7214, 7217, 7218**)

Function of Digital Model

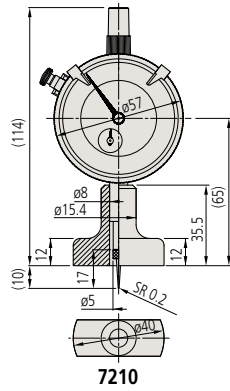
Origin-set, Zero-setting, Data hold, Data output, inch/mm
 conversion (inch/mm models)
 Alarm: Low voltage, Counting value composition error

Optional Accessory for Digital Model

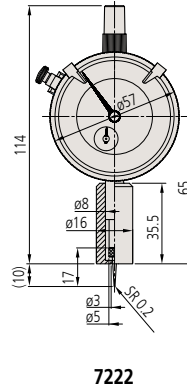
905338: SPC cable (1m)
905409: SPC cable (2m)

DIMENSION

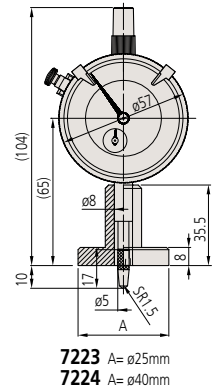
Unit: mm



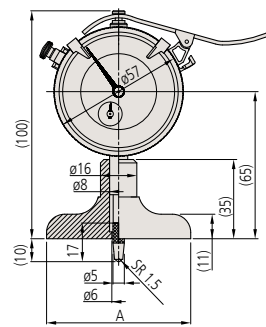
7210



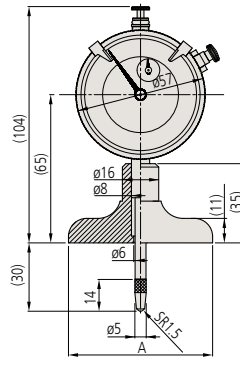
7222



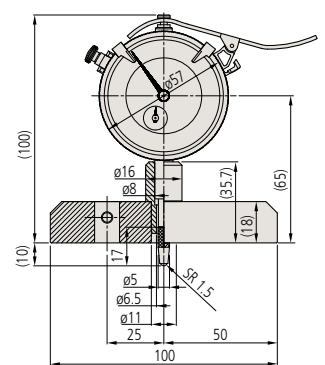
7223 A= ϕ 25mm
7224 A= ϕ 40mm



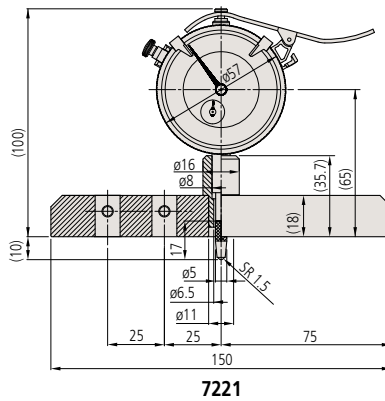
7211 A= 63.5mm
7212 A= 101.6mm



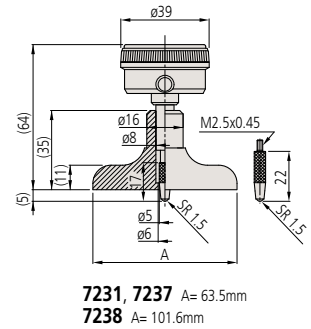
7213, 7217 A= 63.5mm
7214, 7218 A= 101.6mm



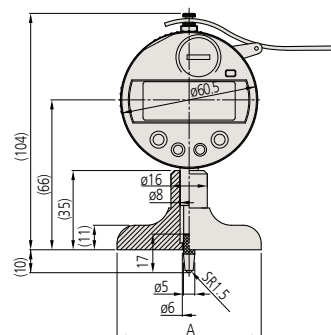
7220



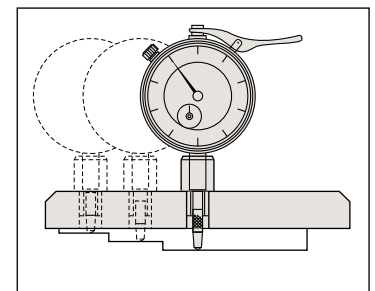
7221



7231, 7237 A= 63.5mm
7238 A= 101.6mm



547-211, 547-251, 547-217, 547-257 A= 63.5mm
547-212, 547-252, 547-218, 547-258 A= 101.6mm



Tire Thread Depth Gage

SERIES 571, 700

FEATURES

- ABSOLUTE Digimatic Thread Depth Gage can keep track of the origin point once set for the entire life of the battery. (series 571)
- Specially designed to measure tire thread depth.
- Plastic construction for light-weight use. (series 700)
- With SPC data output. (series 571)

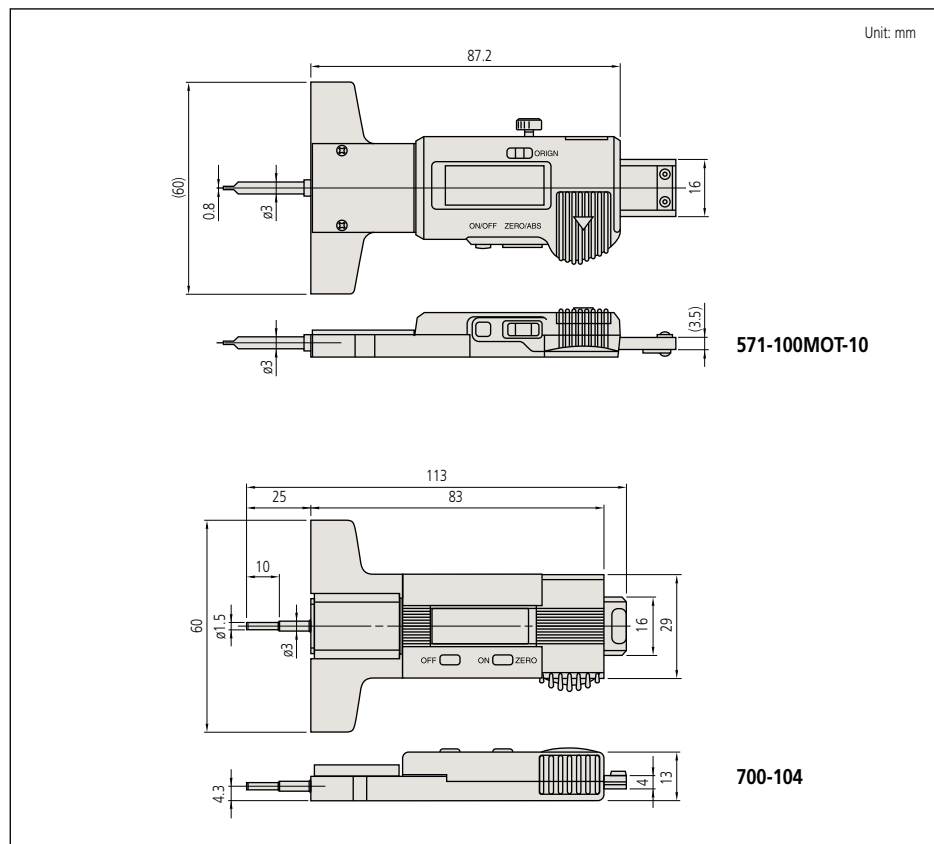


SPECIFICATIONS

Metric		
Range	Order No.	Accuracy
0 - 25mm	571-100MOT-10	±0.02mm
0 - 25mm	700-104	±0.2mm

Inch/Metric		
Range	Order No.	Accuracy
0 - 1"	571-200MOT-10	±.0005"
0 - 1"	700-105	±.008"

DIMENSION



SPC

ABSOLUTE
Absolute System Patented by MITUTOYO

(Refer to the page 9 for details.)

Technical Data

Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Resolution: 0.01mm or .0005"/0.01mm (571 series)
0.1mm or .001"/0.1mm (700 series)
Display: LCD
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 2 years under normal use
(approx. 2000 hours: series 571)

Function

Origin-set*, Zero-setting, Data output* Power ON/OFF,
inch/mm conversion (inch/mm models)
Alarm: Low voltage, Counting value composition error
*series 571

Optional Accessory for series 571

- 959143:** Data hold unit
- 959149:** SPC cable with data switch (1m)
- 959150:** SPC cable with data switch (2m)

