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Digimatic Caliper



Digimatic Height Gages



Linear Height



Depth Gages

New Products



SuperCaliper



ABSOLUTE Coolant Proof Caliper



ABSOLUTE Digimatic Caliper



ABSOLUTE Digimatic Offset Caliper



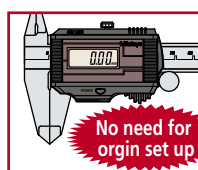
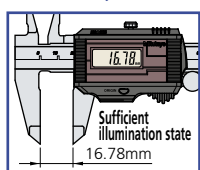
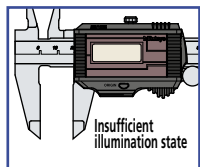
ABSOLUTE Digital Height Gage

SuperCaliper

SERIES 500 — No battery or origin reset needed for IP67 digital caliper

FEATURES

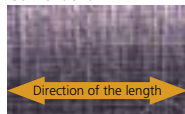
- With no annoying origin restoration necessary, a measurement can be started any time and there is no restriction on operating speed.



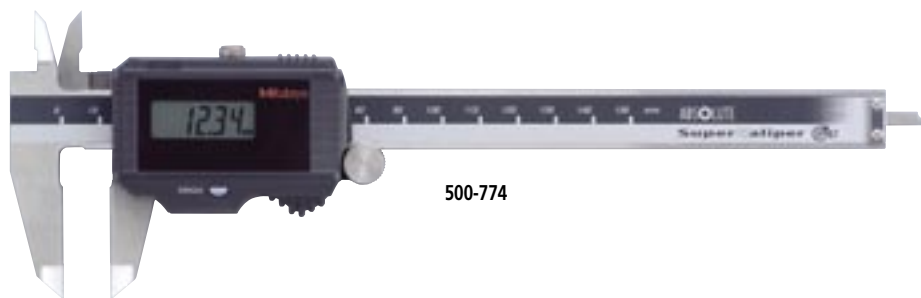
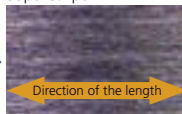
- World's unique* solar-powered SuperCaliper that is eco-friendly with no battery
*According to Mitutoyo investigation in January, 2005
- The impact resistance of the display unit has been increased for improved usability in workshop conditions.
- IP67 protection assures waterproof reliability.
- This SuperCaliper uses components that do not contain harmful substances and is compatible with RoHS Directives.

Improvement in surface finish of beam

Conventional



SuperCaliper



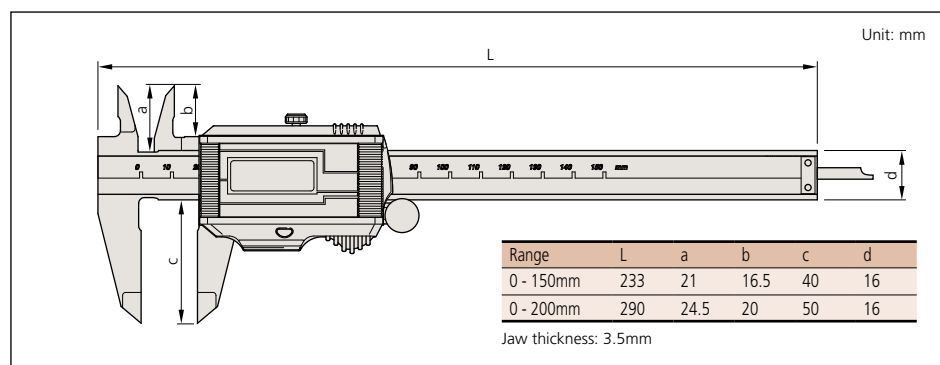
500-774

SPECIFICATIONS

Metric		
Range	Order No.	Remarks
0 - 150mm	500-776	with data output
0 - 150mm	500-774	w/o data output
0 - 200mm	500-777	with data output
0 - 200mm	500-775	w/o data output

Inch/Metric		
Range	Order No.	Remarks
0 - 6"	500-786	with data output
0 - 6"	500-784	w/o data output
0 - 8"	500-787	with data output
0 - 8"	500-785	w/o data output

DIMENSION



ABSOLUTE®
Absolute System Patented by MITUTOYO



(Refer to the page 9 for details.)



(Refer to the page 9 for details.)

Technical Data

Accuracy: $\pm 0.02\text{mm}$ (excluding quantizing error)
 Resolution: 0.01mm or .0005"/0.01mm
 Repeatability: 0.01mm
 Display: LCD
 Length standard: ABSOLUTE electromagnetic induction linear encoder
 Max. response speed: Unlimited
 Battery: Solar battery*
 Dust/Water protection level: IP67
 *Can be used continuously above 60lux ambient illumination.

Function

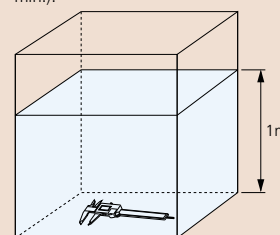
Origin-set, inch/mm conversion (inch/mm models)
 Alarm: Counting value composition error

Optional Accessory

05CZA624: SPC cable with data switch (1m)
05CZA625: SPC cable with data switch (2m)

IP67 protection level

Level 6: Dust-tight
 No ingress of dust.
 Level 7: Protected against the effects of temporary immersion in water.
 Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed 1 meter in water under standardized conditions of pressure and time (30 min.).



About the charge function (SuperCaliper)

The minimum illumination required in the uncharged state is 60lux. As shown in the table 'JIS Z 9110 Artificial Illumination Intensity Standard', this SuperCaliper can be used without problems in a normal work environment.

The charge function allows the operator to use this SuperCaliper without interrupting work even if the ambient illumination is temporarily insufficient.

- In the fully charged state this SuperCaliper can operate for approximately an hour in an environment of 50lux illumination (less than the minimum necessary illumination intensity).
- The time necessary for full charge differs, depending on the charging conditions. If this SuperCaliper is left unused in an illumination of 500 lux (usual for manufacturing environments), it takes approximately one hour to reach full charge.



ABSOLUTE®

Absolute System Patented by MITUTOYO

(Refer to the page 9 for details.)

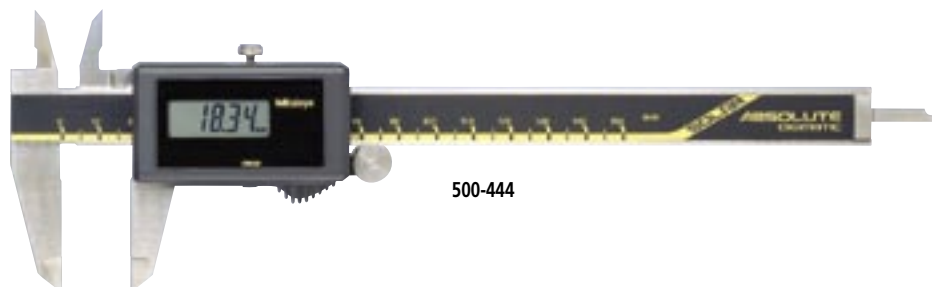
ABSOLUTE Solar Caliper

SERIES 500 — No battery or origin reset needed

Mitutoyo's Absolute Solar Digimatic Caliper retains its origin point even the display turns off for the entire life of the caliper. At 60 Lux and up the ABSOLUTE solar caliper is turned on ready to start measurement.

FEATURES

- No more repeated zero setting caused by the shortage of light intensity.
- Hard-coated solar panel for safe operation.
- No fear for overspeed errors.



500-444

Technical Data

Accuracy: $\pm 0.02\text{mm}$ (excluding quantizing error)

Resolution: 0.01mm or $.0005"/0.01\text{mm}$

Repeatability: 0.01mm

Display: LCD

Length standard: ABSOLUTE electrostatic capacitance type linear encoder

Max. response speed: Unlimited

Battery: Solar battery*

*Can be used continuously above 60lux ambient illumination.

Function

Origin-set, Data hold, Data output, inch/mm conversion (inch/mm models)

Alarm: Counting value composition error

Optional Accessory

959143: Data hold unit

959149: SPC cable with data switch (1m)

959150: SPC cable with data switch (2m)

SPECIFICATIONS

Metric

Range	Order No.	Remarks (depth measuring bar / thumb roller)	
0 - 100mm	500-443	$\phi 1.9\text{mm}$ rod	with thumb roller
0 - 100mm	500-453*	$\phi 1.9\text{mm}$ rod	with thumb roller
0 - 150mm	500-444	Blade	with thumb roller
0 - 150mm	500-454*	Blade	with thumb roller
0 - 200mm	500-445	Blade	with thumb roller
0 - 200mm	500-455*	Blade	with thumb roller

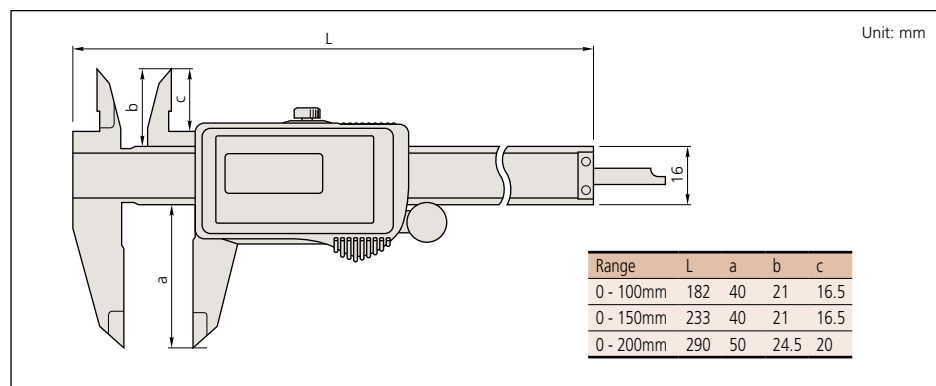
*without SPC data output

Inch/Metric

Range	Order No.	Remarks (depth measuring bar / thumb roller)	
0 - 4"	500-463	$\phi 3/40"$ rod	with thumb roller
0 - 4"	500-473*	$\phi 3/40"$ rod	with thumb roller
0 - 6"	500-464	Blade	with thumb roller
0 - 6"	500-474*	Blade	with thumb roller
0 - 8"	500-465	Blade	with thumb roller
0 - 8"	500-475*	Blade	with thumb roller

*without SPC data output

DIMENSION



SERIES 500 — with Dust/Water Protection Conforming to IP66/67 Level

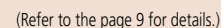
- Can be used in workshop conditions exposed to coolant, water, dust or oil.
- Easy to use - no need to wipe or clean the scale.
- Advanced design styling.

- Incorporates absolute measurement system.
- Automatic power-on/off.
- Data output function.



500-623

500-622



(Refer to the page 9 for details.)



(Refer to the page 9 for details.)



(Refer to the page 9 for details.)

Accuracy: $\pm 0.02\text{mm}$ ($\leq 200\text{mm}$), $\pm 0.03\text{mm}$ ($> 200\text{mm}$)
(excluding quantizing error)

Resolution: 0.01mm or .0005"/0.01mm

Repeatability: 0.01 mm

Display: LCD

Length standard: ABSOLUTE electromagnetic induction linear encoder

Max. response speed: Unlimited

Battery: SR44 (1 pc. / 2 pcs*), **938882**

Battery life: Approx. 3 years under normal use
(1 year: over 300mm models)

Dust/Water protection level: IP66 or IP67
*0 - 300mm model

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

Alarm: Low voltage, Counting value composition error

05CZA624: SPC cable with data switch (1m)

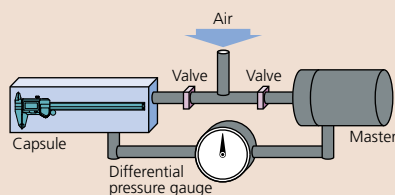
05CZA625: SPC cable with data switch (2m)



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

Air leakage detection system used for water-proof testing

Generally, air leakage tests are performed to evaluate water resistance. Testing begins by placing a measuring tool into the capsule. Next, air with equivalent pressure is supplied to the capsule and the master, then the valves are closed. If none of the air in the capsule seeps into the measuring tool, the capsule's air pressure will remain equal to that in the master, and the differential pressure gauge will continue to point to the center. However, if some air does seep into the measuring tool, it will create an air pressure difference in the amount indicated by the differential pressure gauge. Thus, detection of air pressure differences is used as a criterion for judging leakage. Every single unit of the ABS Coolant Proof calipers and Coolant Proof micrometer is tested this way for air leakage to help ensure product quality.



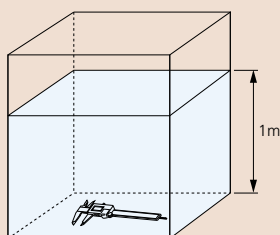
IP66 protection level

- Level 6: Dust-tight
No ingress of dust.
Protected against powerful water jet.
Water projected in powerful jets* against the enclosure from any direction shall have no harmful effects.
*Size of direct jets: uses 12.5 mm (inner diameter) nozzle emitting a 100 kPa jet of water at 100 liters per minute for at least 3 minutes from a distance of approx. 3 meters.

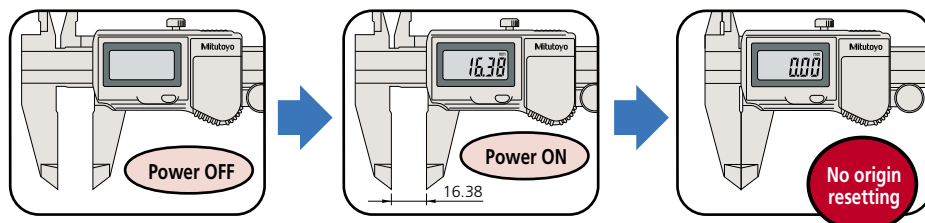


IP67 protection level

- Level 6: Dust-tight
No ingress of dust.
Level 7: Protected against the effects of temporary immersion in water.
Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed 1 meter in water under standardized conditions of pressure and time (30 min.).



Built-in ABS (absolute) scale means that these calipers are ready to use immediately after power-on without origin resetting. It's as easy as vernier caliper measurements.



SPECIFICATIONS

Metric IP66 model		
Range	Order No.	Remarks
0 - 150mm	500-632	with thumb roller
0 - 150mm	500-637	—
0 - 150mm	500-622*	with thumb roller
0 - 150mm	500-626*	—
0 - 200mm	500-633	with thumb roller
0 - 200mm	500-638	—
0 - 200mm	500-623*	with thumb roller
0 - 200mm	500-627*	—
0 - 300mm	500-634	with thumb roller
0 - 300mm	500-639	—
0 - 300mm	500-624*	with thumb roller
0 - 300mm	500-628*	—

*without SPC data output

Metric IP67 model		
Range	Order No.	Remarks
0 - 150mm	500-712	with thumb roller
0 - 150mm	500-716	—
0 - 150mm	500-702*	with thumb roller
0 - 150mm	500-706*	—
0 - 200mm	500-713	with thumb roller
0 - 200mm	500-717	—
0 - 200mm	500-703*	with thumb roller
0 - 200mm	500-707*	—

*without SPC data output

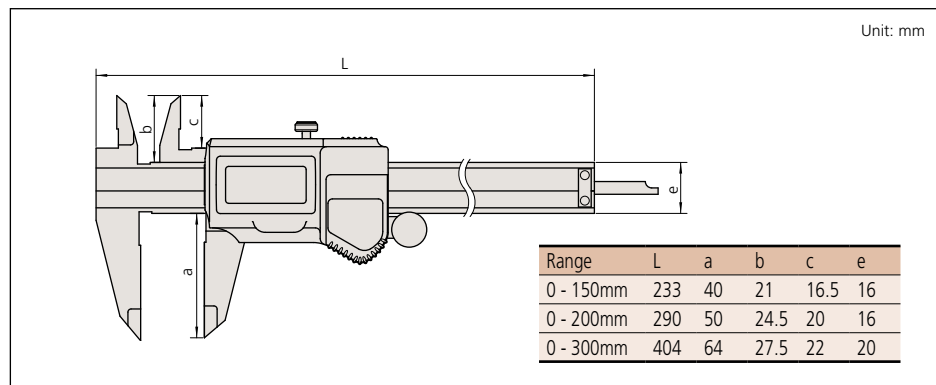
Inch/Metric IP66 model		
Range	Order No.	Remarks
0 - 6"	500-682	with thumb roller
0 - 6"	500-672*	with thumb roller
0 - 8"	500-683	with thumb roller
0 - 8"	500-673*	with thumb roller
0 - 12"	500-684	with thumb roller
0 - 12"	500-674*	with thumb roller

*without SPC data output

Inch/Metric IP67 model		
Range	Order No.	Remarks
0 - 6"	500-762	with thumb roller
0 - 6"	500-752*	with thumb roller
0 - 8"	500-763	with thumb roller
0 - 8"	500-753*	with thumb roller

*without SPC data output

DIMENSION

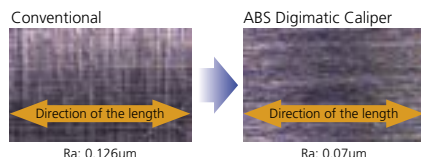


ABSOLUTE Digimatic Caliper

SERIES 500 — with Exclusive ABSOLUTE Encoder Technology

Mitutoyo's absolute Digimatic Caliper is the next generation of electronic calipers. It keeps track of its origin point once set. Whenever turned on, the large LCD screen displays the actual slider position ready to start measurement. No more repeated zero setting is necessary with the absolute encoder technology as well as no more care for overspeed errors.

High quality guide surface finish for smooth slider movement

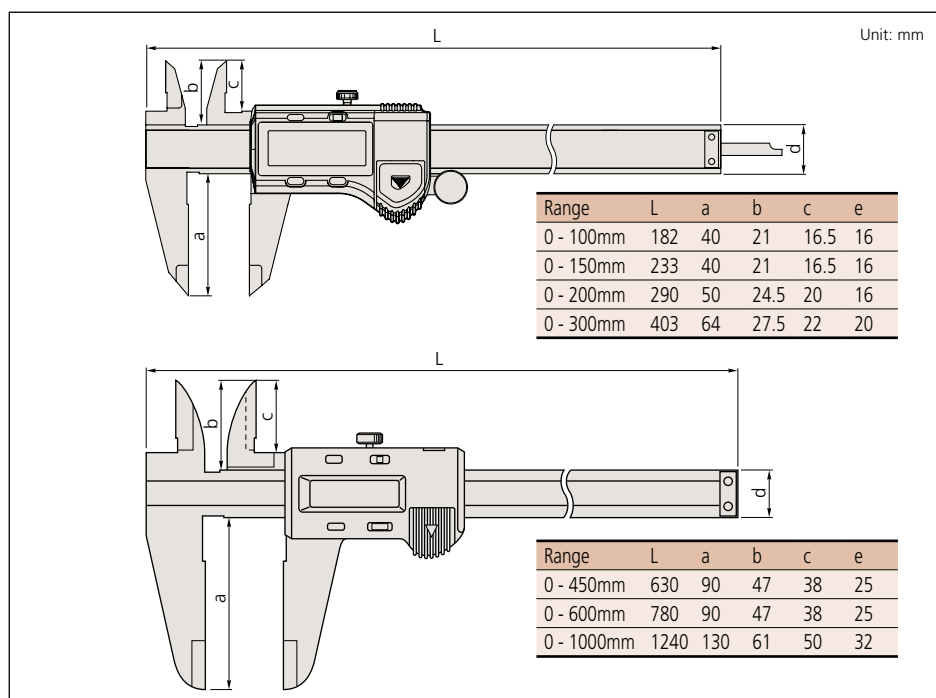


FEATURES

- Large and clear LCD readout.
- The ZERO/ABS key allows the display to be Zero-Set at any slider position along the scale for incremental comparison measurements. This switch will also allow return to the absolute (ABS) coordinate and display of the true position from the origin point (usually jaws-closed point).
- Data Hold Unit (959143) is optional.
- Carbide-tipped jaw type calipers are also available.



DIMENSION



SPC

ABSOLUTE®
Absolute System Patented by MITUTOYO

(Refer to the page 9 for details.)



(Refer to the page 9 for details.)

Technical Data

Accuracy: $\pm 0.02\text{mm}$ ($\leq 200\text{mm}$), $\pm 0.03\text{mm}$ ($\leq 300\text{mm}$)
 $\pm 0.05\text{mm}$ ($\leq 600\text{mm}$), $\pm 0.07\text{mm}$ ($\leq 1000\text{mm}$)
(excluding quantizing error)
Resolution: 0.01mm or .0005"/0.01mm
Repeatability: 0.01mm
Display: LCD
Length standard: ABSOLUTE electrostatic capacitance type linear encoder
Max. response speed: Unlimited
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 3.5 years under normal use

Function

Origin-set, Zero-setting, 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)

959143



959149

SPECIFICATIONS

Metric

Range	Order No.	Remarks (depth measuring bar / thumb roller / others)		
0 - 100mm	500-150-20	ø1.9mm rod	with thumb roller	—
0 - 100mm	500-180-20*	ø1.9mm rod	—	—
0 - 150mm	500-151-20	Blade	with thumb roller	—
0 - 150mm	500-154-20	Blade	with thumb roller	Carbide-tipped jaws for OD measurement
0 - 150mm	500-155-20	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 150mm	500-158-20	ø1.9mm rod	with thumb roller	—
0 - 150mm	500-181-20*	Blade	—	—
0 - 200mm	500-152-20	Blade	with thumb roller	—
0 - 200mm	500-156-20	Blade	with thumb roller	Carbide-tipped jaws for OD measurement
0 - 200mm	500-157-20	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 200mm	500-182-20*	Blade	—	—
0 - 300mm	500-153	Blade	with thumb roller	—
0 - 450mm	500-500-10	—	—	—
0 - 600mm	500-501-10	—	—	—
0 - 1000mm	500-502-10	—	—	—

*without SPC data output

Inch/Metric

Range	Order No.	Remarks (depth measuring bar / thumb roller / others)		
0 - 4"	500-170-20	ø3/40" rod	with thumb roller	—
0 - 4"	500-195-20*	ø3/40" rod	with thumb roller	—
0 - 6"	500-171-20	Blade	with thumb roller	—
0 - 6"	500-174-20	Blade	with thumb roller	Carbide-tipped jaws for OD measurement
0 - 6"	500-175-20	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 6"	500-178-20	ø3/40" rod	with thumb roller	—
0 - 6"	500-196-20*	Blade	with thumb roller	—
0 - 6"	500-159-20*	Blade	with thumb roller	Carbide-tipped jaws for OD measurement
0 - 6"	500-160-20*	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 8"	500-172-20	Blade	with thumb roller	—
0 - 8"	500-176-20	Blade	with thumb roller	Carbide-tipped jaws for OD measurement
0 - 8"	500-177-20	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 8"	500-197-20*	Blade	with thumb roller	—
0 - 8"	500-163-20*	Blade	with thumb roller	Carbide-tipped jaws for OD measurement
0 - 8"	500-164-20*	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 12"	500-173	Blade	with thumb roller	—
0 - 12"	500-167	Blade	with thumb roller	Carbide-tipped jaws for OD measurement
0 - 12"	500-168	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 12"	500-193*	Blade	with thumb roller	—
0 - 12"	500-165*	Blade	—	Carbide-tipped jaws for OD measurement
0 - 12"	500-166*	Blade	—	Carbide-tipped jaws for OD & ID measurement
0 - 18"	500-505-10	—	with thumb roller	—
0 - 24"	500-506-10	—	with thumb roller	—
0 - 40"	500-507-10	—	with thumb roller	—

*without SPC data output

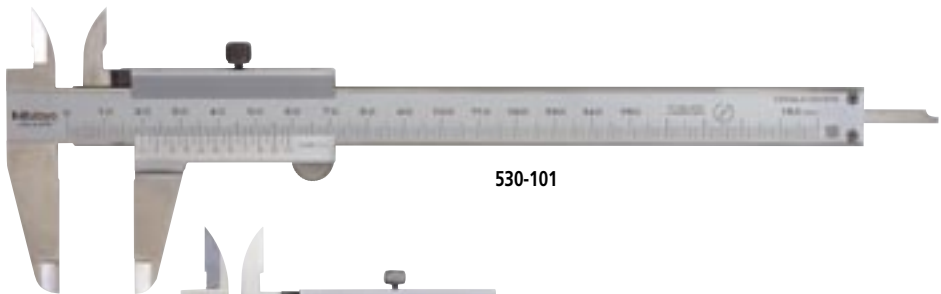
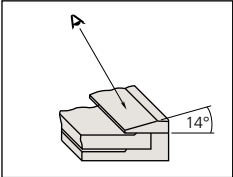


Vernier Caliper

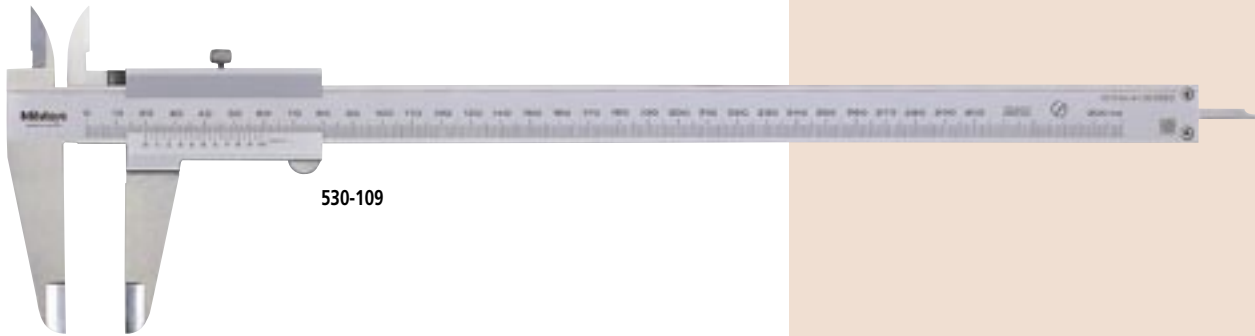
SERIES 530 — Standard model

FEATURES

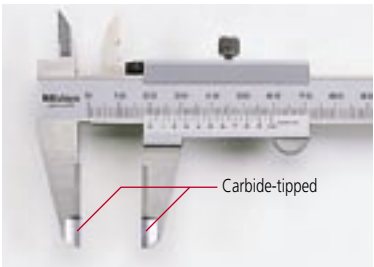
- Plain and basic design.
- Can measure OD (outside diameter), ID (inside diameter), depth, and steps.
- The small vernier face angle (14°) provides easy reading.
- Different reading scales on vernier. (metric/inch and inch models only)
- Clamping screw atop the slider.
- Carbide-tipped jaw type calipers are also available.



530-101



530-109



Carbide-tipped jaw type

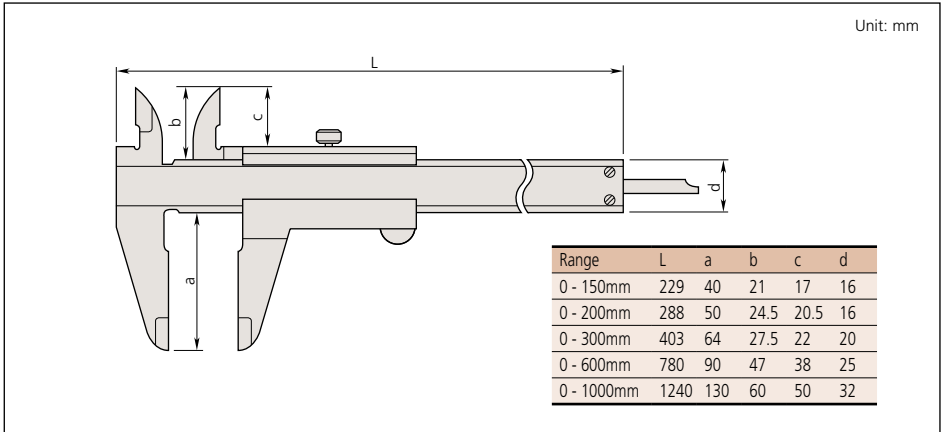


Round depth bar type

Technical Data

Accuracy: $\pm 0.05\text{mm}$ ($\leq 200\text{mm}$), $\pm 0.08\text{mm}$ ($\leq 300\text{mm}$)
 $\pm 0.10\text{mm}$ ($\leq 600\text{mm}$), $\pm 0.15\text{mm}$ ($\leq 1000\text{mm}$)
High accuracy type:
 $\pm 0.03\text{mm}$ ($\leq 200\text{mm}$), $\pm 0.04\text{mm}$ ($\leq 300\text{mm}$)
Graduation: 0.05mm, 0.05mm (1/128") or .001" (1/128")
High accuracy type:
0.02mm or 0.02mm (.001")

DIMENSION



Measurement Applications



OD measurement



ID measurement



Step measurement



Depth measurement

SPECIFICATIONS

Metric

Range	Order No.	Remarks (depth measuring bar / second scale graduation / others)		
0 - 150mm	530-102	ø1.9mm rod	—	—
0 - 150mm	530-101	Blade	—	—
0 - 150mm	530-320	Blade	—	Carbide-tipped jaws for OD measurement
0 - 150mm	530-335	Blade	—	Carbide-tipped jaws for OD & ID measurement
0 - 150mm	530-319	Blade	—	Clamping screw below the slider
0 - 150mm	530-122*	Blade	—	High accuracy model: $\pm 0.03\text{mm}$
0 - 200mm	530-108	Blade	—	—
0 - 200mm	530-321	Blade	—	Carbide-tipped jaws for OD measurement
0 - 200mm	530-123*	Blade	—	High accuracy model: $\pm 0.03\text{mm}$
0 - 300mm	530-109	Blade	—	—
0 - 300mm	530-322	Blade	—	Carbide-tipped jaws for OD measurement
0 - 300mm	530-124*	Blade	—	High accuracy model: $\pm 0.04\text{mm}$
0 - 600mm	530-501	—	—	—
0 - 1000mm	530-502	—	—	—

*Graduation: 0.02mm

Metric/Inch with metric/inch double scale

Range	Order No.	Remarks (depth measuring bar / second scale graduation / others)		
0 - 150mm	530-104	Blade	1/128"	—
0 - 150mm	530-316	Blade	1/128"	Clamping screw below the slider
0 - 150mm	530-125	Blade	1/128"	—
0 - 150mm	530-312*	Blade	.001"	High accuracy model: $\pm 0.03\text{mm}$
0 - 200mm	530-114	Blade	1/128"	—
0 - 200mm	530-118*	Blade	.001"	High accuracy model: $\pm 0.03\text{mm}$
0 - 300mm	530-115	Blade	1/128"	—
0 - 300mm	530-119*	Blade	.001"	High accuracy model: $\pm 0.04\text{mm}$

*Graduation: 0.02mm

Inch with inch/inch double scale

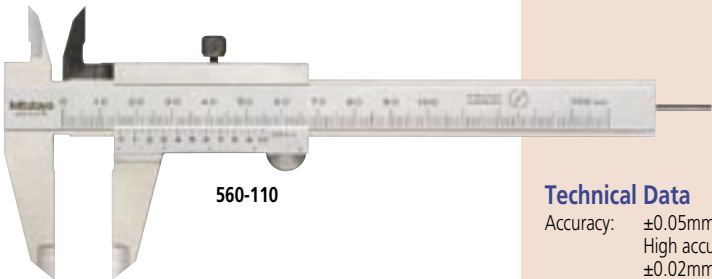
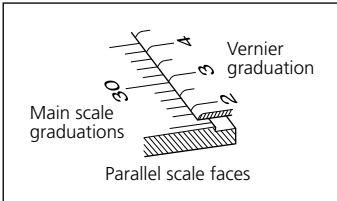
Range	Order No.	Remarks (depth measuring bar / second scale graduation / others)		
0 - 6"	530-105	Blade	1/128"	—
0 - 6"	530-314	Blade	1/128"	Carbide-tipped jaws for OD measurement
0 - 8"	530-116	Blade	1/128"	—

Vernier Caliper

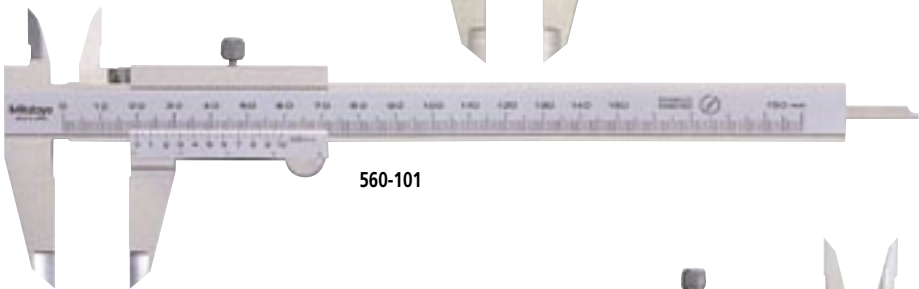
SERIES 560, 536 — Parellex-Free Type

FEATURES

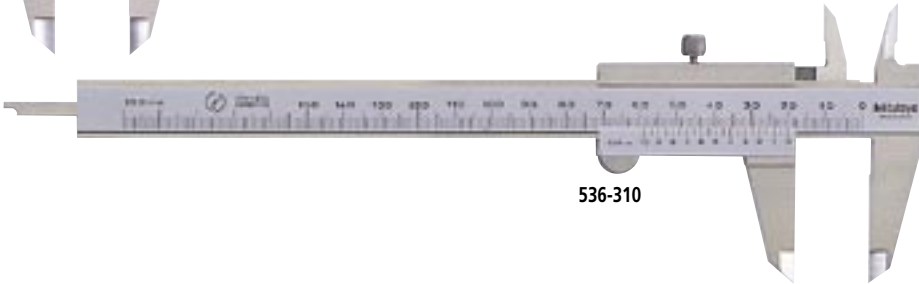
- Parallax-free vernier scales for easy and positive measurement.
- Can measure OD, ID, depth, and steps.
- With clamping screw atop the slider.
- Special model (Series 536) is also available designed for left-handers.



560-110



560-101



536-310

Technical Data

Accuracy: $\pm 0.05\text{mm}$ ($\leq 200\text{mm}$), $\pm 0.08\text{mm}$ ($\leq 300\text{mm}$)
High accuracy type:
 $\pm 0.02\text{mm}$ ($\leq 150\text{mm}$), $\pm 0.03\text{mm}$ ($\leq 200\text{mm}$)
Graduation: 0.05mm or 0.05mm ($1/128''$)
High accuracy type:
 0.02mm or 0.02mm ($.001''$)



SPECIFICATIONS

Metric				
Range	Order No.	Remarks (depth measuring bar / second scale graduation / others)		
0 - 100mm	560-110	$\varnothing 1.9\text{mm}$ rod	—	—
0 - 150mm	560-101	Blade	—	—
0 - 150mm	536-310	Blade	—	Left-handed type
0 - 150mm	560-122*	Blade	—	High accuracy model: $\pm 0.03\text{mm}$
0 - 200mm	560-108	Blade	—	—
0 - 300mm	560-109	Blade	—	—

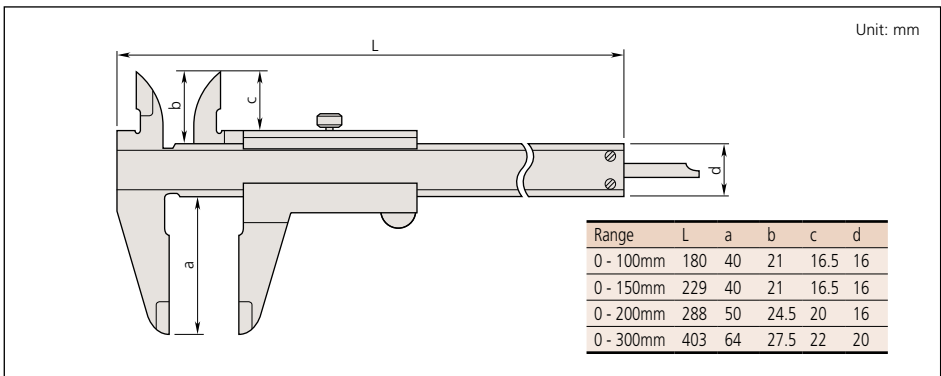
*Graduation: 0.02mm

Metric/Inch with metric/inch double scale

Range	Order No.	Remarks (depth measuring bar / second scale graduation / others)		
0 - 100mm	560-104	Blade	$1/128''$	—
0 - 200mm	560-118*	Blade	$.001''$	High accuracy model: $\pm 0.03\text{mm}$

*Graduation: 0.02mm

DIMENSION

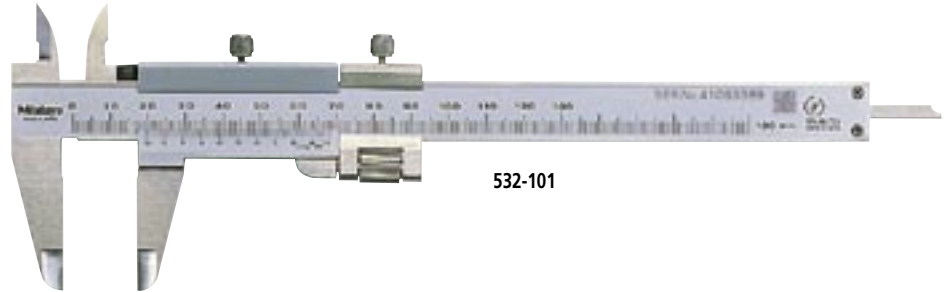


Vernier Caliper

SERIES 532 — with Fine Adjustment

FEATURES

- Provided with a fine-adjustment carriage to feed the slider finely.
- Can measure OD, ID, depth, and steps.



532-101

Technical Data

Accuracy: $\pm 0.03\text{mm}$ ($\leq 180\text{mm}$), $\pm 0.04\text{mm}$ ($\leq 280\text{mm}$)
 Graduation: 0.02mm, 0.02mm (.001") or .001" (1/128")

SPECIFICATIONS

Metric

Range	Order No.	Remarks (depth measuring bar / second scale graduation / others)		
0 - 130mm	532-101	Blade	—	with fine adjustment carriage
0 - 180mm	532-102	Blade	—	with fine adjustment carriage
0 - 280mm	532-103	Blade	—	with fine adjustment carriage

Metric/Inch

with metric/inch double scale

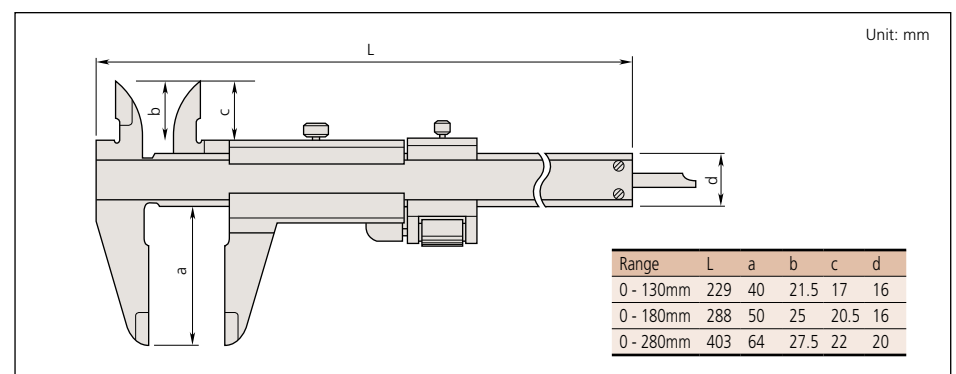
Range	Order No.	Remarks (depth measuring bar / second scale graduation / others)		
0 - 130mm	532-119	Blade	.001"	with fine adjustment carriage
0 - 180mm	532-120	Blade	.001"	with fine adjustment carriage
0 - 280mm	532-121	Blade	.001"	with fine adjustment carriage

Inch

with inch/inch double scale

Range	Order No.	Remarks (depth measuring bar / second scale graduation / others)		
0 - 5"	532-104	Blade	1/128"	with fine adjustment carriage
0 - 7"	532-105	Blade	1/128"	with fine adjustment carriage
0 - 11"	532-106	Blade	1/128"	with fine adjustment carriage

DIMENSION

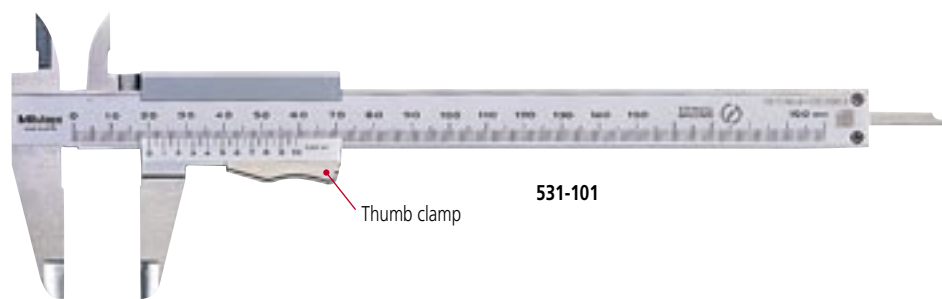


Vernier Caliper

SERIES 531 — with Thumb Clamp

FEATURES

- The slider moves only when the spindle loaded thumb clamp is depressed.
- Can measure OD, ID, depth, and steps.



Technical Data

Accuracy: Refer to the list of specifications.
 Graduation: 0.05mm, 0.05mm (1/128") or .001" (1/128")
 High accuracy type:
 0.02mm or 0.02mm (.001")

SPECIFICATIONS

Metric					
Range	Order No.	Accuracy	Remarks (depth measuring bar / Second scale graduation / Others)		
0 - 150mm	531-101	±0.05mm	Blade	—	—
0 - 150mm	531-140*	±0.03mm	Blade	—	High accuracy model
0 - 200mm	531-102	±0.05mm	Blade	—	—
0 - 200mm	531-141*	±0.03mm	Blade	—	High accuracy model
0 - 300mm	531-103	±0.08mm	Blade	—	—
0 - 300mm	531-142*	±0.04mm	Blade	—	High accuracy model

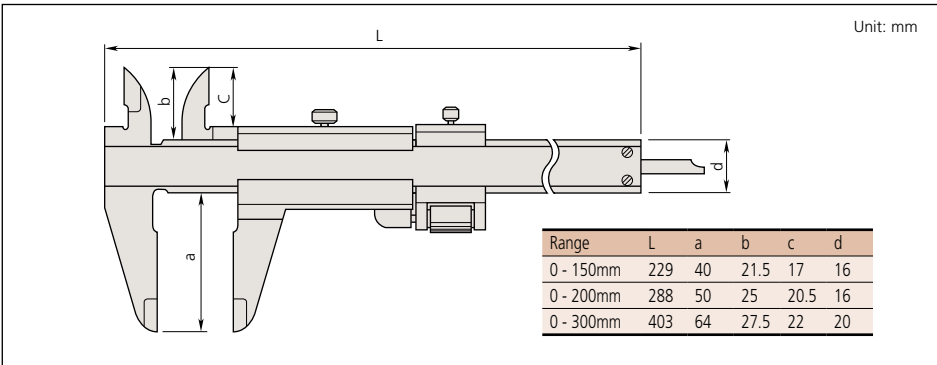
*Graduation: 0.02mm

Metric/Inch with metric/inch double scale					
Range	Order No.	Accuracy	Remarks (depth measuring bar / Second scale graduation / Others)		
0 - 150mm	531-107	±0.05mm	Blade	1/128"	—
0 - 150mm	531-122	±0.05mm	Blade	1/128"	with inch/mm conversion label
0 - 150mm	531-128*	±0.03mm	Blade	.001"	High accuracy model
0 - 200mm	531-108	±0.05mm	Blade	1/128"	—
0 - 200mm	531-129*	±0.03mm	Blade	.001"	High accuracy model
0 - 300mm	531-109	±0.08mm	Blade	1/128"	—
0 - 300mm	531-112*	±0.04mm	Blade	.001"	High accuracy model

*Graduation: 0.02mm

inch with inch/inch double scale					
Range	Order No.	Accuracy	Remarks (depth measuring bar / Second scale graduation / Others)		
0 - 6"	531-113	±.0015"	Blade	1/128"	—
0 - 8"	531-114	±.0015"	Blade	1/128"	—

DIMENSION

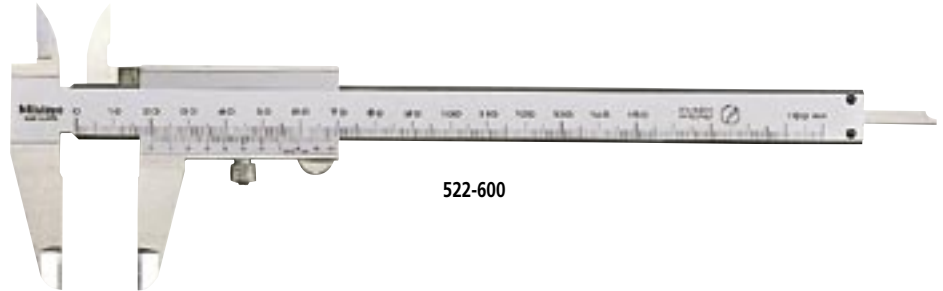
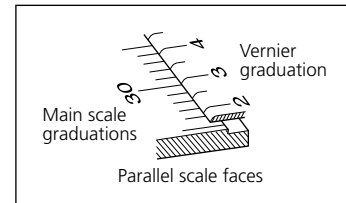


Vernier Caliper

SERIES 522 — Parallax-Free Type

FEATURES

- The main and vernier scales are flush-fitted to eliminate parallax errors because of the diamond-shape (octagonal) cross section of the main scale.
- Can measure OD, ID, depth, and steps.
- With clamping screw below the slider.



522-600

Technical Data

Accuracy: Refer to the list of specifications.
 Graduation: 0.05mm or 0.05mm (1/128")
 High accuracy type:
 0.02mm or 0.02mm (.001")



SPECIFICATIONS

Metric

Range	Order No.	Accuracy	Remarks (depth measuring bar / Second scale graduation / Others)		
0 - 150mm	522-600	±0.05mm	Blade	—	—
0 - 150mm	522-606*	±0.03mm	Blade	—	High accuracy model

*Graduation: 0.02mm

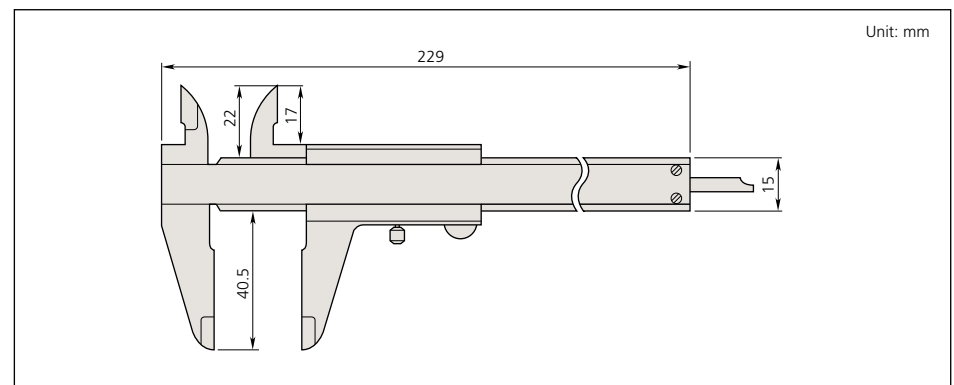
Metric/Inch

with metric/inch double scale

Range	Order No.	Accuracy	Remarks (depth measuring bar / Second scale graduation / Others)		
0 - 150mm	522-601	±0.05mm	Blade	1/128"	—
0 - 150mm	522-602*	±0.03mm	Blade	.001"	High accuracy model


*Graduation: 0.02mm

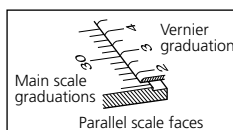
DIMENSION



SERIES 550, 160 — with Nib Style Jaws

- The rounded faces of the jaws are ideal for accurate ID (inside diameter) measurement.
- Inside and outside measurements can be directly read from the upper and lower slider graduations (series 160).
- With fine-adjustment carriage type is available (series 160).

- Parallax-free vernier scale type is available for easy and positive measurement (series 160).
 - With SPC output (series 550).
- 
- The diagram shows a close-up of a vernier scale. It consists of two parts: a 'Main scale' and a 'Vernier graduation'. The main scale has markings for 0, 5, and 10. The vernier graduation has markings for 0, 5, and 10, which are slightly offset from the main scale markings to allow for more precise measurements.



Metric	Digital model
--------	---------------

Range*	Order No.	Accuracy	Remarks
0 (10) - 200mm	550-201-20	±0.03mm	—
0 (10) - 300mm	550-231-10	±0.03mm	with offset/preset function for easy ID measurement
0 (20) - 450mm	550-203-10	±0.05mm	—
0 (20) - 600mm	550-205-10	±0.05mm	—
0 (20) - 1000mm	550-207-10	±0.07mm	—

*(): Minimum dimension in ID measurement

Inch/Metric	Digital model		
Range*	Order No.	Accuracy	Remarks
0 (.4") - 8"	550-201-20	±.001"	—
0 (.4") - 12"	550-231-10	±.0015"	with offset/preset function for easy ID measurement
0 (.5") - 18"	550-203-10	±.002"	—
0 (.5") - 24"	550-205-10	±.002"	—
0 (1") - 40"	550-207-10	±.003"	—

*(): Minimum dimension in ID measurement

Metric	with metric/metric double scale		
Range*	Order No.	Accuracy	Remarks
0 (10) - 200mm	160-170	±0.03mm	High accuracy model with parallax-free vernier scale (0.02mm graduation)
0 (10) - 300mm	160-180	±0.04mm	High accuracy model with parallax-free vernier scale (0.02mm graduation)
0 (20) - 450mm	160-130	±0.10mm	—
0 (20) - 600mm	160-131	±0.10mm	—
0 (20) - 1000mm	160-132	±0.15mm	—

*(): Minimum dimension in ID measurement

Range	L	a	b	d
0 - 200mm	288 (290)	60	8	16
0 - 300mm	445	75	12	20
0 - 450mm	632	100	18	25
0 - 600mm	780	100	18	25
0 - 1000mm	1240	140	24	32

(): Digital models



ABSOLUTE®
Absolute System Patented by MITUTOYO

(Refer to the page 9 for details.)

Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Resolution*: 0.01mm or .0005"/0.01mm
Graduation**: 0.02mm
Display*: LCD
Length standard*: ABSOLUTE electrostatic capacitance type
linear encoder

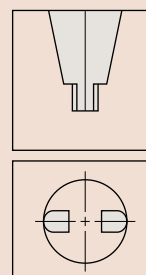
Max. response speed*: Unlimited
Battery*: SR44 (1 pc.), **938882**

Battery life*: Approx. 3.5 years under normal use
*Digital models **Analog models

Origin-set, Zero-setting, Data output, inch/mm conversion
(inch/mm models)

Alarm: Low voltage, Counting value composition error

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



Round surface of jaws for accurate CD measurement



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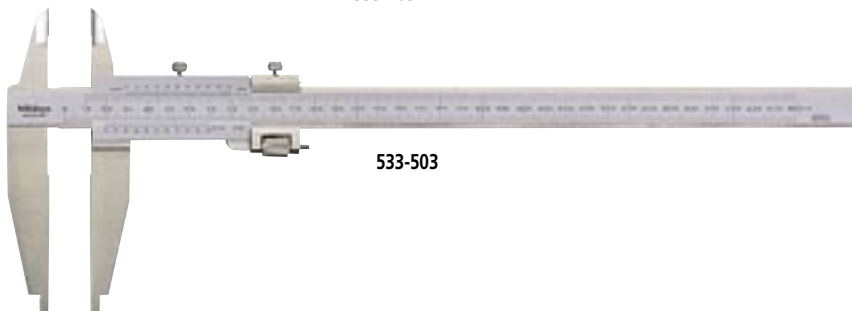
(Refer to the page 9 for details.)



551-201-20



533-403



533-503

Technical Data

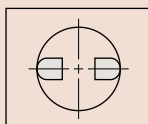
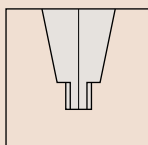
Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Resolution*: 0.01mm or .0005"/0.01mm
Graduation**: 0.02mm or 0.05mm
Display*: LCD
Length standard*: ABSOLUTE electrostatic capacitance type
linear encoder
Max. response speed*: Unlimited
Battery*: SR44 (1 pc.), **938882**
Battery life*: Approx. 3.5 years under normal use
*Digital models **Analog models

Function of Digital Model

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

Optional Accessory for Digital Model

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



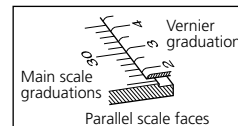
Round surface of jaws for accurate CD
measurement

ABSOLUTE Digimatic & Vernier Caliper

SERIES 551, 533 — with Nib Style and Standard Jaws

FEATURES

- The rounded faces of the jaws are ideal for accurate ID (inside diameter) measurement.
- Inside and outside measurements can be directly read from the upper and lower slider graduations (series 533).
- With fine-adjustment carriage type is available (series 533).
- Parallax-free vernier scale type is available for easy and positive measurement (series 533).
- With SPC output (series 551).



SPECIFICATIONS

Metric Digital model

Range*	Order No.	Accuracy	Remarks
0 (10) - 200mm	551-201-20	±0.03mm	—
0 (10) - 300mm	551-231-10	±0.04mm	with offset/preset function for easy ID measurement
0 (20) - 450mm	551-204-10	±0.06mm	—
0 (20) - 600mm	551-206-10	±0.06mm	—
0 (20) - 1000mm	551-207-10	±0.07mm	—

*(): Minimum dimension in ID measurement

Inch/Metric Digital model

Range*	Order No.	Accuracy	Remarks
0 (.4") - 8"	551-221-20	±.001"	—
0 (.4") - 12"	551-241-10	±.002"	with offset/preset function for easy ID measurement
0 (.5") - 18"	551-224-10	±.0025"	—
0 (.5") - 24"	551-226-10	±.0025"	—
0 (1") - 40"	551-227-10	±.003"	—

*(): Minimum dimension in ID measurement

Metric with metric/metric double scale

Range*	Order No.	Accuracy	Remarks
0 (10) - 200mm	533-401	±0.05mm	with parallax-free vernier scale
0 (10) - 300mm	533-403	±0.08mm	with parallax-free vernier scale
0 (20) - 450mm	533-404	±0.10mm	—
0 (20) - 600mm	533-405	±0.12mm	—
0 (20) - 1000mm	533-406	±0.15mm	—

*(): Minimum dimension in ID measurement

Metric with metric/metric double scale and fine adjustment

Range*	Order No.	Accuracy	Remarks
0 (10) - 280mm	533-503*	±0.04mm	High accuracy model with parallax-free vernier scale (0.02mm graduation)
0 (20) - 500mm	533-504*	±0.05mm	High accuracy model with 0.02mm graduation
0 (20) - 750mm	533-505*	±0.06mm	High accuracy model with 0.02mm graduation
0 (20) - 1000mm	533-506*	±0.07mm	High accuracy model with 0.02mm graduation

*(): Minimum dimension in ID measurement

Dial Caliper

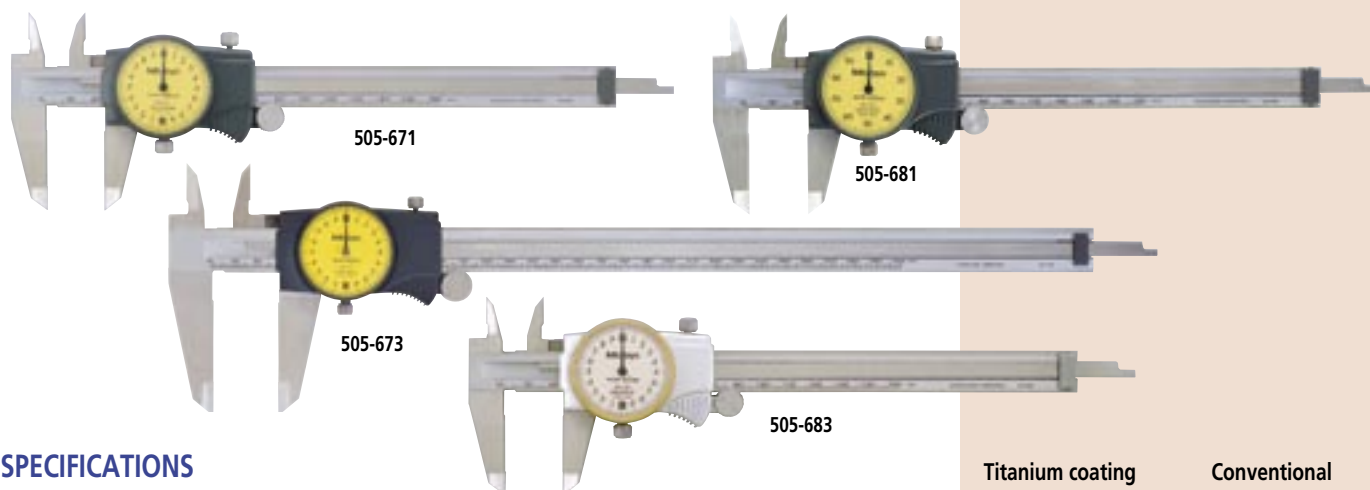
SERIES 505

FEATURES

- New designed dial movement for ultra smooth sliding and high shock protection.
- Titanium coating is applied to the sliding surface to strengthen the durability (except for 0 - 300mm and 0 - 12" model). No wearing by 100,000-time sliding test.
- Can measure OD, ID, depth, and steps.
- Clamping screw atop the slider.
- Special models available with carbide-tipped OD and ID jaws.



(Refer to the page 9 for details.)



SPECIFICATIONS

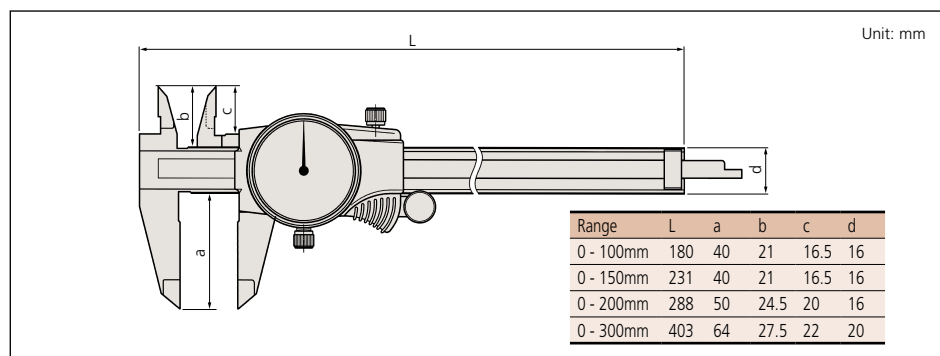
Metric			
Range	Order No.	Accuracy	Remarks (dial reading / others)
0 - 100mm	505-680	±0.015mm	0.01mm, 1mm/rev —
0 - 150mm	505-671 / 505-683*	±0.03mm	0.02mm, 2mm/rev —
0 - 150mm	505-707	±0.03mm	0.02mm, 2mm/rev Carbide-tipped jaws for OD measurement
0 - 150mm	505-711	±0.03mm	0.02mm, 2mm/rev Carbide-tipped jaws for OD & ID measurement
0 - 150mm	505-681 / 505-685*	±0.02mm	0.01mm, 1mm/rev —
0 - 200mm	505-672 / 505-684*	±0.03mm	0.02mm, 2mm/rev —
0 - 200mm	505-682 / 505-686*	±0.03mm	0.01mm, 1mm/rev —
0 - 300mm	505-673	±0.04mm	0.02mm, 2mm/rev —

*Silver cover type

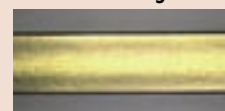
Inch			
Range	Order No.	Accuracy	Remarks (dial reading / others)
0 - 4"	505-674	±.001"	.001", .1"/rev —
0 - 6"	505-675 / 505-689*	±.001"	.001", .1"/rev —
0 - 6"	505-708	±.001"	.001", .1"/rev Carbide-tipped jaws for OD measurement
0 - 6"	505-712	±.001"	.001", .1"/rev Carbide-tipped jaws for OD & ID measurement
0 - 8"	505-676 / 505-690*	±.002"	.001", .1"/rev —
0 - 8"	505-709	±.002"	.001", .1"/rev Carbide-tipped jaws for OD measurement
0 - 8"	505-713	±.002"	.001", .1"/rev Carbide-tipped jaws for OD & ID measurement
0 - 12"	505-720	±.002"	.001", .2"/rev —
0 - 12"	505-677*	±.002"	.001", .1"/rev —
0 - 12"	505-721	±.002"	.001", .2"/rev Carbide-tipped jaws for OD measurement
0 - 12"	505-710*	±.002"	.001", .1"/rev Carbide-tipped jaws for OD measurement
0 - 12"	505-714*	±.002"	.001", .1"/rev Carbide-tipped jaws for OD & ID measurement

*Silver cover type

DIMENSION



Titanium coating



Wear: 0µm

Conventional



Wear: 4µm

Technical Data

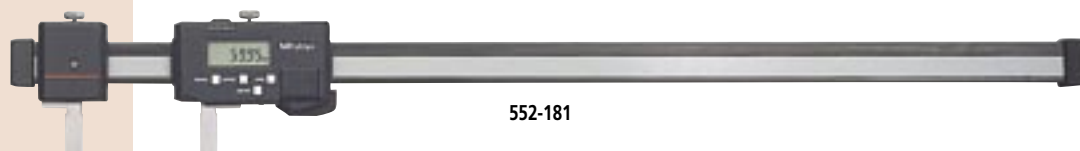
Accuracy: Refer to the list of specifications.
Dial reading: Refer to the list of specifications.

Digimatic Carbon Fiber Caliper

SERIES 552 — with Interchangeable Jaws

FEATURES

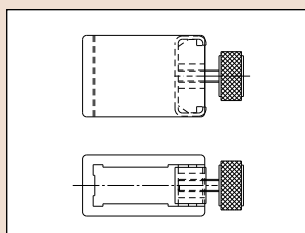
- The range of applications can be expanded by using the interchangeable jaws (optional).
- Quick and easy exchanging of jaws due to the unique clamping mechanism. (A pair of clamping wheels are standard accessories.)
- Provided with preset function for setting a desired starting point, which allows direct readout of offset measurements.
- With SPC data output.



552-181

Technical Data

Accuracy: Refer to the list of specifications.
(excluding quantizing error)
Resolution: 0.01mm or .0005"/0.01mm
Display: LCD
Length standard: Electrostatic capacitance type linear encoder
Max. response speed: 1600mm/s
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 3,000 hours in continuous use
Standard accessory: Attachment clamps (2 pcs.), **05GZA033**



Function

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

Optional Accessory

905338: SPC cable (straight, 1m)
905409: SPC cable (straight, 2m)
905689: SPC cable (L-type, 1m)
905690: SPC cable (L-type, 2m)

SPECIFICATIONS

Metric		
Range	Order No.	Accuracy
0 - 450mm	552-181	±0.04mm
0 - 600mm	552-182	±0.04mm

Inch/Metric		
Range	Order No.	Accuracy
0 - 18"	552-191	±.002"
0 - 24"	552-192	±.002"

Interchangeable Jaws (Optional)

Unit: mm

Standard Type

Order No.	Components	a	b
07CZA056	Right (07CAA044), Left (07CAA045)	28mm (1.1")	36mm (1.4")

Surface Plate Type

Order No.	a	b
07CZA044	90mm (3.5")	28mm (1.1")

Centerline Type

Order No.	Components	a	b
07CZA057	07CZA039 x 2pcs.	30mm	30mm

Scriber Type

Order No.	Components	a	b
07CZA055	Right (07CZA042), Left (07CZA043)	8mm	30mm

Inside Point Type

Order No.	Components	a	b
07CZA058	07CZA041 x 2pcs.	25mm	50mm

Inside Point Type

Order No.	Components	a	b
07CZA059	07CZA048 x 2pcs.	1"	2"

Surface Plate jaw
Centerline jaw

Digimatic Carbon Fiber Caliper

SERIES 552 — with Interchangeable Jaws

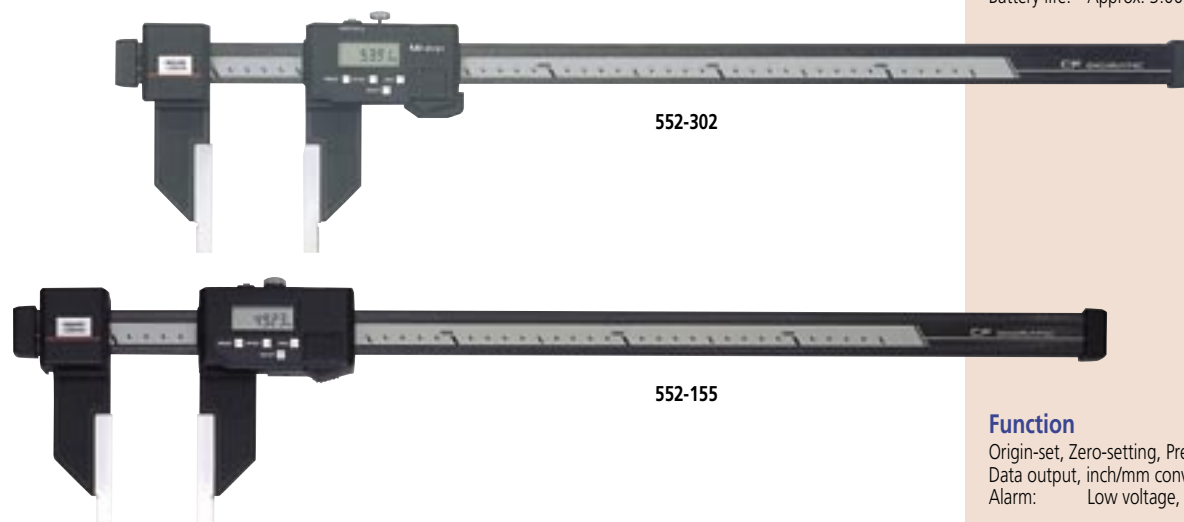
FEATURES

- Lightweight Digimatic Calipers that employ CFRP (Carbon Fiber Reinforced Plastics) in the beam and jaws.
- Highly durable and easy to handle.
- The range of applications can be expanded by using the optional attachments.
- Direct readout of ID measurements from the LCD. (Offset value can be set easily by pressing the Offset key.)
- Preset function for setting a desired starting point.
- With SPC data output.
- Special model available with ceramic jaws which are suitable to measure magnetic products.



Technical Data

Accuracy: Refer to the list of specifications.
(excluding quantizing error)
Resolution: 0.01mm or .0005"/0.01mm
Display: LCD
Length standard: Electrostatic capacitance type linear encoder
Max. response speed: 1600mm/s
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 3,000 hours in continuous use



SPECIFICATIONS

Metric			
Range*	Order No.	Accuracy	Remarks
0 (20) - 300mm	552-301	±0.04mm	—
0 (20) - 450mm	552-302 / 552-155	±0.05mm	552-155: with ceramic jaws
0 (20) - 600mm	552-303 / 552-156	±0.05mm	552-156: with ceramic jaws
0 (20) - 1000mm	552-304	±0.07mm	—
0 (20) - 1500mm	552-305	±0.09mm	—

*(): Minimum dimension in ID measurement

Inch/Metric			
Range*	Order No.	Accuracy	Remarks
0 (.5") - 12"	552-311	±.0015"	—
0 (.5") - 18"	552-312 / 552-165	±.002"	552-165: with ceramic jaws
0 (.5") - 24"	552-313 / 552-166	±.002"	552-166: with ceramic jaws
0 (1") - 40"	552-314	±.003"	—
0 (1") - 60"	552-315	±.0035"	—

*(): Minimum dimension in ID measurement

Metric Long jaw type			
Range*	Order No.	Accuracy	Remarks
0 (20) - 450mm	552-150	±0.07mm	—
0 (20) - 600mm	552-151	±0.07mm	—

*(): Minimum dimension in ID measurement

Inch/Metric Long jaw type			
Range*	Order No.	Accuracy	Remarks
0 (.5") - 12"	552-160	±.003"	—
0 (.5") - 24"	552-161	±.003"	—

*(): Minimum dimension in ID measurement

Function

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

Optional Accessory

- 905338:** SPC cable (straight, 1m)
905409: SPC cable (straight, 2m)
905689: SPC cable (L-type, 1m)
905690: SPC cable (L-type, 2m)
914055: Centerline attachments (mm)*
914056: Centerline attachments (inch)*
914057: Pointed ID measuring attachments (mm)*
914058: Pointed ID measuring attachments (inch)*
914053: Attachment clamps (for models up to 600mm/24" range)
914054: Attachment clamps (for models over 600mm/24" range)

* Attachment clamps are required and not available for long jaw type.



Centerline Attachments

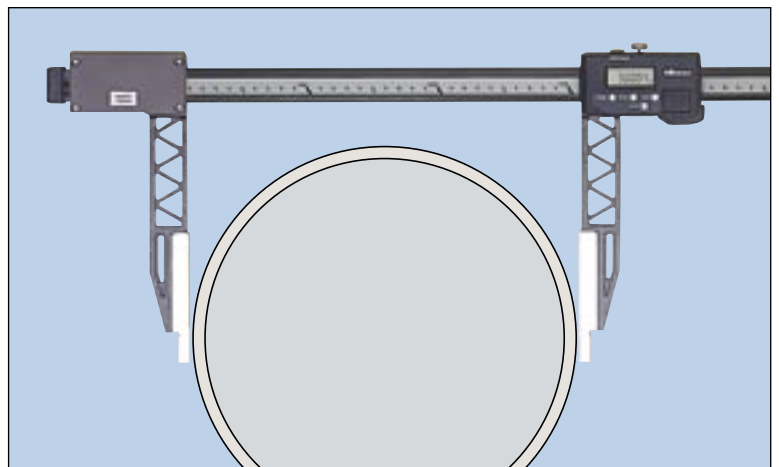
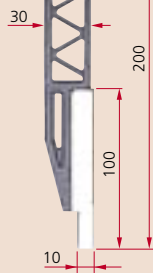
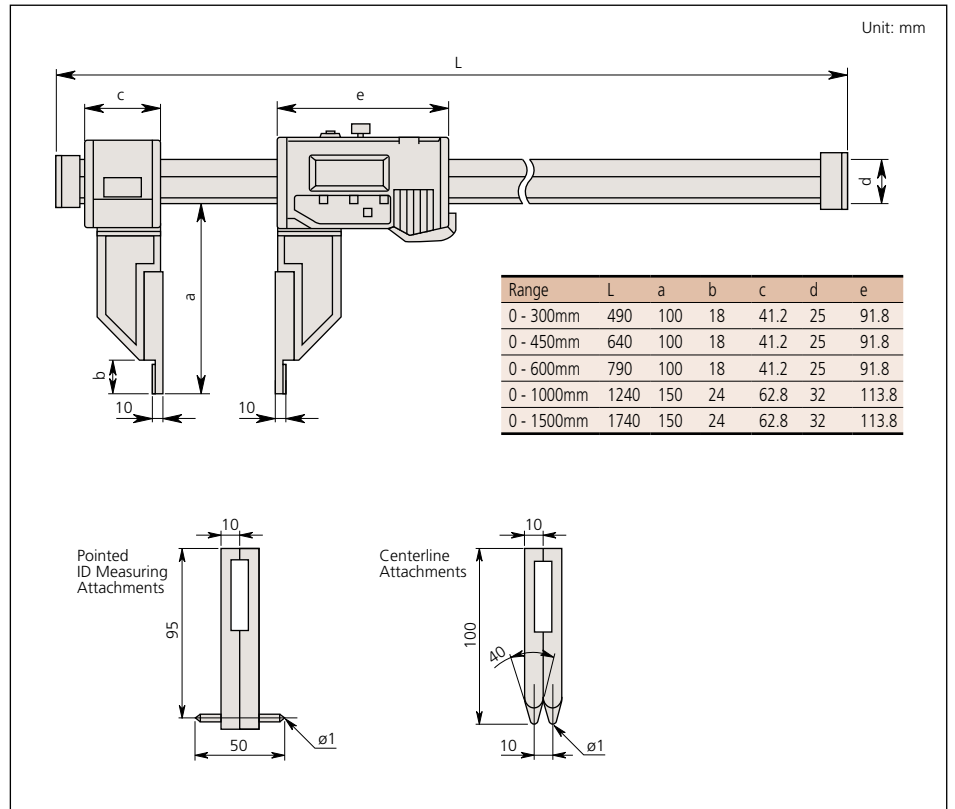
Pointed ID Measuring Attachments



Attachment Clamps



DIMENSION

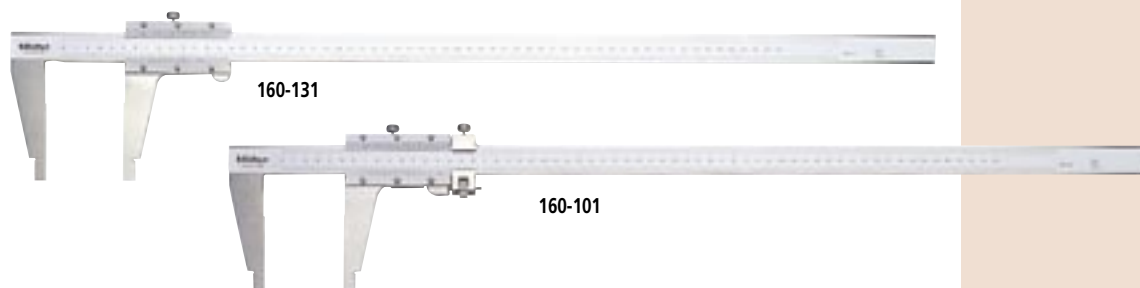


Vernier Caliper

SERIES 160 — with Nib Style Jaws and Fine Adjustment

FEATURES

- The jaws have round measuring faces for accurate ID measurement.
- With fine adjustment carriage to feed the slider finely. (without 160-130~134)
- Inside and outside measurements can be directly read from the upper and lower slider graduations, respectively.



SPECIFICATIONS

Metric with metric/metric double scale

Range*	Order No.	Accuracy	Remarks (lower scale graduation / upper scale graduation / Others)		
0 (20) - 450mm	160-130	±0.10mm	0.05mm	0.05mm	without fine adjustment
0 (20) - 600mm	160-131	±0.10mm	0.05mm	0.05mm	without fine adjustment
0 (20) - 1000mm	160-132	±0.15mm	0.05mm	0.05mm	without fine adjustment
0 (20) - 1500mm	160-133	±0.22mm	0.05mm	0.05mm	without fine adjustment
0 (20) - 2000mm	160-134	±0.28mm	0.05mm	0.05mm	without fine adjustment

*() : Minimum dimension in ID measurement

Metric with metric/metric double scale

Range*	Order No.	Accuracy	Remarks (lower scale graduation / upper scale graduation / Others)		
0 (10) - 300mm	160-127	±0.04mm	0.02mm	0.02mm	—
0 (20) - 450mm	160-128	±0.05mm	0.02mm	0.02mm	—
0 (20) - 600mm	160-101	±0.05mm	0.02mm	0.02mm	—
0 (20) - 1000mm	160-104	±0.07mm	0.02mm	0.02mm	—
0 (20) - 1500mm	160-110	±0.09mm	0.02mm	0.02mm	—
0 (20) - 2000mm	160-113	±0.12mm	0.02mm	0.02mm	—

*() : Minimum dimension in ID measurement

Metric/Inch with metric/inch double scale

Range*	Order No.	Accuracy	Remarks (lower scale graduation / upper scale graduation / Others)		
0 (10) - 300mm	160-150	±0.04mm	0.02mm	.001"	+10mm/.394" to reading in ID measurement
0 (20) - 450mm	160-151	±0.05mm	0.02mm	.001"	+20mm/.787" to reading in ID measurement
0 (20) - 600mm	160-153	±0.05mm	0.02mm	.001"	+20mm/.787" to reading in ID measurement
0 (20) - 1000mm	160-155	±0.07mm	0.02mm	.001"	+20mm/.787" to reading in ID measurement
0 (20) - 1500mm	160-157	±0.09mm	0.02mm	.001"	+20mm/.787" to reading in ID measurement
0 (20) - 2000mm	160-159	±0.12mm	0.02mm	.001"	+20mm/.787" to reading in ID measurement

*() : Minimum dimension in ID measurement

Inch with inch/inch double scale

Range*	Order No.	Accuracy	Remarks (lower scale graduation / upper scale graduation / Others)		
0 (.3") - 12"	160-124	±.0015"	.001"	.001"	—
0 (.5") - 18"	160-116	±.002"	.001"	.001"	—
0 (.5") - 24"	160-102	±.002"	.001"	.001"	—
0 (1") - 40"	160-105	±.003"	.001"	.001"	—
0 (1") - 60"	160-111	±.004"	.001"	.001"	—
0 (1") - 80"	160-114	±.005"	.001"	.001"	—

*() : Minimum dimension in ID measurement

Inch/Metric with inch/metric double scale

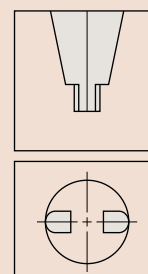
Range*	Order No.	Accuracy	Remarks (lower scale graduation / upper scale graduation / Others)		
0 (.3") - 12"	160-125	±.0015"	.001"	0.02mm	+3"/7.62mm to reading in ID measurement
0 (.5") - 18"	160-118	±.002"	.001"	0.02mm	+5"/12.7mm to reading in ID measurement
0 (.5") - 24"	160-103	±.002"	.001"	0.02mm	+5"/12.7mm to reading in ID measurement
0 (1") - 40"	160-106	±.003"	.001"	0.02mm	+1"/25.4mm to reading in ID measurement
0 (1") - 60"	160-112	±.004"	.001"	0.02mm	+1"/25.4mm to reading in ID measurement
0 (1") - 80"	160-115	±.005"	.001"	0.02mm	+1"/25.4mm to reading in ID measurement

*() : Minimum dimension in ID measurement

Technical Data

Accuracy: Refer to the list of specifications.

Graduation: Refer to the list of specifications.



Round surface of jaws for accurate CD measurement

DIMENSION

Unit: mm						
Range	L	a	b	c	d	e
0 - 300mm	445	95	25	12	20	10
0 - 450mm	630	125	100	18	25	14.8
0 - 600mm	780	125	100	18	25	14.8
0 - 1000mm	1240	172	140	24	32	17
0 - 1500mm	1800	212	180	30	32	19
0 - 2000mm	2300	220	180	30	40	23

Long Jaw Vernier Caliper

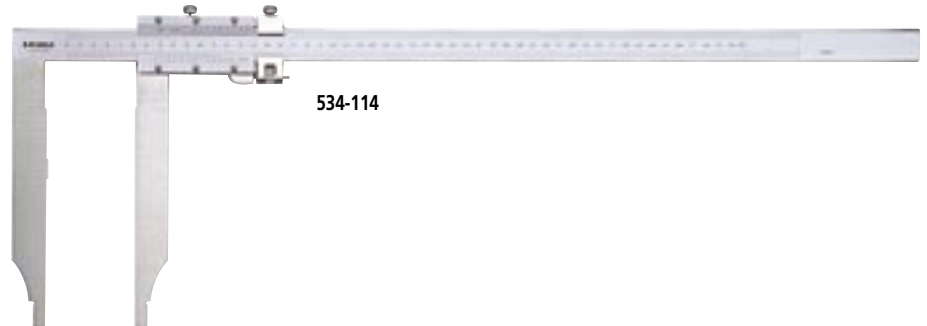
SERIES 534

FEATURES

- Long jaws for measuring hard-to-reach portions.



534-110



534-114

SPECIFICATIONS

Metric with metric/metric double scale

Range*	Order No.	Accuracy	Remarks (lower scale graduation / upper scale graduation / Others)		
0 (10) - 300mm	534-109	±0.07mm	0.05mm	0.05mm	without fine adjustment
0 (20) - 500mm	534-110	±0.13mm	0.05mm	0.05mm	without fine adjustment

*(): Minimum dimension in ID measurement

Metric with metric/metric double scale

Range*	Order No.	Accuracy	Remarks (lower scale graduation / upper scale graduation / Others)		
0 (10) - 300mm	534-113	±0.04mm	0.02mm	0.02mm	—
0 (20) - 500mm	534-114	±0.06mm	0.02mm	0.02mm	—
0 (20) - 750mm	534-115	±0.08mm	0.02mm	0.02mm	—
0 (20) - 1000mm	534-116	±0.10mm	0.02mm	0.02mm	—

*(): Minimum dimension in ID measurement

Metric/Inch with metric/inch double scale

Range*	Order No.	Accuracy	Remarks (lower scale graduation / upper scale graduation / Others)		
0 (10) - 300mm	534-101	±0.07mm	0.05mm	1/128"	+10mm/.394" to reading in ID measurement
0 (10) - 300mm	534-105	±0.04mm	0.02mm	.001"	+10mm/.394" to reading in ID measurement
0 (20) - 500mm	534-102	±0.13mm	0.05mm	1/128"	+20mm/.787" to reading in ID measurement
0 (20) - 500mm	534-106	±0.06mm	0.02mm	.001"	+20mm/.787" to reading in ID measurement
0 (20) - 700mm	534-103	±0.16mm	0.05mm	1/128"	+20mm/.787" to reading in ID measurement
0 (20) - 700mm	534-107	±0.08mm	0.02mm	.001"	+20mm/.787" to reading in ID measurement
0 (20) - 1000mm	534-104	±0.20mm	0.05mm	1/128"	+20mm/.787" to reading in ID measurement
0 (20) - 1000mm	534-108	±0.10mm	0.02mm	.001"	+20mm/.787" to reading in ID measurement

*(): Minimum dimension in ID measurement

Inch with inch/inch double scale

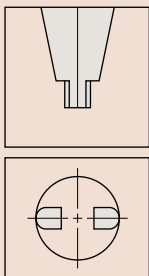
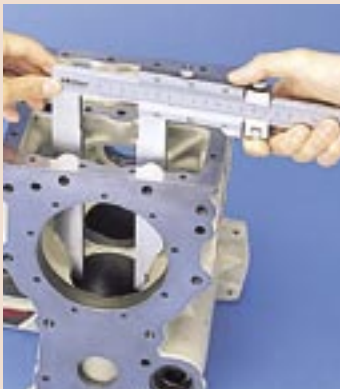
Range*	Order No.	Accuracy	Remarks (lower scale graduation / upper scale graduation / Others)		
0 (.3") - 12"	534-117	±.002"	.001"	.001"	—
0 (.8") - 20"	534-118	±.003"	.001"	.001"	—
0 (.8") - 30"	534-119	±.004"	.001"	.001"	—
0 (.8") - 40"	534-120	±.004"	.001"	.001"	—

*(): Minimum dimension in ID measurement

Technical Data

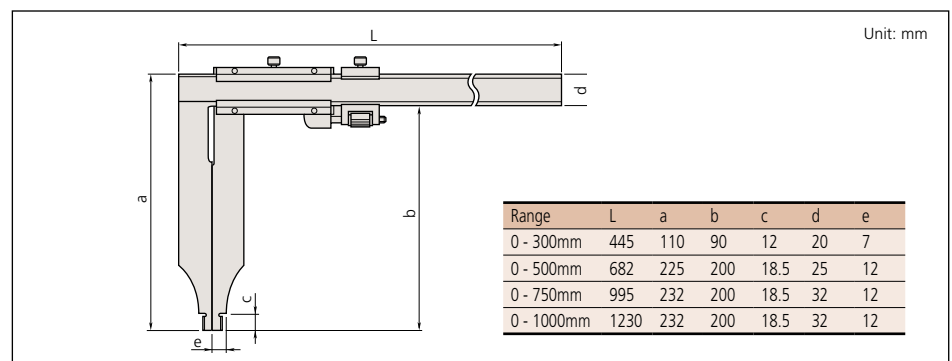
Accuracy: Refer to the list of specifications.

Graduation: Refer to the list of specifications.



Round surface of jaws for accurate CD measurement

DIMENSION



Offset Caliper

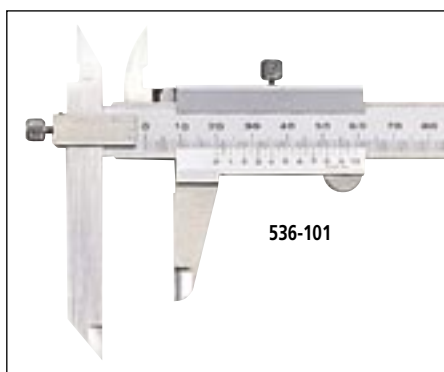
SERIES 573, 536 — ABSOLUTE Digimatic and vernier type

FEATURES

- Main scale jaw can be slid up and down to facilitate measurement of stepped sections. (Hard-to-get-at dimensions such as A, B, C can be accurately measured.)
- With depth bar.
- With SPC data output. (series 573)



573-101



536-101

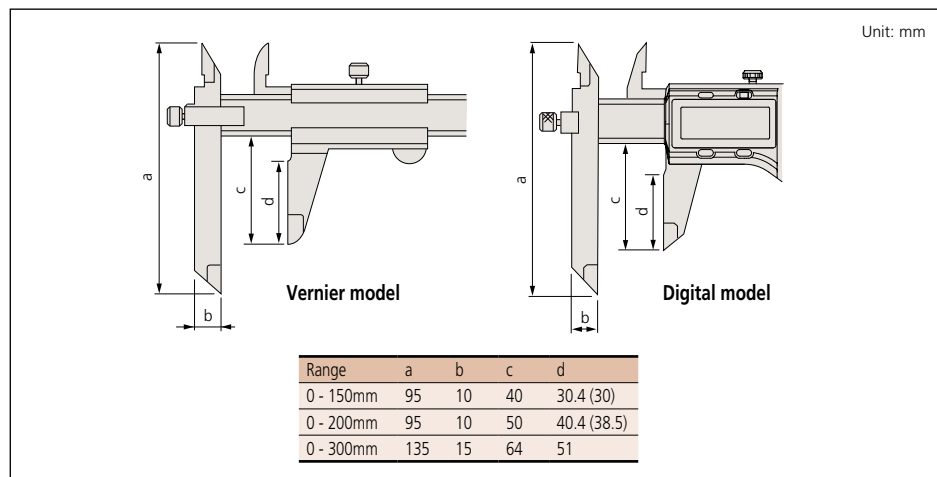
SPECIFICATIONS

Metric Digital model		
Range	Order No.	Accuracy
0 - 150mm	573-101-20	±0.02mm
0 - 200mm	573-102-20	±0.02mm
0 - 300mm	573-103-10	±0.03mm

Metric		
Range	Order No.	Accuracy
0 - 150mm	536-101	±0.05mm
0 - 200mm	536-102	±0.05mm
0 - 300mm	536-103	±0.08mm

Inch/Metric Digital model		
Range	Order No.	Accuracy
0 - 6"	573-201-20	±.001"
0 - 8"	573-202-20	±.001"
0 - 12"	573-203-10	±.0015"

DIMENSION



SPC

ABSOLUTE
Absolute System Patented by MITUTOYO

(Refer to the page 9 for details.)

Technical Data

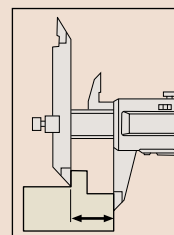
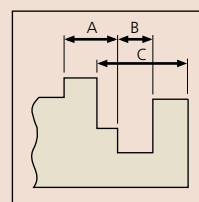
Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Resolution*: 0.01mm or .0005"/0.01mm
Graduation**: 0.05mm
Display*: LCD
Length standard*: ABSOLUTE electrostatic capacitance type linear encoder
Max. response speed*: Unlimited
Battery*: SR44 (1 pc.), **938882**
Battery life*: Approx. 3.5 years under normal use
*Digital models **Analog models

Function of Digital Model

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 for Digital Model

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





(Refer to the page 9 for details.)

Technical Data

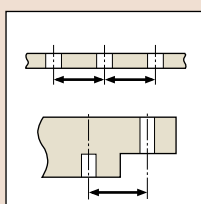
Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Resolution*: 0.01mm or .0005"/0.01mm
Graduation*: 0.05mm
Display*: LCD
Length standard*: ABSOLUTE electrostatic capacitance type
linear encoder
Max. response speed*: Unlimited
Battery*: SR44 (1 pc.), **938882**
Battery life*: Approx. 3.5 years under normal use
*Digital models **Analog models

Function of Digital Model

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 for Digital Model

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

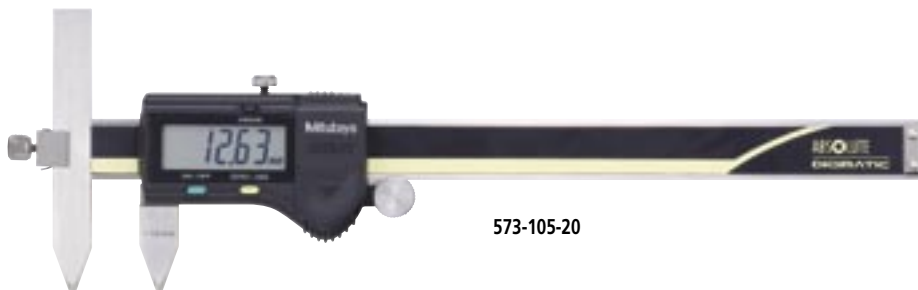


Offset Centerline Caliper

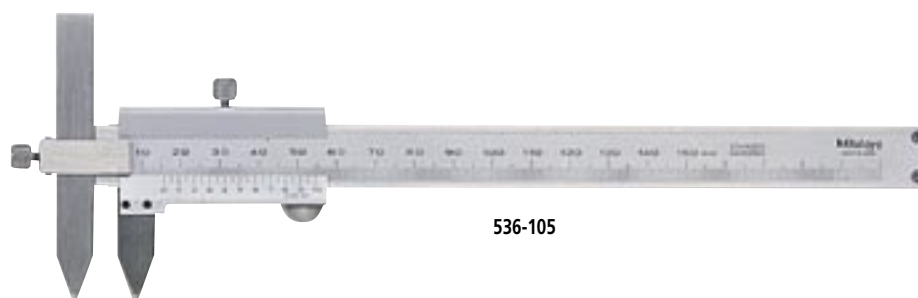
SERIES 534, 536 — ABSOLUTE Digimatic and vernier type

FEATURES

- Specially designed for center to center distance measurements on the same and offset planes.
- Can also measure from edge to center.
- Hole diameter should be in the range of 1.5mm - 10mm (.06" - .4").
- With SPC data output. (series 573)



573-105-20



536-105

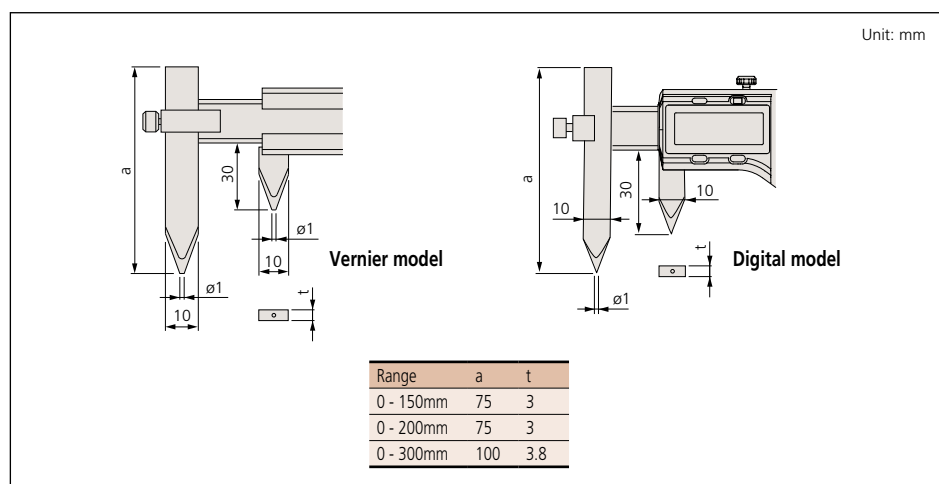
SPECIFICATIONS

Metric Digital model		
Range	Order No.	Accuracy
10 - 150mm	573-105-20	±0.03mm
10 - 200mm	573-106-20	±0.03mm

Inch/Metric Digital model		
Range	Order No.	Accuracy
.4 - 6"	573-205-20	±.0015"
.4 - 8"	573-206-20	±.0015"

Metric		
Range	Order No.	Accuracy
10 - 150mm	536-105	±0.05mm
10 - 200mm	536-106	±0.05mm
10 - 300mm	536-107	±0.08mm

DIMENSION

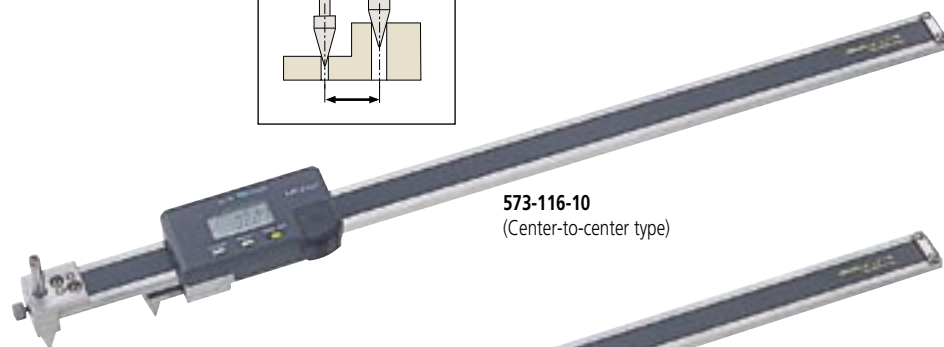
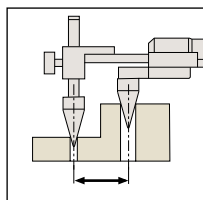


ABSOLUTE Back-Jaw Centerline Caliper

SERIES 537 — Center-to-center & edge-to-center Types

FEATURES

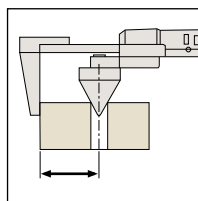
- Specially designed to measure the distance between two centers or the distance from an edge to center.
- Provided with jaws on the back of the slider, measurements can be read easily by looking down.
- Direct reading of pitch measurements is available due to the offset value setting function.
- With SPC data output.



573-116-10
(Center-to-center type)



573-118-10
(Edge-to-center type)

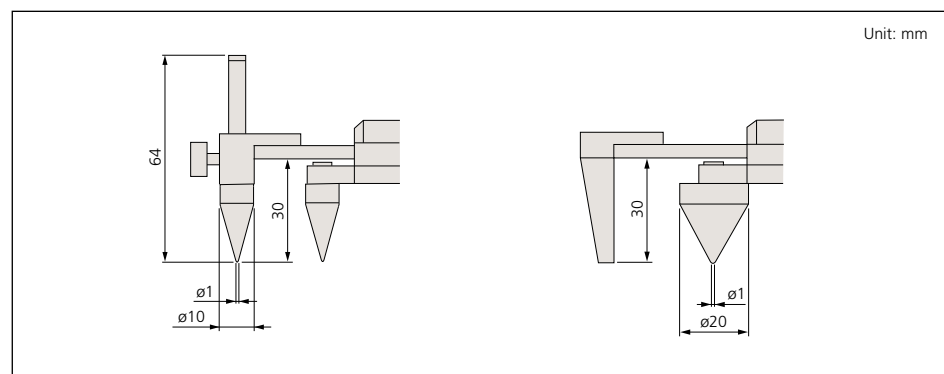


SPECIFICATIONS

Metric — Center-to-center distance type		
Range	Order No.	Accuracy
10 - 200mm	573-116-10	±0.10mm
10 - 300mm	573-117-10	±0.15mm

Metric — Edge-to-center distance type		
Range	Order No.	Accuracy
10 - 200mm	573-118-10	±0.10mm
10 - 300mm	573-119-10	±0.15mm

DIMENSION



SPC

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(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
Length standard*: ABSOLUTE electrostatic capacitance type linear encoder
Max. response speed: Unlimited
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 3.5 years under normal use

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)



(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
Graduation**: 0.05mm
Display*: LCD
Length standard*: ABSOLUTE electrostatic capacitance type
linear encoder
Max. response speed*: Unlimited
Battery*: SR44 (1 pc.), **938882**
Battery life*: Approx. 3.5 years under normal use
*Digital models **Analog models

Function of Digital Model

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 for Digital Model

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

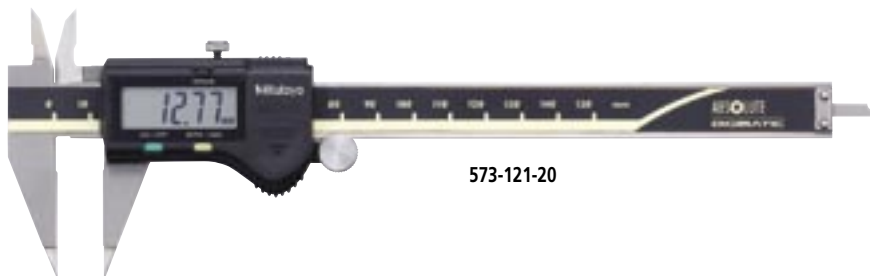


Point Caliper

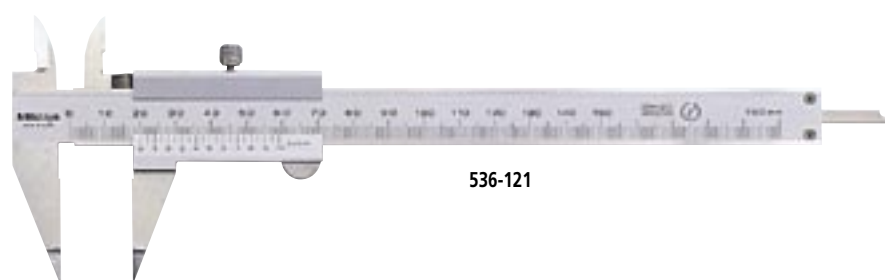
SERIES 573, 536 — ABSOLUTE Digimatic and vernier type

FEATURES

- Narrow tip jaws fit into very small grooves and tracks, making many previously difficult outside measurements far easier to obtain.
- With depth bar.
- With SPC data output. (series 573)



573-121-20



536-121

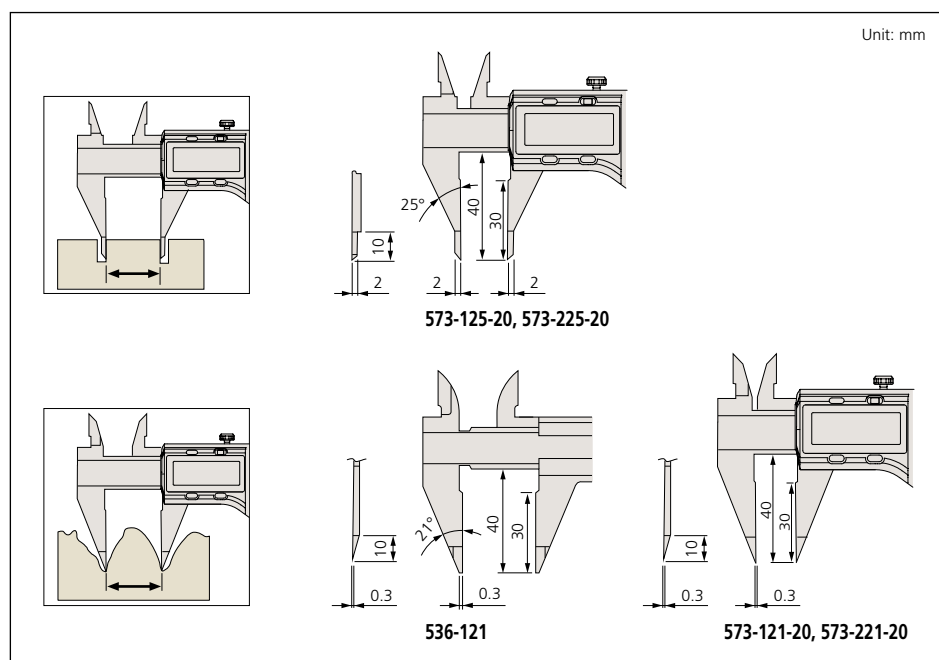
SPECIFICATIONS

Metric Digital model		
Range	Order No.	Accuracy
0 - 150mm	573-121-20	±0.02mm
0 - 200mm	573-125-20	±0.02mm

Inch/Metric Digital model		
Range	Order No.	Accuracy
0 - 6"	573-221-20	±.001"
0 - 8"	573-225-20	±.001"

Metric		
Range	Order No.	Accuracy
0 - 150mm	536-121	±0.05mm

DIMENSION

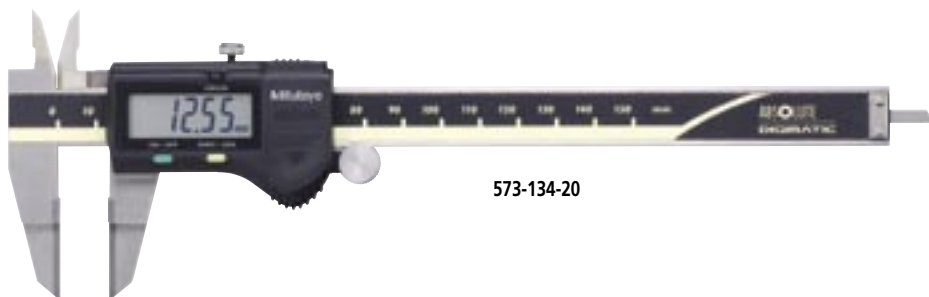


Blade Type Caliper

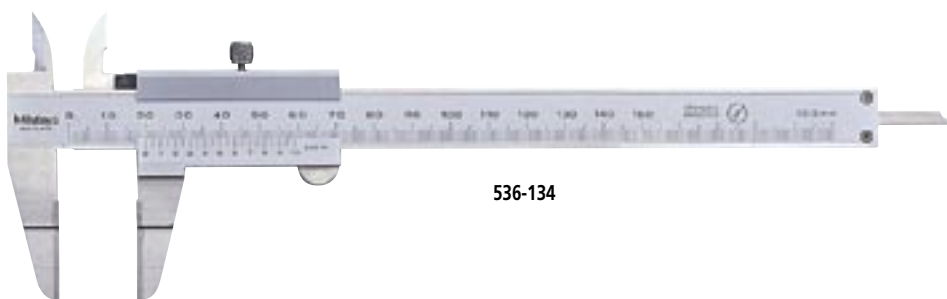
SERIES 573, 536 — ABSOLUTE Digimatic and vernier type

FEATURES

- The thin blade type jaws fit into very small grooves and making previously difficult outside measurements far easier to obtain.
- The OD measuring faces are carbide-tipped.
- With depth bar.
- With SPC data output. (series 573)



573-134-20



536-134

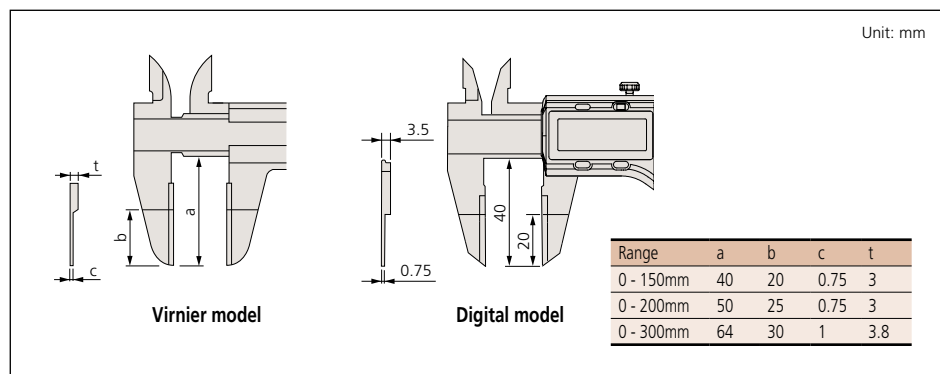
SPECIFICATIONS

Metric Digital model		
Range	Order No.	Accuracy
0 - 150mm	573-134-20	±0.02mm

Inch/Metric Digital model		
Range	Order No.	Accuracy
0 - 6"	573-234-20	±.001"

Metric		
Range	Order No.	Accuracy
0 - 150mm	536-134	±0.05mm
0 - 200mm	536-135	±0.05mm
0 - 300mm	536-136	±0.08mm

DIMENSION



SPC

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(Refer to the page 9 for details.)

Technical Data

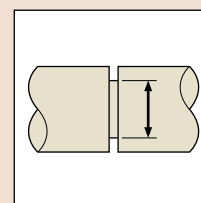
Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Resolution*: 0.01mm or .0005"/0.01mm
Graduation**: 0.05mm
Display*: LCD
Length standard*: ABSOLUTE electrostatic capacitance type linear encoder
Max. response speed*: Unlimited
Battery*: SR44 (1 pc.), **938882**
Battery life*: Approx. 3.5 years under normal use
*Digital models **Analog models

Function of Digital Model

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 for Digital Model

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



Technical Data

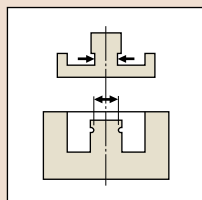
Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Resolution*: 0.01mm or .0005"/0.01mm
Graduation*: 0.05mm
Display*: LCD
Length standard*: ABSOLUTE electrostatic capacitance type
linear encoder
Max. response speed*: Unlimited
Battery*: SR44 (1 pc.), **938882**
Battery life*: Approx. 3.5 years under normal use
*Digital models **Analog models

Function of Digital Model

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 for Digital Model

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



Neck Caliper

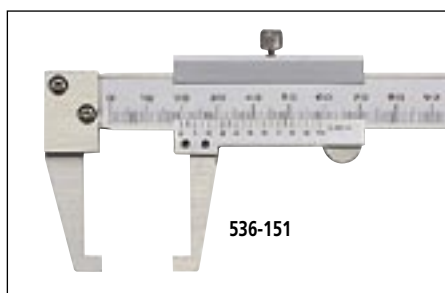
SERIES 573, 536 — ABSOLUTE Digimatic and vernier type

FEATURES

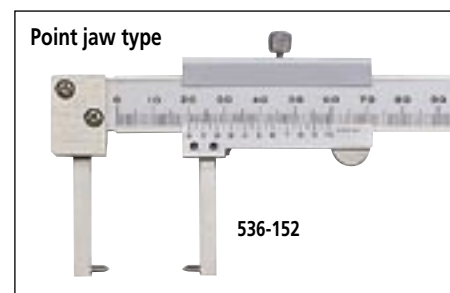
- Can measure wall thickness inside bores and recesses.
- With SPC data output. (series 573)



573-151-20



536-151



536-152

SPECIFICATIONS

Metric Digital model		
Range	Order No.	Accuracy
0 - 150mm	573-151-20	±0.03mm
0 - 150mm	573-152-20*	±0.03mm

*Point type

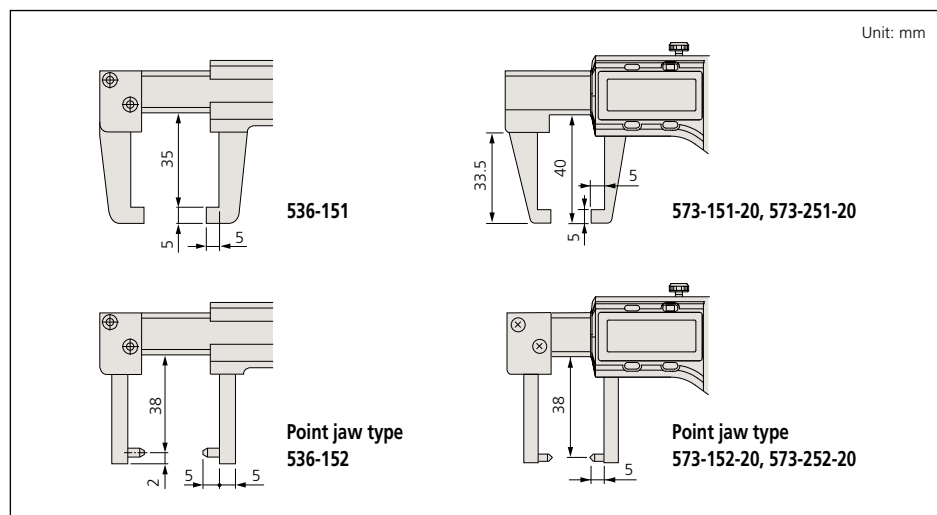
Inch/Metric Digital model		
Range	Order No.	Accuracy
0 - 6"	573-251-20	±.0015"
0 - 6"	573-252-20*	±.0015"

*Point type

Metric		
Range	Order No.	Accuracy
0 - 150mm	536-151	±0.05mm
0 - 300mm	536-152*	±0.05mm

*Point type

DIMENSION



ABSOLUTE Inside Caliper

SERIES 573, 536 — Knife-edge/Inside Groove/Point Jaw Type

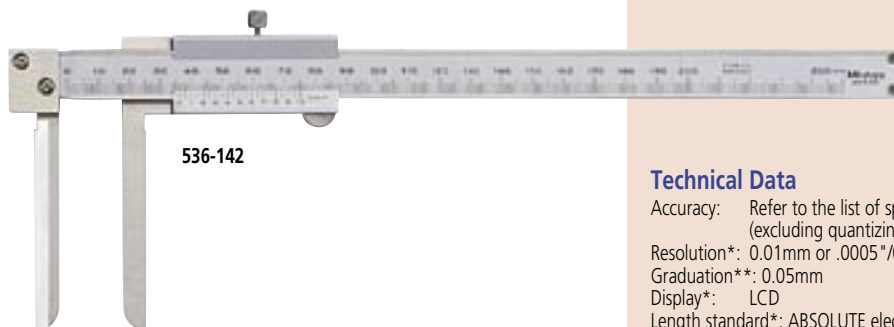
FEATURES

- Specially designed for inside measurements in hard-to-reach places.
- With SPC data output. (series 573)

Knife-edge type



573-142-20



536-142

Inside groove type



573-145-20

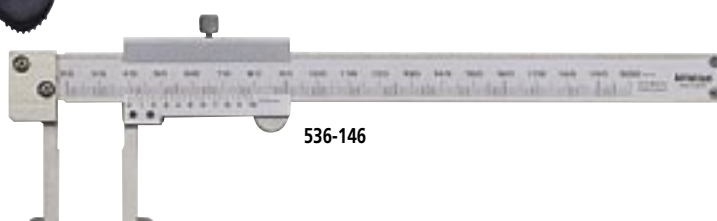


536-145

Point jaw type



573-146-20



536-146

SPECIFICATIONS

Metric Digital model

Range	Order No.	Accuracy	Remarks
10 - 200mm	573-142-20	±0.05mm	Knife-edge type, Measurable min. hole diameter: ø10mm
10 - 150mm	573-145-20	±0.05mm	Inside groove type, Measurable min. hole diameter: ø10mm
20 - 150mm	573-146-20	±0.03mm	Point jaw type, Measurable min. hole diameter: ø20mm

Inch/Metric Digital model

Range	Order No.	Accuracy	Remarks
.4" - 8"	573-242-20	±.002"	Knife-edge type, Measurable min. hole diameter: ø.4"
.4" - 6"	573-245-20	±.002"	Inside groove type, Measurable min. hole diameter: ø.4"
.8" - 6"	573-246-20	±.0015"	Point jaw type, Measurable min. hole diameter: ø.8"

Metric

Range	Order No.	Accuracy	Remarks
10 - 200mm	536-142	±0.12mm	Knife-edge type, Measurable min. hole diameter: ø10mm
10 - 150mm	536-145	±0.05mm	Inside groove type, Measurable min. hole diameter: ø10mm
20 - 150mm	536-146	±0.05mm	Point jaw type, Measurable min. hole diameter: ø20mm
30 - 300mm	536-147	±0.08mm	Point jaw type, Measurable min. hole diameter: ø30mm
70 - 450mm	536-148	±0.10mm	Point jaw type, Measurable min. hole diameter: ø70mm
70 - 600mm	536-149	±0.12mm	Point jaw type, Measurable min. hole diameter: ø70mm

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

Graduation**: 0.05mm

Display*: LCD

Length standard*: ABSOLUTE electrostatic capacitance type linear encoder

Max. response speed*: Unlimited

Battery*: SR44 (1 pc.), 938882

Battery life*: Approx. 3.5 years under normal use

*Digital models **Analog models

Function of Digital Model

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

Alarm: Low voltage, Counting value composition error

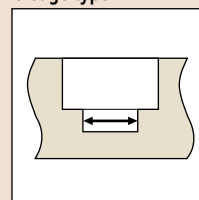
Optional Accessory for Digital Model

959143: Data hold unit

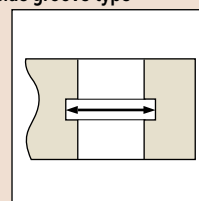
959149: SPC cable with data switch (1m)

959150: SPC cable with data switch (2m)

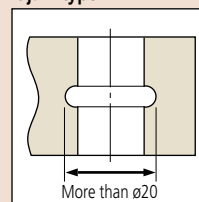
Knife-edge type



Inside groove type



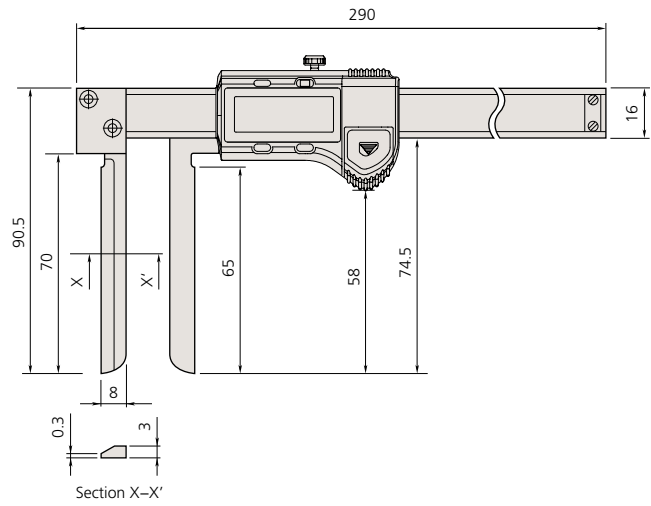
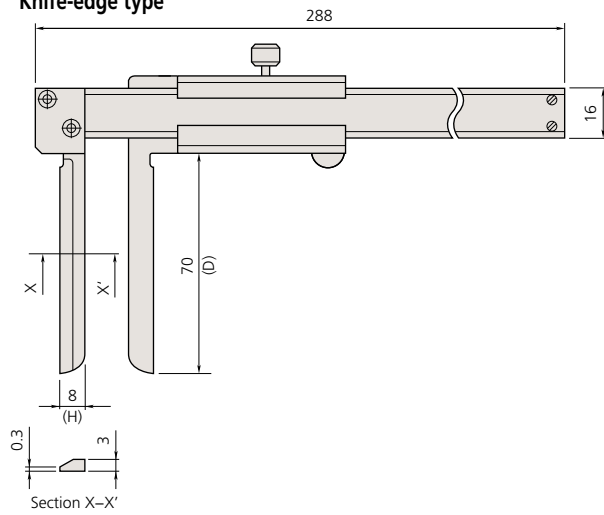
Point jaw type



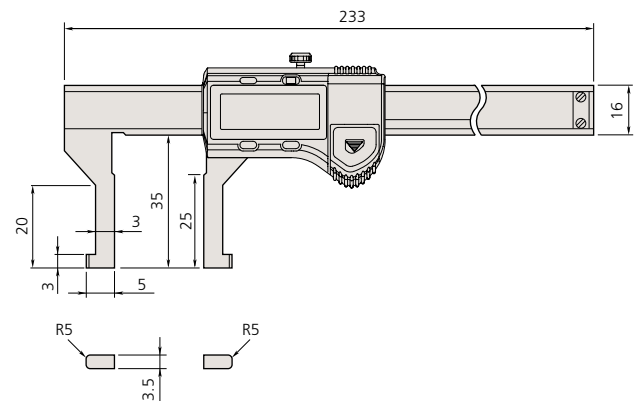
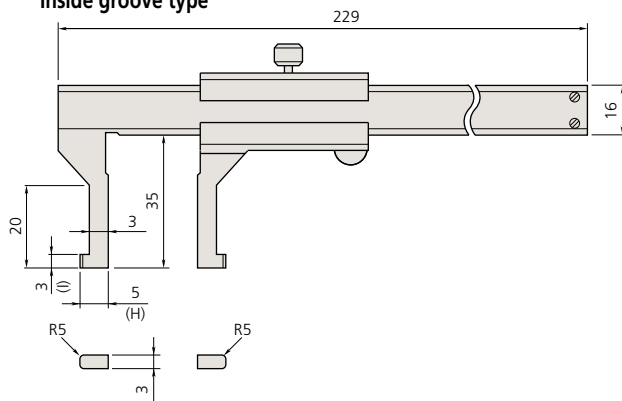
DIMENSION

Unit: mm

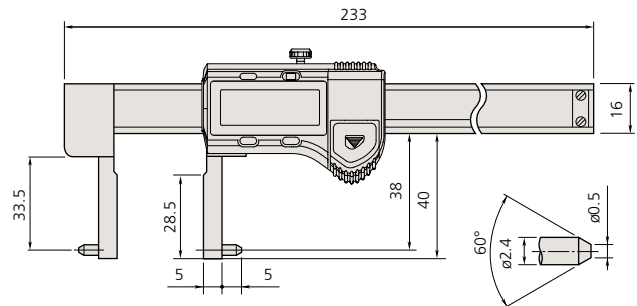
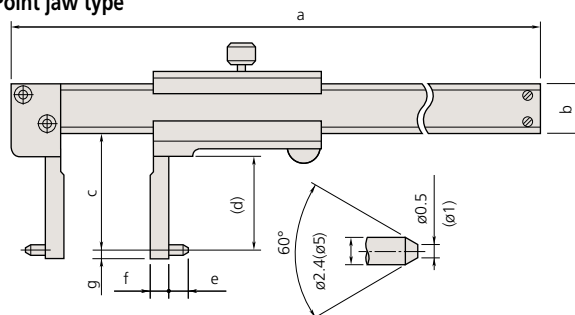
Knife-edge type



Inside groove type



Point jaw type



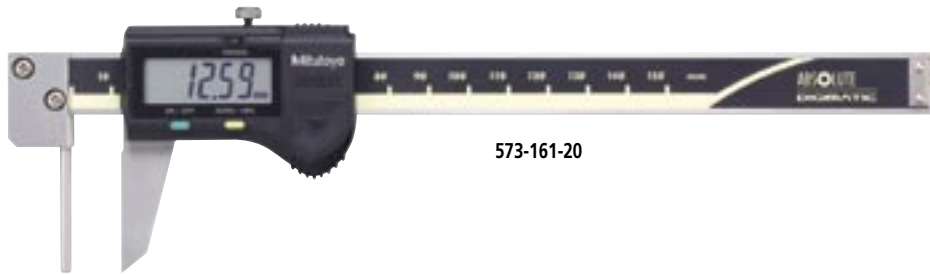
Range	a	b	c	d	e	f	g
150mm	229	16	38	31	5	5	2
300mm	403	20	98	89	5	10	2
450mm	610	25	145	136	10	25	5
600mm	750	25	145	136	10	25	5

Tube Thickness Caliper

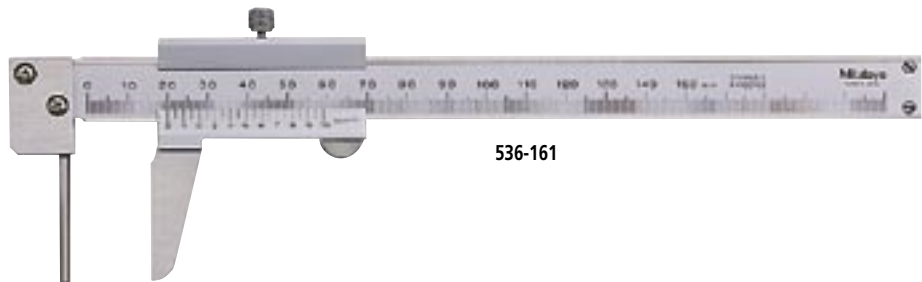
SERIES 573, 536 — ABSOLUTE Digimatic and vernier type

FEATURES

- The main scale jaw is a round bar that facilitates measurements of tube wall thickness.
- With SPC data output. (series 573)



573-161-20



536-161

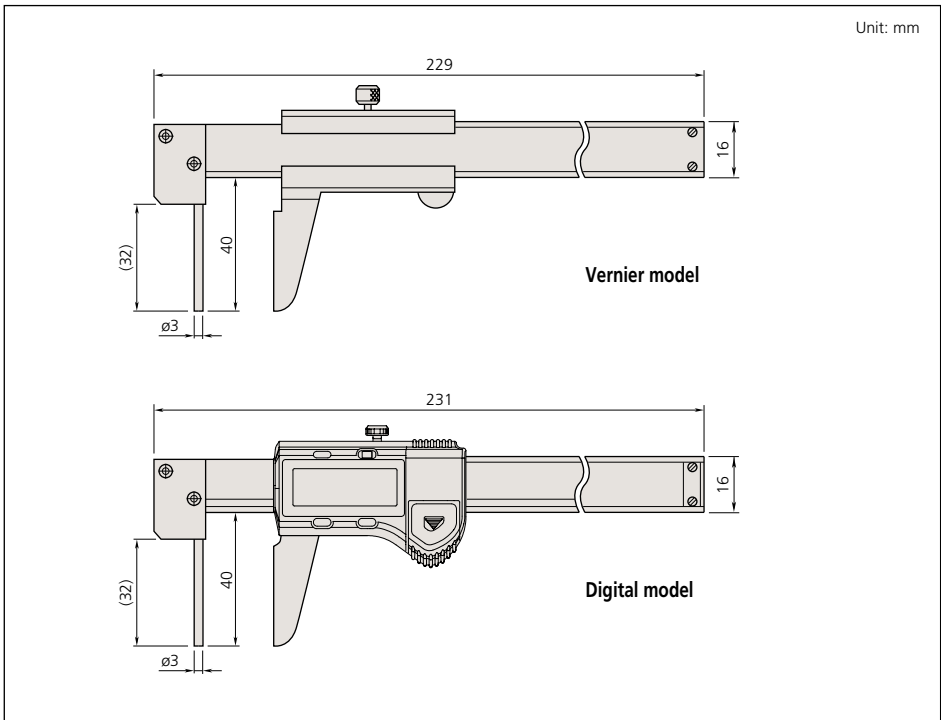
SPECIFICATIONS

Metric Digital model		
Range	Order No.	Accuracy
0 - 150mm	573-161-20	±0.05mm

Metric		
Range	Order No.	Accuracy
0 - 150mm	536-161	±0.05mm

Inch/Metric Digital model		
Range	Order No.	Accuracy
0 - 6"	573-261-20	±.002"

DIMENSION



SPC

ABSOLUTE
Absolute System Patented by MITUTOYO

(Refer to the page 9 for details.)

Technical Data

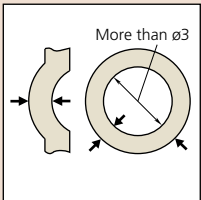
Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Resolution*: 0.01mm or .0005"/0.01mm
Graduation**: 0.05mm
Display*: LCD
Length standard: ABSOLUTE electrostatic capacitance type linear encoder
Max. response speed*: Unlimited
Battery*: SR44 (1 pc.), **938882**
Battery life*: Approx. 3.5 years under normal use
*Digital models **Analog models

Function of Digital Model

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 for Digital Model

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

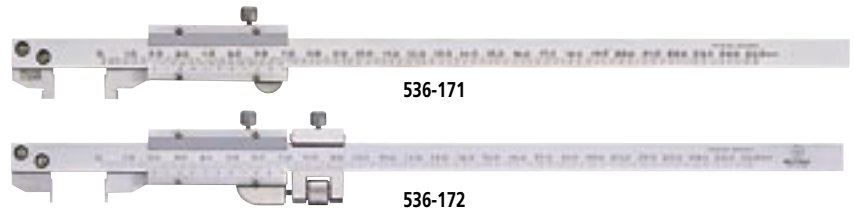


Hook Type Vernier Caliper

SERIES 536

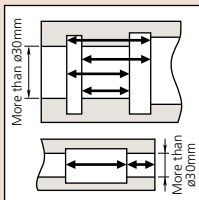
FEATURES

- Can measure width of grooves and lands inside bores and recesses.



Technical Data

Accuracy: $\pm 0.03\text{mm}$
Graduation: 0.02mm



SPECIFICATIONS

Metric

Range*	Order No.	Accuracy	Remarks
0 (10) - 200mm	536-171	$\pm 0.03\text{mm}$	—
0 (2) - 200mm	536-171	$\pm 0.03\text{mm}$	with fine adjustment

*(): Minimum dimension in ID measurement

DIMENSION

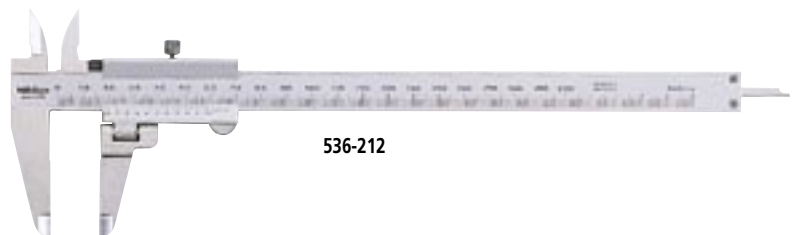
Unit: mm								
Range	L	a	b	c	d	e	f	g
536-171	320	28	—	—	12	4	5	3.5
536-172	320	28	28.5	20	12	4	1	3.5

Swivel Vernier Caliper

SERIES 536 — With moving jaw type

FEATURES

- The moving jaw can be rotated to measure sectioned shafts.
- With depth bar.



SPECIFICATIONS

Metric

Range	Order No.	Accuracy
0 - 200mm	536-212	$\pm 0.05\text{mm}$

DIMENSION

Unit: mm	

Technical Data

Accuracy: $\pm 0.05\text{mm}$
Graduation: 0.05mm



ABSOLUTE Low Force Caliper

SERIES 573

FEATURES

- Due to the low measuring force these calipers are ideal for elastic or resilient workpieces such as plastic parts and rubber parts that standard calipers cannot measure.
- With SPC data output.



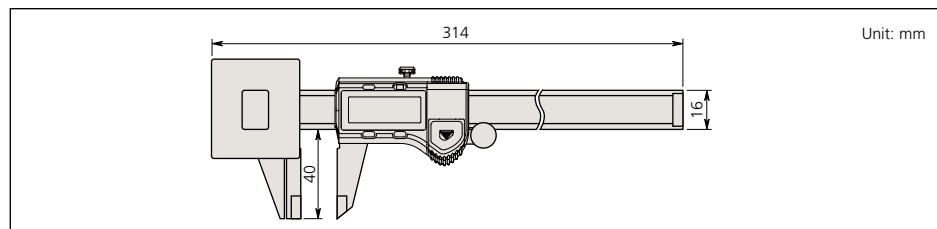
573-191-20

SPECIFICATIONS

Metric		
Range	Order No.	Accuracy
0 - 180mm	573-191-20	±0.05mm

Inch/Metric		
Range	Order No.	Accuracy
0 - 7"	573-291-20	±.002"

DIMENSION

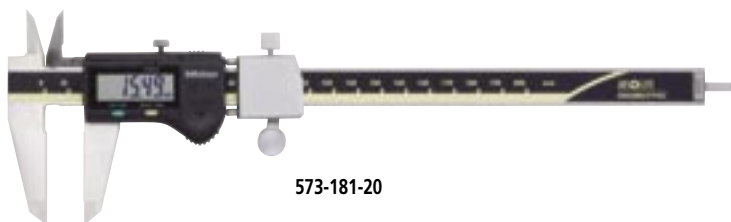


ABSOLUTE Snap Caliper

SERIES 573

FEATURES

- The ABSOLUTE Digimatic snap caliper features a spring-loaded mechanism to allow quick and efficient GO/NO-GO inspection for mass production parts..
- With SPC data output.



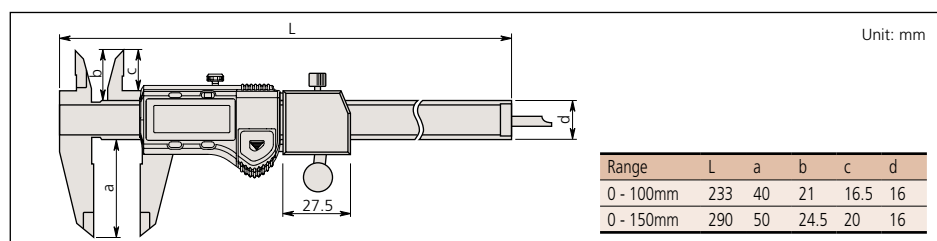
573-181-20

SPECIFICATIONS

Metric		
Range	Order No.	Accuracy
0 - 100mm	573-181-20	±0.02mm
0 - 150mm	573-182-20	±0.02mm

Inch/Metric		
Range	Order No.	Accuracy
0 - 4"	573-281-20	±.001"
0 - 6"	573-282-20	±.001"

DIMENSION



Range	L	a	b	c	d
0 - 100mm	233	40	21	16.5	16
0 - 150mm	290	50	24.5	20	16

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
Display: LCD
Length standard: ABSOLUTE electrostatic capacitance type linear encoder
Measuring force: 0.49N to 0.98N (50gf to 100gf)
Jaw retraction: 0.3mm
Max. response speed: Unlimited
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 3.5 years under normal use

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)



Measurement procedures



To measure resilient workpieces take the measurement when the pointer is between the two index lines.

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
Repeatability: 0.01mm
Display: LCD
Length standard: ABSOLUTE electrostatic capacitance type linear encoder
Measuring force: 7N to 14N (700gf to 1400gf)
Jaw retraction: 2mm
Max. response speed: Unlimited
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 3.5 years under normal use

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)



(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
Length standard: ABSOLUTE electrostatic capacitance type
linear encoder
Max. response speed: Unlimited
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 3.5 years under normal use

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

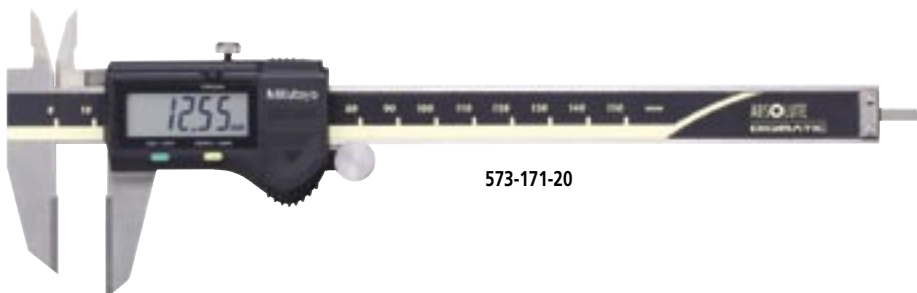
959143: Data hold unit
959149: SPC cable with data switch (1m)
959150: SPC cable with data switch (2m)

Scribing Caliper

SERIES 573, 536 — ABSOLUTE Digimatic and vernier type

FEATURES

- The carbide-tipped jaws facilitate fine scribing on workpiece.
- With depth bar.
- With SPC data output. (series 573)



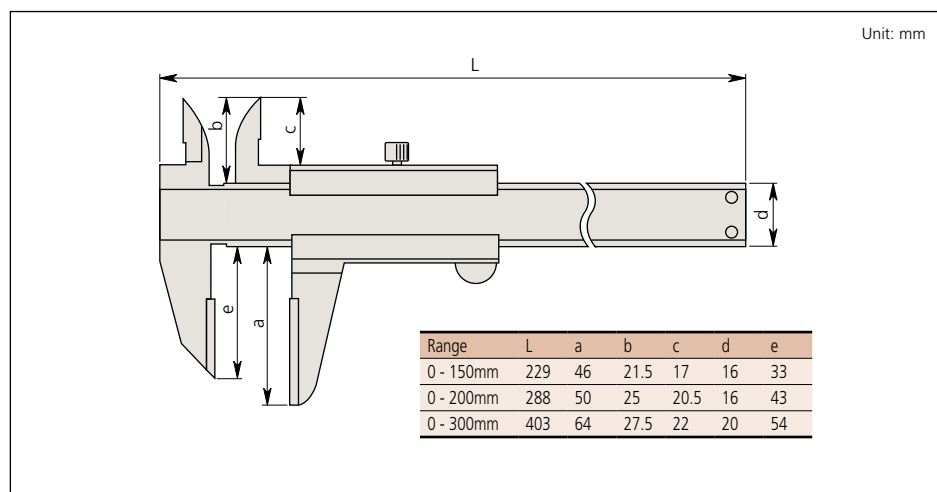
573-171-20

SPECIFICATIONS

Metric Digital model		
Range	Order No.	Accuracy
0 - 150mm	573-171-20	±0.02mm
0 - 200mm	573-172-20	±0.02mm
0 - 300mm	573-173-10	±0.03mm

Metric		
Range	Order No.	Accuracy
0 - 150mm	536-221	±0.05mm
0 - 200mm	536-222	±0.05mm
0 - 300mm	536-223	±0.08mm

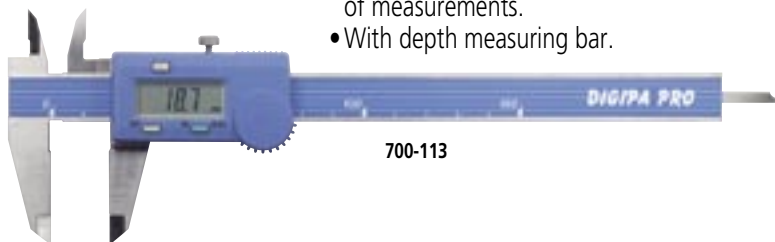
DIMENSION



SERIES 700 — Digital Caliper for DIY

- The "MyCAL-Lite" is an ideal measuring tool for DIY.

- The LCD screen allows error-free readout of measurements.
- With depth measuring bar.



Inch/Metric

Range	Order No.	Accuracy
0 - 6"	700-113	±.005"

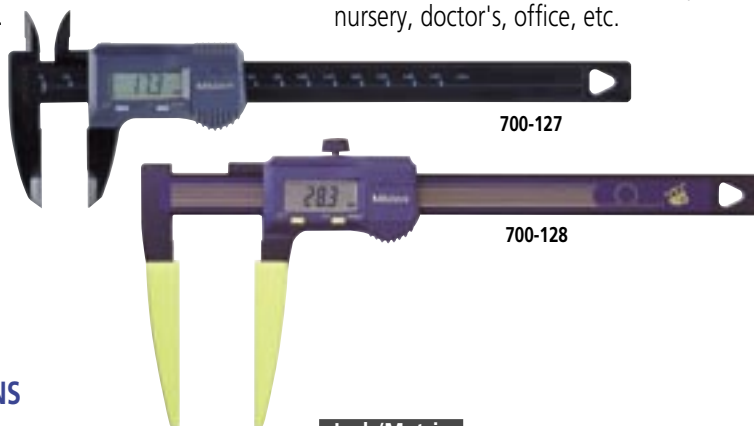
Technical drawing of a mechanical part with dimensions. The drawing shows a side view of a component with a central rectangular opening and a circular feature. Dimensions are indicated in millimeters (mm):

- Overall width: 231 mm
- Overall height: 165 mm
- Height of the central rectangular opening: 21 mm
- Height of the base: 40 mm
- Height of the circular feature: 16 mm

SERIES 700 — Digital Caliper for DIY

- Plastic construction for durable and lightweight use.

- Also ideal for use in Lab, wood-shop, nursery, doctor's, office, etc.



Metric

Range	Order No.	Accuracy
0 - 150mm	700-127	±0.2mm
0 - 150mm	700-128*	±0.5mm

*Deep throat type without inside measuring jaws.

Inch/Metric

Range	Order No.	Accuracy
0 - 6"	700-126	±.008"

Technical drawings of two types of depth gauges, 700-127 and 700-128, with dimensions in mm.

700-127, 700-126

Dimensions (mm): 235, 19, 15, (60), 40, 15, 16, (34), 14.2, 4.

700-128

Dimensions (mm): 235, (60), 80, 65, (34), 16, (14.2), 4.

Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)

Resolution: 0.1mm

Display: LCD

Length standard: Electrostatic capacitance type linear encoder

Max. response speed: 1800mm/s

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

Battery life: Approx. 2 years under normal use

Zero-setting, Power on/off
Alarm: Low voltage, Counting value composition error

Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Resolution: 0.1mm or .001"/0.1mm
Display: LCD
Length standard: Electrostatic capacitance type linear
encoder
Max. response speed: 1800mm/s
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 2 years under normal use

Zero-setting, Power on/off
Alarm: Low voltage, Counting value composition error





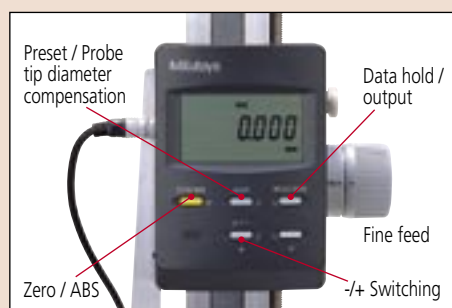
(Refer to the page 9 for details.)

Technical Data

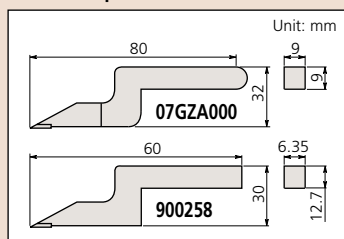
Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Repeatability: 0.001mm
Resolution: 0.001mm or .0001"/0.001mm
Display: LCD, 6-digit
Power supply: Via AC adapter

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: ø1mm contact point for touch-signal probe
145251: ø2mm contact point for touch-signal probe

Touch-Signal Probe (Standard accessory)



Order No.: 574-006

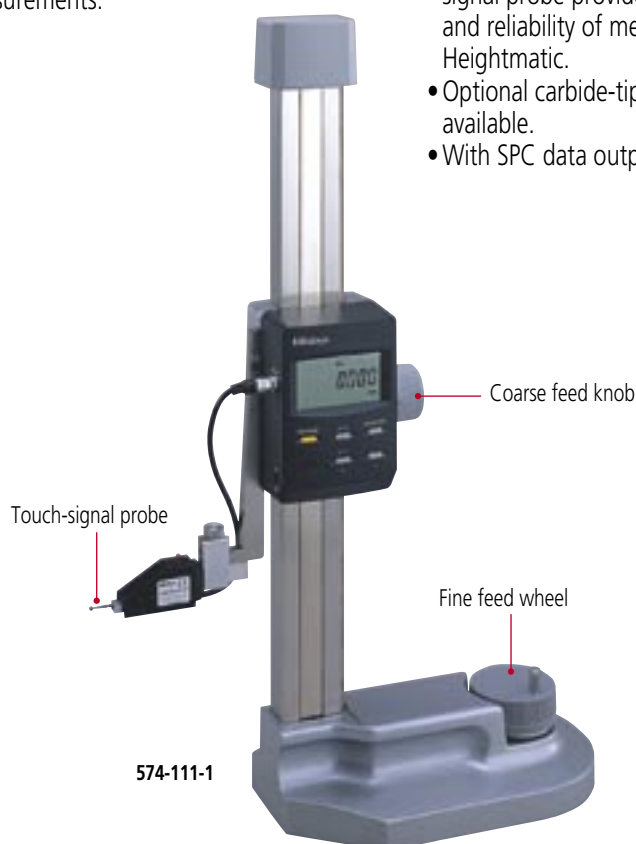
- Two-directional type
- Over travel: Less than 3mm
- Contact point: ø3mm ball
- Repeatability: 0.0015mm
- Measuring force: 0.4N

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

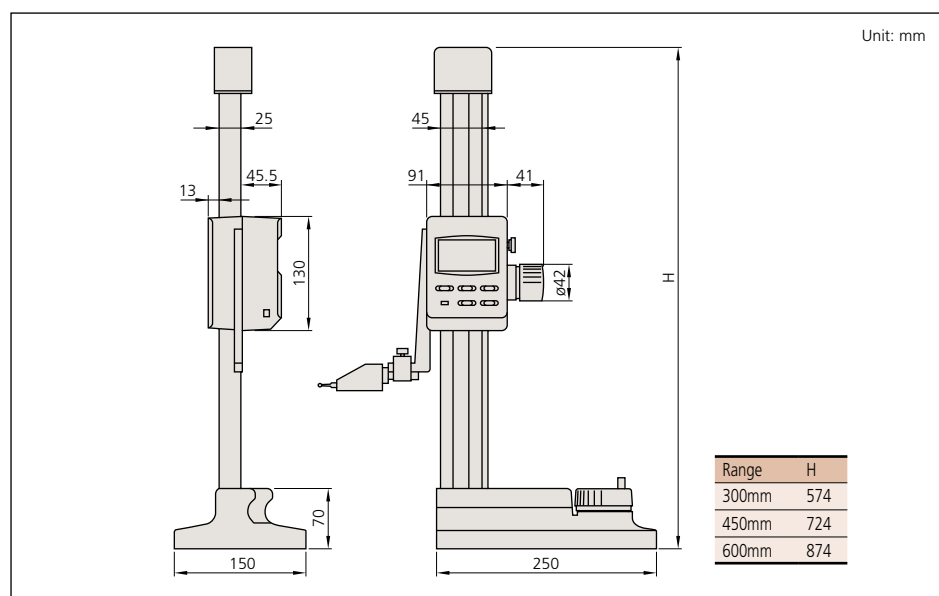
Metric		
Range	Order No.*	Accuracy
0 - 300mm	547-112-1	±0.004mm
0 - 450mm	547-111-1	±0.004mm
0 - 600mm	547-110-1	±0.005mm

* 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"	547-212-1	±.0002"
0 - 18"	547-211-1	±.0002"
0 - 24"	547-210-1	±.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



Range	H
300mm	574
450mm	724
600mm	874

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.
- 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.



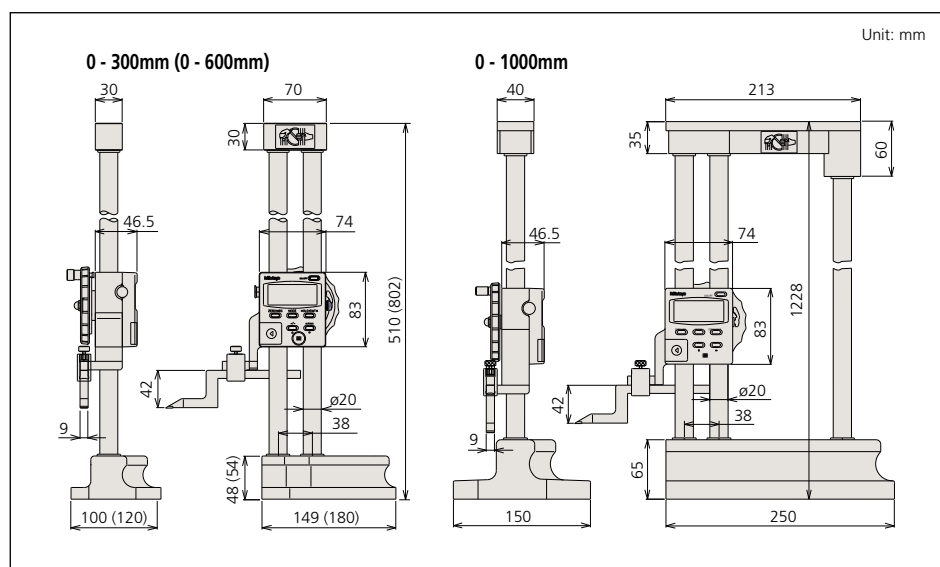
192-663

SPECIFICATIONS

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

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

DIMENSION



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
Max. response speed: 500mm/s
Battery: CR2032 lithium (1 pc.), **055AA217**
Battery life: Approx. 2000 hours under normal use

Function

Zero-setting, ABS/INC switching, Presetting, 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

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
Max. response speed: 500mm/s
Battery: CR2032 lithium (1 pc.), **055AA217**
Battery life: Approx. 2000 hours under normal use

Function

Zero-setting, ABS/INC switching, Presetting, 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)

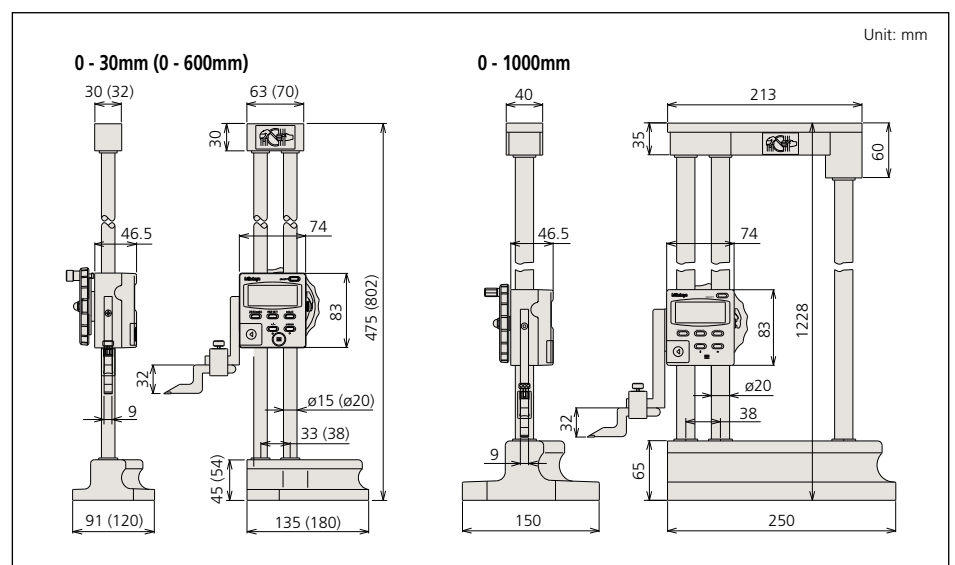


SPECIFICATIONS

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

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

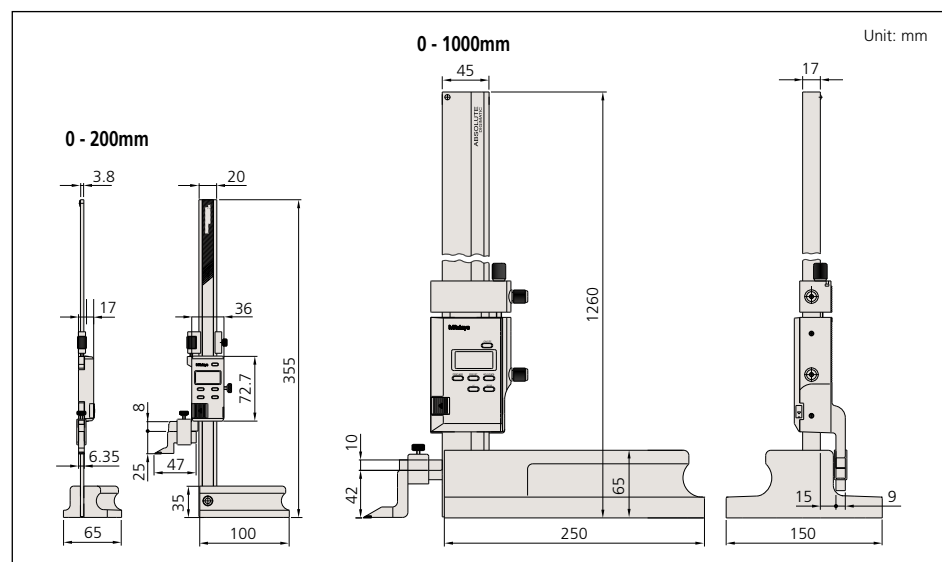


SPECIFICATIONS

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



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
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

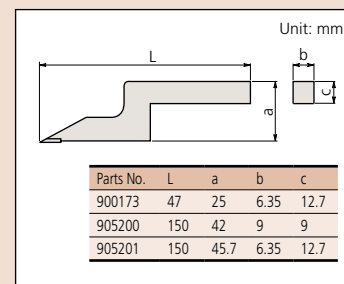
Function

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

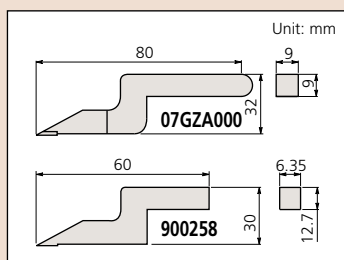
Function

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.

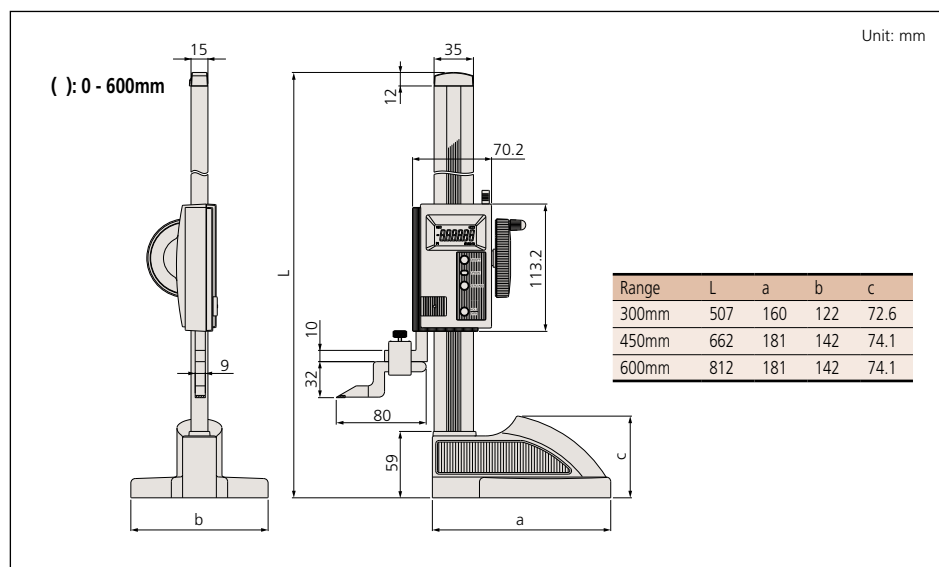


SPECIFICATIONS

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



SERIES 192 — with Digital Counter

- 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

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/Metric

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

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

0 - 1000mm

Unit: mm

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

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

Unit: mm

80 32 9 9 07GZA000

60 30 6.35 12.7 900258

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 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.

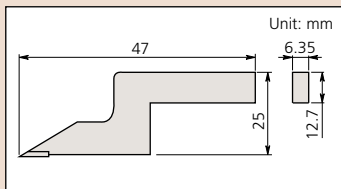
Technical Data

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



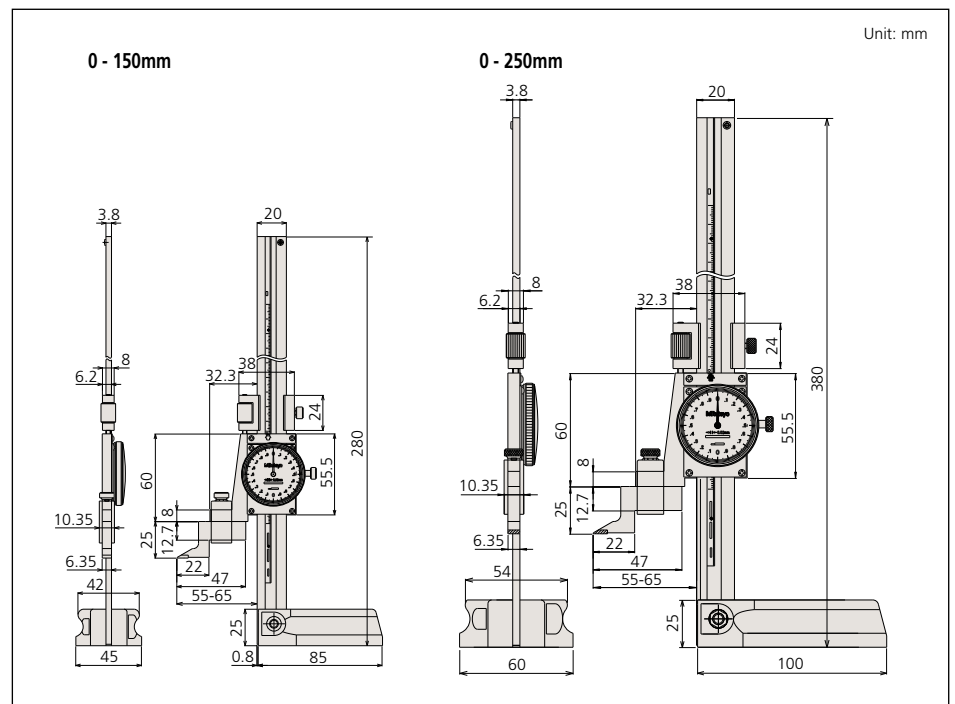
509-301

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

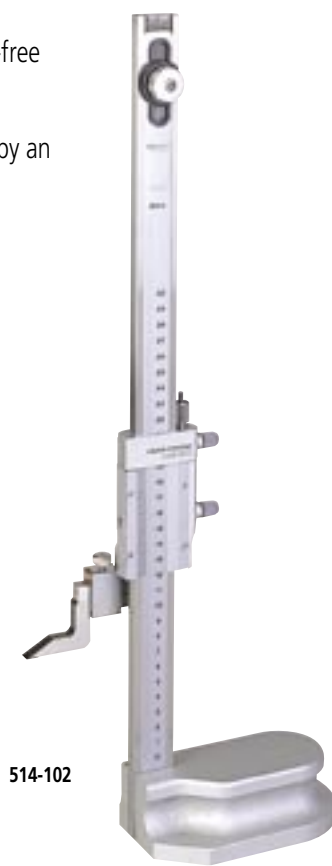


Vernier Height Gage

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

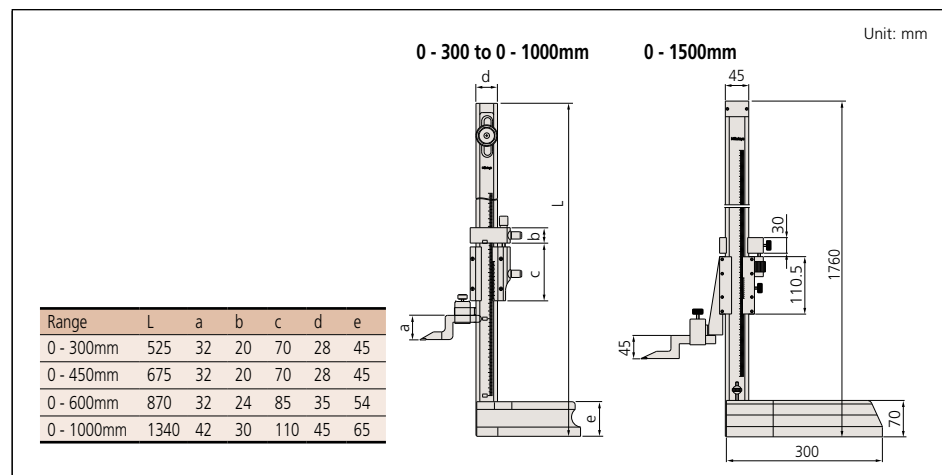
SPECIFICATIONS

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



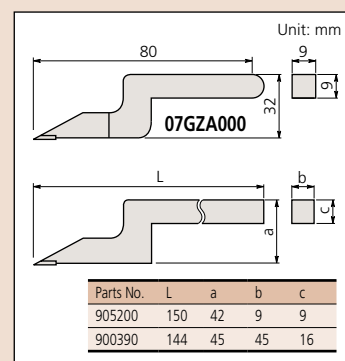
Technical Data

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.

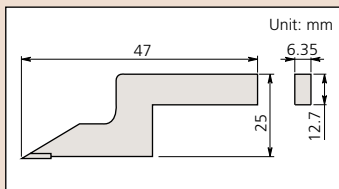
Technical Data

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

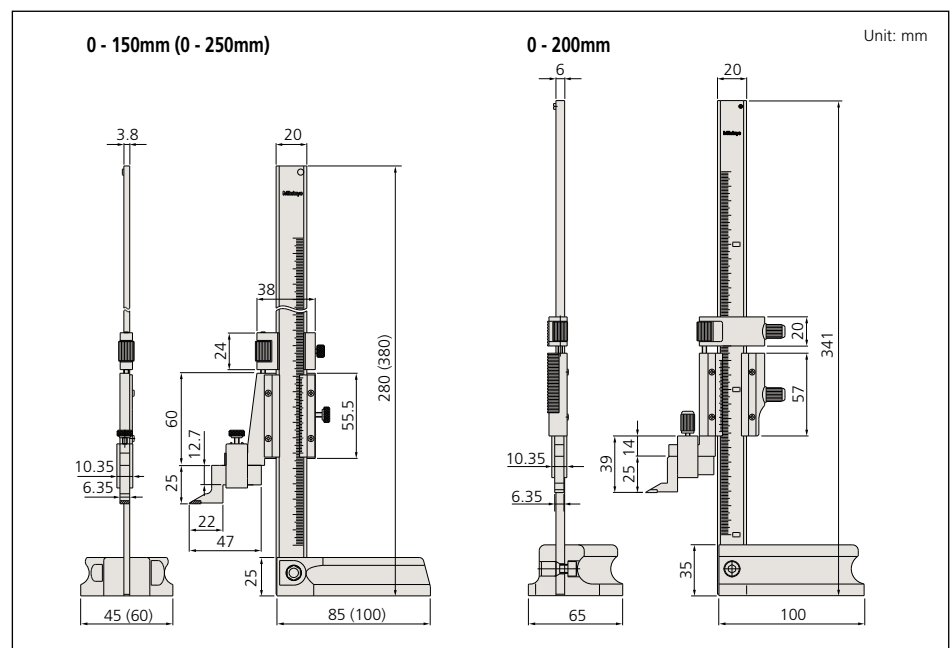
Range	Order No.	Accuracy	Remarks (R / L scale graduations)
0 - 150mm	506-201	$\pm 0.03\text{mm}$	0.02mm —
0 - 200mm	506-207	$\pm 0.03\text{mm}$	0.02mm —
0 - 250mm	506-204	$\pm 0.04\text{mm}$	0.02mm —

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.

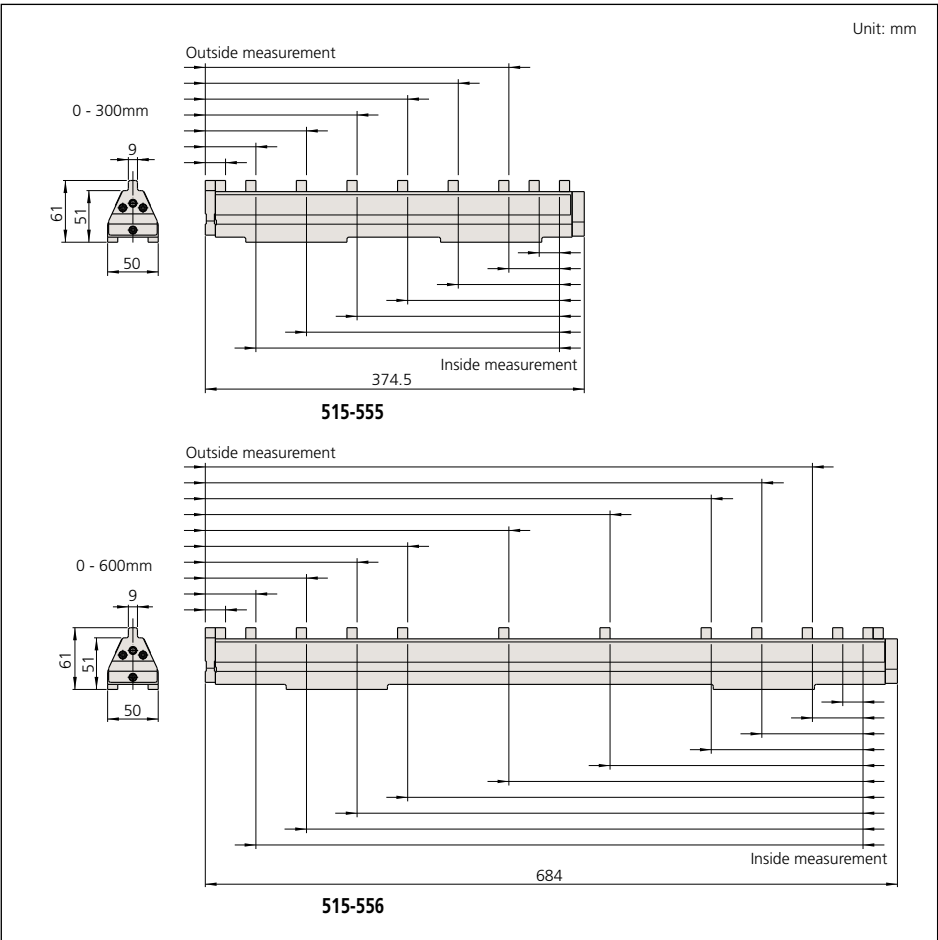


SPECIFICATIONS

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

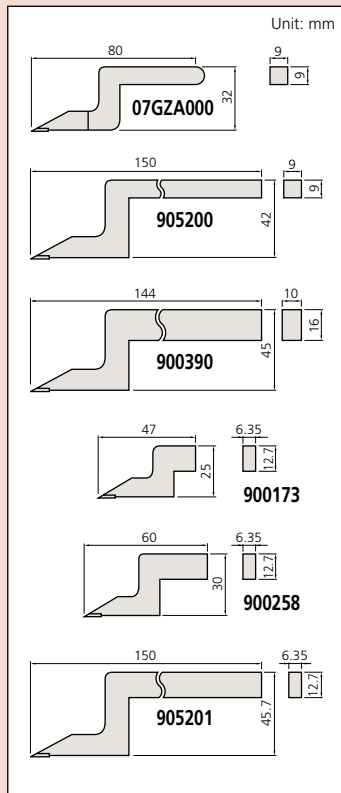


Used for height gage

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)
	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)
900390	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)
	192 Series Digimatic Height Gages (192-630, 192-631, 192-632, 192-633)
900258	570 Series Digimatic Height Gages (570-312, 570-313, 570-314)
	574 Series Heightmatic (574-212-1, 574-211-1, 574-210-1)
	192 Series Digimatic Height Gages (192-670, 192-671, 192-672, 192-673)
905201	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 **518-331K and 518-322K only



518-331-10



518-332-10
(with power grip)



SPECIFICATIONS

Inch/Metric	
Order No.	Remarks
518-321A-21 / 518-322A-21*	120V w/ English manual
518-321A-22 / 518-322A-22*	120V w/ Spanish manual
518-321D-21 / 518-322D-21*	220V w/ English manual
518-321D-22 / 518-322D-22*	220V w/ Spanish manual
518-321D-23 / 518-322D-23*	220V w/ German manual
518-321D-24 / 518-322D-24*	220V w/ French manual
518-321D-25 / 518-322D-25*	220V w/ Italian manual
518-321E-21 / 518-322E-21*	220V w/ English manual

*Power grip preinstalled 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 / .000001" / .00001" / .0001" / .001"
 Accuracy at 20°C: $(1.3+0.6L/600)\mu\text{m}$
 L = Measuring length (mm)
 Repeatability (2σ): Plane: $0.5\mu\text{m}$, Bore: $1\mu\text{m}$
 Perpendicularity*: $6\mu\text{m}$
 Straightness*: $4\mu\text{m}$
 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 (518-331K and 518-322K) / 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 ø5 probe.
 ** It is guaranteed when using a lever head (MLH-321) or Mu-Checker (M-411)

SPC results

```

[STATISTICS] 01-05-1999 19:22
Statistical results
Xbar 99.993002
Range 0.2000
S(n-1) 0.000007
Xbar-RS(n-1) 100.000000
Xbar-SR(n-1) 99.993000
Cp 0.37047
Cpk 0.15000
Ca 0.20000
Cpk 0.15000

Press [F4] to return to the previous state. [F5]:Printing.
  
```

Histogram

```

[STATISTICS] 01-05-1999 19:22
Statistical results
Xbar 99.993002
Range 0.2000
S(n-1) 0.000007
Xbar-RS(n-1) 100.000000
Xbar-SR(n-1) 99.993000
Cp 0.37047
Cpk 0.15000
Ca 0.20000
Cpk 0.15000

Press [F4] to return to the previous state. [F5]:Printing.
  
```

Perpendicularity / measurement

```

[STATISTICS] 01-05-1999 19:22
Statistical results
Xbar 99.993002
Range 0.2000
S(n-1) 0.000007
Xbar-RS(n-1) 100.000000
Xbar-SR(n-1) 99.993000
Cp 0.37047
Cpk 0.15000
Ca 0.20000
Cpk 0.15000

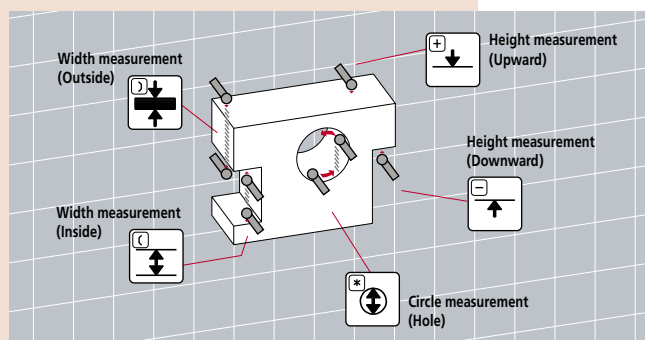
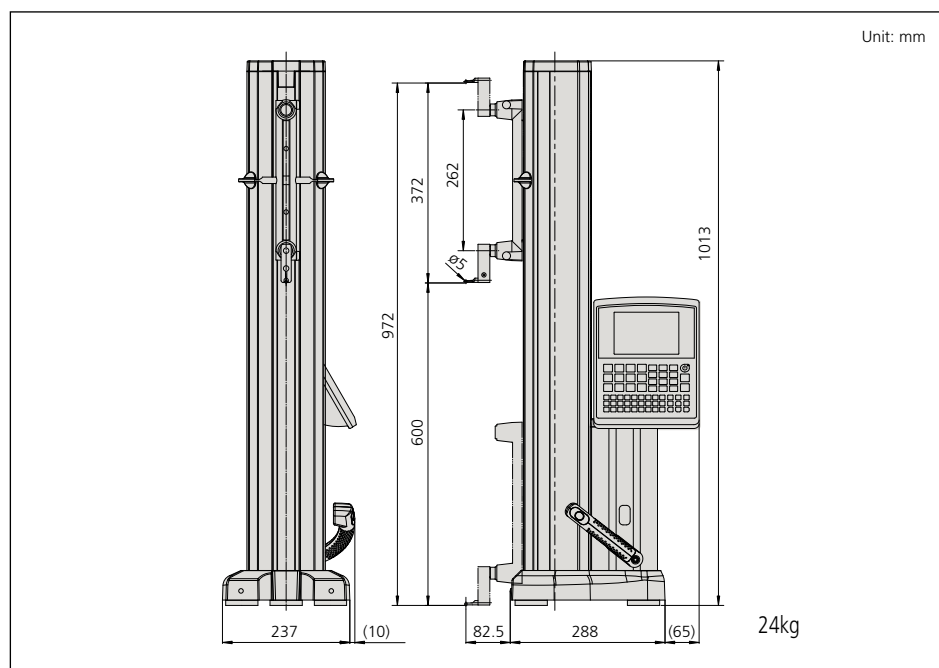
Press [F4] to return to the previous state. [F5]:Printing.
  
```

Optional Accessory

- 12AAC072:** Depth probe
- 12AAC073:** $\varnothing 20\text{mm}$ taper probe
- 12AAA787:** Block for calibrating probe diameter (applicable to taper probe)
- 12AAA792:** Dial indicator ($\varnothing 8\text{mm}$ stem) holder
- 12AAA837:** Dial indicator ($\varnothing 3/8"$ stem) holder
- 12AAA793:** Probe extension holder (85mm/3.3")
- 12AAB136:** $\varnothing 10\text{mm}$ cylindrical probe
- 932361:** Mu-checker lever head holder
- 12AAF666:** $\varnothing 1\text{mm}$ ball probe
- 12AAF667:** $\varnothing 2\text{mm}$ ruby ball probe
- 957261:** $\varnothing 2\text{mm}$ ball probe
- 957262:** $\varnothing 3\text{mm}$ ball probe
- 957263:** $\varnothing 4\text{mm}$ ball probe
- 12AAB552:** $\varnothing 10\text{mm}$ ball probe, L = 55mm
- 12AAF668:** $\varnothing 10\text{mm}$ ball probe, L = 82mm
- 12AAF669:** $\varnothing 10\text{mm}$ ball probe, L = 120mm
- 12AAF670:** $\varnothing 5\text{mm}$ disk probe
- 12AAF671:** $\varnothing 10\text{mm}$ disk probe
- 957264:** $\varnothing 14\text{mm}$ disk probe
- 957265:** $\varnothing 20\text{mm}$ disk probe
- 12AAF672:** $\varnothing 1\text{mm}$ ball offset probe
- 12AAA788:** $\varnothing 4\text{mm}$ ball offset probe
- 12AAF394:** $\varnothing 5\text{mm}$ ball offset probe
- 12AAA789:** $\varnothing 6\text{mm}$ ball offset probe
- 226116:** Test indicator ($\varnothing 6\text{mm}$ stem) adapter
- 226117:** M2 CMM stylus adapter
- 226118:** M3 CMM stylus adapter
- CMM ball and disk hard probes are available.
- 12AAF712:** Battery pack
- 12AAF675:** Large capacity battery pack
- 12AAA796:** Thermal printer (220V)
- 12AAA797:** Thermal printer (120V)
- 12AAA802:** Thermal printing paper (10 pcs.)
- 12AAA804:** Cable for page printer** (2m)
- 12AAA805:** Cable for page printer** (4m)
- 12AAA807:** RS-232C cable (2m/80")
- 12AAA808:** RS-232C cable (4m/160")



DIMENSION AND MASS



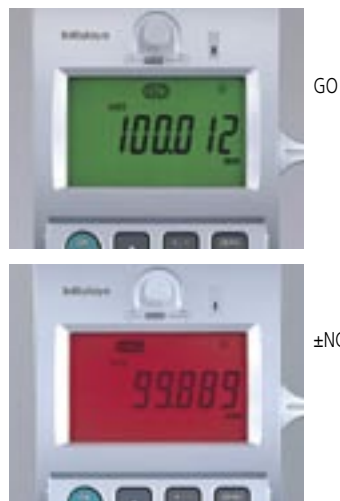
QM-Height

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.



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



518-224

SPECIFICATIONS

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

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

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)

SPC

ABSOLUTE
Absolute System Patented by MITUTOYO

(Refer to the page 9 for details.)

Technical Data

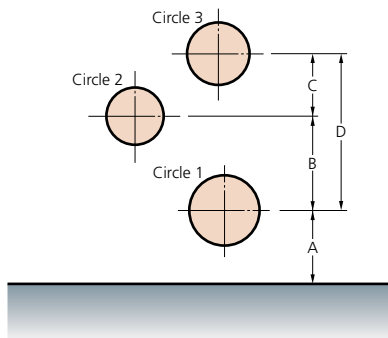
Measuring range: 0 - 465mm or 0 - 715mm
 Slider stroke: 350mm or 600mm
 Resolution: 0.001 / 0.005mm or 0.001 / 0.005mm / .00005" / .0001" / .0002"
 Accuracy at 20°C*: $\pm(2.8+5L/1000)\mu\text{m}$
 L = Measuring length (mm)
 Repeatability (2 σ): 1.8 μm
 Perpendicularity**: 6 μm (0 - 350mm), 13 μm (0 - 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 ϕ 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)

Optional Accessory

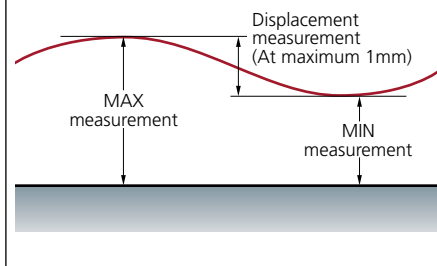
12AAC072:	Depth probe
12AAA792:	Dial indicator (ø8mm stem) holder
12AAA837:	Dial indicator (ø3/8" stem) holder
12AAA793:	Probe extension holder (85mm/3.3")
12AAF667:	ø2mm ruby ball probe
957261:	ø2mm ball probe
957262:	ø3mm ball probe
957263:	ø4mm ball probe
12AAB552:	ø10mm ball probe, L = 55mm
12AAF670:	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



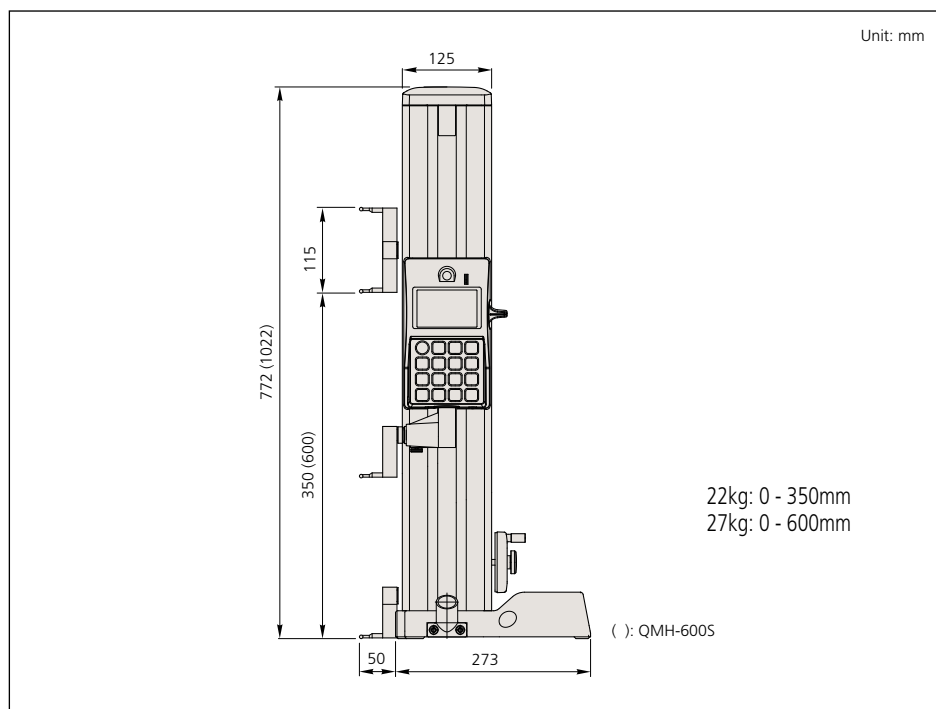
Height measurement



Inside diameter measurement



DIMENSION AND MASS



Depth Micrometer

SERIES 329, 129, 229 — Interchangeable Rod Type

FEATURES

- $\phi 4$ 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



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,
 $L = \text{Max. measuring length (mm)}$
 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:
 $(4+L/50)\mu\text{m}$, $L = \text{Max. measuring length (mm)}$
 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

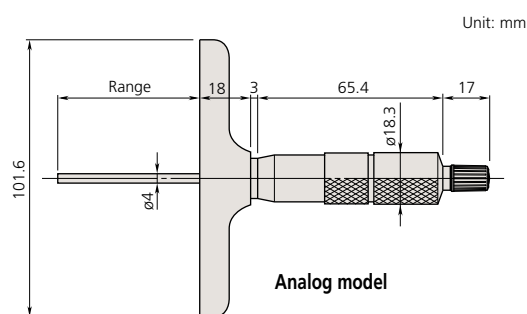
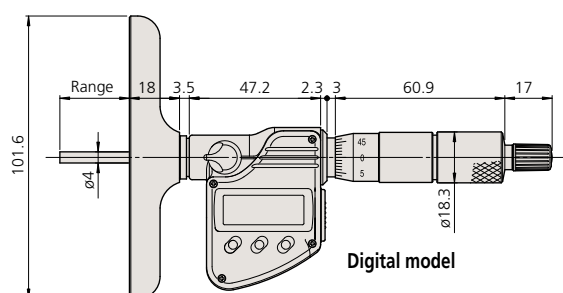
Preset, Zero-setting, Data hold, Automatic power ON/OFF,
 Data output, Preset inch/mm conversion (inch/mm models)
 Alarm: Low voltage, Counting value composition error

Optional Accessory for Digital Model

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



DIMENSION



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

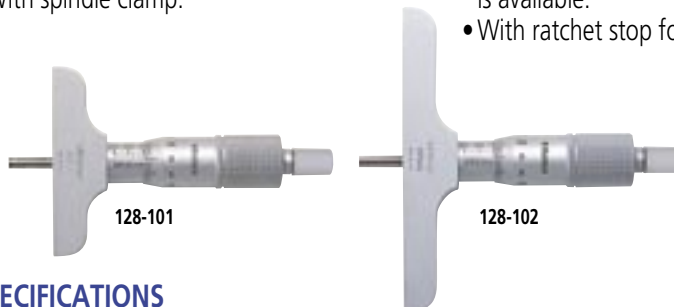


Depth Gage

SERIES 128

FEATURES

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



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.

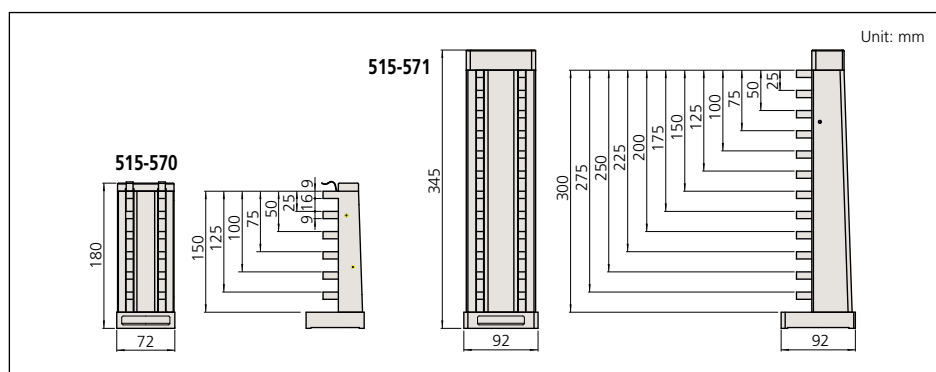


SPECIFICATIONS

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



(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: $\pm 0.5\mu\text{m}$



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

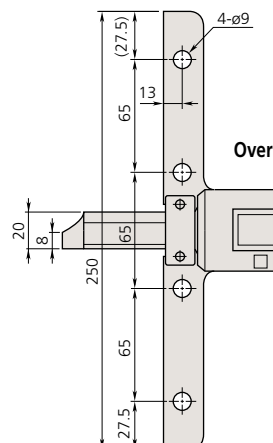
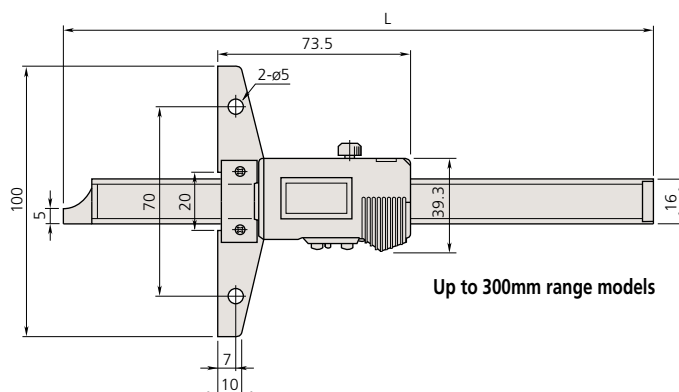
Metric		
Range	Order No.	Base (W x T)
0 - 150mm	571-201-20 / 571-251*	100 x 6mm
0 - 200mm	571-202-20 / 571-252*	100 x 6mm
0 - 300mm	571-203-20	100 x 6mm
0 - 450mm	571-204-10	250 x 10mm
0 - 600mm	571-205-10	250 x 10mm
0 - 750mm	571-206-10	250 x 10mm
0 - 1000mm	571-207-10	250 x 10mm

*IP67 Coolant Proof model

Inch/Metric		
Range	Order No.	Base (W x T)
0 - 6"	571-211-20 / 571-261*	3.93" x .23"
0 - 8"	571-212-20 / 571-262*	3.93" x .23"
0 - 24"	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



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

Unit: mm

SPC



(Refer to the page 9 for details.)

ABSOLUTE®
Absolute System Patented by MITUTOYO

(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

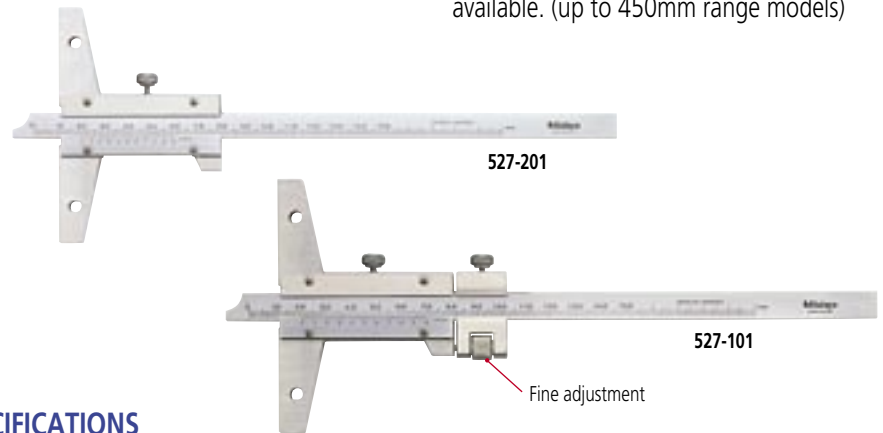
- Base and measuring faces are hardened and micro-lapped.
- Made of hardened stainless steel.
- Optional wider extension base are available. (up to 450mm range models)

Technical Data

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

Optional Accessory

—: Extension base (see page 179.)



SPECIFICATIONS

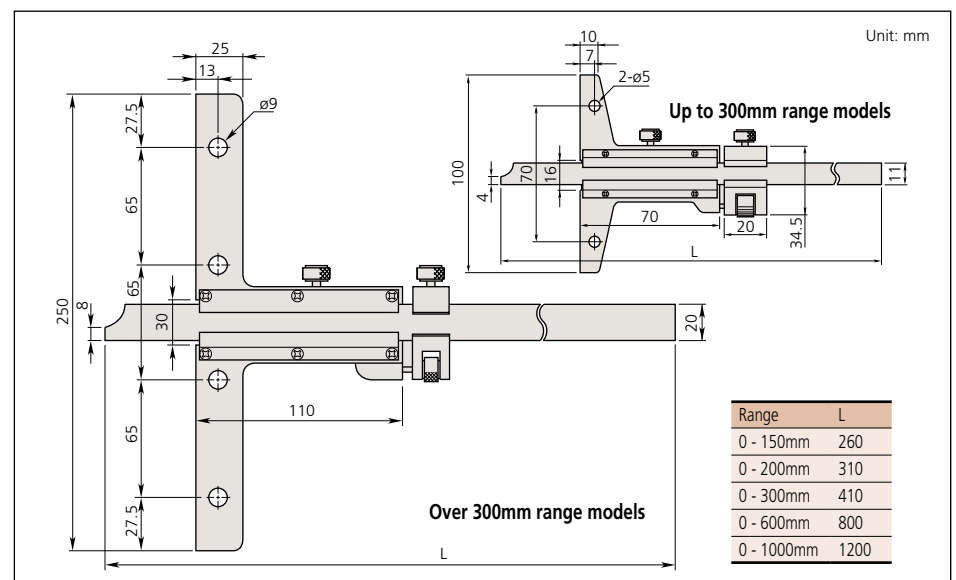
Metric

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.

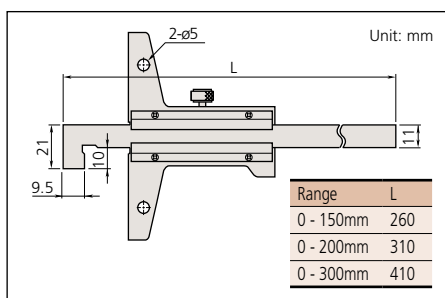


SPECIFICATIONS

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

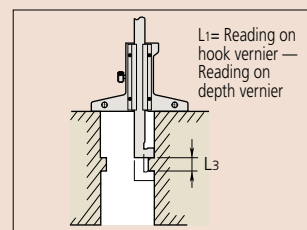
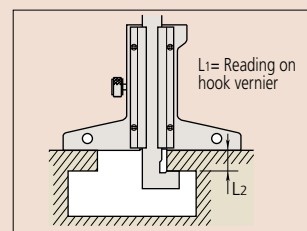
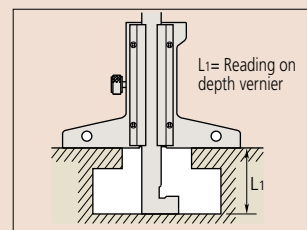


Technical Data

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.)

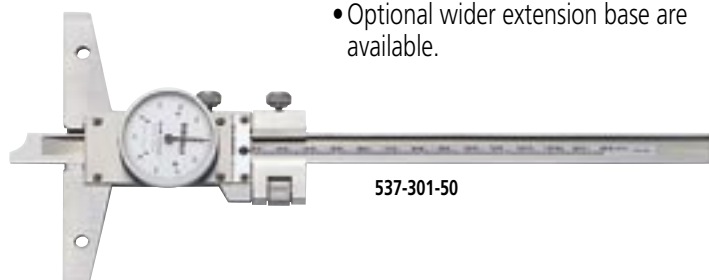


Dial Depth Gage

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.

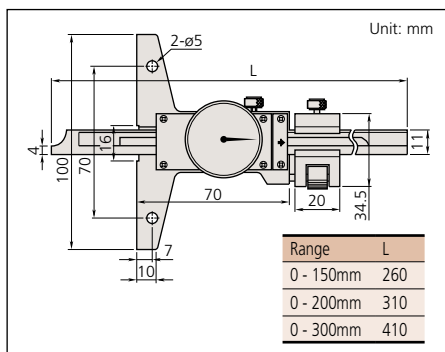


SPECIFICATIONS

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.)

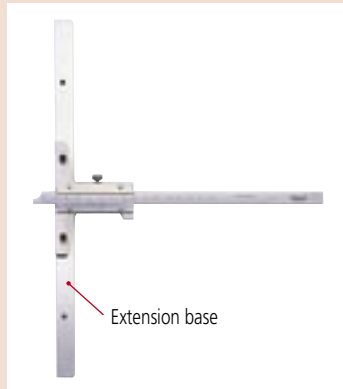


Extension Bases

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.



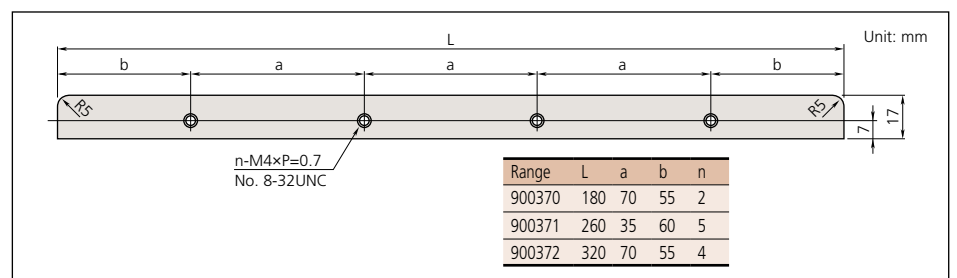
SPECIFICATIONS

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

900372

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

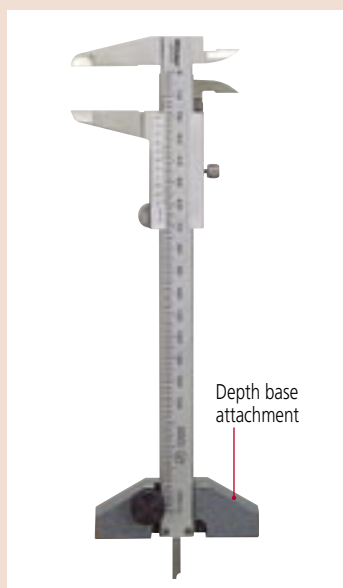


Depth Base Attachment

Optional Accessory for Caliper

FEATURES

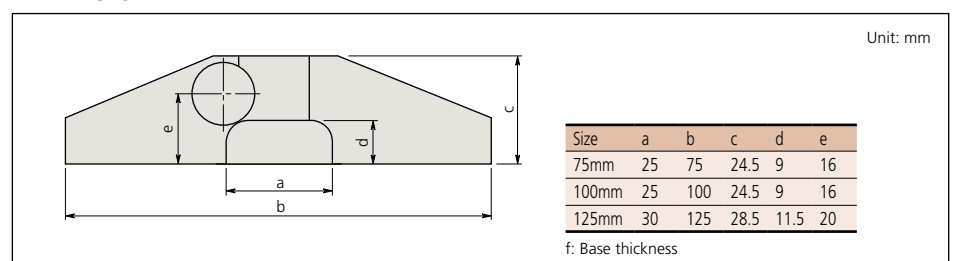
- For 100mm, 150mm, 200mm, 300mm, 4", 6", 8" and 12" vernier and dial calipers which have a depth measuring bar.
- Finely grounded base surface and secure locking clamp.



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"

SPC

ABSOLUTE®
Absolute System Patented by MITUTOYO

(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

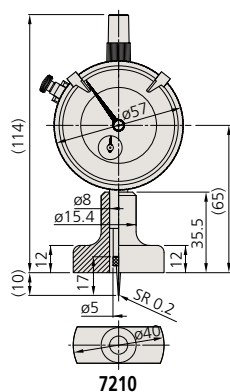
Origin-set, Zero-setting, Data hold, Data output, inch/mm conversion (inch/mm models)
Alarm: Low voltage, Counting value composition error

Optional Accessory for Digital Model

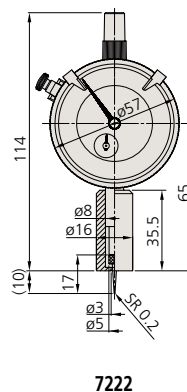
905338: SPC cable (1m)
905409: SPC cable (2m)

DIMENSION

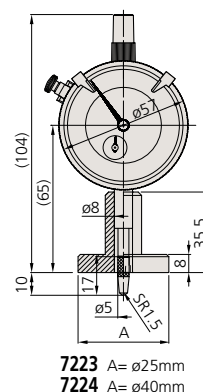
Unit: mm



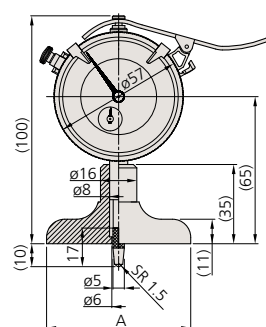
7210



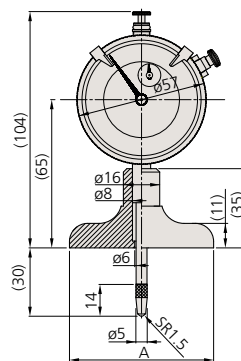
7222



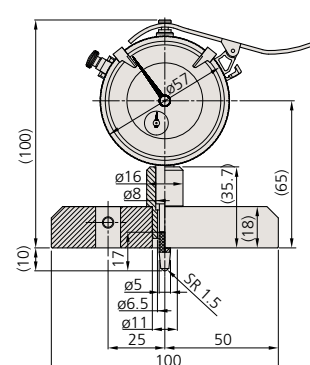
7223 A= 25mm
7224 A= 40mm



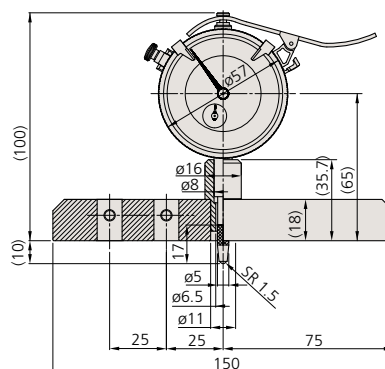
7211 A= 63.5mm
7212 A= 101.6mm



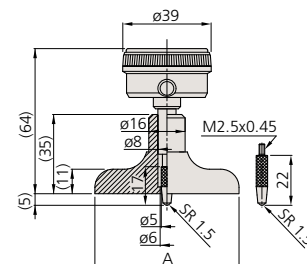
7213, 7217 A= 63.5mm
7214, 7218 A= 101.6mm



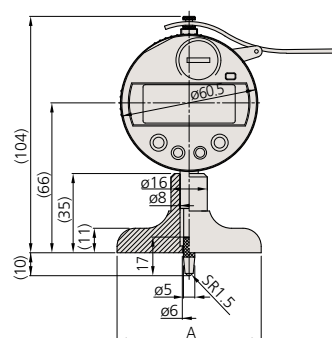
7220



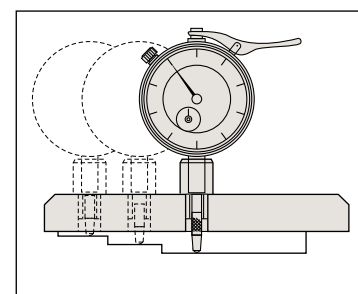
7221



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 ligh-weight use. (series 700)
- With SPC data output. (series 571)



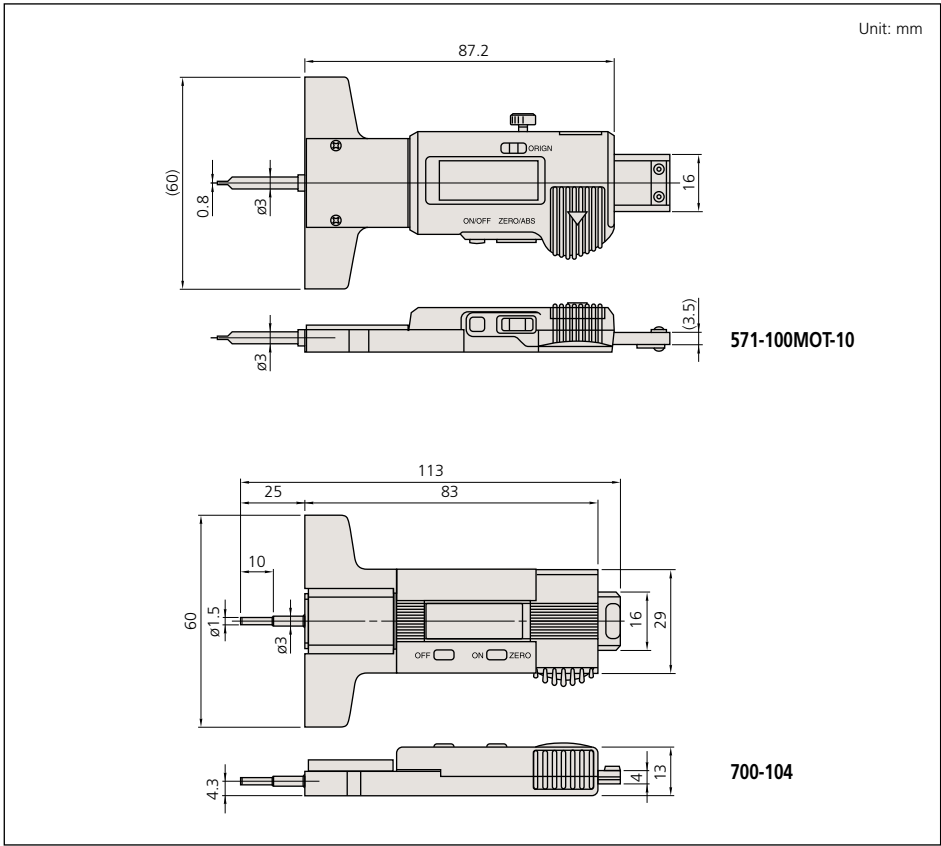
700-104

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)

