

MEASURING TOOLS

CALIPERS

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SMALL TOOLS

เครื่องมือวัดละเอียด

CALIPERS
คาลิปเปอร์

Mitutoyo

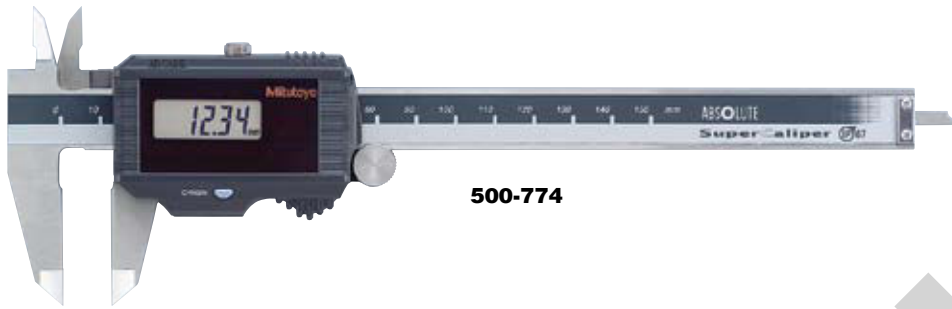
ซูเปอร์คาลิปเปอร์

SuperCaliper

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

MeasurLink® ENABLED

Data Management Software by Mitutoyo



500-774

ABSOLUTE™

IP67



www.tuv.com
ID 000006683



Micrometer

ไมโครมิเตอร์

Inside
Measurement

เครื่องมือวัดภายใน

Calipers

คาลิปเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

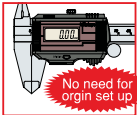
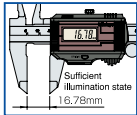
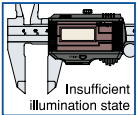
อินดิเคเตอร์

Stands

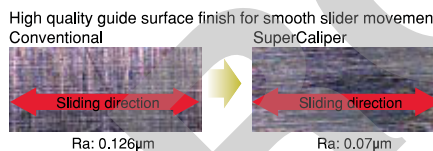
ขาตั้ง

FEATURE

- Top-of-the-line digital caliper. Solar type caliper with no battery and IP67 protection assures waterproof reliability.

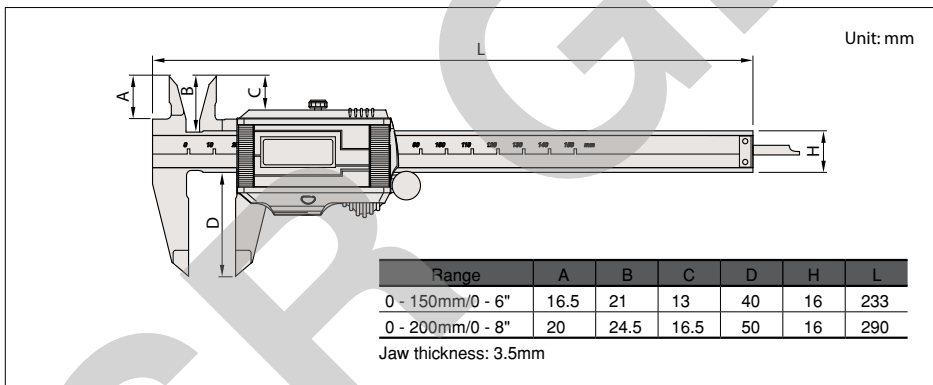


- Waterproof function makes this SuperCaliper suitable for use in an environment containing large amounts of cutting fluid or coolant. Operability is equivalent to the mechanical type caliper.
- This SuperCaliper uses components that do not contain harmful substances and is compatible with RoHS Directives.
- Slider operation is smooth and comfortable.



- With no annoying origin restoration necessary, a measurement can be started any time and there is no restriction on operating speed.
- The impact resistance of the display unit has been increased for improved usability in workshop conditions.

DIMENSIONS



Metric

Order No.	Range	Remark	Mass
500-776	0-150mm	with data output	180g
500-777	0-200mm		210g
500-774	0-150mm	w/o data output	180g
500-775	0-200mm		210g

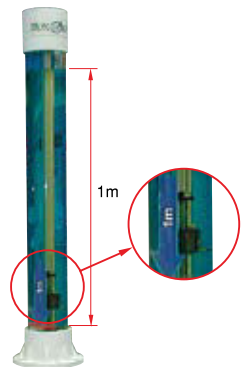
Inch / Metric

Order No.	Range	Remark	Mass
500-786	0 - 6"	with data output	180g
500-787	0 - 8"		210g
500-784	0 - 6"	w/o data output	180g
500-785	0 - 8"		210g

IP CODE

Level 6 : Dust-proof.
No ingress of dust allowed.

Level 5 : Protected against water penetration.
Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed to a depth of 1 meter in water under standardized conditions of pressure and time (30 min.).



Demonstration device

Technical Data

Resolution: 0.01mm or .0005"/0.01mm
Accuracy: 0.02mm (excluding quantizing error)
Repeatability: 0.01mm
Quantizing error: ±1 count
Dust/Water protection level: IP67*
Power supply: Solar cell**
Display: LCD
Scale type: ABSOLUTE electromagnetic induction linear encoder

Max. response speed: Unlimited

* This model is not waterproof type. Therefore, rustproofing shall be applied after use.

** Can be used continuously above 60lux ambient illumination.

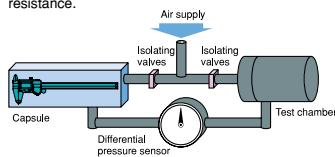
Functions

Origin-set: Absolute origin position can be changed.
Alarm: Error message is displayed and measurement functions become inoperative if:
• Tool is turned on when both illumination and charging voltage are insufficient.
• Main unit is extremely polluted and miscalculation occurs in the display unit.



Air leak test equipment for water resistance inspection

Generally, an air leak test is adopted for evaluating water resistance.



Procedure: Place the measuring tool inside the capsule and seal it. Then fill the capsule and the test chamber with air at the required pressure and close the isolating valves.

If there is no leak in the measuring tool, the differential pressure sensor will read zero, because the amount of air inside the test chamber is unchanging. However, if there is a leak in the measuring tool, the differential pressure sensor will show a non-zero reading due to a decrease in pressure inside the test chamber as air leaks into the tool.

By detecting this differential pressure, GO/NG judgment for the severity of the leak is performed. This air leak test is performed for all ABS coolant proof calipers and coolant proof micrometers.



Air leak test equipment for ABS coolant proof caliper

Optional accessories

(Dedicated for the models equipped with a digimatic output function (Code No. 500-776, 500-777, 500-786 and 500-787))

• Connecting cables for IT/DP/MUX*

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

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

• USB Input Tool Direct

06AFM380A: SPC cable for USB-ITN-A (2m)

• Connecting cables for U-WAVE-T

02AZD790A: SPC cable for U-WAVE with data button (160mm)

02AZE140A: SPC cable for foot switch



* Cannot be used for other than water resistant type Digital calipers with external output function.



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 with confidence in a normal work environment.

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

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

Illumination (lx)	Site (possible operations)
1500	
1000	Design room, drafting room (Fine visual work)
750	
500	Conference room, control room (Usual manufacturing environment) (Normal visual work)
300	
200	Machine room, electric room, lecture hall (Rough visual work)
150	
100	Corridor, passage, stairs (Very rough visual work)
75	
50	Emergency staircase, warehouse (Loading, unloading work)
30	
20	

Excerpts from JIS Z 9110 Artificial illumination Intensity Standard

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาลิปเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

SMALL TOOLS

เครื่องมือวัดละเอียด

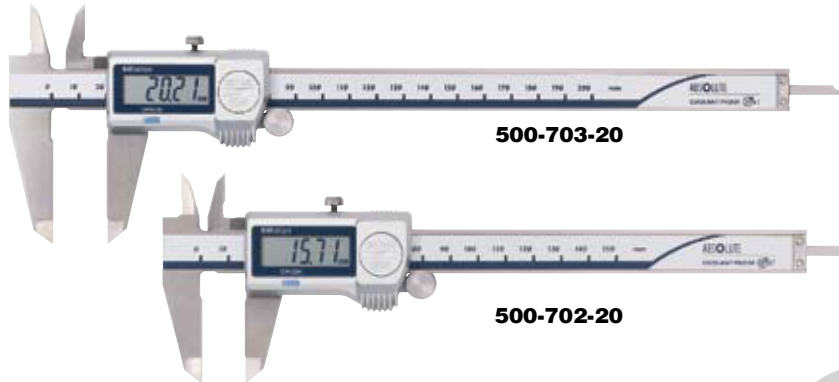
Mitutoyo

คาลิเปอร์กันน้ำ

ABSOLUTE Coolant Proof Caliper

SERIES 500 — with Dust/Water Protection Conforming to IP67 Level

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo



ABSOLUTE[™]

IP67



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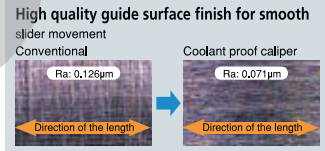


FEATURE

- ABS Coolant Proof Caliper with Dust/Water Protection conforming to IP67 Level. Can be used in workshop conditions exposed to coolant, water, dust or oil. 100% air-leak test ensures every caliper conforms to IP67.
- Font height is 9mm (increased by 22%) and visibility is improved (except for 0 - 300mm / 0 - 12" models).
- Battery cap does not require a screw driver for battery replacement (except for 0 - 300mm / 0 - 12" models).
- Extended battery life of 5 years due to low current integrated circuit (except for 0 - 300mm / 0 - 12" models).

- Easy to use — advanced ergonomic design uses only 1 button.
- Incorporates Mitutoyo's ABSOLUTE measurement system. No need to reset the origin.
- The automatic power-on/off function shuts down the LCD display after 20 minutes inactivity, but the ABS scale origin is unaffected. Power is restored to the display when the slider is moved.
- Stepped features can be measured.
- Can be integrated into statistical process control and measurement systems.
- An inspection certificate is supplied as standard. (However, this cannot be used as a calibration certificate as it is undated.)

Smooth slider movement makes for comfortable operation.



Technical Data

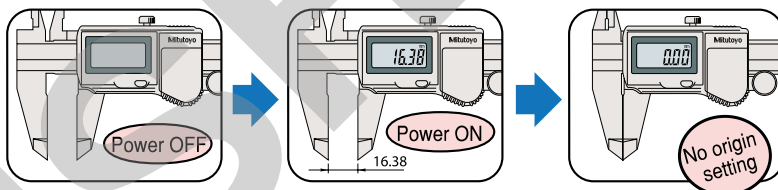
Resolution: 0.01mm or .0005"/0.01mm
Repeatability: 0.01mm or .0005"/0.01mm
Quantizing error: Not including ± 1 count
Dust/Water protection level: IP67 (IEC60529)*
Display: LCD
Scale type: ABSOLUTE electromagnetic induction linear encoder
Max. response speed: Unlimited
Battery: **SR44** (1 pc), **938882**, for initial operational checks (standard accessory)
Battery life: Approx. 5 years under normal use (1 year: 0 - 300mm / 0 - 12" models)
* Although these models are IP67 rated, care should be taken to dry tool after use.

GOOD DESIGN AWARD 2015



Remarkably easy to read display

A built-in ABS (absolute) scale means that these calipers are ready to use immediately after power-on without origin resetting – just like using a vernier caliper.



Optional accessories



Connecting cables for IT/DP/MUX*
05CZA624: SPC cable with data button (1m)
05CZA625: SPC cable with data button (2m)

* Cannot be used for other than water resistant type Digital calipers with external output function



USB Input Tool Direct

06AFM380A: SPC cable for USB-ITN-A (2m)
Wireless data output **U-WAVE[®]**
U-WAVE-TC: **264-620** (IP67 type)
264-621 (Buzzer type)

Connecting unit for U-WAVE-TC:
02AZF310 (IP67 type)
02AZF300 (Buzzer type)
Refer to page A-006 for details

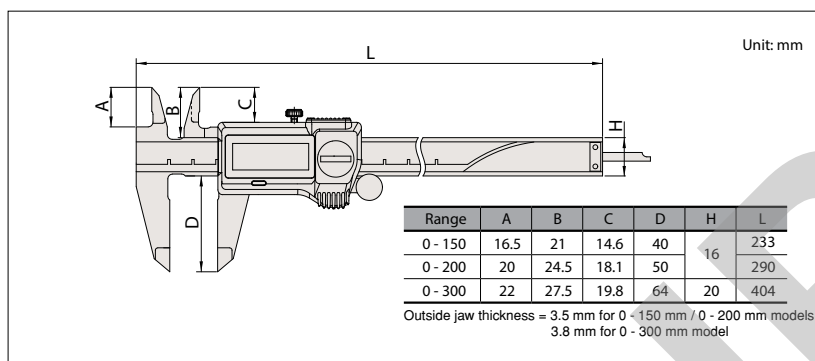
Functions

Origin-set: Absolute origin position can be changed.
Data output: Measurement data output connector allows integration into statistical process control and measurement systems.

Automatic power on/off: LCD display will turn off after 20 minutes inactivity, but the ABS scale unit origin is stored. Power is restored when the slider is moved.

Alarm: Error message is displayed if error in calculation is found and measurement is stopped. Measurement will not be continued while error is displayed. Also, if the battery voltage becomes low, "B" appears to alert the user before measurement is no longer possible.

DIMENSIONS



IP67 protection level

IP67

First characteristic number	Protection from solid objects (people or things)		Second characteristic number	Protection from liquids (water, etc.)	
	Brief description	Description		Brief description	Description
6	Dust-proof	No ingress of dust allowed.	7	Protected against water penetration.	Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed in water under standardized conditions of pressure and time.

For details of the test conditions used in evaluating each degree of protection, please refer to the original standard.

Metric

Order No.	Range	Accuracy*	Mass	Measurement data output port	thumb roller	Remarks
500-702-20	0-150mm		168g			
500-703-20	0-200mm		198g			
500-712-20	0-150mm		168g			
500-713-20	0-200mm		198g			
500-719-20	0-150mm	±0.02mm	168g		✓	Depth bar Ø1.9mm
500-721-20	0-150mm		168g	✓		Carbide-tipped jaws for outside measurement
500-722-20	0-200mm		198g			Carbide-tipped jaws for outside and inside measurement
500-723-20	0-150mm		168g			
500-724-20	0-200mm		198g			
500-714-10			350g	✓	✓	
500-718-11			345g		-	
500-704-10	0-300mm	±0.03mm	350g		✓	
500-708-11			345g		-	

* Not including quantizing error of ±1 count in LSD

Inch / Metric

Order No.	Range	Accuracy*	Mass	Measurement data output port	thumb roller	Remarks
500-731-20	0-6"		168g			Carbide-tipped jaws for outside measurement
500-732-20	0-8"		198g			Carbide-tipped jaws for outside and inside measurement
500-733-20	0-6"		168g			Carbide-tipped jaws for outside measurement
500-734-20	0-8"		198g			Carbide-tipped jaws for outside measurement
500-735-20	0-6"		168g			Carbide-tipped jaws for outside measurement
500-736-20	0-8"		198g			Carbide-tipped jaws for outside measurement
500-737-20	0-6"	±.001"/	168g	✓		Carbide-tipped jaws for outside and inside measurement
500-738-20	0-8"	±0.02mm	198g		✓	
500-752-20	0-6"		168g			
500-753-20	0-8"		198g			
500-762-20	0-6"		168g	✓		
500-763-20	0-8"		198g			
500-768-20	0-6"		168g	-		Depth bar Ø1.9mm
500-769-20	0-6"		168g	✓		Depth bar Ø1.9mm
500-764-10		±.0015" /	350g	✓	✓	
500-754-10	0-12"	±0.03mm"	350g	-		

* Not including quantizing error of ±1 count in LSD

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาลิปเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

SMALL TOOLS

เครื่องมือวัดละเอียด

CALIPERS
คาลิเปอร์

Mitutoyo

คาลิเปอร์

ABSOLUTE Digimatic Caliper

SERIES 500 — with exclusive ABSOLUTE Encoder Technology

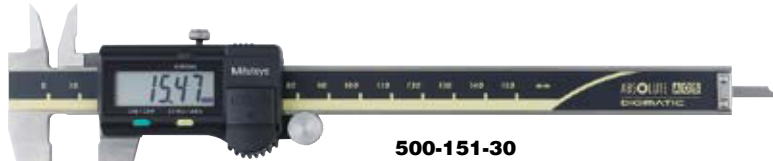
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Data Management Software by Mitutoyo

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Micrometer

ไมโครมิเตอร์



500-151-30

Inside Measurement



500-182-30

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องม้าวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

FEATURE

- ABSOLUTE electromagnetic induction linear encoder system is introduced (except for 0 - 300mm/0 - 12" models).
- New ergonomic design with finger rest.
- The ZERO/ABS button allows the display to be Zero-Set at any slider position along the scale for comparison measurements. This button will also allow return to the absolute (ABS) mode and display of the true position from the origin (usually jaws closed point).

- Large and clear LCD readout.
- Smooth slider movement makes for comfortable operation.
- 18,000 hours battery life.
- Allows step measurement.
- Carbide-tipped jaw calipers are optimal for rough finished parts, castings, grinding stones, etc.
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-002.

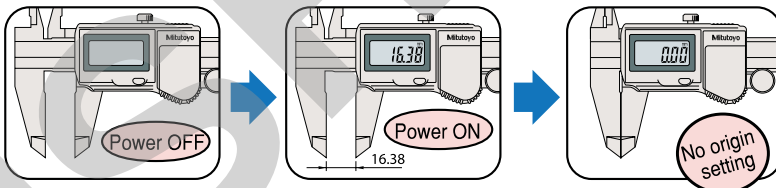


**GOOD DESIGN
AWARD 2015**



Remarkably easy to read display

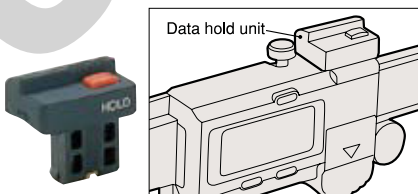
A built-in ABS (absolute) scale means that these calipers are ready to use immediately after power-on without origin resetting – just like using a vernier caliper.



Optional accessories

Dedicated for the models equipped with a digimatic output function.

959143: Data hold unit



Connecting cables for IT/DP/MUX

959149: SPC cable with data button (1m)
959150: SPC cable with data button (2m)



USB Input Tool Direct

06ADV380C: SPC cable for USB-ITN-C (2m)

Wireless data output **U-WAVE[™]**
U-WAVE-TC: **264-620** (IP67 type)
264-621 (Buzzer type)

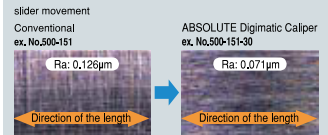
Connecting unit for U-WAVE-TC:
02AZF310 (IP67 type)
02AZF300 (Buzzer type)
Refer to page A-006 for details

Technical Data

Accuracy: $\pm 0.02\text{mm}$ ($\leq 200\text{mm}$),
 $\pm 0.03\text{mm}$ ($\leq 300\text{mm}$)
(excluding quantizing error)
Resolution: 0.01mm or .0005"/0.01mm
Repeatability: 0.01mm
Display: LCD
Scale type*: ABSOLUTE electromagnetic induction linear encoder
*ABSOLUTE electrostatic capacity static linear encoder for 0 - 300mm/0 - 12" models.
Max. response speed: Unlimited
Battery: **SR44** (1 pc), **938882**,
for initial operational checks
(standard accessory)
Battery life: Approx. 5 years under normal use
(18,000 hours for continuous use)

Smooth slider movement makes for comfortable operation.

High quality guide surface finish for smooth slider movement



Functions

Absolute measurement: After power is turned ON, measurement can be started without zero-setting if origin-setting was previously performed. The Absolute origin position can be changed by the ORIGIN button.

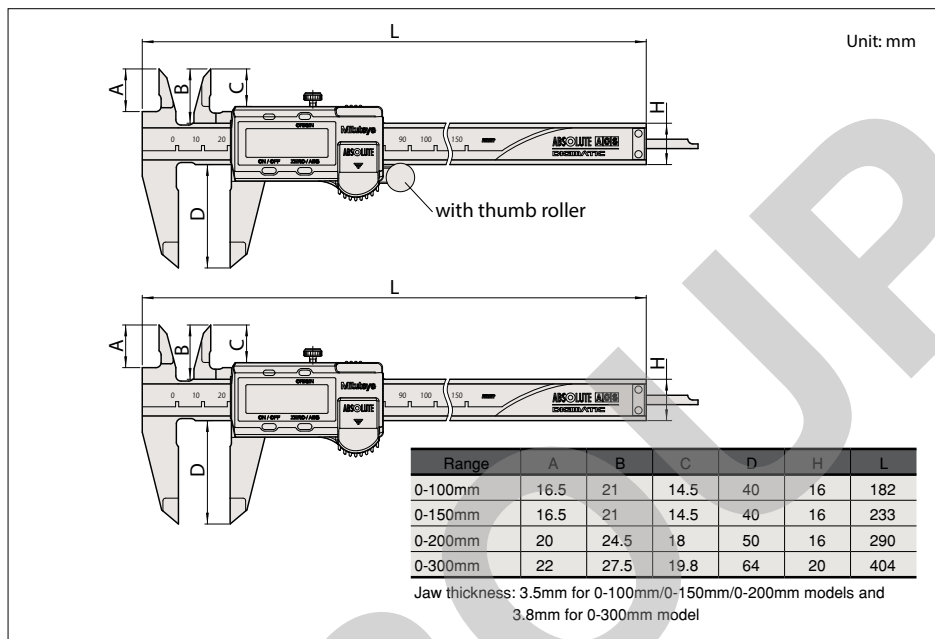
Incremental measurement: Display can be set to zero at any arbitrary position for comparative measurements

Low-voltage alert: If the battery voltage becomes low, a "B" appears in the display to alert the user before measurement is no longer possible. A battery change advisory alert precedes this alert.

Data output: By using the connecting cable (option), measurement data can be output.

Data hold: By using the data hold unit (option), the displayed value can be held. This cannot be used with the data output function.

DIMENSIONS



Metric

Order No.	Range	Accuracy**	Mass	Depth bar	Fine adjustment	Remarks
500-150-30	0-100mm		137g	Ø1.9mm rod	with thumb roller	
500-180-30*					-	-
500-151-30						
500-154-30	0-150mm	±0.02mm	162g	Blade	with thumb roller	Carbide-tipped jaws for outside measurement
500-155-30						Carbide-tipped jaws for outside and inside measurement
500-158-30					Ø1.9mm rod	
500-181-30*	0-200mm		192g	Blade	-	-
500-152-30						
500-156-30					with thumb roller	Carbide-tipped jaws for outside measurement
500-157-30						Carbide-tipped jaws for outside and inside measurement
500-182-30*					-	-
500-153	0-300mm	±0.03mm	350g		with thumb roller	

* Without SPC data output

** Not including quantizing error of ±1 count in LSD

Inch / Metric

Order No.	Range	Accuracy**	Mass	Depth bar	Fine adjustment	Remarks
500-170-30	0-4"		137g	.075" rod		
500-195-30*						-
500-171-30						
500-174-30	0-6"	±0.01"/ ±0.02mm	162g	Blade		Carbide-tipped jaws for outside measurement
500-175-30						Carbide-tipped jaws for outside and inside measurement
500-178-30						-
500-196-30*	0-8"		192g	Blade		Carbide-tipped jaws for outside measurement
500-159-30*						Carbide-tipped jaws for outside and inside measurement
500-160-30*						-
500-172-30					with thumb roller	Carbide-tipped jaws for outside measurement
500-176-30						Carbide-tipped jaws for outside and inside measurement
500-177-30	0-12"	±0.015"/ ±0.03mm	350g			-
500-197-30*						Carbide-tipped jaws for outside measurement
500-163-30*						Carbide-tipped jaws for outside and inside measurement
500-164-30*						-
500-173						Carbide-tipped jaws for outside measurement
500-167	0-12"					Carbide-tipped jaws for outside and inside measurement
500-168						-
500-193*						Carbide-tipped jaws for outside measurement
500-165*						Carbide-tipped jaws for outside and inside measurement
500-166*						

* Without SPC data output

** Not including quantizing error of ±1 count in LSD

Micrometer

ไมโครมิเตอร์

Inside Measurement

เครื่องมือวัดภายใน

Calipers

คาร์ลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

SMALL TOOLS

เครื่องมือวัดละเอียด

Mitutoyo

คาลิเปอร์รุ่นยาว

Long ABSOLUTE Digimatic Caliper

SERIES 500 — with Exclusive ABSOLUTE Encoder Technology

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

ABSOLUTE[™]



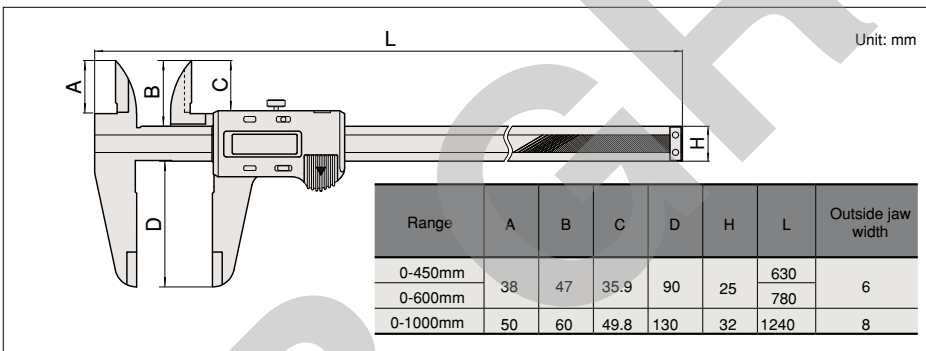
Technical Data

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

FEATURE

- Long Digital caliper incorporating an ABSOLUTE scale and available with a measuring range from 450mm to 1000mm.
- Allows step measurement
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-002.
- For the details of the Absolute scale and its function, refer to page D-007.

DIMENSIONS



Metric

Order No.	Range	Depth bar	Fine adjustment	Remarks
500-500-10	0-450mm			
500-501-10	0-600mm	-	-	-
500-502-10	0-1000mm			

* without SPC data output

Inch / Metric

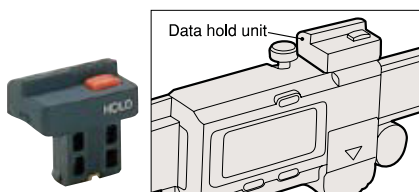
Order No.	Range	Depth bar	Fine adjustment	Remarks
500-505-10	0 - 18"			
500-506-10	0 - 24"	-	-	-
500-507-10	0 - 40"			

* without SPC data output

Optional accessories

Dedicated for the models equipped with a digimatic output function.

959143: Data hold unit



Connecting cables for IT/DP/MUX

959149: SPC cable with data button (1m)
959150: SPC cable with data button (2m)



USB Input Tool Direct
06AFM380C: SPC cable for USB-ITN-C (2m)

Connecting cables for U-WAVE-T
02AZD790C: SPC cable for U-WAVE with data button (160mm)
02AZE140C: SPC cable for footswitch

โซลาร์คาลิปเปอร์รุ่นยาว

Long ABSOLUTE Solar Caliper

SERIES 500 — No battery or origin reset needed

Technical Data

Accuracy: 0.02mm (excluding quantizing error)
Resolution: 0.01mm or .0005"/0.01mm
Repeatability: 0.01mm
Display: LCD
Scale type: ABSOLUTE electrostatic capacity linear encoder
Power supply: Solar cell*
Max. response speed: Unlimited
Operational temperature: 0 to 40°C
* Can be used continuously above 60lux ambient illumination

Functions

Absolute measurement
Scale contamination detection
Data output (use together with optional connecting cable)
Data hold (use optional hold unit. This cannot be used with the data output function)
* For details of the function, refer to page D-007.



500-444

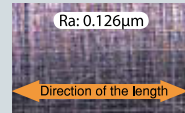
FEATURE

- Mitutoyo's Absolute Solar Digimatic Caliper retains its origin point indefinitely.
- At 60 Lux and above the ABSOLUTE solar caliper is ready to start measurement. No more repeated zero setting caused by a shortage of light.
- An ABSOLUTE scale is incorporated so that zero setting is not required at each power ON. No danger of over speed errors.

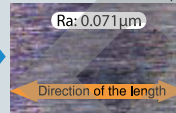
- Slider operation is smooth and comfortable.
- Allows step measurement.
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-002.

High quality guide surface finish for smooth slider movement

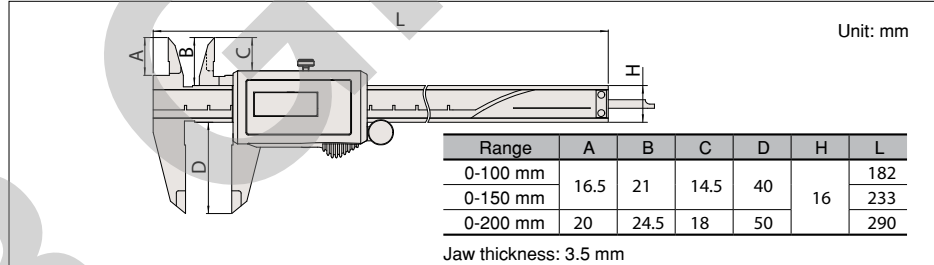
Conventional



ABSOLUTE Solar Caliper



DIMENSIONS



Metric

Order No.	Range	Depth bar	Fine adjustment
500-443	0-100mm	Ø1.9mm rod	
500-453*			
500-444	0-150mm		with thumb roller
500-454*		Blade	
500-445	0-200mm		
500-455*			

* without SPC data output

Inch/Metric

Order No.	Range	Depth bar	Fine adjustment
500-463	0 - 4"	.075" rod	
500-473*			
500-464	0 - 6"		with thumb roller
500-474*		Blade	
500-465	0 - 8"		
500-475*			

* without SPC data output

Optional accessories

Dedicated for the models equipped with a digimatic output function.

959143: Data hold unit



Connecting cables for IT/DP/MUX

959149: SPC cable with data button (1m)
959150: SPC cable with data button (2m)



USB Input Tool Direct

06AFM380C : SPC cable for USB-ITN-C (2m)

Wireless data output **U-WAVE^{fit}**
U-WAVE-TC: 264-620 (IP67 type)
264-621 (Buzzer type)

Connecting unit for U-WAVE-TC:
02AZF310 (IP67 type)
02AZF300 (Buzzer type)
Refer to page A-006 for details

SMALL TOOLS

เครื่องมือวัดละเอียด

CALIPERS
คาร์ลิเปอร์

Mitutoyo

เวอร์เนียคาร์ลิเปอร์รุ่นมาตรฐาน

Vernier Caliper

SERIES 530 — Standard model

Micrometer

ไมโครมิเตอร์

Inside
Measurement

เครื่องมือวัดภายใน

Calipers

คาร์ลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

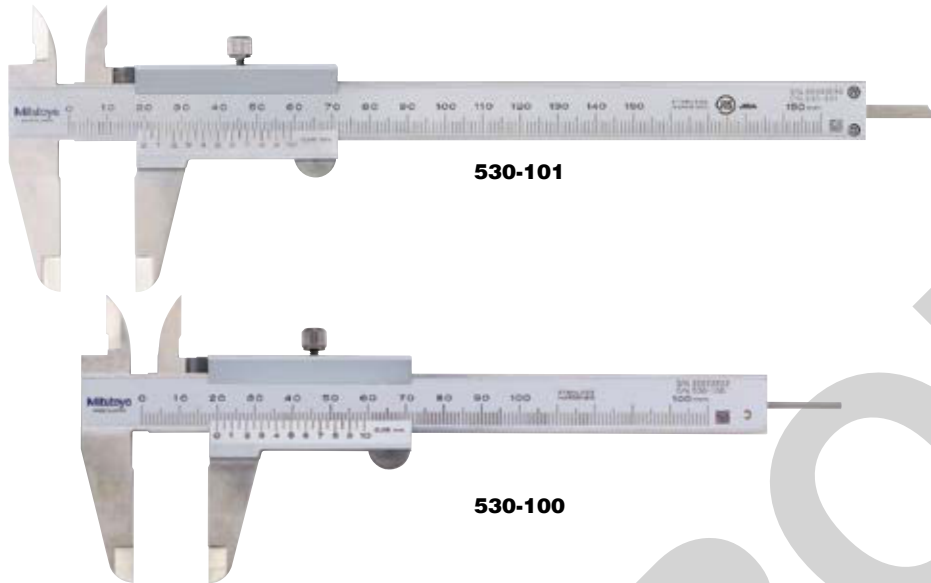
เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง



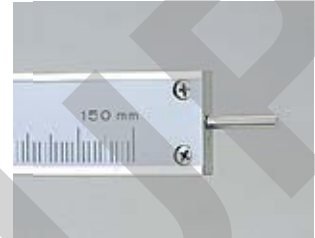
530-101

530-100

Technical Data

Graduation: 0.05mm, 0.05mm (1/128") or .001" (1/128")

High accuracy type:
0.02mm or 0.02mm (.001")



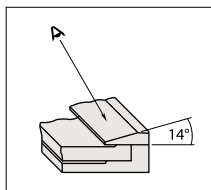
530-102 (Round depth bar type)



530-320 (Carbide-tipped jaw type)

FEATURE

- Plain and basic design.
- Stepped graduation face prevents dust ingress between the main scale and slider.
- The small vernier face angle (14°) provides easy reading.
- Can measure outside and inside dimensions, depth, and steps.
- Carbide-tipped jaw calipers are optimal for rough finished parts, castings, grinding stones, etc.
- Decimal and fractional graduated scales (metric/inch and inch models only).



DIMENSIONS

Unit: mm

Range	A	B	D	E	F	H	L
0 - 100 mm	17	21.5	40	53.5	30	16	182
0 - 150 mm	17	21.5	40	53.5	30	16	229
0 - 200 mm	20.5	25	50	53.5	30	16	288
0 - 300 mm	22	27.5	64	66.5	36	20	404
0 - 600 mm	38	47	90	89	50	25	780
0 - 1000 mm	50	60	130	111	61	32	1240

Note: Order No.530-100 and No.530-102 incorporate a round depth bar (ø1.9 mm).
The depth bar shown in the illustration above is a different type.

Metric

Order No.	Range	Maximum Permissible Error (mm) •E MPE (outside measurement) •S MPE (inside measurement)	Depth bar	Remarks
530-101	0 - 150mm	±0.05	Blade	-
530-122*		±0.03		High accuracy model
530-108		± 0.05		-
530-123*	0 - 200mm	±0.03		High accuracy model
530-109		± 0.08		-
530-124*	0 - 300mm	±0.04		High accuracy model

Order No.	Range	Accuracy	Depth bar	Remarks
530-100	0 - 100mm	±0.05	ø1.9 mm rod	-
530-102		±0.05		-
530-320	0 - 150mm	±0.05	Blade	Carbide-tipped jaws for outside measurement
530-335		±0.05		Carbide-tipped jaws for outside and inside measurement
530-321	0 - 200mm	±0.05		Carbide-tipped jaws for outside measurement
530-322	0 - 300mm	±0.08		Carbide-tipped jaws for outside measurement
530-501	0 - 600mm	±0.10		-
530-502	0 - 1000mm	±0.15		-

* Graduation: 0.02mm

Metric/Inch with metric/inch double scale

Order No.	Range	Accuracy	Depth bar	Graduation	Remarks
530-104	0 - 150mm	±0.05	Blade	1/128"	-
530-316				1/128"	Clamping screw below the slider
530-312*				.001"	High accuracy model: ±0.03mm
530-114	0 - 200mm	± 0.05		1/128"	-
530-118*				.001"	High accuracy model: ±0.03mm
530-115	0 - 300mm	± 0.08		1/128"	-
530-119*				.001"	High accuracy model: ±0.04mm

* Graduation: 0.02mm

Micrometer
ไมโครมิเตอร์

Inside
Measurement
เครื่องมือวัดภายใน

Calipers
คาลิปเปอร์

Height Gages
เกจวัดความสูง

Linear Height
เครื่องมือวัดความสูง

Depth Gages
เกจวัดความลึก

Gauge Blocks
เกจบล็อก

Reference Gages
เครื่องมืออ้างอิง

Indicators
อินดิเคเตอร์

Stands
ขาตั้ง

Measurement Applications

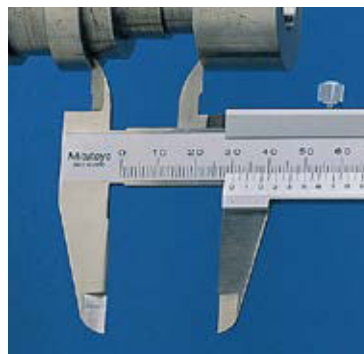
1. Outside measurement



3. Step measurement



2. Inside measurement



3. Depth measurement



SMALL TOOLS

เครื่องมือวัดละเอียด

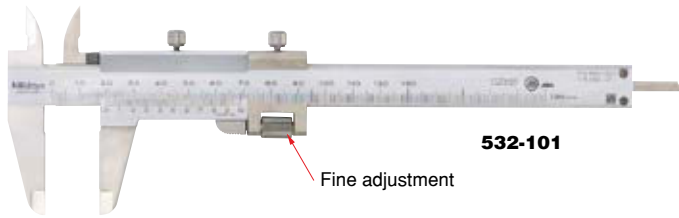
CALIPERS
คาลิเปอร์

Mitutoyo

เวอร์เนียคาลิเปอร์มี fine adjustment

Vernier Caliper

SERIES 532 — with fine adjustment



532-101

Fine adjustment

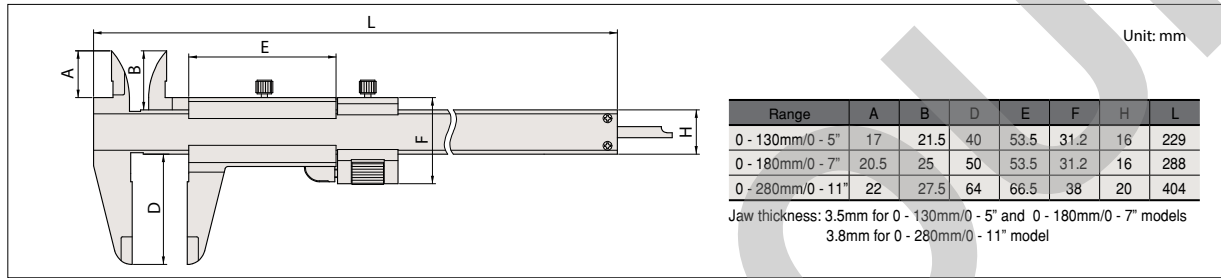
FEATURE

- Fine-adjustment aids slider positioning.
- Allows step measurement.

Technical Data

Graduation: 0.02mm, 0.02mm (.001") or .001" (1/128")

DIMENSIONS



Metric

Order No.	Range	Maximum Permissible Error (mm) •E MPE (outside measurement) •S MPE (inside measurement)	Depth bar	Fine adjustment
532-101	0-130mm	±0.03	Blade	with fine adjustment
532-102	0-180mm	±0.03		
532-103	0-280mm	±0.04		

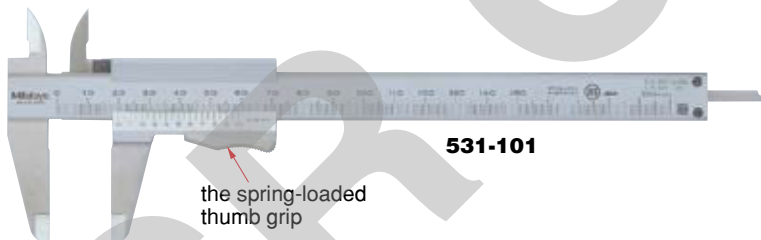
Metric/Inch with metric/inch double scale

Order No.	Range	Accuracy	Depth bar	graduation	Fine adjustment
532-119	0-130mm	±0.03	Blade	.001"	with fine adjustment
532-120	0-180mm	±0.03			
532-121	0-280mm	±0.04			

คาลิเปอร์

Vernier Caliper

SERIES 531 — with thumb clamp



531-101

the spring-loaded thumb grip

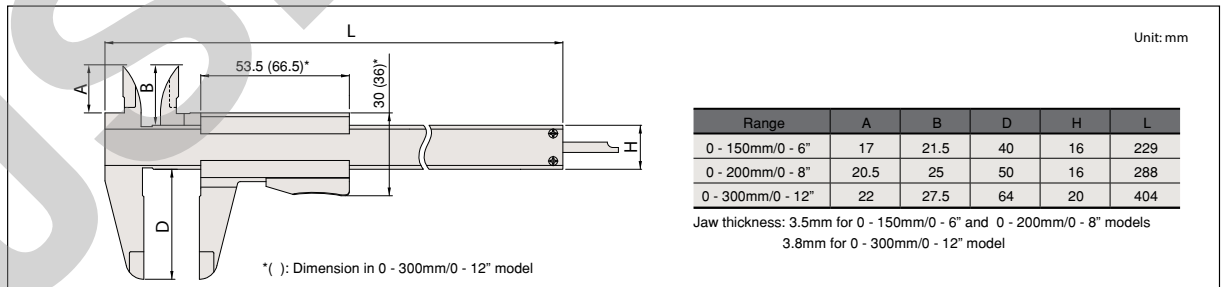
FEATURE

- The slider moves only when the spring-loaded thumb grip is depressed.
- Allows step measurement.

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")

DIMENSIONS



Metric

Order No.	Range	Maximum Permissible Error (mm) •E MPE (outside measurement) •S MPE (inside measurement)	Depth bar	Fine adjustment
531-101*	0-150mm	±0.03	Blade	-
531-102*	0-200mm	±0.03		
531-103*	0-300mm	±0.04		

* Graduation: 0.02mm

Metric/Inch with metric/inch double scale

Order No.	Range	Accuracy	Depth bar	Graduation	Remarks
531-122	0-150mm	±0.05mm	Blade	1/128"	with inch/mm conversion label
531-128*		±0.03mm		.001"	High accuracy model
531-108	0-200mm	±0.05mm		1/128"	-
531-129*		±0.03mm		.001"	High accuracy model
531-109	0-300mm	±0.08mm		1/128"	-
531-112*		±0.04mm		.001"	High accuracy model

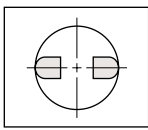
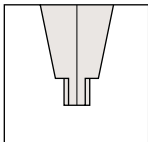
* Graduation: 0.02mm

คาลิเปอร์

**ABSOLUTE Digimatic Caliper
SERIES 550 — with Nib Style Jaws**

ABSOLUTE™

IP67

www.tuv.com
ID 0000045042

Radiused jaws for accurate ID measurement

Technical Data

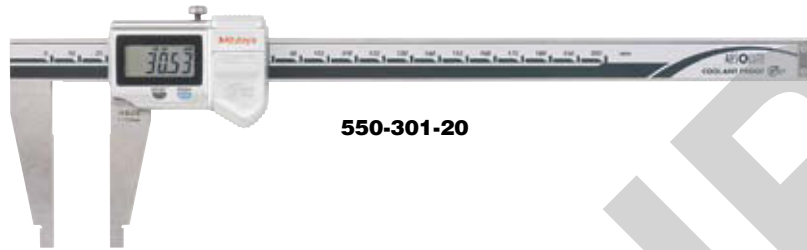
Accuracy: Refer to the list of specifications.
(excluding quantizing error for digital models)
Resolution: 0.01mm or .0005"/0.01mm
Display: LCD
Scale type: ABSOLUTE electromagnetic induction linear encoder
Max. response speed: Unlimited
Battery: **SR44** (1 pc), **9388882**, for initial operational checks (standard accessory)
Battery life: Approx. 5 years under normal use (1 year: 300mm models) (3.5 years: over 300mm models)
Dust/Water protection level: IP67* (models up to 300mm)
*This model is not waterproof type.
Therefore, rustproofing shall be applied after use.

Optional accessories

959143: Data hold unit
Connecting cables for IT/DP/MUX
05CZA624: SPC cable with data button (1m)*
05CZA625: SPC cable with data button (2m)*



959149: SPC cable with data button (1m)
959150: SPC cable with data button (2m)
USB Input Tool Direct
06AFM380A: SPC cable for USB-ITN-A (2m)*
06AFM380C: SPC cable for USB-ITN-C (2m)
Wireless data output **U-WAVE fit**
U-WAVE-TC: **264-620** (IP67 type)
264-621 (Buzzer type)
Connecting unit for U-WAVE-TC:
02AZF310 (IP67 type)
02AZF300 (Buzzer type)
Refer to page A-006 for details
*For IP67 models (up to 300mm)



550-301-20

FEATURE

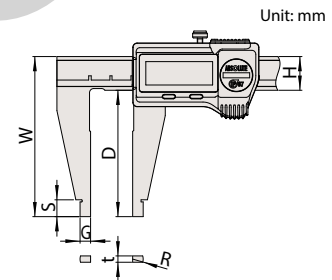
- Offers a resolution of 0.01mm with corresponding accuracy.
- Incorporates an Absolute measurement system. No need to reset the origin after switching on. (Refer to page D-007 for a description of Absolute measurement.)
- Code Nos. 550-301-10, 550-331-10, 550-311-10 and 550-341-10: IP67 (These models are not a waterproof type. Therefore a rustproofing shall be applied after use.)
- Allows integration into statistical process control and measurement systems for models

with measurement data output connector. Refer to page A-002.

- ID measurement value: displayed value + (the minimum inside measurement value mentioned below). OFFSET switch allows to input a compensation value so that the measurement value can be read directly (Code Nos. 550-301-10, 550-331-10, 550-311-10 and 550-341-10). Preset function allows to set a desired starting point (Code Nos. 550-331-10 and 550-341-10).

DIMENSIONS

Range	D	G	S	W	H	t	R
0 - 200 mm	60	5	8	76	16	3	5
0 - 300 mm	75		12	95	20	3.8	
0 - 450 mm	100	10	18	125	25	6	10
0 - 600 mm							
0 - 1000 mm	140		24	172	32	8	



Unit: mm

Metric

Order No.	Range*	Accuracy	Remarks
550-301-20	0-200mm (10.1-210mm)	±0.03mm	IP67
550-331-10	0-300mm (10.1-310mm)	±0.04mm	IP67, with offset/preset function for easy inside measurement
550-203-10	0-450mm (20.1-470mm)	±0.05mm	-
550-205-10	0-600mm (20.1-620mm)	±0.05mm	-
550-207-10	0-1000mm (20.1-1020mm)	±0.07mm	-

* (): Inside measurement

Note: Series 550 is not equipped with a depth bar.

Inch / Metric

Order No.	Range*	Accuracy	Remarks
550-311-20	0 - 8" (.404"-8.4")	±.0015"	IP67
550-341-10	0 - 12" (.404" - 12.4")		IP67, with offset/preset function for easy inside measurement
550-223-10	0 - 18" (.504" - 18.5")	±.002"	-
550-225-10	0 - 24" (.504" - 24.5")		-
550-227-10	0 - 40" (.504" - 40.2")	±.003"	-

* (): Inside measurement

Note: Series 550 is not equipped with a depth bar.

Micrometer

ไมโครมิเตอร์

Inside**Measurement**

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

SMALL TOOLS

เครื่องมือวัดละเอียด

CALIPERS
คาลิเปอร์

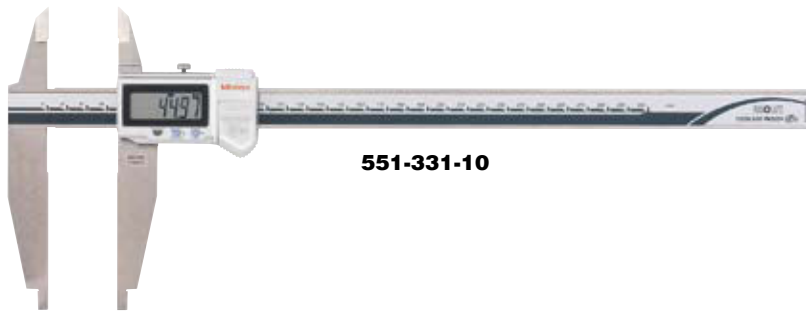
Mitutoyo

คาลิเปอร์

ABSOLUTE Digimatic Caliper

SERIES 551 — with Nib Style and Standard Jaws

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo



551-331-10

ABSOLUTE™

IP67



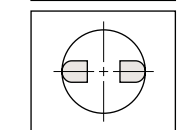
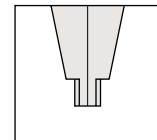
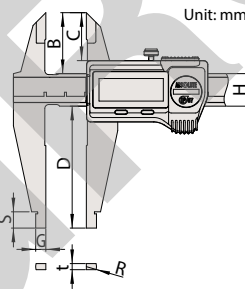
FEATURE

- Offers a resolution of 0.01mm with corresponding accuracy.
- Incorporates an Absolute measurement system. No need to reset the origin after switching on. (Refer to page D-007 for a description of Absolute measurement.)
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-002.
- ID measurement value: displayed value + (the minimum inside measurement value mentioned below). OFFSET switch allows to input a compensation value so that the measurement value can be read directly (Code No. 551-301-10, 551-331-10, 551-311-10 and 551-341-10). Preset function allows to set a desired starting point (Code No. 551-331-10 and 551-341-10).
- Tips of the outside measurement jaw are relieved for easy measurement of thin parts.

DIMENSIONS

Range	B	C	D	G	S	H	t	R
0 - 200 mm	30	23.6	60	5	8	16	3	5
0 - 300 mm	40.1	32.4	90		10	20	3.8	
0 - 500 mm	56	44.9	150	10	15	25	6	10
0 - 750 mm	56				20	32	8	
0 - 1000 mm	56	43.8						

Unit: mm



Radiused jaws for accurate ID measurement

Metric

Order No.	Range*	Accuracy	Remarks
551-301-20	0-200mm (10.1-210mm)	±0.03mm	IP67
551-331-10	0-300mm (10.1-310mm)	±0.04mm	IP67, with offset/preset function for easy inside measurement
551-204-10	0-500mm (20.1-520mm)	±0.06mm	-
551-206-10	0-675mm (20.1-770mm)	±0.06mm	-
551-207-10	0-1000mm (20.1-1020mm)	±0.07mm	-

* (): Inside measurement

Note: Series 550 is not equipped with a depth bar.

Inch / Metric

Order No.	Range*	Accuracy	Remarks
551-311-20	0 - 8" (.404"-8.4")	±.0015"	IP67
551-341-10	0 - 12" (.404" - 12.4")	±.002"	IP67, with offset/preset function for easy inside measurement
551-224-10	0 - 20" (.504" - 20.5")	±.0025"	-
551-226-10	0 - 30" (.504" - 30.5")	±.0025"	-
551-227-10	0 - 40" (1.004" - 41")	±.003"	-

* (): Inside measurement

Note: Series 550 is not equipped with a depth bar.

Technical Data

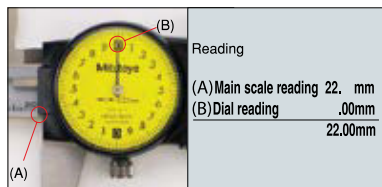
Accuracy: Refer to the list of specifications. (excluding quantizing error for digital models)
Resolution: 0.01 mm or .0005"/0.01 mm
Display: LCD
Scale type: ABSOLUTE electromagnetic induction linear encoder
Max. response speed: Unlimited
Battery: **SR44** (1 pc), **938882**, for initial operational checks (standard accessory)
Battery life: Approx. 5 years under normal use (1 year: 300mm models) (3.5 years: over 300mm models)
Dust/Water protection level: IP67* (models up to 300mm)
*This model is not waterproof type. Therefore, rustproofing shall be applied after use.

Optional accessories

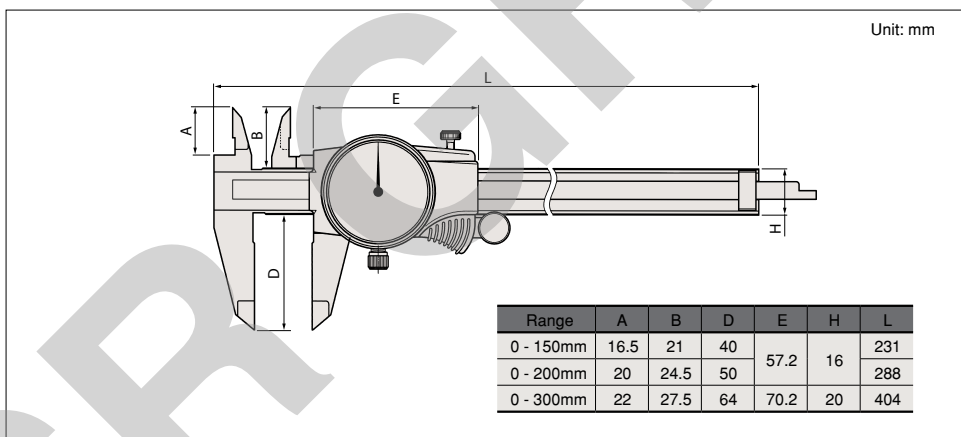
959143: Data hold unit
Connecting cables for IT/DP/MUX
05CZA624: SPC cable with data button (1m)*
05CZA625: SPC cable with data button (2m)*



959149: SPC cable with data button (1m)
959150: SPC cable with data button (2m)
USB Input Tool Direct
06AFM380A: SPC cable for USB-ITN-A (2m)*
06AFM380C: SPC cable for USB-ITN-C (2m)
Wireless data output **U-WAVE fit**
U-WAVE-TC: **264-620** (IP67 type)
264-621 (Buzzer type)
Connecting unit for U-WAVE-TC:
02AZF310 (IP67 type)
02AZF300 (Buzzer type)
Refer to page A-006 for details
*For IP67 models (up to 300mm)

คาลิเปอร์
Dial Caliper
SERIES 505

DIMENSIONS



Metric

Order No.	Range	Accuracy	Graduation	Remarks
505-730	0-150mm	±0.03mm	0.02mm, 2mm/rev	
505-734				Carbide-tipped jaws for outside measurement
505-735				Carbide-tipped jaws for outside and inside measurement
505-732*	0-200mm	±0.02mm	0.01mm, 1mm/rev	
505-731		±0.03mm	0.02mm, 2mm/rev	
505-733*			0.01mm, 1mm/rev	
505-745	0-300mm	±0.04mm	0.02mm, 2mm/rev	

* Silver cover type

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

SMALL TOOLS

เครื่องมือวัดละเอียด

Mitutoyo

คาลิเปอร์

ABSOLUTE Coolant Proof Carbon Fiber Caliper SERIES 552 - with Long Jaws

MeasurLink[®] ENABLED

Data Management Software by Mitutoyo



552-151-10

ABSOLUTE[™]

IP66



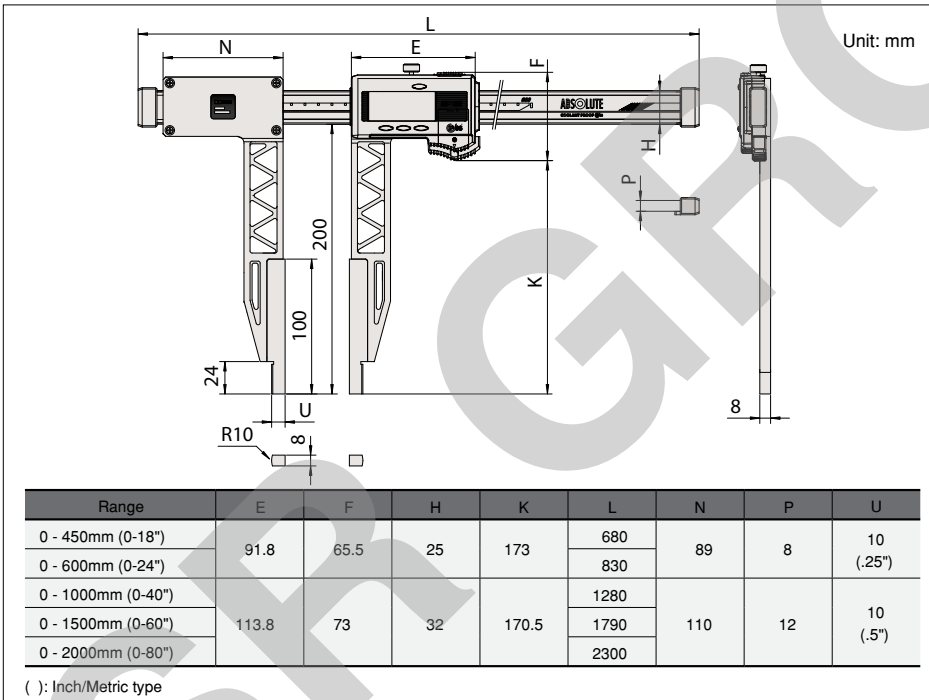
www.tuv.com
ID 000022582

FEATURE

- IP66 Absolute Digital Caliper (Refer to page D-007 for a description of Absolute measurement.)
- Lightweight Digimatic Calipers that employ CFRP (Carbon Fiber Reinforced Plastics) in the beam and jaws.

- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-002.

DIMENSIONS



Metric

Order No.	Range*	Accuracy
552-150-10	0 - 450mm (20.1 - 470mm)	
552-151-10	0 - 600mm (20.1 - 620mm)	±0.06mm
552-152-10	0 - 1000mm (20.1 - 1020mm)	±0.07mm
552-153-10	0 - 1500mm (20.1 - 1520mm)	±0.11mm
552-154-10	0 - 2000mm (20.1 - 2020mm)	±0.14mm

* (): Dimension in inside measurement

Inch / Metric

Order No.	Range*	Accuracy
552-160-10	0 - 18" (.504 - 18.5")	
552-161-10	0 - 24" (.504 - 24.5")	±.0025"
552-162-10	0 - 40" (1.004 - 40.5")	±.003"
552-163-10	0 - 60" (1.004 - 60.5")	±.0045"
552-164-10	0 - 80" (1.004 - 80.5")	±.0055"

* (): Dimension in inside measurement

Technical Data

Accuracy: Refer to the list of specifications.
(excluding quantizing error)
Resolution: 0.01mm or .0005"/0.01mm
Material of jaws: Stainless Steel Hardened
Display: LCD
Scale type: ABSOLUTE electromagnetic induction linear encoder
Max. response speed: Unlimited
Battery: **SR44** (1 pc), **938882**
for initial operational checks
(standard accessory)
Battery life: Approx. 5,000 hours in continuous use
Dust/Water protection level: IP66 (IEC 60529)*
Standard accessory: Jaw clamps (2pcs.), 05GZA033
*This model is not waterproof type. Please wipe away the wet after use.

Functions

Zero-setting
Data hold
Offsetting
Presetting
Data output
Low-power and low-voltage alert
Counting value composition error
Automatic power on/off, inch/mm reading
(inch/mm models)

Optional accessories

Connecting cables for **IT/DP/MUX**
05CZA624: SPC cable with data button (1m)
05CZA625: SPC cable with data button (2m)



USB Input Tool Direct

06AFM380A: SPC cable for **USB-ITN-A** (2m)
Connecting cables for **U-WAVE-T**
02AZD790A: SPC cable for U-WAVE with data button (160mm)
02AZE140A: SPC cable for footswitch

คาลิเปอร์

**ABSOLUTE Coolant Proof Carbon Fiber Caliper
SERIES 552 - with Ceramic Jaws**

ABSOLUTE™

IP66

www.tuv.com
ID 0000022582**Technical Data**

Accuracy: Refer to the list of specifications.
(excluding quantizing error)
Resolution: 0.01mm or .0005"/0.01mm
Material of jaws: Ceramic
Display: LCD
Scale type: ABSOLUTE electromagnetic induction
linear encoder
Max. response speed: Unlimited
Battery: **SR44** (1 pc), **938882**,
for initial operational checks
(standard accessory)
Battery life: Approx. 5,000 hours in continuous use
Dust/Water protection level: IP66 (IEC 60529)
Standard accessory : Jaw clamps (2pcs.), 05GZA033
*This model is not waterproof type. Please wipe away
the wet after use.

Functions

Zero-setting
Data hold
Offsetting
Presetting
Data output
Low-power and low-voltage alert
Counting value composition error
Automatic power on/off, inch/mm reading
(inch/mm models)

Optional accessories

Connecting cables for **IT/DP/MUX**
05CZA624: SPC cable with data button (1m)
05CZA625: SPC cable with data button (2m)

**USB Input Tool Direct**

06AFM380A: SPC cable for **USB-ITN-A** (2m)
Connecting cables for **U-WAVE-T**
02AZD790A: SPC cable for U-WAVE with data
button (160mm)
02AZE140A: SPC cable for footswitch

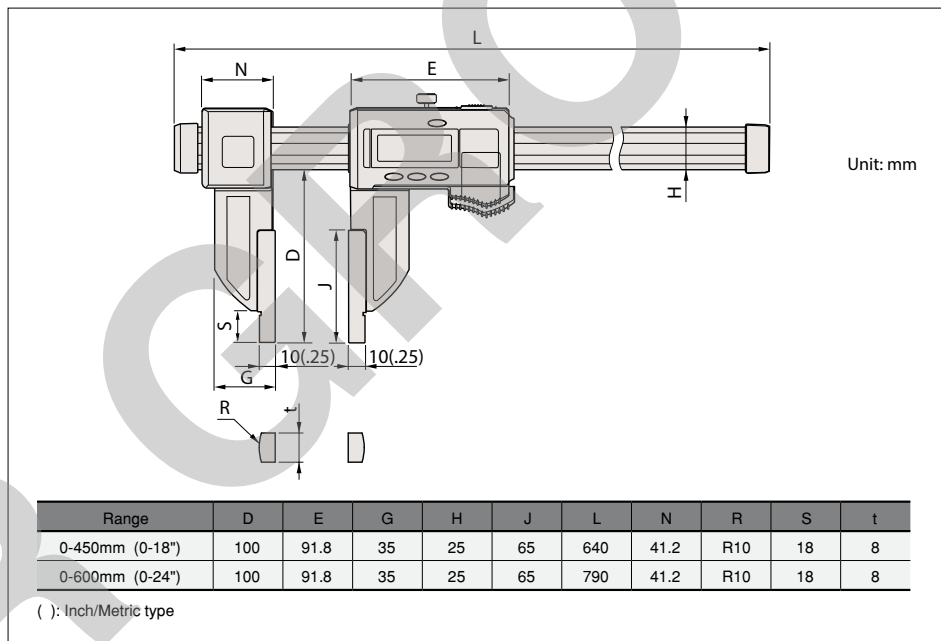


552-156-10

FEATURE

- IP66 Absolute Digital Caliper (Refer to page D-007 for a description of Absolute measurement.)
- Lightweight Digimatic Calipers that employ CFRP (Carbon Fiber Reinforced Plastics) in the beam and jaws.
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-002.

• The zirconia-ceramic jaws make this caliper suitable for measuring moderately magnetic workpieces. However, since steel is used in the main unit, it may not be suitable for measuring strongly magnetic workpieces.

DIMENSIONS**Metric**

Order No.	Range*	Accuracy
552-155-10	0 - 450mm (20.1 - 470mm)	±0.04mm
552-156-10	0 - 600mm (20.1 - 620mm)	

* () : Dimension in inside measurement

Inch / Metric

Order No.	Range*	Accuracy
552-165-10	0 - 18" (.504 - 18.5")	±.002"
552-166-10	0 - 24" (0.504 - 24.5")	

* () : Dimension in inside measurement

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

SMALL TOOLS

เครื่องมือวัดละเอียด

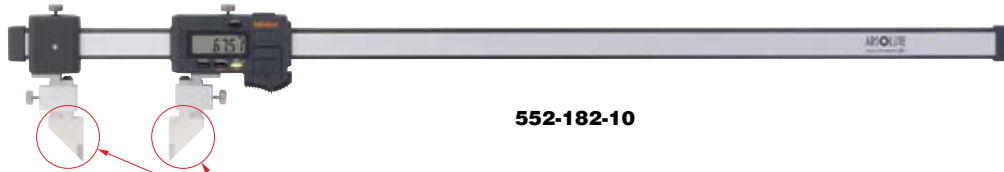
Mitutoyo

คาลิเปอร์

ABSOLUTE Coolant Proof Carbon Fiber Caliper SERIES 552 - with Interchangeable Jaws

MeasurLink® ENABLED

Data Management Software by Mitutoyo



552-182-10

552-182-10 with optional interchangeable jaws

ABSOLUTE™

IP66



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ID 000022582

Micrometer

ไมโครมิเตอร์

Inside
Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

Metric

Order No.	Range*	Accuracy
552-181-10	0-450mm	±0.04mm
552-182-10	0-600mm	±0.04mm
552-183-10	0-1000mm	±0.05mm
552-184-10	0-1500mm	±0.09mm
552-185-10	0-2000mm	±0.12mm

Inch / Metric

Order No.	Range*	Accuracy
552-191-10	0-18"	
552-192-10	0-24"	±.002"
552-193-10	0-40"	
552-194-10	0-60"	±.004"
552-195-10	0-80"	±.005"

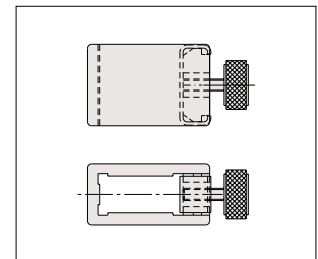
Technical Data

Accuracy: Refer to the list of specifications.
(excluding quantizing error)
Resolution: 0.01mm or .0005"/0.01mm
Display: LCD
Scale type: ABSOLUTE electromagnetic induction
linear encoder
Max. response speed: Unlimited
Battery: **SR44** (1 pc), **938882**,
for initial operational checks
(standard accessory)
Battery life: Approx. 5,000 hours in continuous use
Dust/Water protection level: IP66 (IEC 60529)
Standard accessory : Jaw clamps (2pcs.), 05GZA033
*Although these models are IP66 rated, care should be
taken to dry tool after use.

Functions

Zero-setting
Data hold
Offsetting
Presetting
Data output
Low-power and low-voltage alert
Counting value composition error
Automatic power on/off, inch/mm reading
(inch/mm models)

Standard accessories (2pcs.)



Jaw clamps: No.05GZA033

Optional accessories

Connecting cables for **IT/DP/MUX**
05CZA624: SPC cable with data button (1m)
05CZA625: SPC cable with data button (2m)



USB Input Tool Direct
06ADV380A: SPC cable for **USB-ITN-A** (2m)
Connecting cables for **U-WAVE-T**
02AZD790A: SPC cable for U-WAVE with data
button (160mm)
02AZE140A: SPC cable for footswitch

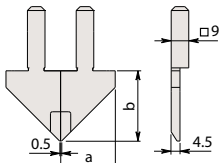
Optional accessories

Interchangeable jaws

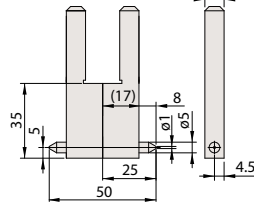
Type	Applicable	Range	Accuracy when attached to the caliper
Standard type	552-181-10 (552-191-10)	0 - 450mm (0-18")	±0.06mm (±.0025")
	552-182-10 (552-192-10)	0 - 600mm (0-24")	
	552-183-10 (552-193-10)	0 - 1000mm (0-40")	±0.07mm (±.0030")
	552-184-10 (552-194-10)	0 - 1500mm (0-60")	±0.11mm (±.0045")
	552-185-10 (552-195-10)	0 - 2000mm (0-80")	±0.14mm (±.0055")
Inside point type	552-181-10 (552-191-10)	Inside: 50.1-500mm (2.004-20") Outside: 0-450mm (0-18")	±0.09mm (±.0035")
	552-182-10 (552-192-10)	Inside: 50.1-650mm (2.004-26") Outside: 0-600mm (0-40")	
	552-183-10 (552-193-10)	Inside: 50.1-1050mm (2.004-42") Outside: 0 - 1000mm (0-40")	±0.10mm (±.0040")
	552-184-10 (552-194-10)	Inside: 50.1-1550mm (2.004-62") Outside: 0-1500mm (0-60")	±0.14mm (±.0055")
	552-185-10 (552-192-10)	Inside: 50.1-2050mm (2.004-82") Outside: 0-2000mm (0-80")	±0.17mm (±.0070")
Centerline type	552-181-10 (552-191-10)	30.1 - 480mm (1.204-19.2")	±0.08mm (±.0030")
	552-182-10 (552-192-10)	30.1 - 630mm (1.204-25.2")	±0.09mm (±.0035")
	552-183-10 (552-193-10)	30.1 - 1030mm (1.204-41.2")	±0.13mm (±.0055")
	552-184-10 (552-194-10)	30.1 - 1530mm (1.204-61.2")	±0.16mm (±.0060")
	552-185-10 (552-195-10)	30.1 - 2030mm (1.204-81.2")	±0.16mm (±.0060")
Scriber type	552-181-10 (552-191-10)	30.1 - 480mm (1.204-19.2")	±0.10mm (±.0040")
	552-182-10 (552-192-10)	30.1 - 630mm (1.204-25.2")	±0.11mm (±.0045")
	552-183-10 (552-193-10)	30.1 - 1030mm (1.204-41.2")	±0.15mm (±.0060")
	552-184-10 (552-194-10)	30.1 - 1530mm (1.204-61.2")	±0.18mm (±.0070")
	552-185-10 (552-195-10)	30.1 - 2030mm (1.204-81.2")	±0.18mm (±.0070")
Surface plate type + Scriber type for height gages	552-181-10 (552-191-10)	0 - 450mm (0-17.7")	±0.10mm (±.0040")
	552-182-10 (552-192-10)	0 - 600mm (0-23.7")	±0.11mm (±.0045")
	552-183-10 (552-193-10)	0 - 1000mm (0-39.4")	±0.15mm (±.0060")
	552-184-10 (552-194-10)	0 - 1500mm (0-59.4")	±0.18mm (±.0070")
	552-185-10 (552-195-10)	0-2000mm (0-79.6")	±0.18mm (±.0070")
Surface plate type + Inside point type	552-181-10 (552-191-10)	Inside: 60 - 450mm (1.004-19") Outside: 0 - 450mm (1-18")	±0.12mm (±.0050")
	552-182-10 (552-192-10)	Inside: 60 - 600mm (1.004-25") Outside: 0 - 600mm (1-24")	
	552-183-10 (552-193-10)	Inside: 60 - 1000mm (1.004-41") Outside: 0 - 1000mm (1-40")	±0.13mm (±.0055")
	552-184-10 (552-194-10)	Inside: 60 - 1500 (1.004-62") Outside: 0 - 1500mm (1-60")	±0.17mm (±.0070")
	552-185-10 (552-195-10)	Inside: 60 - 2000mm (1.004-81") Outside: 0 - 2000mm (1-80")	±0.20mm (±.0080")
Surface plate type + Centerline type	552-181-10 (552-191-10)	15 - 465mm (0.6-18.6")	±0.11mm (±.0045")
	552-182-10 (552-192-10)	15 - 615mm (0.6-24.6")	±0.12mm (±.0050")
	552-183-10 (552-193-10)	15 - 1015mm (0.6-40.6")	±0.16mm (±.0065")
	552-184-10 (552-194-10)	15 - 1515mm (0.6-60.6")	±0.19mm (±.0075")
	552-185-10 (552-195-10)	15 - 2015mm (0.6-80.6")	±0.19mm (±.0075")

SPECIFICATIONS

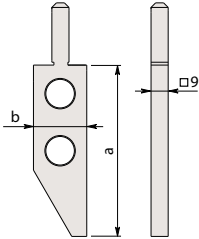
Standard type



Inside point type

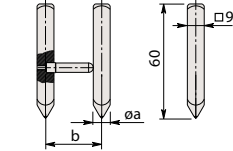


Surface Plate Type

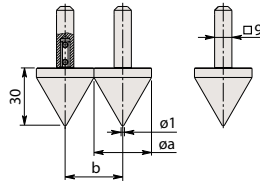


Unit: mm

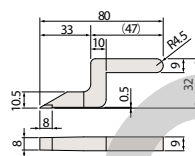
Scriber Type



Centerline Type



Scriber for height gages



Standard Type

Order No.	Components	a	b
07CZA056	Ring (07CAA044), Left (07CAA045)	28mm (1.1")	30mm (1.2")

* 1set

Inside Point Type

Order No.	Components	a	b
07CZA058	07CZA041 x 2pcs.	25mm	50mm
07CZA059	07CZA048 x 2pcs.	1"	2"

Scriber Type

Order No.	Components	a	b
07CZA055	Ring (07CAA042), Left (07CAA043)	8mm	30mm
07CZA061	Ring (07CAA042), Left (07CAA049)	0.31"	1.2"

Surface plate Type

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

Scriber Type

Order No.	Components	a	b
07CZA057	07CZA039 x 2pcs.	30mm	30mm
07CZA060	07CZA047 x 2pcs.	1.2"	1.2"

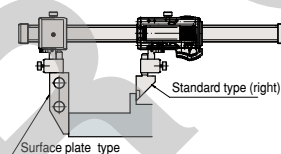
Note: Entering the appropriate offset value enables the display to indicate the correct measurement value inscribed on the jaws, which should be installed so that this inscription is visible from the display side of the caliper.

Scriber for height gages

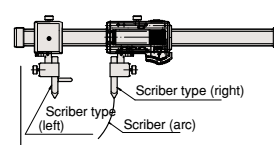
Order No.
07GZA000

APPLICATION EXAMPLES

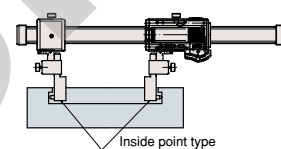
Surface plate type + Standard type



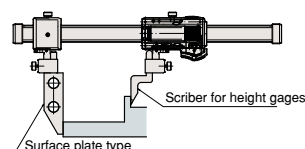
Scriber type



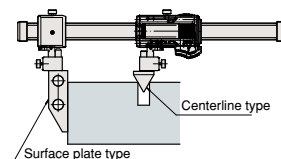
Inside point type



Surface plate type + Scriber for height gages



Surface plate type + Centerline type



SMALL TOOLS

เครื่องมือวัดละเอียด

Mitutoyo

คาลิเปอร์

Vernier Caliper

SERIES 160 - with Nib style Jaws and Fine Adjustment

Micrometer

ไมโครมิเตอร์

Inside Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

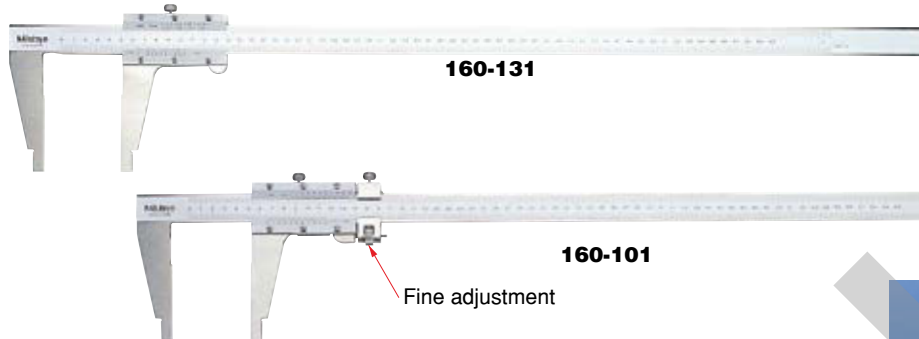
เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง



FEATURE

- Inside and outside measurements can be read directly from the upper and lower vernier scales.

- The jaws have radiused measuring faces for accurate inside diameter (ID) measurement.
- With fine adjustment (except for 160-130/131/132/133/134).

Metric with inside measurement vernier scale

Order No.	Range*	Accuracy	Graduation	Remarks
160-130	0 (20.1) - 450mm	±0.10mm		
160-131	0 (20.1) - 600mm	±0.10mm		
160-132	0 (20.1) - 1000mm	±0.15mm	0.05mm	without fine adjustment
160-133	0 (20.1) - 1500mm	±0.22mm		
160-134	0 (20.1) - 2000mm	±0.28mm		

* (): Minimum dimension in ID measurement

Metric with inside measurement vernier scale

Order No.	Range*	Accuracy	Graduation	Remarks
160-127	0 (20.1) - 300mm	±0.04mm		
160-128	0 (20.1) - 450mm	±0.05mm		
160-101	0 (20.1) - 600mm	±0.05mm	0.02mm	without fine adjustment
160-104	0 (20.1) - 1000mm	±0.07mm		
160-110	0 (20.1) - 1500mm	±0.1mm		
160-113	0 (20.1) - 2000mm	±0.12mm		

* (): Minimum dimension in ID measurement

Metric/Inch with metric/inch double scale

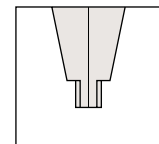
Order No.	Range*	Accuracy	Graduation	Remarks
160-150	0 (20.1) - 300mm	±0.04mm		+10mm/.394" to reading in inside measurement
160-151	0 (20.1) - 450mm	±0.05mm		
160-153	0 (20.1) - 600mm	±0.05mm	0.02mm/.001"	
160-155	0 (20.1) - 1000mm	±0.07mm		+20mm/.787" to reading in inside measurement
160-157	0 (20.1) - 1500mm	±0.1mm		
160-157	0 (20.1) - 2000mm	±0.12mm		

* (): Minimum dimension in ID measurement

Metric/Inch with metric/inch double scale

Order No.	Range*	Accuracy	Graduation	Remarks
160-125	0 (.304") - 12"	±.0015"		+.3"/7.62mm to reading in inside measurement
160-119	0 (.504") - 18"	±.002"		
160-103	0 (.504") - 24"	±.002"	.001" / 0.02mm	+.5"/12.7mm to reading in inside measurement
160-106	0 (1.004") - 40"	±.003"		
160-112	0 (1.004") - 60"	±.004"		+.1"/25.4mm to reading in inside measurement
160-115	0 (1.004") - 80"	±.005"		

* (): Minimum dimension in ID measurement



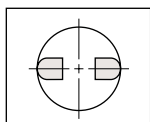
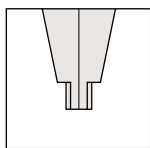
Radiused jaws for accurate ID measurement

DIMENSIONS

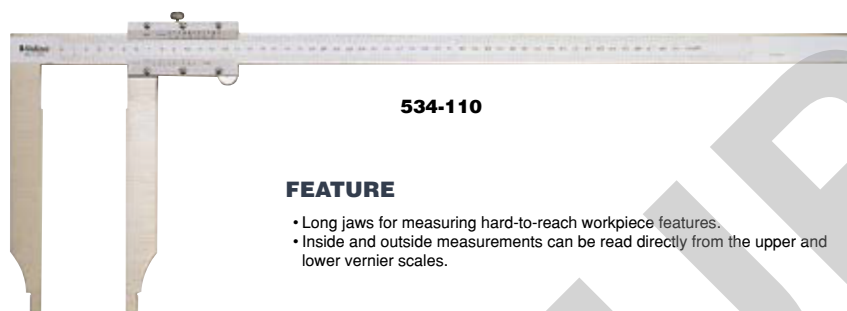
Range	D	E	F	H	L	M	R	S	T
0-300mm/0-12"	75	103	38	20	445	10	R 5	12	3.8
0-450mm*	100	89	—	25	630	14.8	R10	18	6
0-450mm/0-18"	112	51	—	—	—	—	R10	18	6
0-600mm*	100	89	—	25	780	14.8	R10	18	6
0-600mm/0-24"	112	51	—	—	—	—	R10	18	6
0-1000mm*	111	—	—	—	—	—	R10	24	8
0-1000mm/0-40"	140	150	62.5	32	1240	17	R10	30	8
0-1500mm*	180	129	—	32	1800	19	R10	30	8
0-1500mm/0-60"	170	170	62.5	—	—	—	R10	30	12
0-2000mm*	129	—	—	—	—	—	R10	30	12
0-2000mm/0-80"	180	180	78	40	2300	23	R10	30	12

*: without fine adjustment

คาลิเปอร์

Long Jaw Vernier Caliper
SERIES 534

Radiused jaws for accurate ID measurement



534-110

FEATURE

- Long jaws for measuring hard-to-reach workpiece features.
- Inside and outside measurements can be read directly from the upper and lower vernier scales.

Metric with inside measurement vernier scale

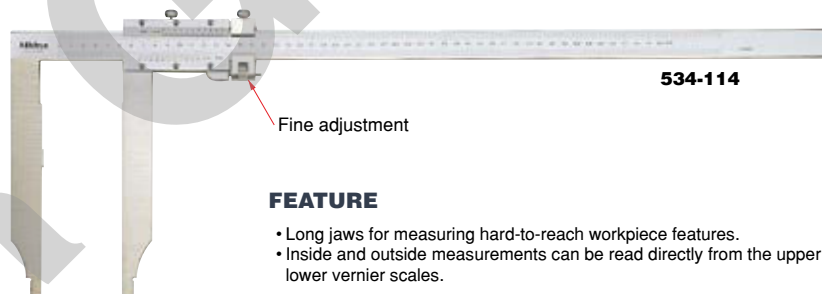
Order No.	Range*	Accuracy	Graduation	Remarks
534-109	0 (10.1) - 300mm	±0.07mm		
534-110	0 (20.1) - 500mm	±0.13mm	0.05mm	without fine adjustment

* (): Minimum dimension in inside measurement

Metric/Inch with metric/inch double scale

Order No.	Range*	Accuracy	Graduation	Remarks
534-101	0 (10.1) - 300mm	±0.07mm	0.05mm/1/128"	+10mm/.394" to reading in inside measurement
534-105	0 (10.1) - 300mm	±0.04mm	0.02mm/.001"	without fine adjustment
534-102	0 (20.1) - 500mm	±0.13mm	0.05mm/1/128"	
534-106	0 (20.1) - 500mm	±0.06mm	0.02mm/.001"	
534-103	0 (20.1) - 750mm	±0.16mm	0.05mm/1/128"	+20mm/.787" to reading in inside measurement
534-107	0 (20.1) - 750mm	±0.08mm	0.02mm/.001"	without fine adjustment
534-104	0 (20.1) - 1000mm	±0.20mm	0.05mm/1/128"	
534-108	0 (20.1) - 1000mm	±0.10mm	0.02mm/.001"	

* (): Minimum dimension in inside measurement



534-114

Fine adjustment

FEATURE

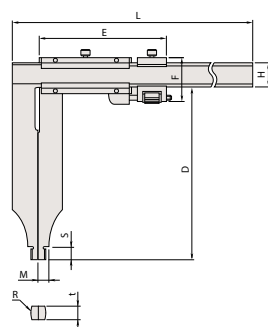
- Long jaws for measuring hard-to-reach workpiece features.
- Inside and outside measurements can be read directly from the upper and lower vernier scales.

Metric with inside measurement vernier scale

Order No.	Range*	Accuracy	Graduation	Remarks
534-113	0 (10.1) - 300mm	±0.04mm		
534-114	0 (20.1) - 500mm	±0.06mm		
534-115	0 (20.1) - 750mm	±0.08mm	0.02mm	without fine adjustment
534-116	0 (20.1) - 1000mm	±0.10mm		

* (): Minimum dimension in inside measurement

DIMENSIONS



Unit: mm

Range	D	E	F	H	L	M	R	S	t
0-300mm*	90	76.5	—	20	445	7	R5	12	3.8
0-300mm/0-12"		103	38				R5		3.8
0-500mm*		89	—				R10		6
0-500mm/0-20"	200	112	51	32	995	12	R10	18.5	6
0-750mm*		—	—				R10		6
0-750mm/0-30"		150	62.5				R10		8
0-1000mm*		—	—				R10		8
0-1000mm/0-40"			62.5		1230		R10		8

* Without fine adjustment

SMALL TOOLS

เครื่องมือวัดละเอียด

Mitutoyo

คาลิเปอร์

Offset Caliper

SERIES 573, 536 - ABSOLUTE Digimatic and vernier type

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

IP67



Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

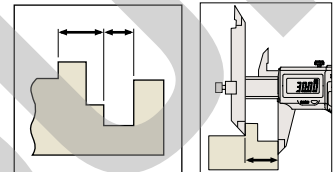
ขาตั้ง



573-601-20

ABSOLUTE™

536-101

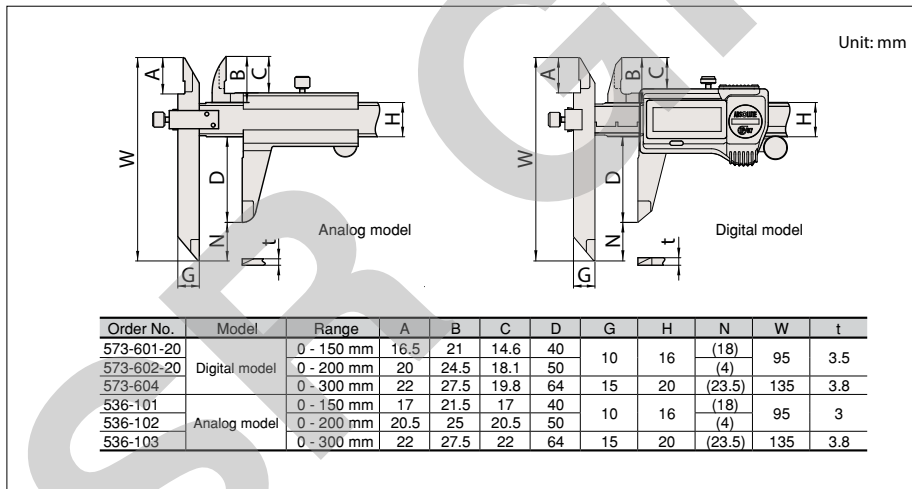


FEATURE

- The beam-mounted jaw can be adjusted to facilitate measurement of stepped sections and hard-to-get-at workpiece features.
- Digital models are IP67 Absolute type. No need to reset the origin after switching on. (Refer to page D-007 for a description of Absolute measurement.)

- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-002.

DIMENSIONS



Unit: mm

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
Scale type*: ABSOLUTE electromagnetic induction linear encoder
Max. response speed*: Unlimited
Battery: **SR44** (1 pc), **938882**, for initial operational checks (standard accessory)
Battery life*: Approx. 5 years under normal use (1 year: 300mm model)
Dust/Water protection level*: IP67 (IEC 60529)***
* Digital models ** Analog models
*** This model is not waterproof type. Therefore, rustproofing shall be applied after use.

Optional accessories for Digital Model

959143: Data hold unit
Connecting cables for IT/DP/MUX
05CZA624: SPC cable with data button (1m)
05CZA625: SPC cable with data button (2m)
USB Input Tool Direct
06AFM380A: SPC cable for **USB-ITN-A** (2m)
Wireless data output **U-WAVE/ii**
U-WAVE-TC: **264-620** (IP67 type)
264-621 (Buzzer type)
Connecting unit for U-WAVE-TC:
02AZF310 (IP67 type)
02AZF300 (Buzzer type)
Refer to page A-006 for details
Note: cannot be used with 573-611-20, 573-612-20 and 573-614

Metric Digital model

Order No.	Range*	Accuracy
573-601-20	0 - 150mm	±0.02mm
573-611-20*	0 - 150mm	±0.02mm
573-602-20	0 - 200mm	±0.02mm
573-612-20*	0 - 200mm	±0.02mm
573-604	0 - 300mm	±0.03mm
573-614*	0 - 300mm	±0.03mm

* Without thumb roller

Inch / Metric Digital model

Order No.	Range*	Accuracy
573-701-20	0 - 6"	±.001"
573-702-20	0 - 8"	±.001"
573-704	0 - 12"	±.0015"

Metric Analog model

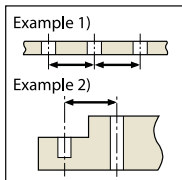
Order No.	Range*	Accuracy
536-101	0 - 150mm	±0.05mm
536-102	0 - 200mm	±0.05mm
536-103	0 - 300mm	±0.08mm

คาลิเปอร์

Offset Centerline Caliper

SERIES 573, 536 - ABSOLUTE Digimatic and vernier type

IP67



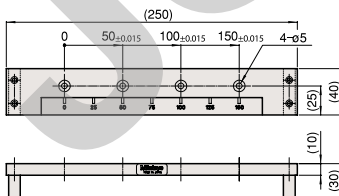
Technical Data

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
Scale type*: ABSOLUTE electromagnetic induction linear encoder
Max. response speed*: Unlimited
Battery: **SR44** (1 pc), **9388882**, for initial operational checks (standard accessory)
Battery life*: Approx. 5 years under normal use (1 year: 310mm model)
Dust/Water protection level*: IP67 (IEC 60529)***
* Digital models ** Analog models
*** This model is not waterproof type.
Therefore, rustproofing shall be applied after use.

Optional accessories for Digital Model

959143: Data hold unit
Connecting cables for IT/DP/MUX
05CZA624: SPC cable with data button (1m)
05CZA625: SPC cable with data button (2m)
USB Input Tool Direct
06AFM380A: SPC cable for **USB-ITN-A** (2m)
Wireless data output **U-WAVE fit**
U-WAVE-TC: **264-620** (IP67 type)
264-621 (Buzzer type)
Connecting unit for U-WAVE-TC:
02AZF310 (IP67 type)
02AZF300 (Buzzer type)
Refer to page A-006 for details
Note: cannot be used with 573-708-20
05FAJ735: Inspection Equipment for Offset Caliper

Unit: mm



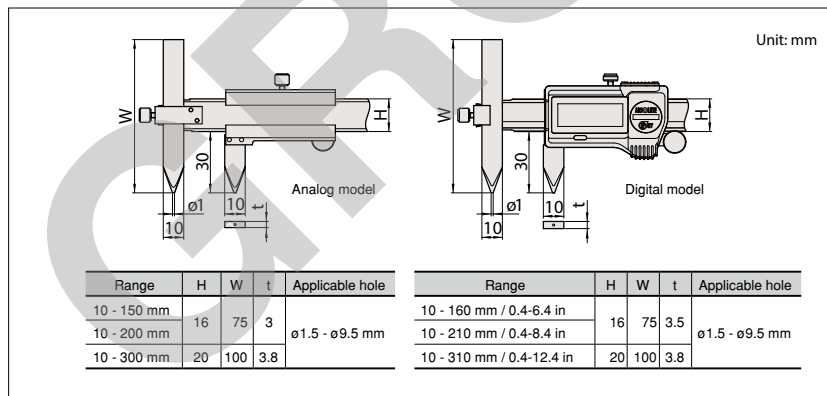
573-605-20

ABSOLUTE™



536-105

DIMENSIONS



Metric Digital model

Order No.	Range*	Accuracy
573-605-20	10.1 - 160mm	±0.03mm
573-615-20*	10.1 - 160mm	±0.03mm
573-606-20	10.1 - 210mm	±0.03mm
573-616-20*	10.1 - 210mm	±0.03mm
573-608	10.1 - 310mm	±0.04mm
573-618*	10.1 - 310mm	±0.04mm

* Without thumb roller

Inch / Metric Digital model

Order No.	Range*	Accuracy
573-705-20	.404 - 6.4"	±.0015"
573-706-20	.404 - 8.4"	±.0015"
573-708-20	.404 - 12.4"	±.0015"

Metric Analog model

Order No.	Range*	Accuracy
536-105	10.1 - 150mm	±0.05mm
536-106	10.1 - 200mm	±0.05mm
536-107	10.1 - 300mm	±0.08mm

SMALL TOOLS

เครื่องมือวัดละเอียด

CALIPERS
คาลิเปอร์

Mitutoyo

คาลิเปอร์

ABSOLUTE Back-Jaw Centerline Caliper

SERIES 573 - Center-to-Center & Edge-to-Center Types

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

ABSOLUTE[™]

Micrometer

ไมโครมิเตอร์

Inside
Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

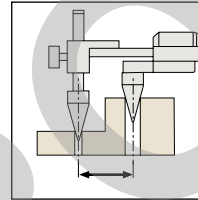
Stands

ขาตั้ง



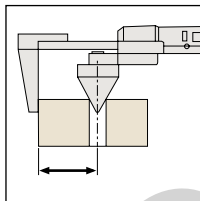
573-118-10

573-116-10

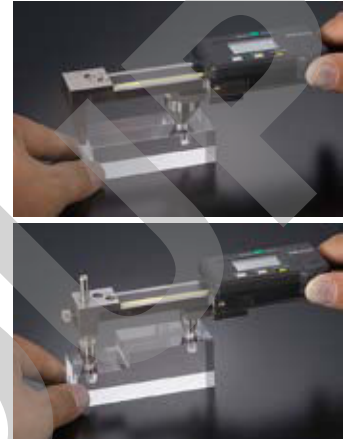


FEATURE

- Specially designed to measure hole Center-to-Center and Edge-to-Center distances.
- Provided with jaws on the back of the slider, measurements can be read easily from above.



- A digital model is IP67 Absolute type. (Refer to page D-007 for Absolute function.)
- Direct reading of pitch measurements is available due to the offset value setting function.
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-002.
- Dedicated



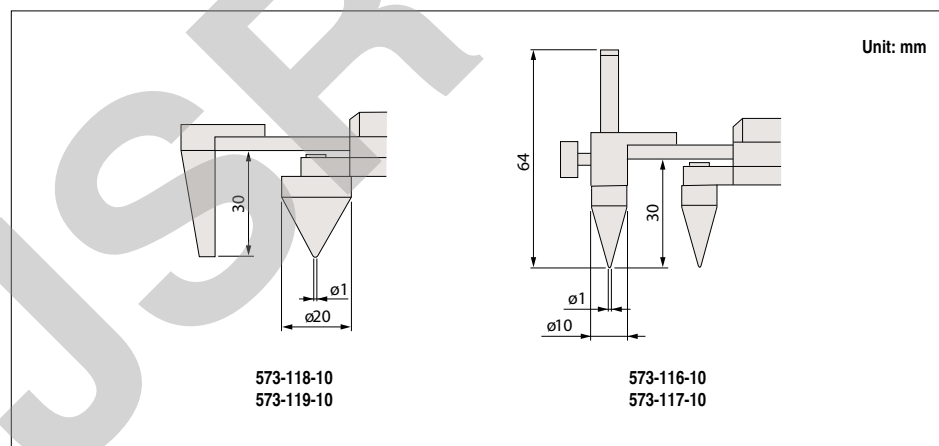
Technical Data

Accuracy: Refer to the list of specifications. (excluding quantizing error)
Resolution*: 0.01mm or .0005"/0.01mm
Graduation**: 0.05mm
Display*: LCD
Scale type*: ABSOLUTE electromagnetic induction linear encoder
Max. response speed*: Unlimited
Battery: **SR44** (1 pc), **938882**, for initial operational checks (standard accessory)
Battery life*: Approx. 3.5 years under normal use

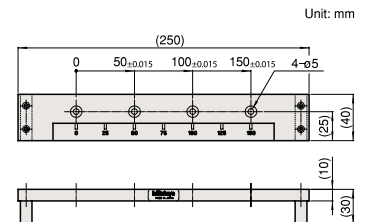
Optional accessories

959143: Data hold unit
Connecting cables for IT/DP/MUX
959149: SPC cable with data button (1m)
959150: SPC cable with data button (2m)
USB Input Tool Direct
06AFM380C: SPC cable for **USB-ITN-C** (2m)
Connecting cables for **U-WAVE-T**
02AZD790C: SPC cable for **U-WAVE** with data button (160mm)
02AZE140C: SPC cable for footswitch
05FAJ735: Centerline caliper inspection gage

DIMENSIONS



Unit: mm



Metric Edge-to-center distance type

Order No.	Range*	Accuracy
573-118-10	10.1 - 200mm	±0.10mm
573-119-10	10.1 - 300mm	±0.15mm

Metric Center-to-center distance type

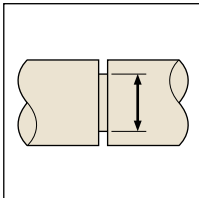
Order No.	Range*	Accuracy
573-116-10	10.1 - 200mm	±0.10mm
573-117-10	10.1 - 300mm	±0.15mm

คาร์ลิเปอร์

Point Caliper

SERIES 573, 536 - ABSOLUTE Digimatic and vernier type

IP67



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

Scale type*: ABSOLUTE electromagnetic induction linear encoder

Max. response speed*: Unlimited

Battery: **SR44** (1 pc), **938882**
for initial operational checks
(standard accessory)

Battery life*: Approx. 5 years under normal use
Dust/Water protection level*: IP67 (IEC 60529)***

* Digital models ** Analog models

*** This model is not waterproof type.
Therefore, rustproofing shall be applied after use.

Optional accessories

Connecting cables for IT/DP/MUX

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

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

USB Input Tool Direct

06AFM380A: SPC cable for **USB-ITN-A** (2m)

Wireless data output **U-WAVE^{fit}**

U-WAVE-TC: **264-620** (IP67 type)

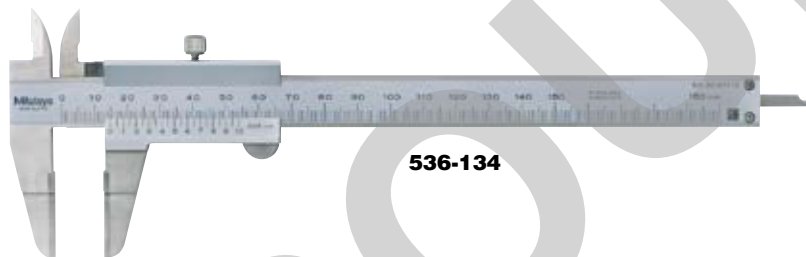
264-621 (Buzzer type)

Connecting unit for U-WAVE-TC:

02AZF310 (IP67 type)

02AZF300 (Buzzer type)

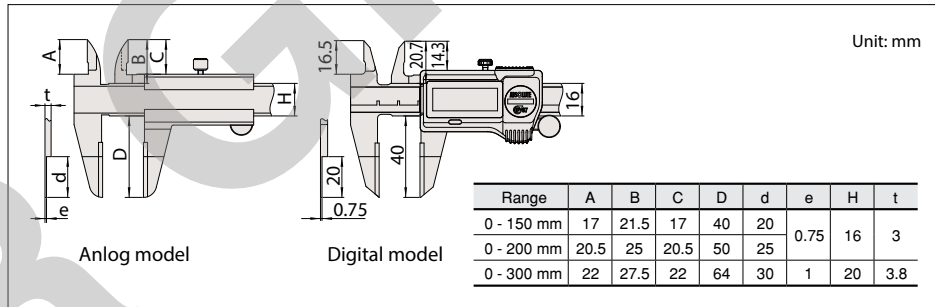
Refer to page A-006 for details



FEATURE

- The thin blade-type jaws fit into very small grooves and make previously difficult outside measurements far easier to obtain.
- The outside measuring faces are carbide tipped.
- Allows step measurement.
- Digital models are IP67 Absolute type. No need to reset the origin after switching on. (Refer to page D-007 for a description of Absolute measurement.)
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-002.

DIMENSIONS



Metric

Digital model

Order No.	Range*	Accuracy
573-634-20	0 - 150mm	±0.02mm
573-635-20*	0 - 150mm	±0.02mm

* without thumb roller

Inch / Metric

Digital model

Order No.	Range*	Accuracy
573-734-20	0 - 6"	±.001"

Metric

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

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาร์ลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

SMALL TOOLS

เครื่องมือวัดละเอียด

Mitutoyo

คาลิเปอร์

Point Caliper

SERIES 573, 536 - ABSOLUTE Digimatic and vernier type

MeasurLink[®] ENABLED

Data Management Software by Mitutoyo

IP67



Micrometer

ไมโครมิเตอร์

Inside Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง



573-621-20
ABSOLUTE[™]

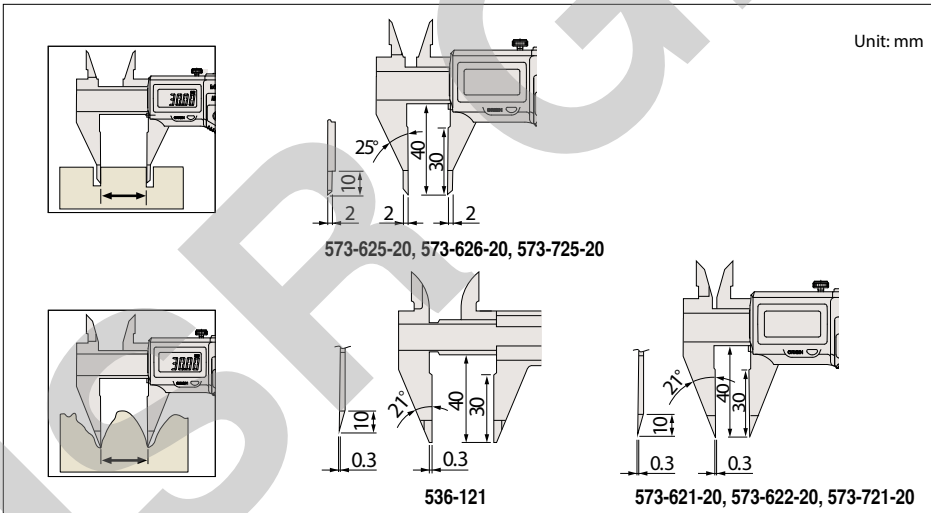
536-121

FEATURE

- Narrow-tip jaws fit into very small grooves and tracks, making many previously difficult outside measurements far easier to obtain.
- Allows step measurement.

- Digital models are IP67 Absolute type. No need to reset the origin after switching on. (Refer to page D-007 for a description of Absolute measurement.)
- SPC output models allow integration into statistical process control and measurement systems. Refer to page A-002.

DIMENSIONS



Metric

Digital model

Order No.	Range*	Accuracy
573-621-20	0 - 150mm	±0.02mm
573-625-20	0 - 150mm	±0.02mm
573-622-20*	0 - 150mm	±0.02mm
573-626-20*	0 - 150mm	±0.02mm

* without thumb roller

Inch / Metric

Digital model

Order No.	Range*	Accuracy
573-721-20	0 - 6"	±.001"
573-725-20	0 - 6"	±.001"

Metric

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

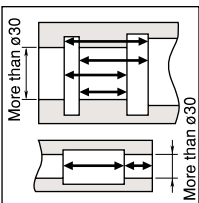
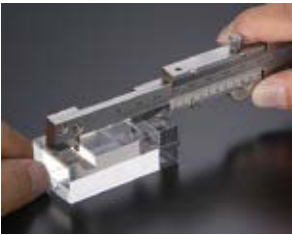
Technical Data

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
 Scale type*: ABSOLUTE electromagnetic induction linear encoder
 Max. response speed*: Unlimited
 Battery: **SR44** (1 pc), **938882**, for initial operational checks (standard accessory)
 Battery life*: Approx. 5 years under normal use
 Dust/Water protection level*: IP67 (IEC 60529)***
 * Digital models ** Analog models
 *** This model is not waterproof type. Therefore, rustproofing shall be applied after use.

Optional accessories

Connecting cables for IT/DP/MUX
05CZA624: SPC cable with data button (1m)
05CZA625: SPC cable with data button (2m)
 USB Input Tool Direct
06AFM380A: SPC cable for **USB-ITN-A** (2m)
 Wireless data output **U-WAVEⁱⁱⁱ**
 U-WAVE-TC: **264-620** (IP67 type)
264-621 (Buzzer type)
 Connecting unit for U-WAVE-TC:
02AZF310 (IP67 type)
02AZF300 (Buzzer type)
 Refer to page A-006 for details

คาลิเปอร์

Hook Type Vernier Caliper
SERIES 536

536-171

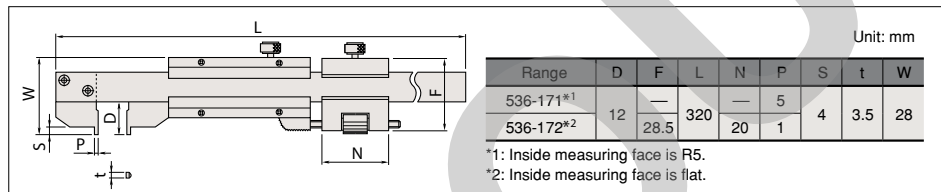


536-172

FEATURE

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

DIMENSIONS



Metric

Order No.	Range*	Accuracy	Graduation	Remarks
536-171	0 - 200mm (10.1 - 200mm)	±0.03mm	0.02mm	-
536-172	0 - 200mm (2.1 - 200mm)	±0.03mm	0.02mm	with fine adjustment

* (): Dimension in inside measurement

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

คาลิเปอร์

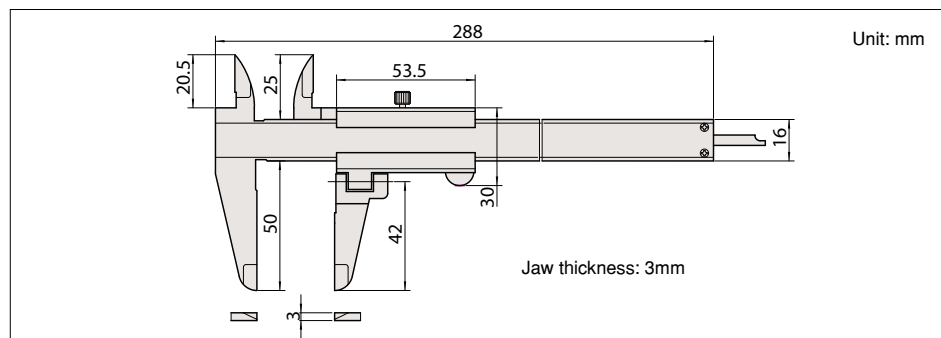
Swivel Vernier Caliper
SERIES 536 - Moving Jaw type

536-212

FEATURE

- The moving jaw can be rotated to measure sectioned shafts.
- Allows step measurement.

DIMENSIONS



Metric

Order No.	Range*	Accuracy	Graduation	Remarks
536-212	0 - 200mm	±0.05mm	0.05 mm	with depth bar

* with depth bar

SMALL TOOLS

เครื่องมือวัดละเอียด

Mitutoyo

คาลิเปอร์

Neck Caliper

SERIES 573, 536 - ABSOLUTE Digimatic and vernier type

MeasurLink® ENABLED
Data Management Software by Mitutoyo

IP67

TÜV Rheinland®
CERTIFIED
www.tuv.com
ID 000045042

Micrometer

ไมโครมิเตอร์

Inside Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

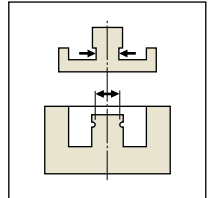
ขาตั้ง



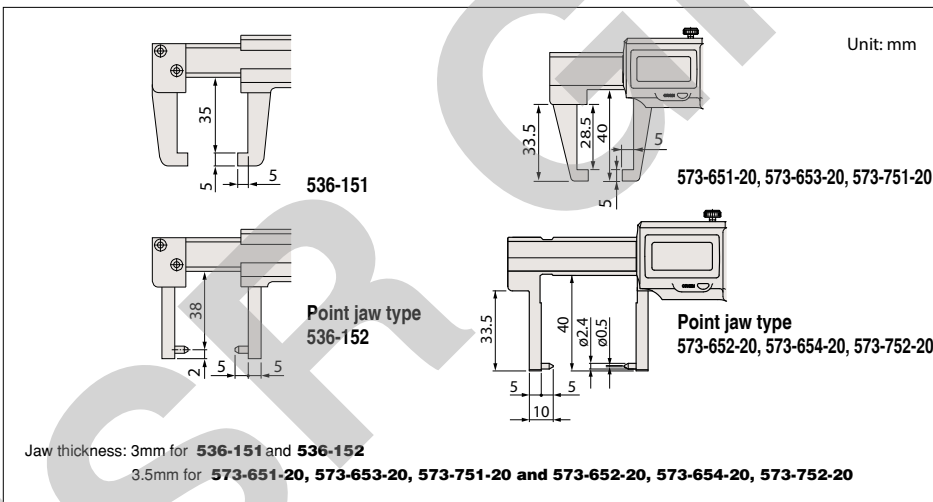
FEATURE

- Specially designed for inside measurements in hard-to-reach places.
- Digital models are IP67 Absolute type. No need to reset the origin after switching on. (Refer to page D-007 for a description of Absolute measurement.)

- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-002.



DIMENSIONS



Metric

Digital model

Order No.	Range	Accuracy
573-651-20	0 - 150mm	±0.03mm
573-652-20*	0 - 150mm	±0.03mm
573-653-20**	0 - 150mm	±0.03mm
573-654-20***	0 - 150mm	±0.03mm

* Point type

** Without thumb roller

Inch / Metric

Digital model

Order No.	Range	Accuracy
573-751-20	0 - 6"	±0.015"
573-752-20*	0 - 6"	±0.015"

* Point type

Metric

Analog model

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

* Point type

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
- Scale type*: ABSOLUTE electromagnetic induction linear encoder
- Max. response speed*: Unlimited
- Battery: **SR44** (1 pc), **938882**, for initial operational checks (standard accessory)
- Battery life*: Approx. 5 years under normal use
- Dust/Water protection level*: IP67 (IEC 60529)***
- * Digital models ** Analog models
- *** This model is not waterproof type.
- Therefore, rustproofing shall be applied after use.

Optional accessories

- Connecting cables for IT/DP/MUX
- 05CZA624**: SPC cable with data button (1m)
- 05CZA625**: SPC cable with data button (2m)
- USB Input Tool Direct
- 06AFM380A**: SPC cable for **USB-ITN-A** (2m)
- Wireless data output **U-WAVE/ir**
- U-WAVE-TC: **264-620** (IP67 type)
- 264-621** (Buzzer type)
- Connecting unit for U-WAVE-TC:
- 02AZF310** (IP67 type)
- 02AZF300** (Buzzer type)
- Refer to page A-006 for details

คาลิเปอร์

ABSOLUTE Inside Caliper

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

IP67



www.tuv.com
ID 0000045042



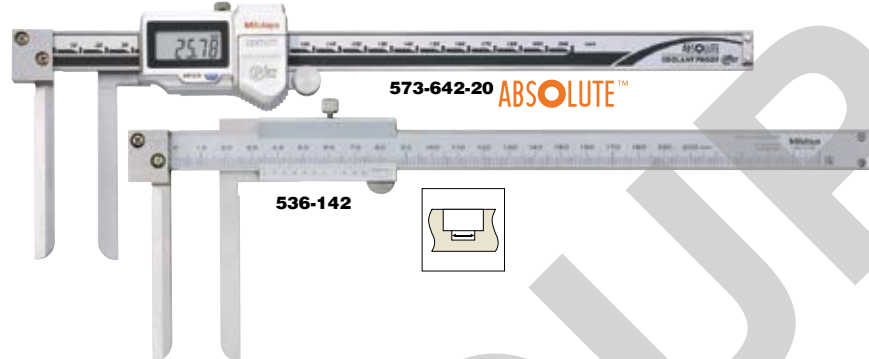
Technical Data

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
Scale type: ABSOLUTE electromagnetic induction
linear encoder
Max. response speed*: Unlimited
Battery: **SR44** (1 pc), **938882**,
for initial operational checks
(standard accessory)
Battery life*: Approx. 5 years under normal use
Dust/Water protection level*: IP67 (IEC 60529)**
* Digital models ** Analog models
*** This model is not waterproof type.
Therefore, rustproofing shall be applied after use.

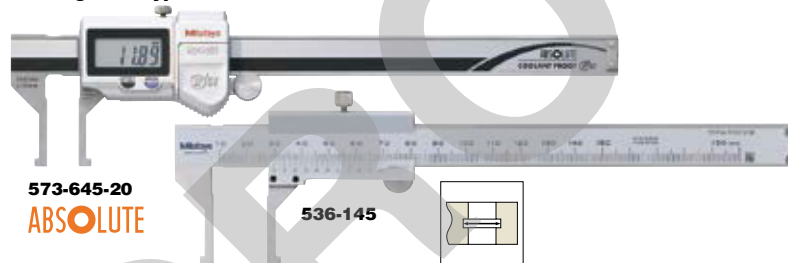
Optional accessories

Connecting cables for IT/DP/MUX
05CZA624: SPC cable with data button (1m)
05CZA625: SPC cable with data button (2m)
USB Input Tool Direct
06AFM380A: SPC cable for **USB-ITN-A** (2m)
Wireless data output **U-WAVE fit**
U-WAVE-TC: **264-620** (IP67 type)
264-621 (Buzzer type)
Connecting unit for U-WAVE-TC:
02AZF310 (IP67 type)
02AZF300 (Buzzer type)
Refer to page A-006 for details
Note: cannot be used with 573-642-20, 573-643-20
and 573-742-20

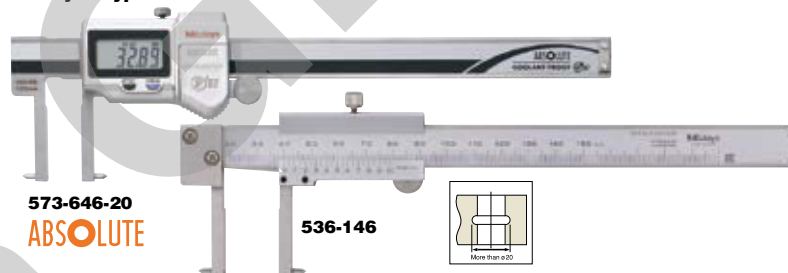
Knife-edge type



Inside groove type



Point jaw type



Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

Metric Digital model

Order No.	Range	Accuracy	Remarks
573-642-20	10 - 200mm	±0.05mm	Knife-edge type, Measurable min.
573-643-20*	10 - 200mm	±0.05mm	Knife-edge type, Measurable min.
573-645-20**	10.1 - 160mm	±0.05mm	Inside groove type, Measurable min.
573-647-20*	10.1 - 160mm	±0.05mm	Inside groove type, Measurable min.
573-646-20**	20.1 - 170mm	±0.05mm	Point jaw type, Measurable min.
573-648-20*	20.1 - 170mm	±0.05mm	Point jaw type, Measurable min.

* without thumb roller

** Incorporated with the offsetting function, which indicates the actual measurement value.

Inch / Metric Digital model

Order No.	Range	Accuracy	Remarks
573-742-20	.4 - 8"	±.002"	Knife-edge type, Measurable min.
573-745-20**	.404 - 6.4"	±.002"	Inside groove type, Measurable min.
573-746-20**	.804 - 6.8"	±.0015"	Point jaw type, Measurable min.

** Incorporated with the offsetting function, which indicates the actual measurement value.

Metric

Order No.	Range	Accuracy	Remarks
536-142	10.1 - 200mm	±0.12mm	Knife-edge type, Measurable min.
536-145	10.1 - 150mm	±0.05mm	Inside groove type, Measurable min.
536-146	20.1 - 150mm	±0.05mm	Point jaw type, Measurable min.
536-147	30.1 - 300mm	±0.08mm	Point jaw type, Measurable min.
536-148	70.1 - 450mm	±0.10mm	Point jaw type, Measurable min.
536-149	70.1 - 600mm	±0.12mm	Point jaw type, Measurable min.

SMALL TOOLS

เครื่องมือวัดละเอียด

Mitutoyo

DIMENSIONS

CALIPERS

คาร์ลิเปอร์

Micrometer

ไมโครมิเตอร์

Inside Measurement

เครื่องมือวัดภายใน

Calipers

คาร์ลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

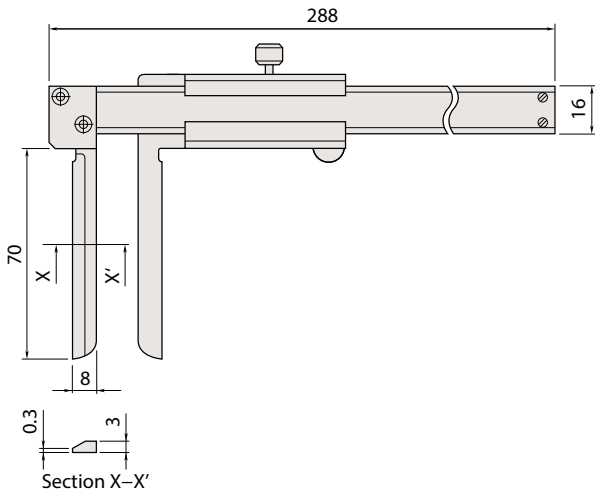
อินดิเคเตอร์

Stands

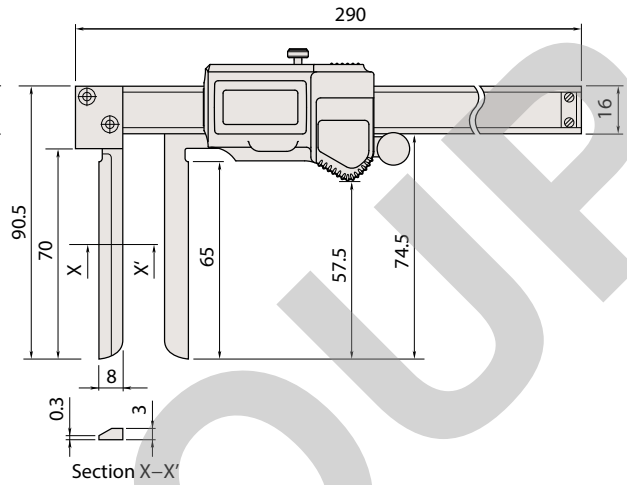
ขาตั้ง

Unit: mm

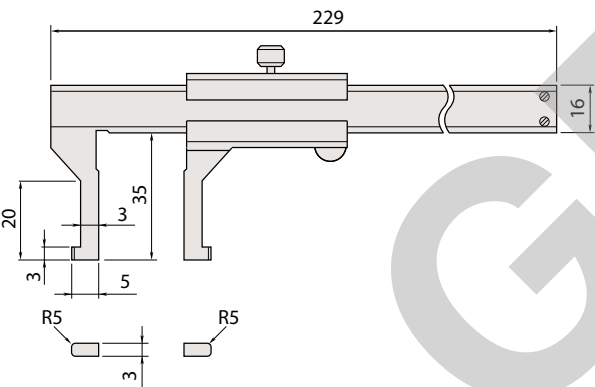
Knife-edge type: 536-142



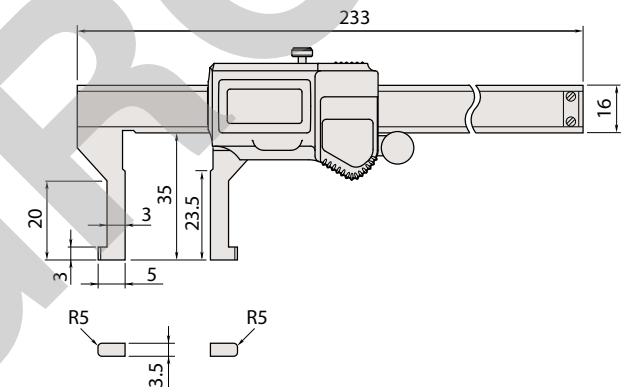
Knife-edge type: 573-642-20, 573-643-20, 573-742-20



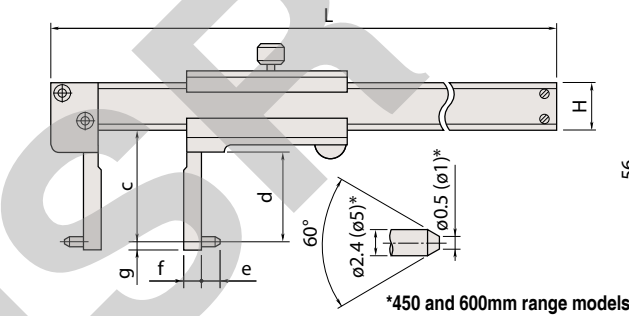
Inside groove type: 536-145



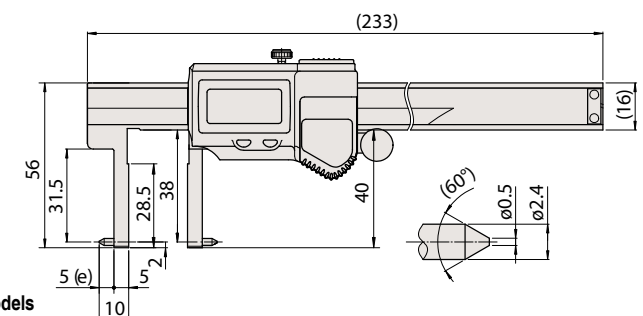
Inside groove type: 573-645-20, 573-647-20, 573-745-20



Point jaw type: 536-146, 147, 148, 149



Point jaw type: 573-646-20 573-648-20, 573-746-20



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

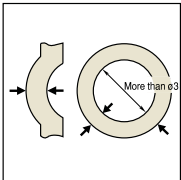
*450 and 600mm range models

คาร์ลิเปอร์

Tube Thickness Caliper

SERIES 573, 536 - ABSOLUTE Digimatic and vernier type

IP67

www.tuv.com
ID 000045042

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

Scale type*: ABSOLUTE electromagnetic induction linear encoder

Max. response speed*: Unlimited

Battery: **SR44** (1 pc), **938882**
for initial operational checks
(standard accessory)

Battery life*: Approx. 5 years under normal use
Dust/Water protection level*: IP67 (IEC 60529)***

* Digital models ** Analog models
*** This model is not waterproof type.
Therefore, rustproofing shall be applied after use.

Optional accessories

Connecting cables for IT/DP/MUX

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

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

USB Input Tool Direct

06AFM380A: SPC cable for **USB-ITN-A** (2m)

Wireless data output **U-WAVE^{fit}**

U-WAVE-TC: **264-620** (IP67 type)

264-621 (Buzzer type)

Connecting unit for U-WAVE-TC:

02AZF310 (IP67 type)

02AZF300 (Buzzer type)

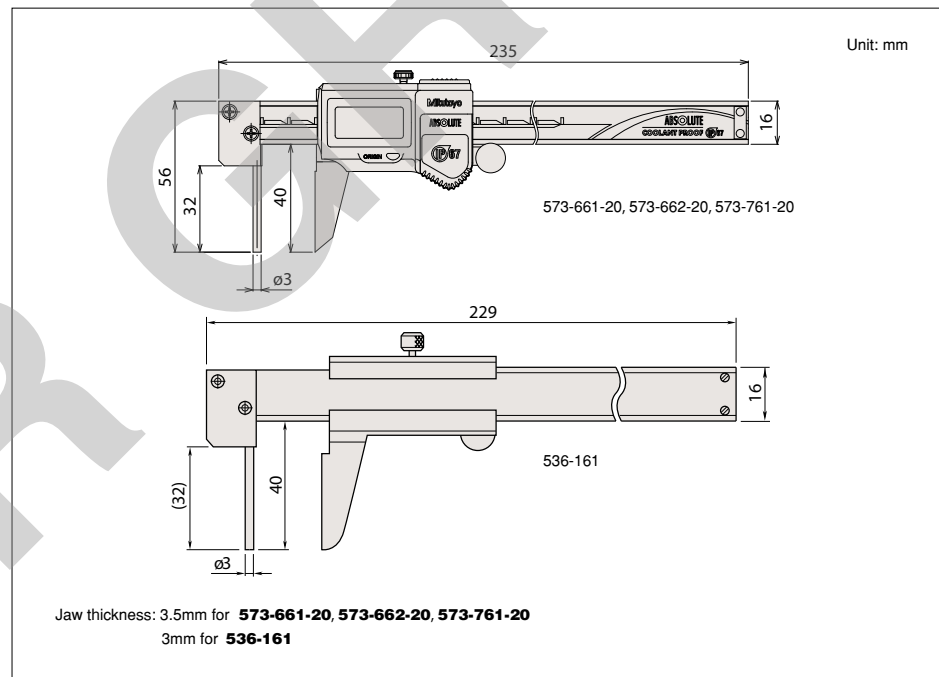
Refer to page A-006 for details



FEATURE

- The beam-mounted jaw is a round bar that facilitates measurements of tube wall thickness.
- Digital models are IP67 Absolute type. No need to reset the origin after switching on. (Refer to page D-007 for a description of Absolute measurement.)
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-002.

DIMENSIONS



Jaw thickness: 3.5mm for **573-661-20, 573-662-20, 573-761-20**
3mm for **536-161**

Metric Digital model

Order No.	Range	Accuracy
573-661-20	0 - 150mm	±0.05mm
573-662-20*	0 - 150mm	±0.05mm

* Without thumb roller

Inch / Metric Digital model

Order No.	Range	Accuracy
573-761-20	0 - 6"	±.002"

Metric Analog model

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

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาร์ลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

SMALL TOOLS

เครื่องมือวัดละเอียด

Mitutoyo

คาลิเปอร์

ABSOLUTE Low Force Caliper SERIES 573



573-191-30

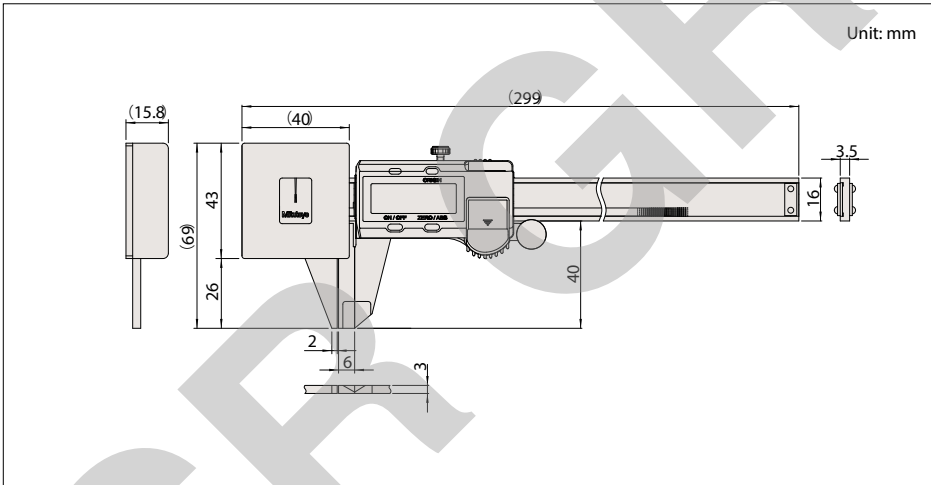
FEATURE

- ABSOLUTE electromagnetic induction linear encoder system is introduced.
- Due to the low measuring force, these calipers are ideal for measuring elastic workpieces such as plastic parts and rubber parts that standard calipers cannot measure accurately.
- Allows fine feeding easily by using thumb roller.
- Displacement of main scale jaw is 0.3mm.
- Measuring force: 0.49N to 0.98N (0.5gf to 1.0gf)
- Absolute type. (Refer to page D-007 for a description of Absolute measurement.)

- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-002.



DIMENSIONS



Metric

Order No.	Range	Accuracy*
573-191-30	0 - 180mm	±0.05mm

* Excluding quantizing error.
Note) Dedicated for outside measurement (depth bar is not fitted).

Inch / Metric

Order No.	Range	Accuracy*
573-291-20	0 - 7"	±.002"

* Excluding quantizing error.
Note) Dedicated for outside measurement (depth bar is not fitted).

ABSOLUTE™

Technical Explanation

Measurement procedure



A consistently low measuring force can be guaranteed by only taking measurements when the pointer is between the two fiducial lines.

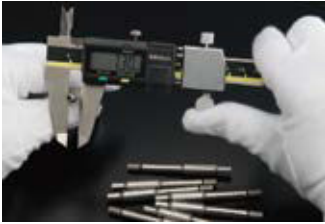
Technical Data

Accuracy: Refer to the list of specifications. (excluding quantizing error)
Resolution*: 0.01mm or .0005"/0.01mm
Graduation*: 0.05mm
Display*: LCD
Scale type*: ABSOLUTE electromagnetic induction linear encoder
Jaw retraction: 0.3 mm
Max. response speed*: Unlimited
Battery: **SR44** (1 pc), **938882**, for initial operational checks (standard accessory)
Battery life*: Approx. 3.5 years under normal use

Optional accessories

959143: Data hold unit
Connecting cables for IT/DP/MUX
959149: SPC cable with data button (1m)
959150: SPC cable with data button (2m)
USB Input Tool Direct
06AFM380C: SPC cable for **USB-ITN-C** (2m)
Wireless data output **U-WAVE/fit**
U-WAVE-TC: **264-620** (IP67 type)
264-621 (Buzzer type)
Connecting unit for U-WAVE-TC:
02AZF310 (IP67 type)
02AZF300 (Buzzer type)
Refer to page A-006 for details

คาลิเปอร์

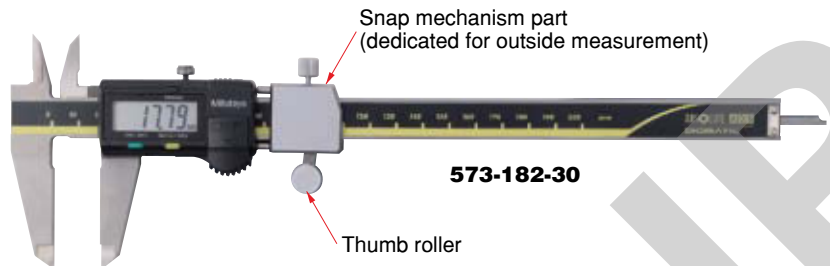
ABSOLUTE Snap Caliper
SERIES 573

Technical Data

Accuracy: Refer to the list of specifications.
(excluding quantizing error)
Resolution*: 0.01mm or .0005"/0.01mm
Graduation**: 0.01mm
Display: LCD
Scale type*: ABSOLUTE electromagnetic induction linear encoder
Jaw retraction: 2mm
Max. response speed*: Unlimited
Battery: **SR44** (1 pc), **938882**,
for initial operational checks
(standard accessory)
Battery life*: Approx. 3.5 years under normal use

Optional accessories

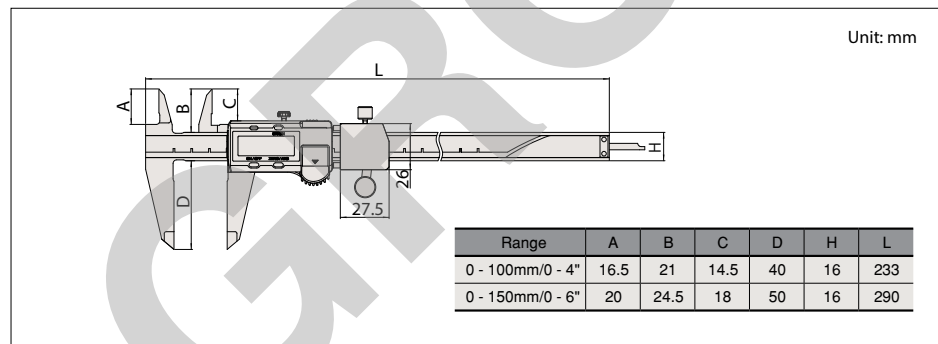
959143: Data hold unit
Connecting cables for IT/DP/MUX
959149: SPC cable with data button (1m)
959150: SPC cable with data button (2m)
USB Input Tool Direct
06AFM380C: SPC cable for **USB-ITN-C** (2m)
Connecting cables for **U-WAVE-T**
02AZD790C: SPC cable for **U-WAVE** with data
button (160mm)
02AZE140C: SPC cable for footswitch



FEATURE

- ABSOLUTE electromagnetic induction linear encoder system is introduced.
- Snap mechanism allows continuous and easy measurement without moving the slider by using the lever.
- The ABSOLUTE Digimatic snap caliper features a spring-loaded mechanism to allow quick and efficient GO/NO-GO inspection for mass production parts.
- Allows step measurement
- Displacement of snap part is 2 mm.
- Measuring force: 7N to 14N
- Absolute type. (Refer to page D-007 for a description of Absolute measurement.)
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-002.

DIMENSIONS



Metric

Order No.	Range	Accuracy*
573-181-30	0 - 100mm	±0.02mm
573-182-30	0 - 150mm	±0.02mm

* Excluding quantizing error.
Note) Dedicated for outside measurement (depth bar is not fitted).

Inch / Metric

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

* Excluding quantizing error.
Note) Dedicated for outside measurement (depth bar is not fitted).

Micrometer
ไมโครมิเตอร์

Inside
Measurement
เครื่องมือวัดภายใน

Calipers
คาลิเปอร์

Height Gages
เกจวัดความสูง

Linear Height
เครื่องมือวัดความสูง

Depth Gages
เกจวัดความลึก

Gauge Blocks
เกจบล็อก

Reference Gages
เครื่องมืออ้างอิง

Indicators
อินดิเคเตอร์

Stands
ขาตั้ง

SMALL TOOLS

เครื่องมือวัดละเอียด

Mitutoyo

คาลิเปอร์

ABSOLUTE Coolant Proof Carbon Fiber Caliper SERIES 552 — with Standard jaws



ABSOLUTE™

IP66



www.tuv.com
ID 000022582

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

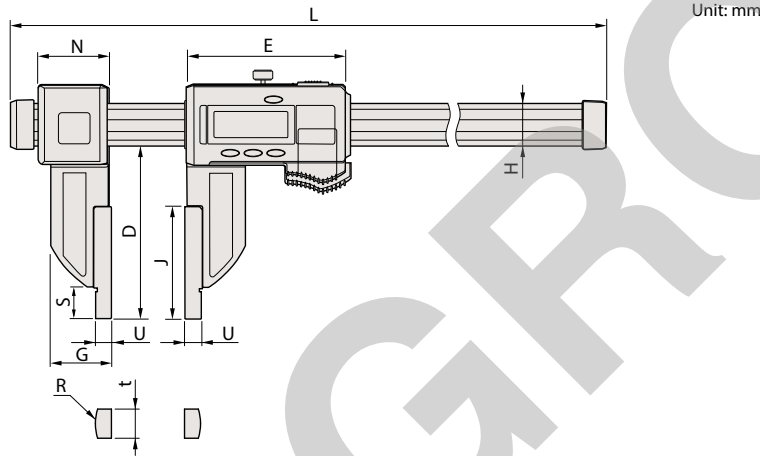
Stands

ขาตั้ง

FEATURE

- IP66 Absolute Digital Caliper (Refer to page D-007 for Absolute function.)
- Lightweight Digimatic Calipers that employ CFRP (Carbon Fiber Reinforced Plastics) in the beam and jaws.
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-002.

DIMENSIONS



Range	D	E	G	H	J	L	N	R	S	t	U
0-450mm (0-18")	100	91.8	35	25	65	640	41.2	R10	18	8	10 (.25")
0-600mm (0-24")	100	91.8	35	25	65	790	41.2	R10	18	8	10 (.25")
0-1000mm (0-40")	150	113.8	45	32	100	1230	62.8	R10	24	8	10 (.5")
0-1500mm (0-60")	150	113.8	45	32	100	1740	62.8	R10	24	8	10 (.5")
0-2000mm (0-80")	150	113.8	45	32	100	2250	62.8	R10	24	8	10 (.5")

Technical Data

Accuracy: Refer to the list of specifications.
(excluding quantizing error)
Resolution*: 0.01mm or .0005"/0.01mm
Material of jaws: Stainless Steel Hardened
Display*: LCD
Scale type*: ABSOLUTE electromagnetic induction linear encoder
Max. response speed*: Unlimited
Battery: **SR44** (1 pc), **938882**,
for initial operational checks
(standard accessory)
Battery life*: Approx. 5,000 hours in continuous use
Dust/Water protection level: IP66 (IEC60529)*
Standard accessory: Jaw clamps (2 pcs.), 05GZA033
*This model in not waterproof type. Please wipe away the wet after use.

Functions

Zero-setting
Data hold
Offsetting
Presetting
Data output
Low-power and low-voltage alert
Counting value composition error
Automatic power on/off, inch/mm reading
(inch/mm models)

Optional accessories

Connecting cables for IT/DP/MUX
05CZA624: SPC cable with data button (1m)
05CZA625: SPC cable with data button (2m)



USB Input Tool Direct
06AFM380A: SPC cable for **USB-ITN-A** (2m)
Connecting cables for **U-WAVE-T**
02AZD790A: SPC cable for **U-WAVE** with data button (160mm)
02AZE140A: SPC cable for footswitch

Metric

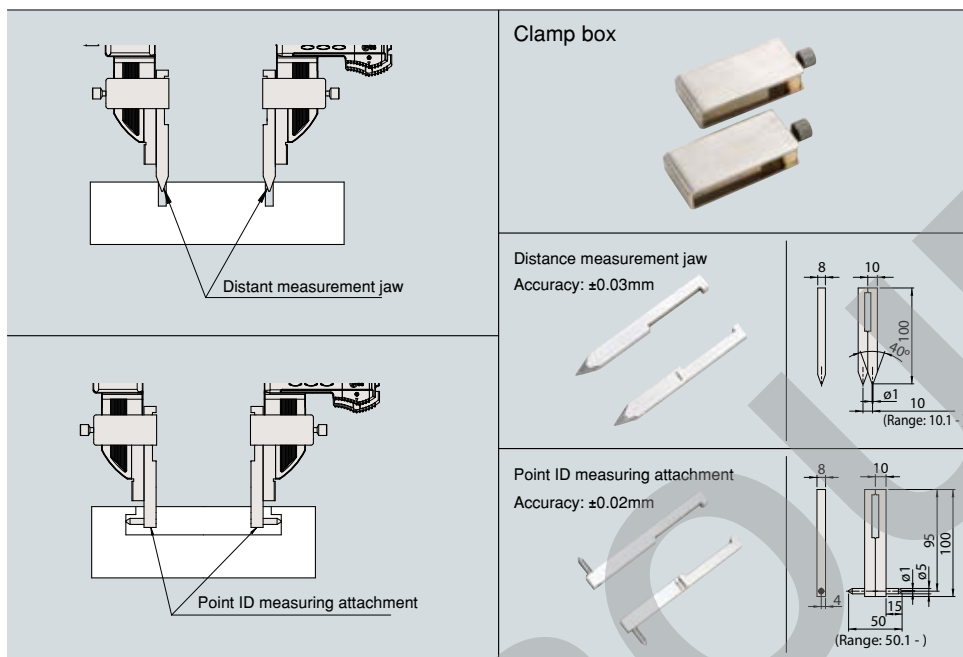
Order No.	Range*	Accuracy*
552-302-10	0 - 450mm (20.1 - 470mm)	±0.04mm
552-303-10	0 - 600mm (20.1 - 620mm)	±0.04mm
552-304-10	0 - 1000mm (20.1 - 1020mm)	±0.05mm
552-305-10	0 - 1500mm (20.1 - 1520mm)	±0.09mm
552-306-10	0 - 2000mm (20.1 - 2020mm)	±0.12mm

* (): Dimension in inside measurement

Metric

Order No.	Range*	Accuracy*
552-312-10	0 - 18" (.504 - 18.5")	±.002"
552-313-10	0 - 24" (.504 - 24.5")	±.002"
552-314-10	0 - 40" (1.004 - 40.5")	±.002"
552-315-10	0 - 60" (1.004 - 60.5")	±.004"
552-316-10	0 - 80" (1.004 - 80.5")	±.005"

* (): Dimension in inside measurement



	No. 552-302-10, 552-155-10, 552-303-10 and 552-156-10.	No. 552-304-10 and 552-305-10
Clamp box (1 pair)	No.914053	No.914054
Distance measurement jaw (1 pair)		No.914055
Point ID measuring attachment		No.914057

	No. 552-312-10, 552-165-10, 552-313-10 and 552-166-10	No. 552-314-10, 552-315-10 552-316-10
Clamp box (1 pair)	No.914053	No.914054
Distance measurement jaw (1 pair)		No.914056
Point ID measuring attachment		No.914058

ไมโครมิเตอร์

เครื่องมือวัดภายใน

เกจวัดความสูง

เครื่องมือวัดความสูง

เกจวัดความลึก

นางจันทิมา

เครื่องมืออ้างอิง

อินดิเคเตอร์

๕
ชาตัง

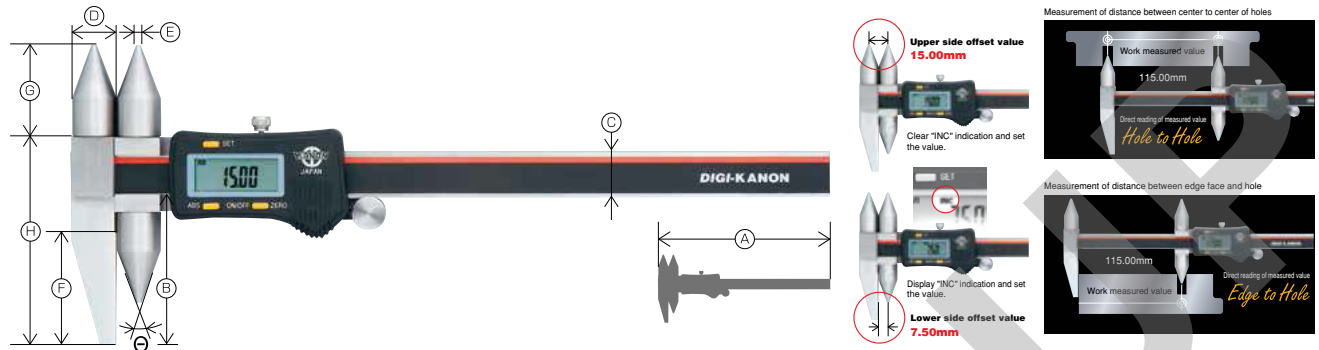
SMALL TOOLS

เครื่องมือวัดละเอียด

BESTOOL-KANON

คาลิเปอร์

Centerline caliper for distance between center to center of holes with equal diameter E-RM-J



- By setting the upper side offset value (15.00 mm) and the lower offset value (7.50 mm), this instrument allows the measured center distance to be indicated as actual size. This saves time for addition or subtraction of indicated value that is required by former instruments, resulting easier use.
- Since one unit of this caliper allows measurement of center distance of holes and distance between edge face and hole through direct reading, the product eliminates the need for preparing two units for two types of measurement, resulting in convenient use.
- Offset value setting in the upper side and the lower side can be easily conducted by pressing the "SET" button.

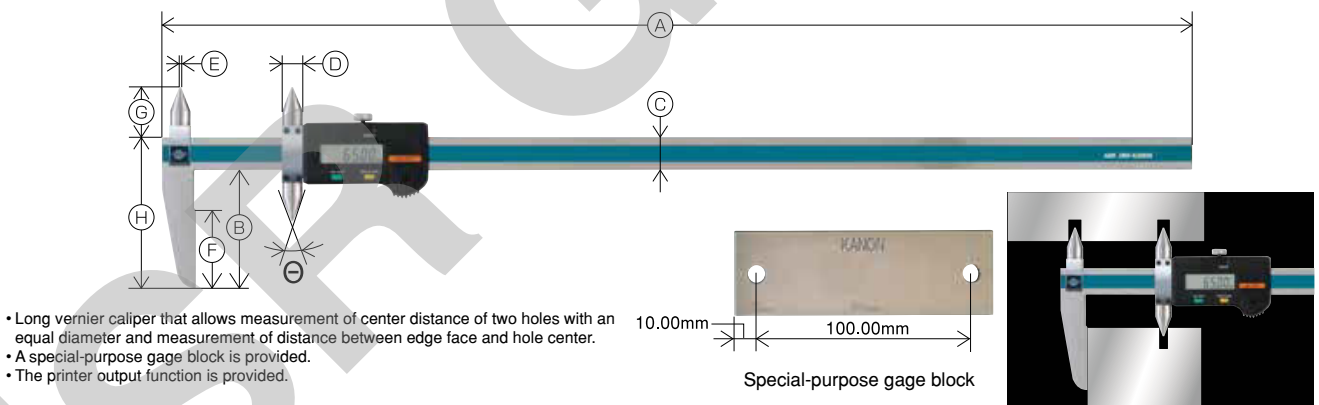
Specifications

Unit:mm

Order No.	Measuring range		Resolution	Instrumental error	Minimum hole diameter	Maximum hole diameter	Power supply	Weight	A	B	C	D	E	F	G	H	θ
	Pitch for upper side	Pitch for lower side															
E-RM15J	15 ~150	7.5 ~150						300g	260								
E-RM20J	15 ~200	7.5 ~200	0.01	±0.05	Ø3	Ø14	SR44 1 piece	340g	310	50	16	Ø15	Ø1.9	38	32	71	40°
E-RM30J	15 ~300	7.5 ~300						380g	405								

คาลิเปอร์

Adequate for center distance measurement for holes with equal diameter on long work E-RM60B



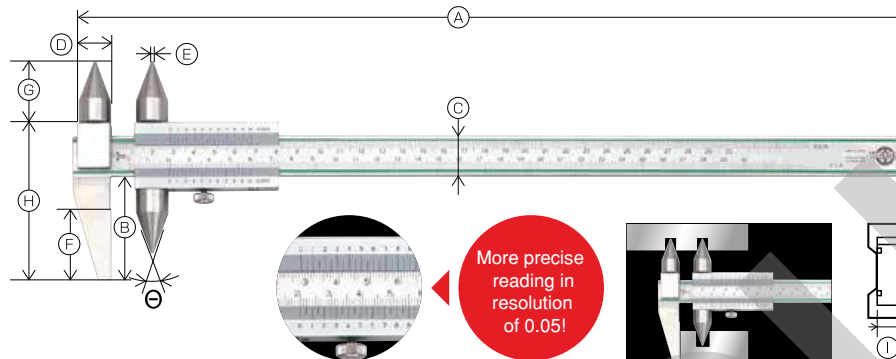
- Long vernier caliper that allows measurement of center distance of two holes with an equal diameter and measurement of distance between edge face and hole center.
- A special-purpose gage block is provided.
- The printer output function is provided.

Specifications

Unit:mm

Order No.	Measuring range		Resolution	Instrumental error	Minimum hole diameter	Maximum hole diameter	Power supply	Weight	A	B	C	D	E	F	G	H	θ
	Pitch for upper side	Pitch for lower side															
E-RM60B	17 ~600	9 ~600	0.01	±0.05	Ø3	Ø15	SSR44 1piece	2.4kg	780	85	25	Ø16	Ø1.9	69	31	110	40°

คาลิเปอร์

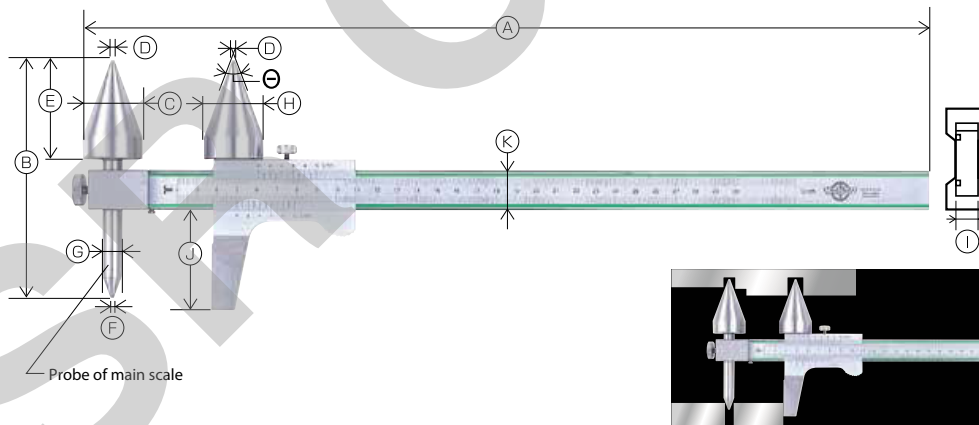
**Centerline caliper for distance between center to center distance of holes with equal diameter
RM-DX****Specifications**

Order No.	Measuring range		Minimum reading	Instrumental error	Minimum hole diameter	Maximum hole diameter	Weight	A	B	C	D	E	F	G	H	I	Θ
	Pitch for upper side	Pitch for lower side															
RM15DX	17~150	9~150	0.05 (Division of 39 into 20 equal part)	±0.07	Ø3	Ø15	400g	280	50	20	Ø16	Ø1.9	34	31	76	4	40°
RM20DX	17~200	9~200		±0.08			430g	330									
RM30DX	17~300	9~300		±0.08			500g	410									
RM60DX	17~600	9~600		±0.11			1.16kg	780									
RM100DX	21~1000	11~1000		±0.15	Ø5	Ø19	3.15kg	1200	90	32	20	4	67	35	129	8	

Unit:mm

Micrometer
ไมโครมิเตอร์Inside
Measurement
เครื่องมือวัดภายในCalipers
คาลิเปอร์Height Gages
เกจวัดความสูงLinear Height
เครื่องมือวัดความสูงDepth Gages
เกจวัดความลึกGauge Blocks
เกจบล็อกReference Gages
เครื่องมืออ้างอิงIndicators
อินดิเคเตอร์Stands
ขาตั้ง

คาลิเปอร์

**Offset centerline caliper
RM(II)**

• In addition measurement between holes with different diameters is available because the probe of main scale moves vertically.

Specifications

Order No.	Measuring range		Minimum reading	Instrumental error	Minimum hole diameter	Maximum hole diameter	Weight	A	B	C	D	E	F	G	H	I	J	K	Θ
	Pitch for upper side	Pitch for lower side																	
RM(II)15	25~150	20~150	0.1	±0.07	Ø1		180g	261	70	Ø6	Ø0.2	-	Ø0.2	Ø6	Ø6	3	40	16	53°
RM(II)30	35~300	25~300	(Division of 29mm)	±0.08	Ø3	Ø19	550g	422	120		Ø2	50	Ø2	Ø10		4	50	20	
RM(II)60	35~600	25~600	into 10 equal	±0.11			1.3kg	781		Ø30					Ø30	6	70	25	40°
RM(II)100	50~1000	40~1000	parts)	±0.15			3.5kg	1233	90		Ø4	42	Ø12	Ø12		8	80	32	

Unit:mm

SMALL TOOLS

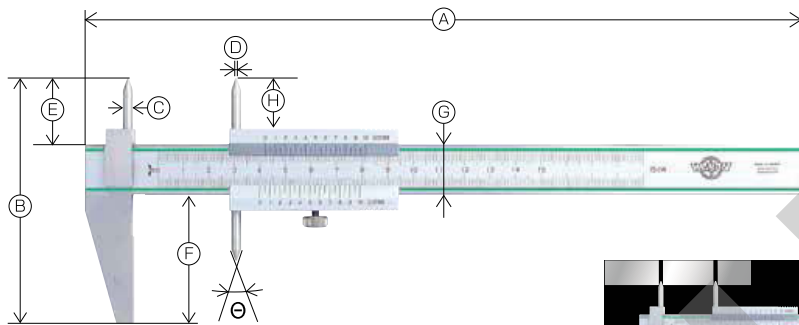
เครื่องมือวัดละเอียด

CALIPERS
คาลิเปอร์

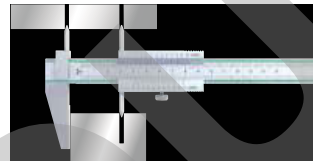
BESTOOL-KANON

คาลิเปอร์

Adequate for center distance measurement for small diameter holes
RM-S



Vernier caliper for measuring circular hole center distance adequate for "small diameter hole".



Specifications

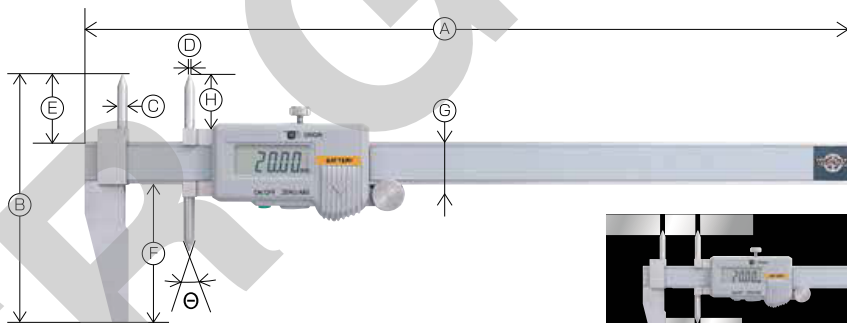
Unit:mm

Order No.	Measuring range		Minimum reading	Instrumental error	Minimum hole diameter	Maximum hole diameter	Weight	A	B	C	D	E	F	G	H	Θ
	Pitch for upper side	Pitch for lower side														
RM-S15	5 ~150	3 ~150	0.05 (Division of 39 mm into 20 equal parts)	±0.07	Ø1	Ø3.5	180g	280	96	Ø4	Ø0.8	26	50	20	20	40°

คาลิเปอร์

Adequate for center distance measurement for holes
E-RM-S

Caliper for measuring circular hole center distance adequate for "offset system" with vertical movement of probe and measurement of "small diameter hole and small surface"



Specifications

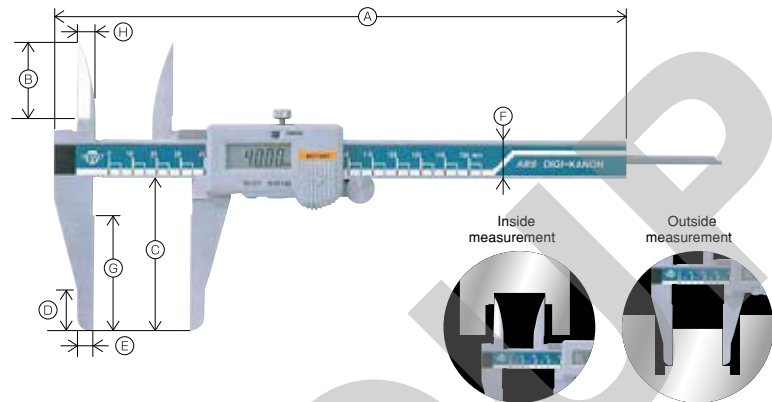
Unit:mm

Order No.	Measuring range		Resolution	Instrumental error	Minimum hole diameter	Maximum hole diameter	Power supply	Weight	A	B	C	D	E	F	G	H	Θ
	Pitch for upper side	Pitch for lower side															
E-RM-S15B	5~150	3~150	0.01	±0.05	Ø1	Ø3.5	SSR44 1piece	160g	280	90.7	Ø4	Ø0.8	24.7	50	16	20	40°

คาลิเปอร์

**ROBA caliper with donkey shape
E-ROBA**

- Since the jaw for inside and the jaw for outside are long, the product is adequate for measurement of the inside and outside of a narrow and deep location.
- The printer output function is provided.

**Specifications**

Unit:mm

Order No.	Measuring length	Resolution	Instrumental error	Power supply	Weight	A	B	C	D	E	F	G	H
E-ROBA15B	150	0.01	±0.05	SSR44 1piece	180g	247	34	64	17	6.5	16	48	9
E-ROBA20B	200				200g	297							

Micrometer

ไมโครมิเตอร์

Inside**Measurement**

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

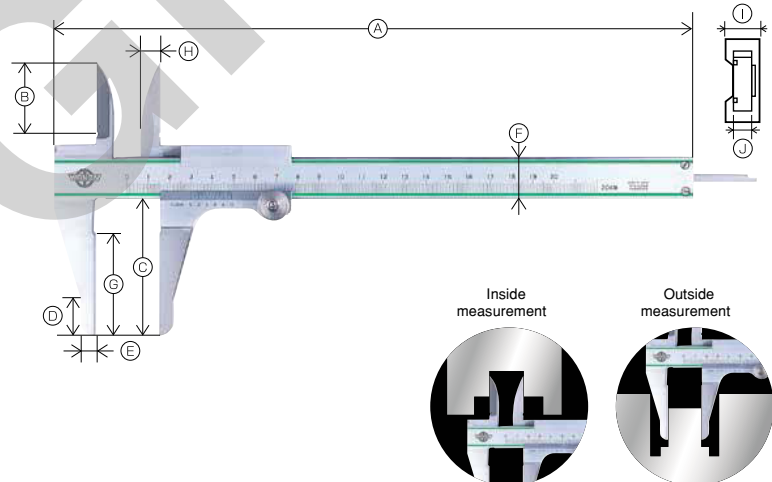
Stands

ขาตั้ง

คาลิเปอร์

**ROBA caliper with donkey shape
ROBA**

- Since the jaw for inside and the jaw for outside are long, the product is adequate for measurement of the inside and outside of a narrow and deep location.

**Specifications**

Unit:mm

Order No.	Measuring length	Minimum reading	Instrumental error	Weight	A	B	C	D	E	F	G	H	I	J
ROBA15	150	0.05 (Division of 19mm into 20 equal parts)	±0.05	270g	250									
ROBA20	200			310g	300	34	64	17	6.5	20	48	9	8	4
ROBA30	300		±0.08	370g	410									

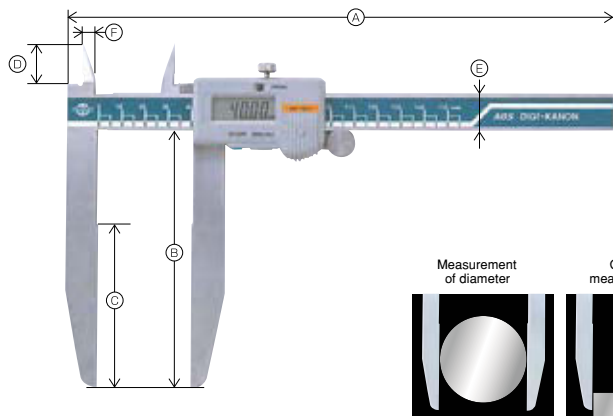
SMALL TOOLS

เครื่องมือวัดละเอียด

BESTOOL-KANON

คาลิเปอร์

Long Jaw Caliper E-LSM



- Since the length of outside jaw is more than 1/2 of measuring length, the product is adequate for measurement of diameter of sphere, pipe, and so on.
- The printer output function is provided.

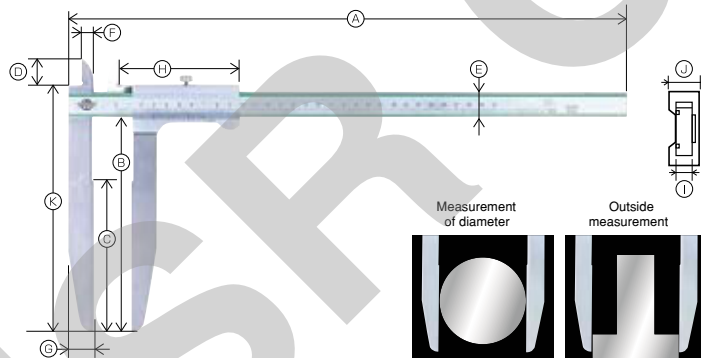
Specifications

Order No.	Measuring length	Length of jaw	Resolution	Instrumental error	Power supply	Weight	A	B	C	D	E	F
E-LSM15B	150	110	0.01	±0.05	SSR44 1piece	220g	236	110	70	20	16	6
E-LSM20B	200	110				250G	290					
E-LSM30B	300	170				490G	400	170	120	22.1	20	8.75
E-LSM60B	600	320				4.8KG	780	320	200	-	25	-

*E-LSM60B is not equipped with the inside jaw.

คาลิเปอร์

Long Jaw Caliper LSM



- Adequate for measurement of diameter of large diameter pipe and so on

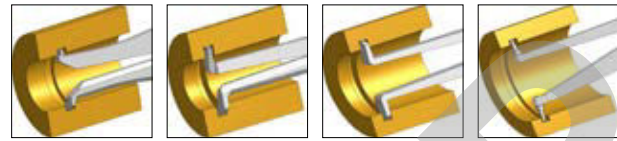
Specifications

Order No.	Measuring length	Length of jaw	Minimum reading	Instrumental error	Weight	A	B	C	D	E	F	G	H	I	J	J
LSM15x80	150	80	0.05 (Division of 39 mm into 20 equal parts)	±0.07	160g	295	80	50								105.5
LSM20x110	200	110			220g	345	110	70	22	20	10	20	95	4	8	1.5.5
LSM30x170	300	170			440g	445	170	120								195.5
LSM45x230	450	230			1.23kg	630	230	150	-	25	-	25	-	6	12.5	255
LSM60x320	600	320		±0.11	3.50kg	825	320	200	-	32	-	32	-	8	15	352

*LSM45/60 is not equipped with the inside jaw.

ตีนผี

Internal Measurement - Application range up to 60 mm

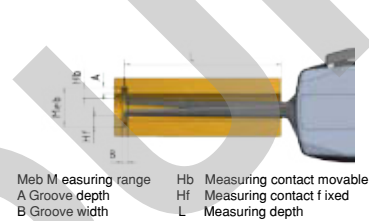


(1) Chisel R 0,1 mm

(2) Ball Ø 0,6 mm
Ball Ø 1,0 mm
Ball Ø 1,3 mm

(4) Ball Ø 1,0 mm

(5) Ball Ø 1,0 mm
Ball Ø 1,5 mm
Ball Ø 2,0 mm



Meb M measuring range
A Groove depth
B Groove width
Hb Measuring contact movable
Hf Measuring contact fixed
L Measuring depth

Micrometer
ไมโครมิเตอร์

Inside Measurement
เครื่องมือวัดภายใน

Calipers
การวัด

Height Gages
เกจวัดความสูง

Linear Height
เครื่องมือวัดความสูง

Depth Gages
เกจวัดความลึก

Gauge Blocks
เกจบล็อก

Reference Gages
เครื่องมืออ้างอิง

Indicators
อินดิเคเตอร์

Stands
ขาตั้ง

Type	Measuring span Mes (mm)	Measuring range Meb (mm)	Range of indication Azb (mm)	Scale interval Skw (mm)	Permissible errors G (mm)	Repeatability limit r (mm)	Measuring force min. (N)	Measuring force max. (N)	Weight (g)	Protection class	Measuring contact movable Hb (mm)	Measuring contact fixed Hf (mm)	Type of measuring contact (mm)	Groove depth A max. (mm)	Groove width B min. (mm)	Measuring depth L max. (mm)	Picture	Electronic E Mechanical M	Wooden box
G102	10	2.5 - 12.5	2.4 - 12.8	0.005	0.015	0.005	0.8	1.2	225	IP67	0.9	0.9	Chisel R 0,1	0.7	0.5	12	(1)	E	1732-45
H102	10	2.5 - 12.5	2.4 - 12.8	0.005	0.015	0.005	0.8	1.2	155	IP65	0.9	0.9	Chisel R 0,1	0.7	0.5	12	(1)	M	1732-45
G105	10	5 - 15	4.7 - 15.3	0.005	0.015	0.005	0.8	1.2	230	IP67	2.5	2.5	Ball Ø 0,6	2.3	0.8	35	(2)	E	1732-45
H105	10	5 - 15	4.7 - 15.3	0.005	0.015	0.005	0.8	1.2	160	IP65	2.5	2.5	Ball Ø 0,6	2.3	0.8	35	(2)	M	1732-45
G210	20	10 - 30	9.5 - 30.5	0.01	0.03	0.01	1.1	1.6	250	IP67	5.3	5.3	Ball Ø1	5.2	1.2	85	(2)	E	1732-45
H210	20	10 - 30	9.5 - 30.5	0.01	0.03	0.01	1.1	1.6	180	IP65	5.3	5.3	Ball Ø1	5.2	1.2	85	(2)	M	1732-45
G220	20	20 - 40	19.5 - 40.5	0.01	0.03	0.01	1.1	1.6	250	IP67	7.3	7.3	Ball Ø1	7.0	1.2	85	(4)	E	1732-45
H220	20	20 - 40	19.5 - 40.5	0.01	0.03	0.01	1.1	1.6	180	IP65	7.3	7.3	Ball Ø1	7.0	1.2	85	(4)	M	1732-45
G230	20	30 - 50	29.5 - 50.5	0.01	0.03	0.01	1.1	1.6	255	IP67	7.3	7.3	Ball Ø1	7.0	1.2	85	(4)	E	1732-45
H230	20	30 - 50	29.5 - 50.5	0.01	0.03	0.01	1.1	1.6	185	IP65	7.3	7.3	Ball Ø1	7.0	1.2	85	(4)	M	1732-45
G240	20	40 - 60	39.5 - 60.5	0.01	0.03	0.01	1.1	1.6	265	IP67	8.5	8.5	Ball Ø1	8.3	1.2	85	(5)	E	1732-45
H240	20	40 - 60	39.5 - 60.5	0.01	0.03	0.01	1.1	1.6	195	IP65	8.5	8.5	Ball Ø1	8.3	1.2	85	(5)	M	1732-45
G313	30	13 - 43	12.5 - 43.5	0.02	0.04	0.02	1.2	1.7	360	IP67	5.7	5.7	Ball Ø1,3	5.7	1.6	127	(2)	E	1732-51
G330	30	30 - 60	29.5 - 60.5	0.02	0.04	0.02	1.2	1.7	370	IP67	6.5	6.5	Ball Ø1,3	6.2	1.8	132	(5)	E	1732-51

SMALL TOOLS

เครื่องมือวัดละเอียด

Kroeplin
Längenmesstechnik

ตีพิมพ์

Internal Measurement - Application range up to 120 mm



(5) Ball Ø 1,0 mm
Ball Ø 1,5 mm
Ball Ø 2,0 mm

(3) Ball Ø 1,0 mm
Ball Ø 2,0 mm

Micrometer

ไมโครมิเตอร์

Inside Measurement
เครื่องมือวัดภายใน

Calipers

คาร์ลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง



Meb Measuring range
A Groove depth
B Groove width

Hb Measuring contact movable
Hf Measuring contact fixed
L Measuring depth



G240



H240



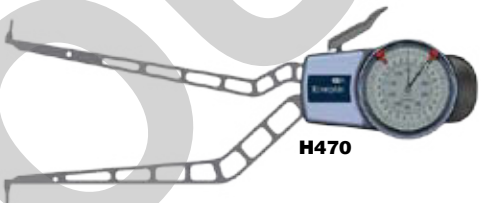
G415



H415



G370

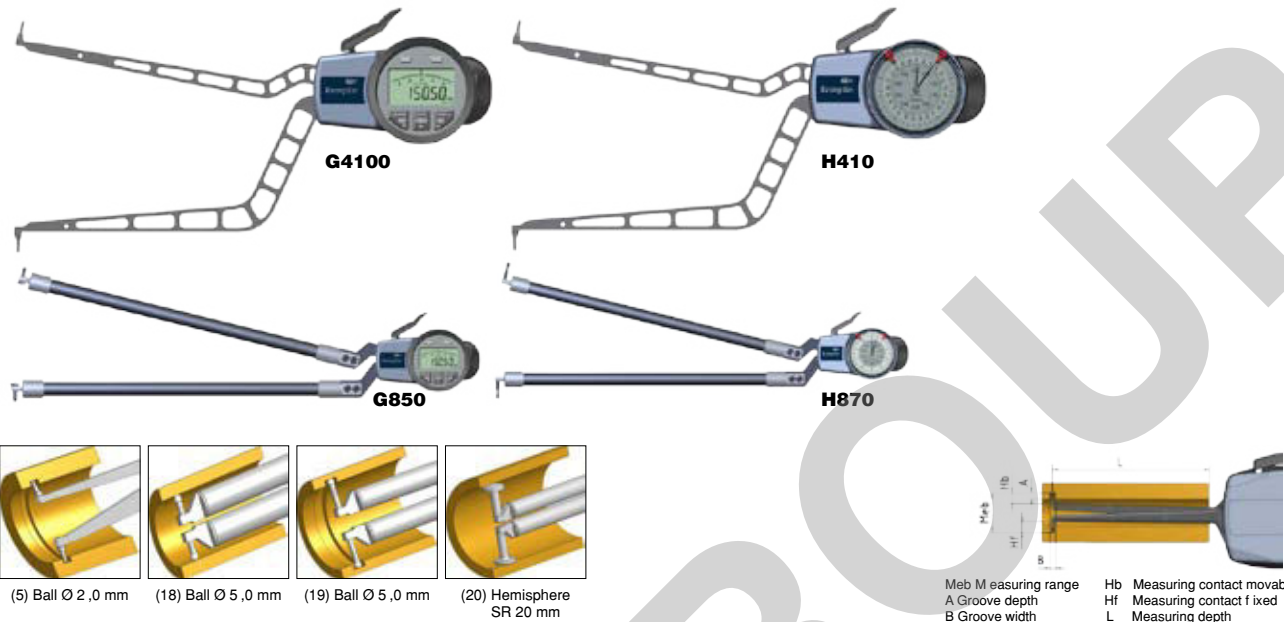


H470

	Type	Measuring span Mes (mm)	Measuring range Meb (mm)	Range of indication AzB (mm)	Scale interval Skw (mm)	Permissible errors G (mm)	Repeatability limit r (mm)	Measuring force min. (N)	Measuring force max. (N)	Weight (g)	Protection class	Measuring contact movable Hb (mm)	Measuring contact fixed Hf (mm)	Type of measuring contact (mm)	Groove depth A max. (mm)	Groove width B min. (mm)	Measuring depth L max. (mm)	Picture	Electronic E Mechanical M	Wooden box
Stands	G250	20	50 - 70	49.5 - 70.5	0.01	0.03	0.01	1.1	1.6	265	IP67	8.5	8.5	Ball Ø1	8.3	1.2	85	(5)	E	1732-45
	H250	20	50 - 70	49.5 - 70.5	0.01	0.03	0.01	1.1	1.6	195	IP65	8.5	8.5	Ball Ø1	8.3	1.2	85	(5)	M	1732-45
	G260	20	60 - 80	59.5 - 80.5	0.01	0.03	0.01	1.1	1.6	270	IP67	8.5	8.5	Ball Ø1	8.3	1.2	85	(5)	E	1732-45
	H260	20	60 - 80	59.5 - 80.5	0.01	0.03	0.01	1.1	1.6	200	IP65	8.5	8.5	Ball Ø1	8.3	1.2	85	(5)	M	1732-45
	G270	20	70 - 90	69.5 - 90.5	0.01	0.03	0.01	1.1	1.6	270	IP67	8.5	8.5	Ball Ø1	8.3	1.2	85	(5)	E	1732-45
	H270	20	70 - 90	69.5 - 90.5	0.01	0.03	0.01	1.1	1.6	200	IP65	8.5	8.5	Ball Ø1	8.3	1.2	85	(5)	M	1732-45
	G280	20	80 - 100	79.5 - 100.5	0.01	0.03	0.01	1.1	1.6	270	IP67	8.5	8.5	Ball Ø1	8.3	1.2	85	(5)	E	1732-45
	H280	20	80 - 100	79.5 - 100.5	0.01	0.03	0.01	1.1	1.6	200	IP65	8.5	8.5	Ball Ø1	8.3	1.2	85	(5)	M	1732-45
	G350	30	50 - 80	49.5 - 80.5	0.02	0.04	0.02	1.2	1.7	370	IP67	8.5	8.5	Ball Ø2	8.3	2.4	132	(5)	E	1732-51
	G370	30	70 - 100	69.5 - 100.5	0.02	0.04	0.02	1.2	1.7	375	IP67	8.5	8.5	Ball Ø2	8.3	2.4	132	(5)	E	1732-51
	G390	30	90 - 120	89.5 - 120.5	0.02	0.04	0.02	1.2	1.7	380	IP67	8.5	8.5	Ball Ø2	8.3	2.4	132	(3)	E	1732-51
	G415	50	15 - 65	14.5 - 65.5	0.02	0.06	0.04	1.0	1.8	415	IP67	6.0	6.0	Ball Ø1,5	5.5	1.9	188	(3)	E	1732-51
	H415	50	15 - 65	14.5 - 65.5	0.05	0.05	0.025	0.9	1.9	355	IP65	6.0	6.0	Ball Ø1,5	5.5	1.9	188	(5)	M	1732-51
	G440	50	40 - 90	39.5 - 90.5	0.02	0.06	0.04	1.0	1.8	420	IP67	8.5	8.5	Ball Ø2	5.5	2.4	192	(5)	E	1732-51
	H440	50	40 - 90	39.5 - 90.5	0.05	0.05	0.025	0.9	1.9	370	IP65	8.5	8.5	Ball Ø2	8.3	2.4	192	(5)	M	1732-51
	G470	50	70 - 120	69.5 - 120.5	0.02	0.06	0.04	1.0	1.8	420	IP67	8.5	8.5	Ball Ø2	8.3	2.4	192	(5)	E	1732-51
	H470	50	70 - 120	69.5 - 120.5	0.05	0.05	0.025	0.9	1.9	370	IP65	8.5	8.5	Ball Ø2	8.3	2.4	192	(5)	M	1732-51

ตีนผี

Internal Measurement - Application range up to 120 mm



Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

การลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

Type	Measuring span Mes (mm)	Measuring range Meb (mm)	Range of indication AzB (mm)	Scale interval Skw (mm)	Permissible errors G (mm)	Repeatability limit r (mm)	Measuring force min. (N)	Measuring force max. (N)	Weight (g)	Protection class	Measuring contact movable Hb (mm)	Measuring contact fixed Hf (mm)	Type of measuring contact	Groove depth A max. (mm)	Groove width B min. (mm)	Measuring depth L max. (mm)	Picture	Electronic E Mechan- ical M	Wooden box
G4100	50	100 - 150	99.5 - 150.5	0.02	0.06	0.04	1.0	1.8	425	IP67	8.5	8.5	Ball Ø2	8.3	2.4	192	(5)	E	1732-51
H4100	50	100 - 150	99.5 - 150.5	0.05	0.05	0.025	0.9	1.9	385	IP65	8.5	8.5	Ball Ø2	8.3	2.4	192	(5)	M	1732-51
G4130	50	130 - 180	129.5 - 180.5	0.02	0.02	0.04	1.0	1.8	430	IP67	8.5	8.5	Ball Ø2	8.3	2.4	192	(5)	E	HK
H4130	50	130 - 180	129.5 - 180.5	0.05	0.05	0.025	0.9	1.9	390	IP65	8.5	8.5	Ball Ø2	8.3	2.4	192	(5)	M	HK
G4150	50	150 - 200	149.5 - 200.5	0.02	0.02	0.04	1.0	1.8	435	IP67	8.5	8.5	Ball Ø2	8.3	2.4	192	(5)	E	HK
H4150	50	150 - 200	149.5 - 200.5	0.05	0.05	0.025	0.9	1.9	395	IP65	8.5	8.5	Ball Ø2	8.3	2.4	192	(5)	M	HK
G850	100	50 - 150	49.5 - 150.5	0.05	0.05	0.1	0.8	2.0	650	IP67	4.0	4.0	Ball Ø5	3.0	5.5	395	(18)	E	HK
H850	100	50 - 150	49.5 - 150.5	0.1	0.1	0.1	0.8	2.0	590	IP65	4.0	4.0	Ball Ø5	3.0	5.5	395	(18)	M	HK
G870	100	70 - 170	69.5 - 170.5	0.05	0.05	0.1	0.8	2.0	650	IP67	14.0	14.0	Ball Ø5	13.0	5.5	395	(19)	E	HK
H870	100	70 - 170	69.5 - 170.5	0.1	0.1	0.1	0.8	2.0	590	IP65	14.0	14.0	Ball Ø5	13.0	5.5	395	(19)	M	HK
ID6080	100	80 - 180	79.5 - 180.5	0.1	0.1	0.1	1.5	2.5	1600	-	12.0	12.0	Ball Ø5	11.0	5.5	535	(19)	M	HK
ID60150	100	150 - 250	149.5 - 250.5	0.1	0.1	0.1	1.5	2.5	1600	-	32.0	32.0	Ball Ø5	31.0	5.5	535	(19)	M	HK
ID60220	100	220 - 320	219.5 - 320.5	0.1	0.1	0.1	1.5	2.5	1700	-	32.0	32.0	Ball Ø5	31.0	5.5	535	(19)	M	HK
ID80200	200	200 - 400	199.5 - 400.5	0.2	0.2	0.2	1.0	2.0	2200	-	29.0	29.0	Hemisphere SR 20	28.0	21.0	735	(20)	M	HK

SMALL TOOLS

เครื่องมือวัดละเอียด

CALIPERS
คาร์ลิเปอร์

Kroeplin
Längenmesstechnik

ตี้นผี

Internal Comparison Measurement - Application range from 50 mm to 430 mm

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาร์ลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง



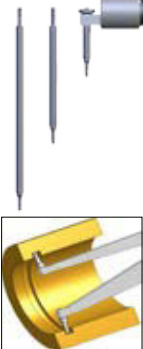
H4M180



H2M50



H2M90



(5) Ball Ø 1,0 mm
Ball Ø 2,0 mm



Meb Measuring range
A Groove depth
B Groove width

Hb Measuring contact movable
Hf Measuring contact fixed
L Measuring depth

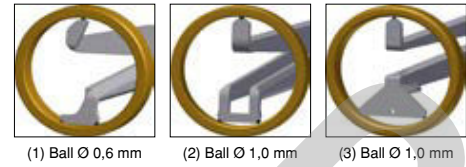
Type	Measuring span Mes (mm)	Measuring range Meb (mm)	Range of indication AzB (mm)	Scale interval Skw (mm)	Permissible errors G (mm)	Repeatability limit r (mm)	Measuring force min. (N)	Measuring force max. (N)	Weight (g)	Protection class	Measuring contact movable Hb (mm)	Measuring contact fixed Hf (mm)	Type of measuring contact	Groove depth A max. (mm)	Groove width B min. (mm)	Measuring depth L max. (mm)	Picture	Electronic E Mechanical M	Wooden box
H2M50	20	50 - 100	49.5 - 100.5	0.01	0.03	0.015	1.1	1.6	220	IP65	12.0	variable	Ball Ø1	8.3	1.2	85	(5)	M	HK
H2M90	20	90 - 140	89.5 - 140.5	0.01	0.03	0.015	1.1	1.6	230	IP65	12.0	variable	Ball Ø1	8.3	1.2	85	(5)	M	HK
H2M130	20	130 - 180	129.5 - 180.5	0.01	0.03	0.015	1.1	1.6	240	IP65	12.0	variable	Ball Ø1	8.3	1.2	85	(5)	M	HK
H4M180	50	180 - 310	179.5 - 310.5	0.05	0.10	0.05	0.9	1.9	420	IP65	21.0	variable	Ball Ø2	8.3	2.2	170	(5)	M	HK
H4M300	50	300 - 430	299.5 - 430.5	0.05	0.15	0.05	0.9	1.9	450	IP65	21.0	variable	Ball Ø2	8.3	2.2	170	(5)	M	HK

คินฟี

Internal measurement with 3-point contact - Application range from 7 mm to 105 mm



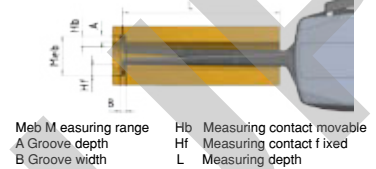
G210P3



(1) Ball Ø 0,6 mm

(2) Ball Ø 1,0 mm

(3) Ball Ø 1,0 mm

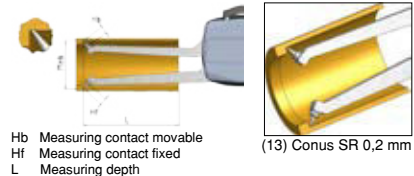
Measuring range
A Groove depth
B Groove widthMeasuring contact movable
Hf Measuring contact fixed
L Measuring depthMicrometer
ไมโครมิเตอร์Inside
Measurement
เครื่องมือวัดภายในCalipers
การลิเปอร์Height Gages
เกจวัดความสูงLinear Height
เครื่องมือวัดความสูงDepth Gages
เกจวัดความลึกGauge Blocks
เกจบล็อกReference Gages
เครื่องมืออ้างอิงIndicators
อินดิเคเตอร์Stands
ขาตั้ง

คาลิเปอร์

Internal measurement for blind holes - Application range from 720 mm to 70 mm



H2G40

Hb Measuring contact movable
Hf Measuring contact fixed
L Measuring depth

(13) Conus SR 0,2 mm

Type	Measuring span Mes (mm)	Measuring range Meb (mm)	Range of indication AzB (mm)	Scale interval Skw (mm)	Permissible errors G (mm)	Repeatability limit r (mm)	Measuring force min. (N)	Measuring force max. (N)	Weight (g)	Protection class	Type of measuring contact (mm)	Measuring contact movable Hb (mm)	Measuring contact fixed Hf (mm)	max. Measuring contact thickness (mm)	Measuring depth L max. (mm)	Picture	Mechanical M Electronic E	Wooden box
G2G20	20	20 - 40	19.5 - 40.5	0.01	0.03	0.01	1.1	1.6	250	IP67	Conus SR = 0, 2	5.0	5.0	Ø1.6	85	(13)	E	1732-45
H2G20	20	20 - 40	19.5 - 40.5	0.01	0.03	0.01	1.1	1.6	180	IP65	Conus SR = 0, 2	5.0	5.0	Ø1.6	85	(13)	M	1732-45
G2G30	20	30 - 50	29.5 - 50.5	0.01	0.03	0.01	1.1	1.6	255	IP67	Conus SR = 0, 2	5.0	5.0	Ø1.6	85	(13)	E	1732-45
H2G30	20	30 - 50	29.5 - 50.5	0.01	0.03	0.01	1.1	1.6	185	IP65	Conus SR = 0, 2	5.0	5.0	Ø1.6	85	(13)	M	1732-45
G2G40	20	40 - 60	39.5 - 60.5	0.01	0.03	0.01	1.1	1.6	265	IP67	Conus SR = 0, 2	5.0	5.0	Ø1.6	85	(13)	E	1732-45
H2G40	20	40 - 60	39.5 - 60.5	0.01	0.03	0.01	1.1	1.6	195	IP65	Conus SR = 0, 2	5.0	5.0	Ø1.6	85	(13)	M	1732-45
G2G50	20	50 - 70	49.5 - 70.5	0.01	0.03	0.01	1.1	1.6	265	IP67	Conus SR = 0, 2	5.0	5.0	Ø1.6	85	(13)	E	1732-45
H2G50	20	50 - 70	49.5 - 70.5	0.01	0.03	0.01	1.1	1.6	195	IP65	Conus SR = 0, 2	5.0	5.0	Ø1.6	85	(13)	M	1732-45

SMALL TOOLS

เครื่องมือวัดละเอียด

CALIPERS
คาร์ลิเปอร์

Kroeplin
Längenmesstechnik

ตีนผี

Electronic Internal Measuring Gauge

Micrometer

ไมโครมิเตอร์

G010

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาร์ลิเปอร์

G002

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

G005

Reference Gages

เครื่องมืออ้างอิง

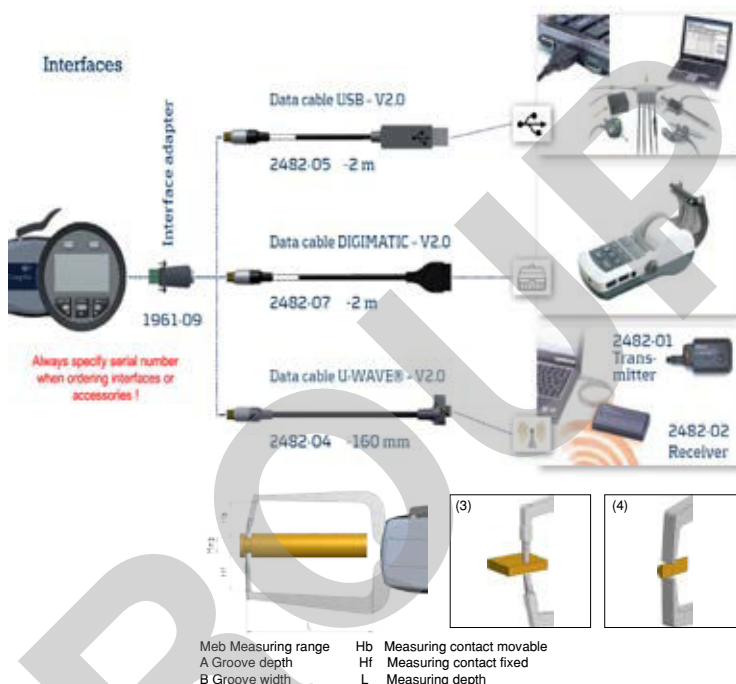
Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

Interfaces



Meb Measuring range
A Groove depth
B Groove width

Hb Measuring contact movable
Hf Measuring contact fixed
L Measuring depth

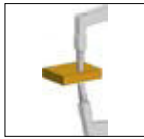
Type	Measuring span Mes (mm)	Measuring range Meb (mm)	Range of indication AzB (mm)	Numerical interval Zw (mm)	Permissible errors G (mm)	Repeatability limit r (mm)	Measuring force min. (N)	Measuring force max. (N)	Weight (g)	Protection class	Measuring contact movable Hb (mm)	Measuring contact fixed Hf (mm)	Type of measuring contact (mm)	Groove depth A max. (mm)	Groove width B min. (mm)	Measuring depth L max. (mm)	Picture
G002	10	2.5-12.5	2.4-12.8	0.001	0.010	0.005	0.8	1.3	160	IP67	0.9	0.9	Chisel R0.12	0.7	0.6	12	(3)
G005	15	5-20	4.7-20.3	0.001	0.010	0.005	0.8	1.3	160	IP67	2.2	2.2	Ball Ø 0.6	2.2	0.8	44	(4)
G010	15	10-25	9.7-25.3	0.001	0.010	0.005	0.8	1.3	160	IP67	4.4	4.4	Ball Ø 1	4	1.5	46	(4)

Accessories: Wooden box [1732-38] available on request

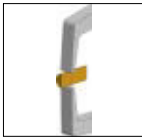
Scope of supply: Certificate of quality Operating instructions

เขาคว

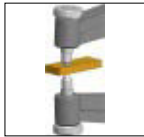
External measurement - Application range up to 30 mm



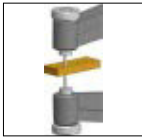
(6) Ball Ø 1,5 mm
Ball Ø 3,0 mm



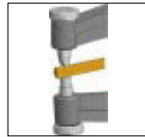
(7) Chisel R 0,4 mm
Chisel R 0,75 mm



(23) Ball Ø 5,0 mm



(24) Needle Ø 0,75 mm



(25) Chisel R 0,5 mm
Plane Ø 3,5 mm



Hb Measuring contact movable
Hf Measuring contact fixed
L Measuring depth



POCO2K



C110



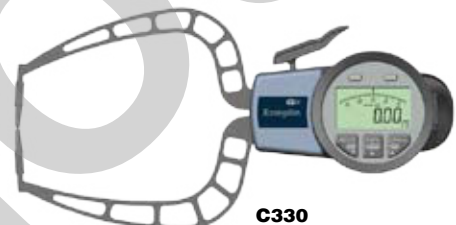
D110



C220



D220



C330

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

การวัดเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

Type	Measuring span Mes (mm)	Measuring range Mab (mm)	Range of indication Azb (mm)	Scale interval Skw (mm)	Permissible errors G (mm)	Repeatability limit r (mm)	Measuring force min. (N)	Measuring force max. (N)	Weight (g)	Protection class	Measuring contact movable Hb (mm)	Measuring contact fixed Hf (mm)	Type of measuring contact (mm)	Measuring depth L max. (mm)	Picture	Electronic E Mechanical M	Wooden box
POCO 2K	10	0 - 10	0 - >10	0.1	0.1	0.05	0.3	1.3	40	-	5	5	Ball Ø5	36	(23)	M	1732-01
POCO 2N	10	0 - 10	0 - >10	0.1	0.1	0.05	0.3	1.3	40	-	3.5	3.5	Needle Ø 0,75	36	(24)	M	1732-01
POCO 2F	10	0 - 10	0 - >10	0.1	0.1	0.05	0.3	1.3	40	-	4.5	4.5	Sn-R 0, 5 / F Ø 3,5	36	(25)	M	1732-01
C110	10	0 - 10	0 - 10.5	0.005	0.015	0.005	0.8	1.2	240	IP67	19.1	18.6	Ball Ø1,5	35	(6)	E	1732-45
D110	10	0 - 10	0 - 10.5	0.005	0.015	0.005	0.8	1.2	170	IP65	19.1	18.6	Ball Ø1,5	35	(6)	M	1732-45
C110S	10	0 - 10	0 - 10.5	0.005	0.015	0.005	0.8	1.2	240	IP67	18.8	18.5	Chisel R 0, 4	35	(7)	E	1732-45
D110S	10	0 - 10	0 - 10.5	0.005	0.015	0.005	0.8	1.2	170	IP65	18.8	18.5	Chisel R 0, 4	35	(7)	M	1732-45
C220	20	0 - 20	0 - 20.5	0.01	0.03	0.01	1.1	1.6	280	IP67	24.7	24.6	Ball Ø1,5	85	(6)	E	1732-45
D220	20	0 - 20	0 - 20.5	0.01	0.03	0.01	1.1	1.6	210	IP65	24.7	24.6	Ball Ø1,5	85	(6)	M	1732-45
C220S	20	0 - 20	0 - 20.5	0.01	0.03	0.01	1.1	1.6	280	IP7	24.7	24.6	Chisel R 0, 4	85	(7)	E	1732-45
D220S	20	0 - 20	0 - 20.5	0.01	0.03	0.01	1.1	1.6	210	IP65	24.7	24.6	Chisel R 0, 4	85	(7)	M	1732-45
C330	30	0 - 30	0 - 30.5	0.02	0.04	0.02	0.9	1.6	430	IP67	30	30	Ball Ø3	116	(6)	E	1732-51
C330S	30	0 - 30	0 - 30.5	0.02	0.04	0.02	0.9	1.6	430	IP67	30	30	Chisel R 0,75	116	(7)	E	1732-51

SMALL TOOLS

เครื่องมือวัดละเอียด

Kroeplin
Längenmesstechnik

เขาควาย

External measurement - Application range up to 200 mm

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

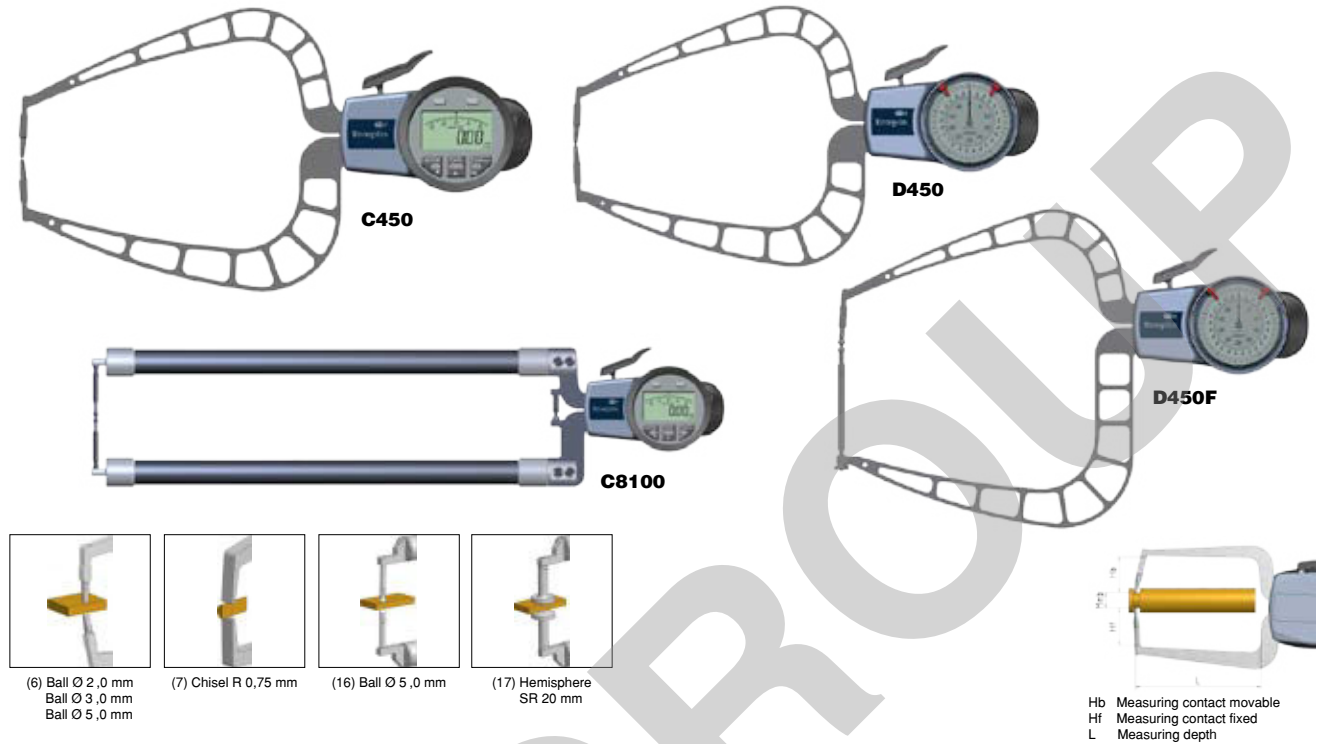
เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

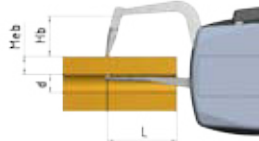


Type	Measuring span Mes (mm)	Measuring range MeB (mm)	Range of indication AzB (mm)	Scale interval Skw (mm)	Permissible errors G (mm)	Repeatability limit r (mm)	Measuring force min. (N)	Measuring force max. (N)	Weight (g)	Protection class	Measuring contact movable Hb (mm)	Measuring contact fixed Hf (mm)	Type of measuring contact (mm)	Measuring depth L max. (mm)	Picture	Electronic E Mechanical M	Wooden box
C450	50	0 - 50	0 - 50.5	0.02	0.06	0.04	0.8	1.7	490	IP67	30	30	Ball Ø3	167	(6)	E	1732-51
D450	50	0 - 50	0 - 50.5	0.05	0.05	0.025	0.8	1.7	430	IP65	30	30	Ball Ø3	167	(6)	M	1732-51
C450S	50	0 - 50	0 - 50.5	0.02	0.06	0.04	0.8	1.7	490	IP67	30	30	Ball Ø3	167	(7)	E	1732-51
D450S	50	0 - 50	0 - 50.5	0.05	0.05	0.025	0.8	1.7	430	IP65	30	30	Ball Ø3	167	(7)	M	1732-51
C450B	50	0 - 50	0 - 50.5	0.02	0.08	0.06	0.8	1.7	510	IP67	72.6	30	Ball Ø5	167	(6)	E	HK
D450B	50	0 - 50	0 - 50.5	0.05	0.075	0.05	0.8	1.7	450	IP65	72.6	30	Ball Ø5	167	(6)	M	HK
C450F	50	0 - 50	0 - 50.5	0.02	0.08	0.06	0.8	1.7	510	IP67	30	72.6	Ball Ø5	167	(6)	E	HK
D450F	50	0 - 50	0 - 50.5	0.05	0.075	0.05	0.8	1.7	450	IP65	30	72.6	Ball Ø5	167	(6)	M	HK
C4100	50	50 - 100	49.5 - 100.5	0.02	0.08	0.06	0.8	1.7	510	IP67	30	23	Ball Ø3	167	(6)	E	HK
D4100	50	50 - 100	49.5 - 100.5	0.05	0.075	0.05	0.8	1.7	450	IP65	30	23	Ball Ø3	167	(6)	M	HK
C4150	50	100 - 150	99.5 - 150.5	0.02	0.08	0.06	0.8	1.7	530	IP67	30	23	Ball Ø3	167	(6)	E	HK
D4150	50	100 - 150	99.5 - 150.5	0.05	0.075	0.05	0.8	1.7	470	IP65	30	23	Ball Ø3	167	(6)	M	HK
C8100	100	0 - 100	0 - 101	0.05	0.15	0.1	0.8	1.8	660	IP67	35	35	Ball Ø5	382	(16)	E	HK
D8100	100	0 - 100	0 - 101	0.1	0.15	0.1	0.8	1.8	600	IP65	35	35	Ball Ø5	382	(16)	M	HK
OD60100	100	0 - 100	0 - 101	0.1	0.3	0.15	1.5	2.5	1500	-	32	32	Ball Ø5	530	(16)	M	HK
OD60100BJ	100	0 - 100	0 - 101	0.1	0.3	0.15	1.5	2.5	2300	-	32	132	Ball Ø5	530	(16)	M	HK
OD80200	200	0 - 200	0 - 201	0.2	0.4	0.2	1.0	2.0	2300	-	100	100	Hemisphere S R 20	725	(17)	M	HK

Hb Measuring contact movable
Hf Measuring contact fixed
L Measuring depth

เขาคว

Tube wall measurement - Application range up to 100 mm



L Measuring depth
Hb Measuring contact movable
Hf Measuring contact fixed
d Diameter

C1R10



D2R20



C3R30



D4R50



(8) Ball Ø 1,5 mm



(9) Chisel R 0,4 mm
Ball Ø 1,5 mm



(10) Ball Ø 1,5 mm
Ball Ø 2,0 mm
Ball Ø 3,0 mm



(11) Chisel R 0,4 mm
Chisel R 0,75 mm
Ball Ø 1,5 mm
Ball Ø 2,0 mm
Ball Ø 3,0 mm



(15) Ball Ø 5,0 mm



(21) Ball Ø 2,0 mm
Hemisphere
SR 0,5 mm



POCO2R

Type	Measuring span Mes (mm)	Measuring range Meb (mm)	Range of indication Azb (mm)	Scale interval Skw (mm)	Permissible errors G (mm)	Repeatability limit r (mm)	Measuring force min. (N)	Measuring force max. (N)	Weight (g)	Protection class	Type of measuring contact movable (mm)	Measuring contact movable Hb (mm)	Type of measuring contact (mm)	Measuring contact fixed Hf (mm)	bore diameter d min. (mm)	Measuring depth L max. (mm)	Picture	Electronic E Mechanical M	Wooden box
POCO 2R	10	0 - 10	0 - >10	0.1	0.1	0.05	0.3	1.3	40	-	Ball Ø 2.0	5.0	Hemisphere SR = 0.5	0.8	3	25	(21)	M	1732-01
C1R10	10	0 - 10	0 - 10.5	0.005	0.015	0.005	0.8	1.2	235	IP67	Ball Ø 1.5	19.1	Ball Ø 1.5	0.9	3	35	(8)	E	1732-45
D1R10	10	0 - 10	0 - 10.5	0.005	0.015	0.005	0.8	1.2	165	IP65	Ball Ø 1.5	19.1	Ball Ø 1.5	0.9	3	35	(8)	M	1732-45
C1R10S	10	0 - 10	0 - 10.5	0.005	0.015	0.005	0.8	1.2	235	IP67	Chisel R = 0.4	18.8	Ball Ø 1.5	0.9	3	35	(9)	E	1732-45
D1R10S	10	0 - 10	0 - 10.5	0.005	0.015	0.005	0.8	1.2	165	IP65	Chisel R = 0.4	18.8	Ball Ø 1.5	0.9	3	35	(9)	M	1732-45
C2R20	20	0 - 20	0 - 20.5	0.01	0.03	0.01	1.1	1.6	270	IP67	Ball Ø 1.5	24.7	Ball Ø 1.5	2.5	9	80	(10)	E	1732-45
D2R20	20	0 - 20	0 - 20.5	0.01	0.03	0.01	1.1	1.6	200	IP65	Ball Ø 1.5	24.7	Ball Ø 1.5	2.5	9	80	(10)	M	1732-45
C2R20S	20	0 - 20	0 - 20.5	0.01	0.03	0.01	1.1	1.6	270	IP67	Chisel R = 0.4	24.7	Ball Ø 1.5	2.5	9	80	(11)	E	1732-45
D2R20S	20	0 - 20	0 - 20.5	0.01	0.03	0.01	1.1	1.6	200	IP65	Chisel R = 0.4	24.7	Ball Ø 1.5	2.5	9	80	(11)	M	1732-45
C3R30	30	0 - 30	0 - 30.5	0.02	0.04	0.02	0.9	1.6	410	IP67	Ball Ø 3	30	Ball Ø 3	4	10	116	(10)	E	1732-51
C3R30S	30	0 - 30	0 - 30.5	0.02	0.04	0.02	0.9	1.6	410	IP65	Chisel R = 0.75	30	Ball Ø 3	4	10	116	(11)	E	1732-51
C4R50	50	0 - 50	0 - 50.5	0.02	0.06	0.04	0.8	1.7	460	IP67	Ball Ø 3	30	Ball Ø 3	4.3	13	169	(10)	E	1732-51
D4R50	50	0 - 50	0 - 50.5	0.05	0.05	0.025	0.8	1.7	400	IP65	Ball Ø 3	30	Ball Ø 3	4.3	13	169	(10)	M	1732-51
C4R50S	50	0 - 50	0 - 50.5	0.02	0.06	0.04	0.8	1.7	460	IP67	Chisel R = 0.75	30	Ball Ø 3	4.3	13	169	(11)	E	1732-51
D4R50S	50	0 - 50	0 - 50.5	0.05	0.05	0.025	0.8	1.7	400	IP65	Chisel R = 0.75	30	Ball Ø 3	4.3	13	169	(11)	M	1732-51
C8R100	100	0 - 100	0 - 101	0.05	0.15	0.1	0.8	1.8	660	IP67	Ball Ø 5	35	Ball Ø 3	15	36	382	(15)	E	HK
D8R100	100	0 - 100	0 - 101	0.1	0.15	0.1	0.8	1.8	600	IP65	Ball Ø 5	35	Ball Ø 3	15	36	382	(15)	M	HK

Micrometer
ไมโครมิเตอร์

Inside Measurement
เครื่องมือวัดภายใน

Calipers
การลิเปอร์

Height Gages
เกจวัดความสูง

Linear Height
เครื่องมือวัดความสูง

Depth Gages
เกจวัดความลึก

Gauge Blocks
เกจบล็อก

Reference Gages
เครื่องมืออ้างอิง

Indicators
อินดิเคเตอร์

Stands
ขาตั้ง

SMALL TOOLS

เครื่องมือวัดละเอียด

Kroeplin
Längenmesstechnik

เชาควาย

Measurement of foamed material and foils - Application range up to 100

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาร์ลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

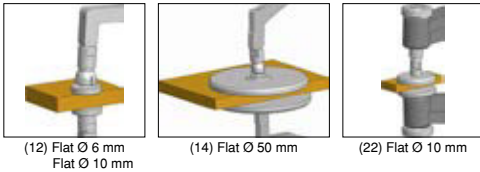
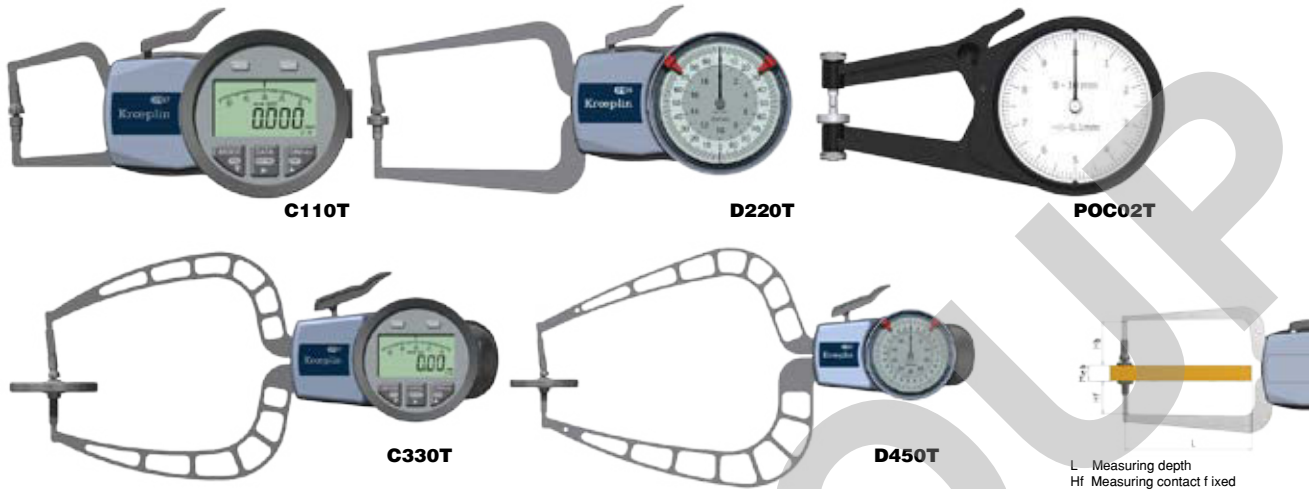
เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

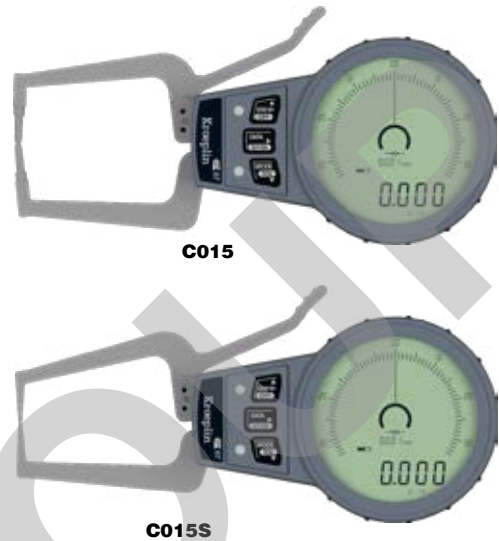
ขาตั้ง



Type	Measuring span Mes (mm)	Measuring range Web (mm)	Range of Indication AzB (mm)	Scale interval Skw (mm)	Permissible errors G (mm)	Repeatability limit r (mm)	Measuring force min. (N)	Measuring force max. (N)	Weight (g)	Protection class	Measuring contact movable Hb (mm)	Measuring contact fixed Hf (mm)	Type of measuring contact (mm)	Measuring depth L max. (mm)	Picture	Electronic E Mechanical M	Wooden box
POCO 2T	10	0 - 10	0 - >10	0.1	0.1	0.05	0.3	1.3	40	-	5.0	5.0	Flat Ø 10	36	(22)	M	1732-01
C110T	10	0 - 10	0 - 10.5	0.005	0.02	0.005	0.8	1.2	175	IP67	21.7	14.8	Flat Ø 6	35	(12)	E	1732-45
D110T	10	0 - 10	0 - 10.5	0.005	0.02	0.005	0.8	1.2	175	IP65	21.7	14.8	Flat Ø 6	35	(12)	M	1732-45
C220T	20	0 - 20	0 - 20.5	0.01	0.04	0.01	1.1	1.6	220	IP67	28.2	20.7	Flat Ø 10	85	(12)	E	1732-45
D220T	20	0 - 20	0 - 20.5	0.01	0.04	0.01	1.1	1.6	220	IP65	28.2	20.7	Flat Ø 10	85	(12)	M	1732-45
C330T	30	0 - 30	0 - 30.5	0.02	0.06	0.04	0.9	1.6	430	IP67	36	24	Flat Ø 50	116	(14)	E	1732-51
C450T	50	0 - 50	0 - 50.5	0.02	0.08	0.06	0.8	1.7	500	IP67	36	24	Flat Ø 50	167	(14)	E	1732-51
D450T	50	0 - 50	0 - 50.5	0.05	0.1	0.05	0.8	1.7	440	IP65	36	24	Flat Ø 50	167	(14)	M	1732-51
C8100T	100	0 - 100	0 - 101	0.05	0.15	0.1	0.8	1.8	670	IP67	41	9	Flat Ø 50	382	(14)	E	HK
D8100T	100	0 - 100	0 - 101	0.1	0.15	0.1	0.8	1.8	610	IP65	41	9	Flat Ø 50	382	(14)	M	HK
OD60100T	100	0 - 100	0 - 102	0.1	0.4	0.2	1.5	2.5	1700	-	46	26	Flat Ø 50	555	(14)	M	HK

เขาคว

Electronic External Measuring Gauges



Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

การลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

Type	Measuring span Mes (mm)	Measuring range Meb (mm)	Range of indication AzB (mm)	Numerical interval Zw (mm)	Permissible errors G (mm)	Repeatability limit r (mm)	Measuring force min. (N)	Measuring force max. (N)	Weight (g)	Protection class	Measuring contact movable Hb (mm)	Measuring contact fixed Hf (mm)	Type of measuring contact (mm)	Groove depth A max. (mm)	Groove width B min. (mm)	Measuring depth L max. (mm)	Picture
C015	15	0 - 15	0 - 15.5	0.001	0.010	0.005	1.3	1.5	170	IP67	17	17	Ball Ø1.5	15	2.5	45	(1)
C015S	15	0 - 15	0 - 15.5	0.001	0.015	0.005	1.3	1.5	170	IP67	12	12	Chisel R 0.4	11	1.5	45	(2)

Accessories: Wooden box [1732-38] available on request
Scope of supply: Certificate of quality Operating instructions

SMALL TOOLS

เครื่องมือวัดละเอียด

CALIPERS
คาร์ลิเปอร์

SINCE 1916
PEACOCK

เขาคววย

Dial Calipers - LA series (Outside measuring of ODs and thicknesses)

The dial caliper gauge show its great power in measurement of inside and outside sizes, wall thickness, groove width and hole diameters and any other shapes and sections that is not apparently accessible.

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาร์ลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

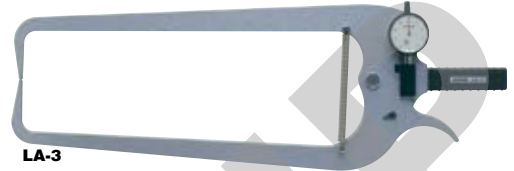
ขาตั้ง



LA-1
Graduation : 0.1 mm
Range : 0-80mm
Throat depth: 120mm



LA-2
Graduation : 0.1 mm
Range : 0-80 mm
Throat depth: 240 mm



LA-3
Graduation : 0.1 mm
Range : 0-80 mm
Throat depth: 400 mm



LA-4
Graduation : 0.05mm
Range : 0-50mm
Throat depth: 90mm



LA-5
Graduation : 0.05mm
Range : 0-50mm
Throat depth: 150mm



LA-6
Graduation : 0.01mm
Range : 0-10mm
Throat depth: 60mm



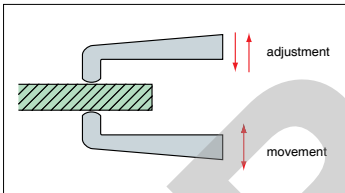
LA-8
Graduation : 0.1mm
Range : 0-80mm
Throat depth: 130mm



LA-7
Graduation : 0.01mm
Range : 0-60mm
Throat depth: 85mm

- Adjustable frame
- The LA-7 can measure an absolute value in a measuring range of 10 mm
- It allows measurement of comparative values in more than 10 mm

Applied examples - Outside -



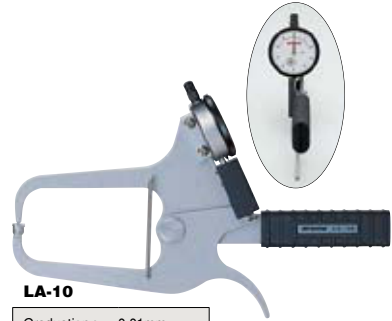
Note: Throat Depth is changed by Measuring Range.
Contact us more detailed information.

Ex. LA-13

Range	Throat Depth
0 ~ 50mm	235mm
0 ~ 60mm	125mm
0 ~ 80mm	102mm
0 ~ 100mm	91mm
0 ~ 130mm	86mm



LA-9
Graduation : 0.1mm
Range : 0-30mm
Throat depth: 100mm



LA-10
Graduation : 0.01mm
Range : 0-20mm
Throat depth: 100mm

- The tip of the bottom frame Ø10mm Flat Rocking Contact Point.

Order No.	Graduation (mm)	Range (mm)	Indication error (mm)	Throat depth (mm)	Dimensions (mm)			
					H1	H2	H3	H4
LA-1	0.1	0 ~ 80	±0.2	120	25	40	25	40
LA-2	0.1	0 ~ 80	±0.2	240	48	57	48	57
LA-3	0.1	0 ~ 80	±0.2	400	60	60	58	79
LA-4	0.05	0 ~ 50	±0.15	90	30	40	30	40
LA-5	0.05	0 ~ 50	±0.15	150	38	57	15	21
LA-5S	0.05	0 ~ 10	±0.15	120	1.5	10	34	34
LA-6	0.01	0 ~ 10	±0.03	60	2.5	18	2.5	18
LA-7	0.01	0 ~ 60	±0.03	85	20	20	15	15
LA-8	0.1	0 ~ 80	±0.2	130	-	-	-	-
LA-9	0.1	0 ~ 30	±0.2	100	2	12	2	12
LA-10	0.01	0 ~ 20	±0.03	100	28	28	28	28

เขาคววย Dial Calipers



LA-11

Graduation : 0.1mm
Range : 0-50mm
Throat depth: 125mm



LA-13

Graduation : 0.1mm
Range : 0-130mm
Throat depth: 235mm



LA-14

Graduation : 0.01mm
Range : 100-150mm
Throat depth: 70mm

• LA-14 is for comparative measurement.



LA-20

Graduation : 0.1mm
Range : 0-80mm
Throat depth: 125mm



LA-21

Graduation : 0.1mm
Range : 0-80mm
Throat depth: 220mm



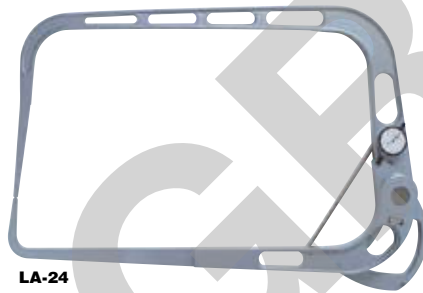
LA-22

Graduation : 0.1mm
Range : 0-80mm
Throat depth: 250mm



LA-23

Graduation : 0.1mm
Range : 0-80mm
Throat depth: 300mm



LA-24

Graduation : 0.1mm
Range : 0-100mm
Throat depth: 600mm

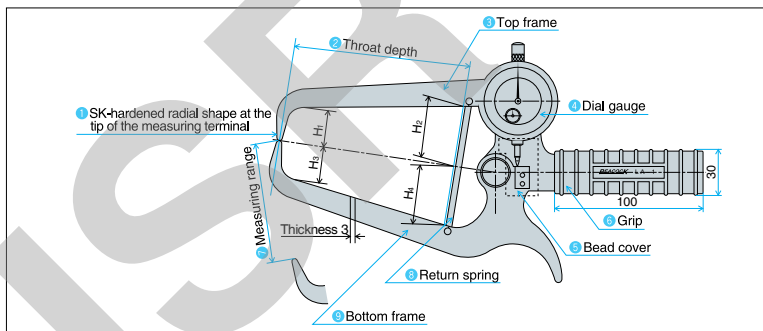
• Max. opening frame 500mm



LA-31

Graduation : 0.01mm
Range : 0-20mm
Throat depth: 125mm

Name of parts



Example



Note: Throat Depth is changed by Measuring Range.
Contact us more detailed information.

Ex. LA-13

Range	Throat Depth
0 ~ 50mm	235mm
0 ~ 60mm	125mm
0 ~ 80mm	102mm
0 ~ 100mm	91mm
0 ~ 130mm	86mm

Order No.	Graduation (mm)	Range (mm)	Indication error (mm)	Throat depth (mm)	Dimensions (mm)			
					H1	H2	H3	H4
LA-11	0.1	0 ~ 50	±0.2	125	2	5.5	2	5.5
LA-13	0.1	0 ~ 130	±0.3	235	134	134	15	37
LA-14	0.1	100 ~ 150	±0.03	70	-	-	-	-
LA-20	0.05	0 ~ 80	±0.2	125	17	11	17	11
LA-21	0.05	0 ~ 80	±0.2	220	66	69	12	10
LA-22	0.05	0 ~ 80	±0.2	250	28	23	62	62
LA-23	0.01	0 ~ 80	±0.2	300	45	50	48	43
LA-24	0.01	0 ~ 100	±0.4	600	300	300	100	100
LA-31	0.1	0 ~ 20	±0.03	125	60	63	-	-

SMALL TOOLS

เครื่องมือวัดละเอียด

CALIPERS
คาร์ลิเปอร์

SINCE 1916
PEACOCK

ตีนผี

Dial Calipers -LB series (Inside measuring of ID and groove widths)

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาร์ลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง



LB-1

Graduation : 0.1mm
Range : 10-90mm
Throat depth: 125mm



LB-2

Graduation : 0.1mm
Range : 10-90mm
Throat depth: 180mm



LB-3

Graduation : 0.1mm
Range : 10-30mm
Throat depth: 50mm



LB-4

Graduation : 0.01mm
Range : 10-30mm
Throat depth: 100mm



LB-5

Graduation : 0.01mm
Range : 20-40mm
Throat depth: 150mm



LB-6

Graduation : 0.01mm
Range : 30-50mm
Throat depth: 80mm



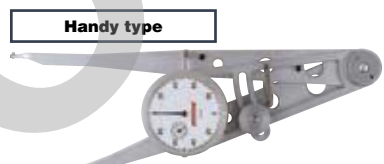
LB-8

Graduation : 0.01mm
Range : 100-120mm
Throat depth: 90mm



LB-9

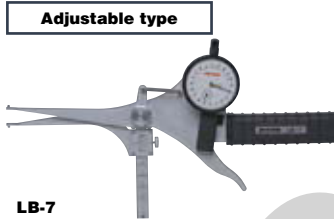
Graduation : 0.01mm
Range : 20-40mm
Throat depth: 130mm



Handy type

LH-2

Graduation : 0.01mm
Range : 10-120mm
Throat depth: 50mm



LB-7

Graduation : 0.01mm
Range : 10-70mm
Throat depth: 85mm



LB-7S

Graduation : 0.01mm
Range : 15-35mm
Throat depth: 50mm



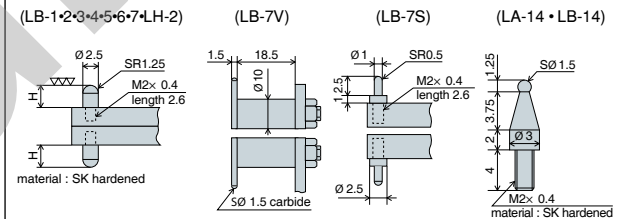
LB-7V

Graduation : 0.01mm
Range : 35-85mm
Throat depth: 20mm

LB-14

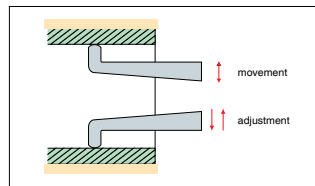
Graduation : 0.01mm
Range : 100-150mm
Throat depth: 70mm

Dimensions for contact point



※ Hmm (height of contact point) 3, 4, 5, 6, 7, 8, 9, 10mm type are available as options. Order pair as 1 set (2pcs).

Applied Example -- inside --



Note: Throat Depth is changed by Measuring Range.
Contact us more detailed information.

Ex. LB-2

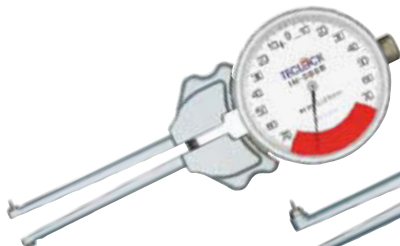
Range	Throat Depth
10mm	up to 20mm
15mm	up to 45mm
20mm	up to 70mm
30mm	up to 84mm
90mm	up to 180mm

Order No.	Graduation (mm)	Range (mm)	Indication error (mm)	Throat depth (mm)	Height of contact point (mm)
LB-1	0.1	10 ~ 90	±0.2	125	2
LB-2	0.1	10 ~ 90	±0.2	180	2
LB-3	0.01	10 ~ 30	±0.03	50	2
LB-4	0.01	10 ~ 30	±0.03	100	2
LB-5	0.01	20 ~ 40	±0.03	150	4
LB-6	0.01	30 ~ 50	±0.03	80	4
LB-7	0.01	10 ~ 70	±0.03	85	2
LB-7S	0.01	15 ~ 35	±0.03	50	3.5
LB-7V	0.01	35 ~ 85	±0.03	20	6.5
LB-8	0.01	100 ~ 120	±0.03	90	30 (SK hardened, one unit with frame)
LB-9	0.01	20 ~ 40	±0.03	130	2 (SK hardened, one unit with frame)
LB-14	0.01	100 ~ 150	±0.03	70	7
LH-2 ※	0.01	10 ~ 120	±0.03	50	2

※ For LH-2, the range of accuracy is 10 to 20mm. In case of 20mm or more, check the tolerance with Master Gauge.

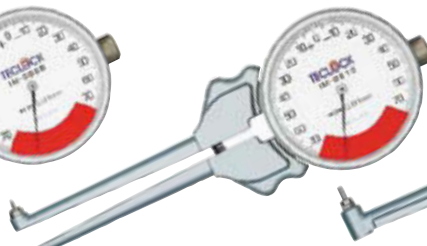
สินค้า

One Revolution Internal Dial Caliper Gauge



IM-880B

Graduation 0.01mm
Measuring Range 19.3~35.7mm



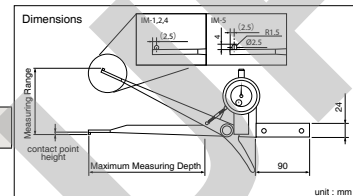
IM-881B

Graduation 0.01mm
Measuring Range 29.3~62.7mm



IM-882B

Graduation 0.01mm
Measuring Range 54.3~153.7mm

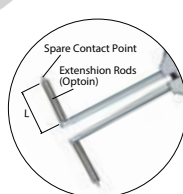
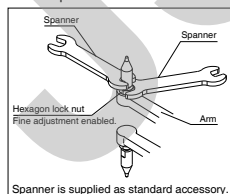


Order No.	Graduation (mm)	Measuring Range (mm)	Indicating Range (mm)	Indication Error (μm)	Measuring Force (N)	Spare Contact Point			Maximum Measuring Depth A (mm)	Entrance Diameter Ød (mm)*	Groove Depth H (mm)	Groove Width B (mm)	Weight (g)
						Code No.	Extension Rods	Measuring Range (mm)					
IM-880B	0.01	20~35	1.4	±20	3 or less	ZS-423	ZS-423	-	19.3~20.7	70	14.3	2.5	196
						ZS-423	ZS-424	-	20.3~21.7		15.3	2.5	
						ZS-424	ZS-424	-	21.3~22.7		14.3	3.5	
						ZS-424	ZS-425	-	22.3~23.7		15.3	3.5	
						ZS-425	ZS-425	-	23.3~24.7		15.3	4	
						ZS-425	ZS-426	-	24.3~25.7		16.3	4	
						ZS-426	ZS-426	-	25.3~26.7		17.3	4	
						ZS-426	ZS-427	-	26.3~27.7		18.3	4	
						ZS-427	ZS-427	-	27.3~28.7		19.3	4	
						ZS-427	ZS-428	-	28.3~29.7		20.3	4	
						ZS-428	ZS-428	-	29.3~30.7		21.3	4	
						ZS-428	ZS-429	-	30.3~31.7		22.3	4	
						ZS-429	ZS-429	-	31.3~32.7		23.3	4	
						ZS-426	ZS-426	ZS-646	32.3~33.7		24.3	4	
IM-881B	0.01	30~62	1.4	±20	3 or less	ZS-426	ZS-427	ZS-646	33.3~34.7	75	25.3	4	218
						ZS-427	ZS-427	ZS-646	34.3~35.7		26.3	4	
						ZS-408	ZS-408	-	29.3~38.7		24	3	
						ZS-409	ZS-409	-	35.3~44.7		27.4	4.3	
						ZS-410	ZS-410	-	41.3~50.7		33.4	4.3	
						ZS-411	ZS-411	-	47.3~56.7		39.4	4.3	
						ZS-412	ZS-412	-	53.3~62.7		45.4	4.3	
						ZS-413	ZS-413	-	54.3~73.7		45	5	
						ZS-414	ZS-414	-	70.3~89.7		54	8.5	
						ZS-415	ZS-415	-	86.3~105.7		70	8.5	
IM-882B	0.01	55~153	1.4	± 20	3 or less	ZS-416	ZS-416	-	102.3~121.7	90	86	8.5	240
						ZS-417	ZS-417	-	118.3~137.7		102	8.5	
						ZS-418	ZS-418	-	134.3~153.7		118	8.5	

Optional Extension Rods

• IM-880 series dial caliper gauges can measure internal dimension up to measuring range in the right list by installing extension rods. Standard products of spare extension rods can be used as it is.

Mounting Method of Spare Contact Point

IM-880:
Measuring range with extension rods (mm)

Spare Contact Point	Extension Rods	Measuring Range
ZS-423	ZS-646 L=7	34~37
ZS-424		36~39
ZS-425		38~41
ZS-426		40~43
ZS-427		42~45
ZS-428		44~47
ZS-429	ZS-647 L=14	46~49
ZS-423		48~51
ZS-424		50~53
ZS-425		52~55
ZS-426		54~57
ZS-427		56~59
ZS-428	ZS-648 L=21	58~61
ZS-429		60~63
ZS-423		62~65
ZS-424		64~67
ZS-425		66~69
ZS-426		68~71
ZS-427	ZS-649 L=28	70~73
ZS-428		72~75
ZS-429		74~77
ZS-423		76~79
ZS-424		78~81
ZS-425		80~83
ZS-426		82~85
ZS-427		84~87
ZS-428		86~89
ZS-429		88~91

IM-881:
Measuring range with extension rods (mm)

Spare Contact Point	Extension Rods	Measuring Range
ZS-408	ZS-693 L=15	60~68
ZS-409		66~74
ZS-410		72~80
ZS-411		78~86
ZS-412		84~92
ZS-408		90~98
ZS-409	ZS-694 L=30	96~104
ZS-410		102~110
ZS-411		108~116
ZS-412		114~122
ZS-408		120~128
ZS-409	ZS-695 L=45	126~134
ZS-410		132~140
ZS-411		138~146
ZS-412		144~152

IM-882:
Measuring range with extension rods (mm)

Spare Contact Point	Extension Rods	Measuring Range
ZS-413	ZS-696 L=48	151~169
ZS-414		167~185
ZS-415		183~201
ZS-416		199~217
ZS-417		215~233
ZS-418		231~249
ZS-413	ZS-697 L=96	247~265
ZS-414		263~281
ZS-415		279~297
ZS-416		295~313
ZS-417		311~329
ZS-418		327~345

SMALL TOOLS

เครื่องมือวัดละเอียด

TECLOCK

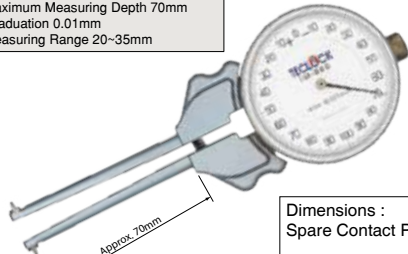
ตีพิมพ์

Dial Depth Gauge

- Internal caliper gauge to measure internal diameter of cylindrical workpiece and recessed groove diameter. It can measure groove diameter of "O" ring by modifying spare contact point.
- Set dimension within ± 1 mm (indication range 2mm) can be comparatively measured (880 series) by alternatively using auxiliary spare contact point in accordance with measured dimension.
- Please set dimension within measuring range with micrometer or ring gauge.

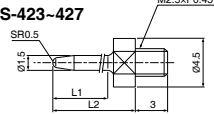
IM-880

Maximum Measuring Depth 70mm
Graduation 0.01mm
Measuring Range 20~35mm

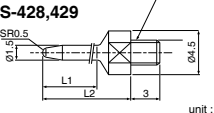


Dimensions :
Spare Contact Point (Option)

ZS-423~427



ZS-428,429



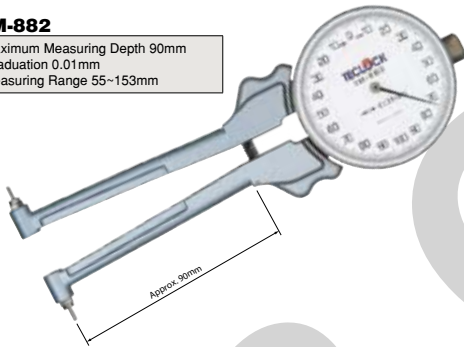
unit : mm

Dimension Table :
Spare Contact Point (Option)

Order No.	L1	L2	Measuring Range
ZS-423	2.5	4	20~23
ZS-424	3.5	5	22~25
ZS-425	4.5	6	24~27
ZS-426	5.5	7	26~29
ZS-427	5.5	8	28~31
ZS-428	5.5	9	30~33
ZS-429	5.5	10	32~35

IM-882

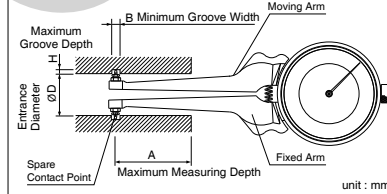
Maximum Measuring Depth 90mm
Graduation 0.01mm
Measuring Range 55~153mm



Dimension Table :
Spare Contact Point (Option)

Order No.	L	Measuring Range
ZS-413	7	55~73
ZS-414	15	71~89
ZS-415	23	87~105
ZS-416	31	103~121
ZS-417	39	119~137
ZS-418	47	135~153

Dimensions

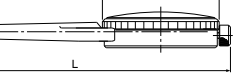


Dimensions : Spare Contact Point (Option)

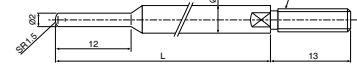
ZS-413



ZS-414

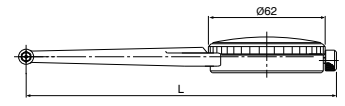


ZS-415~418



unit : mm

External Dimensions



Model	L
IM-880	165
IM-881	170
IM-882	183

unit : mm

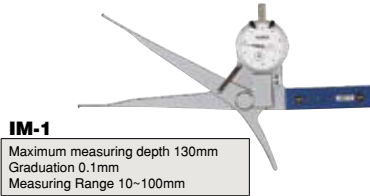
Order No.	Graduation (mm)	Measuring Range (mm)	Indicating Range (mm)	Indication Error (μm)	Measuring Force (N)	Weight (g)	Spare Contact Point		Maximum Measuring Depth A (mm)	Entrance Diameter Ød (mm)*	Groove Depth H (mm)	Minimum Groove Width B (mm)
							Code No.	Measuring Range (mm)				
IM-880	0.01	20~35	2	± 20	3 or less	196	ZS-423	20~23	70	15~18	2.5	2.5
							ZS-424	22~25		15~18	3.5	
							ZS-425	24~27		16~19	4	
							ZS-426	26~29		18~21	4	
							ZS-427	28~31		20~23	4	
							ZS-428	30~33		22~25	4	
							ZS-429	32~35		24~27	4	
IM-881	0.01	30~62	2	± 20	3 or less	218	ZS-408	30~38	75	24~32	3	2.5
							ZS-409	36~44		27.4~35.4	4.3	
							ZS-410	42~50		33.4~41.4	4.3	
							ZS-411	48~56		39.4~47.4	4.3	
							ZS-412	54~62		45.4~53.4	4.3	
							ZS-413	55~73		45~63	5	
							ZS-414	71~89		54~72	8.5	
IM-882	0.01	55~153	2	± 20	3 or less	240	ZS-415	87~15	90	70~88	8.5	3.5
							ZS-416	103~121		86~104	8.5	
							ZS-417	119~137		102~120	8.5	
							ZS-418	135~153		118~136	8.5	

*OD=Measuring Rang - 2H

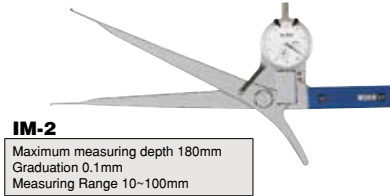
ตีนผี

Internal Dial Caliper Gauge

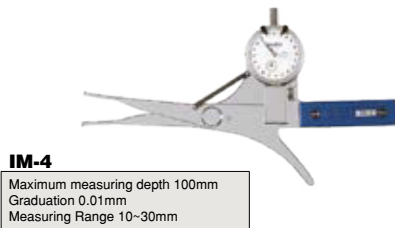
- These gauges are designed for use in measuring deep internal diameter of bores of castings etc, and for internal reading in fabrications. Clearance has been provided for use in recessed bores. The convenient retraction lever allows one-hand operation.



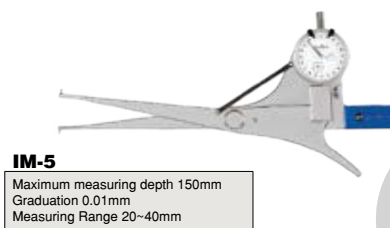
IM-1
Maximum measuring depth 130mm
Graduation 0.1mm
Measuring Range 10~100mm



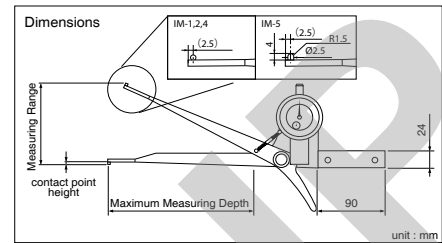
IM-2
Maximum measuring depth 180mm
Graduation 0.1mm
Measuring Range 10~100mm



IM-4
Maximum measuring depth 100mm
Graduation 0.01mm
Measuring Range 10~30mm



IM-5
Maximum measuring depth 150mm
Graduation 0.01mm
Measuring Range 20~40mm



Model	10	15	20	30 ~
IM-1	35	50	80	130
IM-2	35	50	80	180
IM-4	35	50	80	100
IM-5	-	-	140	150

Inside of workpiece should be straight or round shape without step etc.

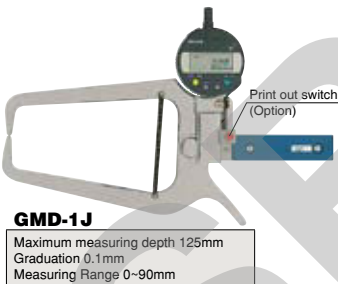
Order No.	Graduation (mm)	Measuring Range (mm)	Indication Error (mm)	Maximum Measuring Depth (mm)	Contact Point Height (mm)	Measuring Force (N)	Weight (g)
IM-1	0.1	10~100	±0.1	130	2	5 or less	500
IM-2	0.1	10~100	±0.1	180	2	5 or less	620
IM-4	0.01	10~30	±0.02	100	2	5 or less	500
IM-5	0.01	20~40	±0.02	150	4	5 or less	600

Internal size of workpiece is 10mm, 15mm, 20mm and 30mm or over against measuring applicable depth.

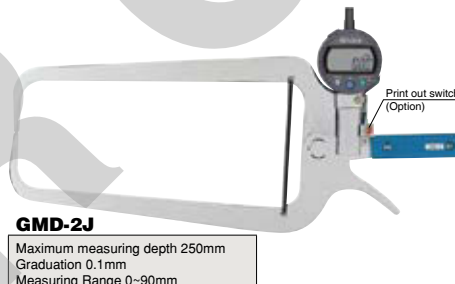
เขาควย

External Digital Caliper Gauge

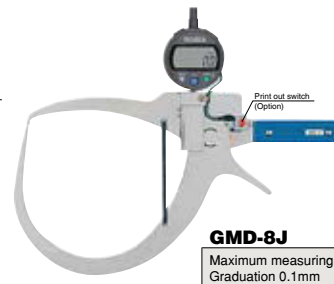
- External dimension measuring instrument of which digital gauge is built into frame. This can treat statistics data and print out it by connecting it to the optional exclusive printer SD-765P
- It is possible to equip print out switch (Option).



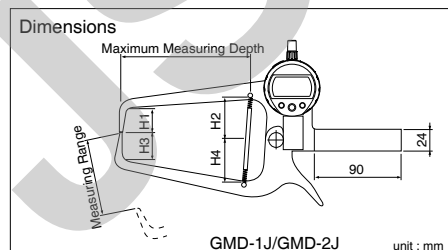
GMD-1J
Maximum measuring depth 125mm
Graduation 0.1mm
Measuring Range 0~90mm



GMD-2J
Maximum measuring depth 250mm
Graduation 0.1mm
Measuring Range 0~90mm

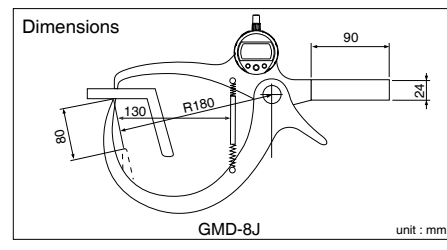


GMD-8J
Maximum measuring depth 130mm
Graduation 0.1mm
Measuring Range 0~80mm



Dimension Table :

Order No.	H1	H2	H3	H4
GMD-1J	25	40	25	40
GMD-2J	50	60	50	60



Order No.	Graduation (mm)	Measuring Range (mm)	Indication Error (mm)	Maximum Measuring Depth (mm)	Measuring Force (N)	Weight (g)
GMD-1J	0.1	0~90	±0.1	125	5 or less	560
GMD-2J	0.1	0~90	±0.1	250	5 or less	830
GMD-8J	0.1	0~90	±0.1	130	5 or less	580

SMALL TOOLS

เครื่องมือวัดละเอียด

TECLOCK

เขาควายน

External Dial Caliper Gauge

- These gauges are designed for use in measuring external dimension of thick and large measuring work piece or special shape products which seem to be difficult to measure.
- Special order can be produced.

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง



GM-1

Maximum measuring depth 125mm
Graduation 0.1mm
Measuring Range 0~90mm



GM-2

Maximum measuring depth 250mm
Graduation 0.1mm
Measuring Range 0~90mm

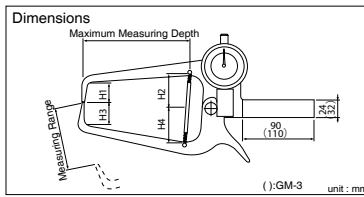


GM-3

Maximum measuring depth 400mm
Graduation 0.1mm
Measuring Range 0~90mm

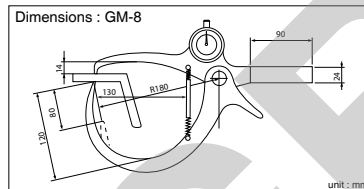


Overall length of GM-3 is large as 635mm.



Dimension Table :

Order No.	H1	H2	H3	H4
GM-1	25	40	25	40
GM-2	50	60	50	60
GM-3	60	70	60	80



GM-8

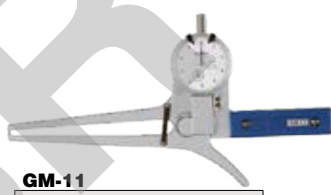
Maximum measuring depth 130mm
Graduation 0.1mm
Measuring Range 0~80mm

Order No.	Graduation (mm)	Measuring Range (mm)	Indication Error (mm)	Maximum Measuring Depth (mm)	Measuring Force (N)	Weight (g)
GM-1	0.1	0~90	±0.1	125	5 or less	530
GM-2	0.1	0~90	±0.1	250	5 or less	800
GM-3	0.1	0~90	±0.2	400	10 or less	1,400
GM-8	0.1	0~90	±0.1	130	5 or less	550



GM-9

Maximum measuring depth 100mm
Graduation 0.1mm
Measuring Range 0~30mm



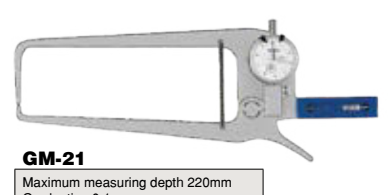
GM-11

Maximum measuring depth 125mm
Graduation 0.1mm
Measuring Range 0~50mm



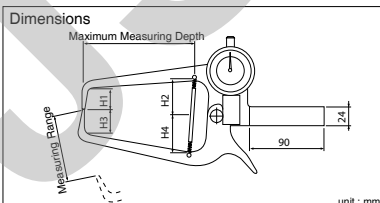
GM-20

Maximum measuring depth 125mm
Graduation 0.1mm
Measuring Range 0~80mm



GM-21

Maximum measuring depth 220mm
Graduation 0.1mm
Measuring Range 0~90mm



Dimension Table :

Order No.	H1	H2	H3	H4
GM-9	2	12	2	12
GM-11	2	6	2	6
GM-20	17	11	17	11
GM-21	65	70	10	15
GM-22	20	25	65	70



GM-22

Maximum measuring depth 250mm
Graduation 0.1mm
Measuring Range 0~90mm

Order No.	Graduation (mm)	Measuring Range (mm)	Indication Error (mm)	Maximum Measuring Depth (mm)	Measuring Force (N)	Weight (g)
GM-9	0.1	0~90	±0.1	100	5 or less	460
GM-11	0.1	0~90	±0.1	125	5 or less	480
GM-20	0.1	0~90	±0.1	125	5 or less	500
GM-21	0.1	0~90	±0.1	220	5 or less	660
GM-22	0.1	0~90	±0.1	250	5 or less	720

SMALL TOOLS

เครื่องมือวัดละเอียด

SK Seiki

เกจวัดความหนาแบบมือกด

DIAL CALIPER GAUGE

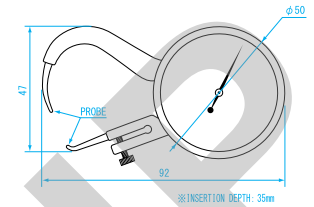
Ideal for measuring small parts. Spherical measuring type.



- USE :**
- For external measurement
- MATERIAL :**
- Body: Steel (silver finish)
- FEATURES**
- Convenient portable size
 - Pointed measuring face fits into tight spots



DIMENSIONS Units : mm



Order No.	Model No.	Resolution (mm)	Measuring Range (mm)	Accuracy (mm)	Measuring Face	Weight
DCG-MP1	151583	0.05	0 ~10	±0.1	Point (Ø1mm)	75g

เกจวัดความหนาแบบมือกด

DIAL CALIPER GAUGE

Ideal for measuring tube and fitting thickness



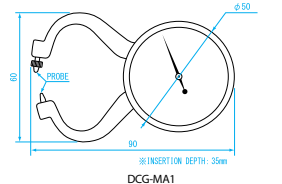
DCG-MA1



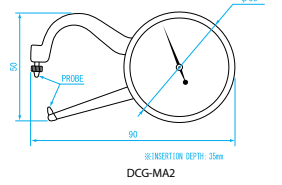
DCG-MA2

- USE :**
- For external measurement
- MATERIAL :**
- Body: Steel (silver finish)
- FEATURES**
- Convenient portable size
 - Round probe tip for measuring irregular shapes

DIMENSIONS Units : mm



DCG-MA1



DCG-MA2

Order No.	Model No.	Resolution (mm)	Measuring Range (mm)	Accuracy (mm)	Measuring Face	Weight
DCG-MA1	151581	0.05	0 ~10	±0.1	Round (Ø 2mm)	75g
DCG-MA2	151582	0.05	0 ~10	±0.1	Round (Ø 2mm)	75g

เกจวัดความหนาแบบมือกด

DIAL CALIPER GAUGE

Ideal for measuring tube and fitting thickness



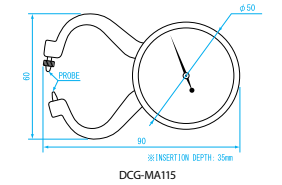
DCG-MA115



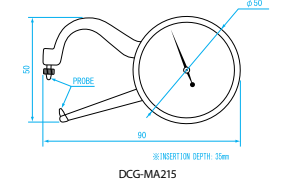
DCG-MA215

- USE :**
- For external measurement
- MATERIAL :**
- Body: Steel (silver finish)
- FEATURES**
- Convenient portable size
 - Round probe tip for measuring irregular shapes

DIMENSIONS Units : mm



DCG-MA115



DCG-MA215

Order No.	Model No.	Resolution (mm)	Measuring Range (mm)	Accuracy (mm)	Measuring Face	Weight
DCG-MA115	151575	0.05	0 ~15	±0.1	Round (Ø 2mm)	75g
DCG-MA215	151576	0.05	0 ~15	±0.1	Round (Ø 2mm)	75g

ตีนผี

INSIDE CALIPERS

USE :

- Transfer inside diameter and groove dimensions

MATERIAL :

- Cold rolled steel

FEATURES

- Smooth opening and closing enable correct size transfers for measurement



Order No.	Model No.	Length (mm)	Thickness (mm)	Weight
IC-150	001105	150	1.6	50g
IC-200	001107	200		70g
IC-300	001109	300	2.0	220g

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาร์ลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

ตีนผีมีสปริง

INSIDE CALIPERS (SPRING TYPE)

USE :

- Transfer inside diameter and groove dimensions

MATERIAL :

- Body: Carbon tool steel

FEATURES

- Set to proper dimension, and move to scale for measurement
- Opening/closing screw is centrally located in the legs to assure sensitive and smooth action



Order No.	Model No.	Nominal Size (mm)	Length (Tip to pivot Center)	Thickness (mm)	Weight
SI-150	000905	150	150mm	3.2	80g
SI-200	000907	200	200mm		120g

เขาควาย

OUTSIDE CALIPERS

USE :

- Transfer diameters and measure round stock

MATERIAL :

- Cold rolled steel

FEATURES

- Smooth opening and closing enable accurate size transfers for measurement



Order No.	Model No.	Length (mm)	Thickness (mm)	Weight
OC-150	001205	150	1.6	50g
OC-200	001207	200		70g
OC-300	001209	300	2.0	220g
OC-400	001211	400	2.5	340g
OC-600	001214	600	3.2	540g

SMALL TOOLS

เครื่องมือวัดละเอียด

JSR Group Seiki

เขาควยผีมีสปริง

OUTSIDE CALIPERS (SPRING TYPE)



USE :

- Transfer inside diameter and groove dimensions

MATERIAL :

- Body: Carbon tool steel

FEATURES

- Set to proper dimension, and move to scale for measurement
- Opening/closing screw is centrally located in the legs to assure sensitive and smooth action

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

Order No.	Model No.	Nominal Size (mm)	Length (Tip to pivot Center)	Thickness (mm)	Weight
SO-150	001005	150	150mm	3.2	80g
SO-200	001007	200	200mm		120g

เขาควยสำหรับวัดนอก-วัดใน แบบมีสเกล

COMBINATION CALIPERS WITH METRIC GRADUATIONS



GCC-100 SCALE SHOWN

Unit: mm

Order No.	A	B	C	Thickness
GCC-100	152	100	98	1.5
GCC-130	196	130	125	
GCC-150	225	150	143	
GCC-200	300	200	190	2.0
GCC-250	367	250	210	2.5
GCC-300	450	300	268	
GCC-350	500	350	272	
GCC-400	600	400	360	
GCC-500	900	600	545	3.0
GCC-600				

USE :

- OD, ID, Thickness and groove measurement

MATERIAL :

- Stainless steel (Hardened tip)

FEATURES

- Graduated in millimeters from the center by photo etching on the head of the calipers
- Combination calipers are engineered for measuring both inner and outer diameters

Order No.	Model No.	Nominal Size (mm)	Graduation (mm)	Accuracy (mm)	Weight
GCC-100	002003	100			100g
GCC-130	002004	130			180g
GCC-150	002005	150			195g
GCC-200	002007	200			500g
GCC-250	002008	250			720g
GCC-300	002009	300	1	± 0.5	1.0kg
GCC-350	002010	350			1.3kg
GCC-400	002011	400			1.7kg
GCC-500	002013	500			3.8kg
GCC-600	002014	600			4.0kg

คาลิเปอร์ขาอ

HERMAPHRODITE CALIPERS

USE :

- Transfer dimensions off edge of material

MATERIAL :

- Cold rolled steel

FEATURES

- Smooth opening and closing Can scribe brass and aluminum



Order No.	Model No.	Length (mm)	Thickness (mm)	Weight
HC-150	001305	150	1.6	50g
HC-200	001307	200		70g
HC-300	001309	300	2.0	220g

Micrometer

ไมโครมิเตอร์

Inside

Measurement

เครื่องมือวัดภายใน

Calipers

คาลิเปอร์

Height Gages

เกจวัดความสูง

Linear Height

เครื่องมือวัดความสูง

Depth Gages

เกจวัดความลึก

Gauge Blocks

เกจบล็อก

Reference Gages

เครื่องมืออ้างอิง

Indicators

อินดิเคเตอร์

Stands

ขาตั้ง

คาลิเปอร์ขาอ ไม่มีสปริงปลายคาร์ไบด์

CARBIDE TIP FIRM JOINT HERMAPHRODITE CALIPERS

USE :

- Transferring dimension off edge

MATERIAL :

- Body: Carbon steel (black oxide coated)

- Tip: Carbide tipped (G2)

FEATURES

- Carbide tips for scribing on glass or hardened steel
- Riveted construction



Order No.	Model No.	Nominal Size (mm)	Length (mm)	Thickness (mm)	Weight
FHC-150	000705	150	161	2	70g
FHC-200	000707	200	212	2.2	100g

วงเวียนขีดมีสปริง

DIVIDERS (SPRING TYPE)

USE :

- Scribing circles, and dividing distance

MATERIAL :

- Body: Carbon tool steel

FEATURES

- Hardened tip
- Opening/closing screw is centrally located in the legs to assure sensitive and smooth action



Order No.	Model No.	Nominal Size (mm)	Length (Tip to pivot Center)	Thickness (mm)	Weight
SD-150	000805	150	150mm	3.2	80g
SD-200	000807	200	200mm		120g

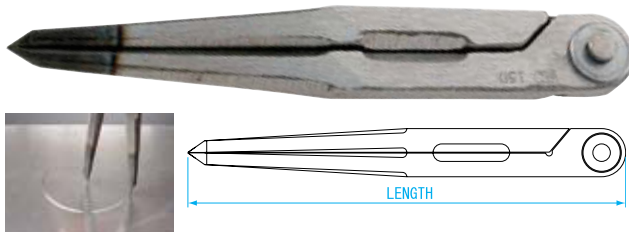
SMALL TOOLS

เครื่องมือวัดละเอียด

JSR Group Seiki

วงเวียนขีดเหล็กไม่มีสปริง

FIRM JOINT STEEL DIVIDERS



USE :

- For scribing circles, and dividing distances

MATERIAL :

- Body: Carbon tool steel for machine use
- Tip: Hardened tip

FEATURES

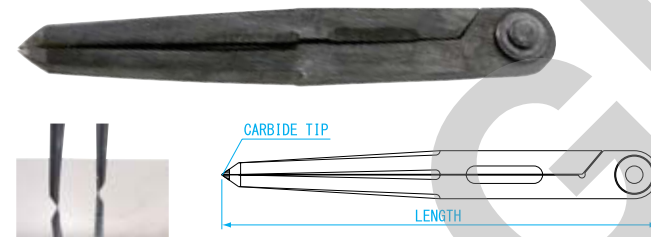
- Hardened tip for crisp scribing
- Construction: Riveted with washer

※ Compass circle is approx. diameter of circle transcribed with jaws open 45° angle.

Order No.	Model No.	Nominal Size (mm)	Length (mm)	Compass Circle (mm)	Weight
FD-100	000503	100	100	150	58g
FD-150	000505	150	150	230	135g
FD-200	000507	200	200	300	239g
FD-250	000508	250	250	380	340g
FD-300	000509	300	300	460	440g

วงเวียนขีดเหล็กไม่มีสปริงปลายคาร์ไบด์

CARBIDE TIP FIRM JOINT DIVIDERS



USE :

- Scribing circles and dividing distance

MATERIAL :

- Body: Carbon steel (black oxide coated)
- Tip: Carbide tipped (G2)

FEATURES

- Carbide tips for scribing on glass or hardened steel
- Riveted construction with pin and washer

※ Compass circle is approx. diameter of circle transcribed with jaws open 45° angle.

Order No.	Model No.	Nominal Size (mm)	Length (mm)	Compass Circle (mm)	Weight
TFD-100	000403	100	100	150	70g
TFD-150	000405	150	150	230	140g
TFD-200	000407	200	200	300	260g
TFD-250	000408	250	250	380	350g
TFD-300	000409	300	300	460	510g