

Calipers

A standard measuring tool of industry

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

- IP66 Absolute Digital Caliper (Refer to page D-8 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-3.



552-303-10

SPECIFICATIONS

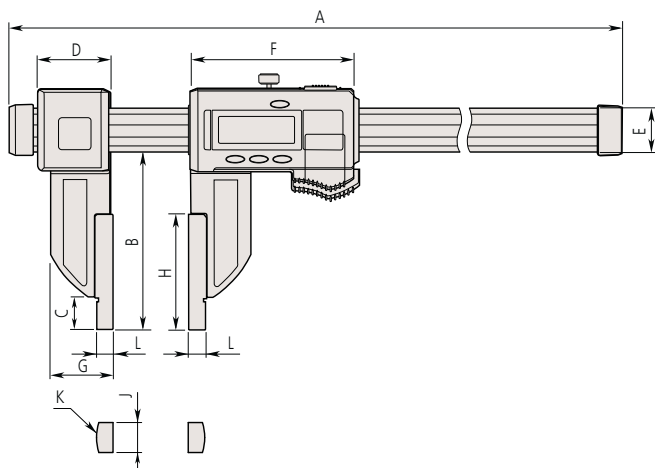
Metric		
Order No. (standard / long jaws / ceramic jaws)	Range*	Accuracy (standard / long jaws / ceramic jaws)
552-302-10	0 (20) - 450mm	±0.04mm / ±0.06mm / ±0.04mm
552-303-10	0 (20) - 600mm	±0.04mm / ±0.06mm / ±0.04mm
552-304-10	0 (20) - 1000mm	±0.05mm / ±0.07mm
552-305-10	0 (20) - 1500mm	±0.09mm / ±0.11mm
552-306-10	0 (20) - 2000mm	±0.12mm / ±0.14mm

* (): Minimum dimension in inside measurement

Inch/Metric		
Order No. (standard / long jaws / ceramic jaws)	Range*	Accuracy (standard / long jaws / ceramic jaws)
552-312-10	0 (.5") - 18"	±.002" / ±.0025" / ±.002"
552-313-10	0 (.5") - 24"	±.002" / ±.0025" / ±.002"
552-314-10	0 (1") - 40"	±.002" / ±.003"
552-315-10	0 (1") - 60"	±.004" / ±.0045"
552-316-10	0 (1") - 80"	±.005" / ±.0055"

* (): Minimum dimension in inside measurement

DIMENSIONS



Unit: mm

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

ABSOLUTE

(Refer to page VIII for details.)

IP66

(Refer to page VIII for details.)



• Dust-tight and water protected IP66

(Refer to page IX for details.)

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

Battery life: Approx. 5,000 hours in continuous use

Dust/Water protection level: IP66*

Standard accessory: Jaw clamps (2 pcs.), 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

For details, refer to page A-15.

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

	Code No. 552-302-10, 552-155-10, 552-303-10, 552-156-10, 552-312-10, 552-165-10, 552-313-10 and 552-166-10	Code No. 552-304-10, 552-305-10, 552-306-10, 552-314-10, 552-315-10 and 552-316-10
Clamp box (1 pair)	No.914053	No.914054
Distance measurement jaw (1 pair)	No.914055	
Point ID measuring attachment	No.914057	

<p>Distant measurement jaw</p>	<p>Clamp box</p>
	<p>Distance measurement jaw</p> <p>Accuracy: $\pm 0.03\text{mm}$</p>
<p>Point ID measuring attachment</p>	<p>Point ID measuring attachment</p> <p>Accuracy: $\pm 0.02\text{mm}$</p>

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- IP66 Absolute Digital Caliper (Refer to page D-8 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-3.



SPECIFICATIONS

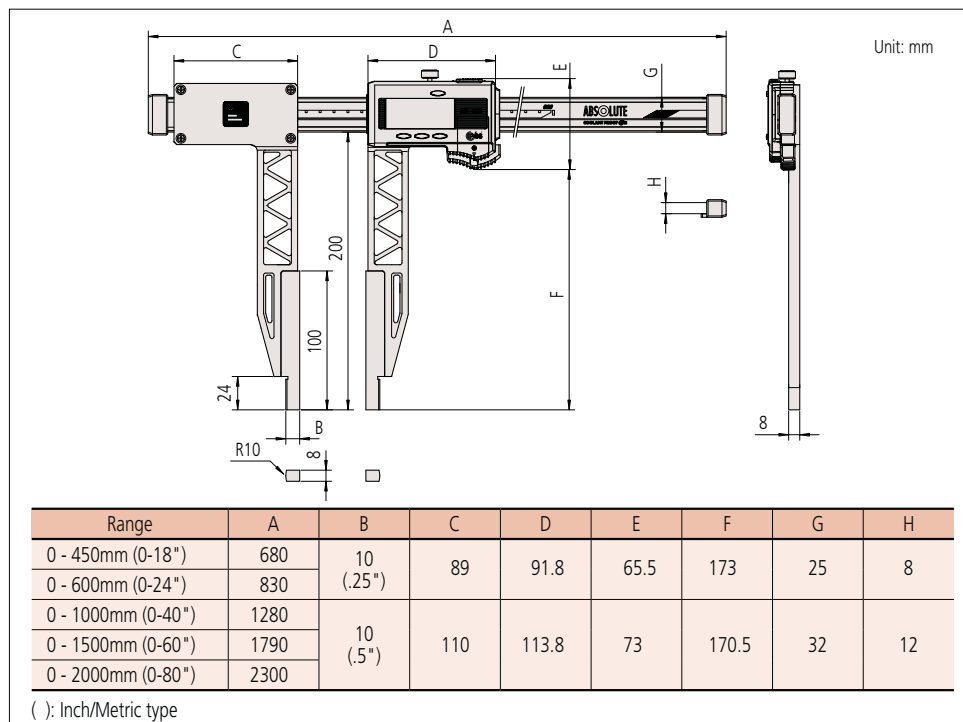
Metric		
Order No. (standard / long jaws / ceramic jaws)	Range*	Accuracy (standard / long jaws / ceramic jaws)
552-150-10	0 (20) - 450mm	±0.04mm / ±0.06mm / ±0.04mm
552-151-10	0 (20) - 600mm	
552-152-10	0 (20) - 1000mm	±0.05mm / ±0.07mm
552-153-10	0 (20) - 1500mm	±0.09mm / ±0.11mm
552-154-10	0 (20) - 2000mm	±0.12mm / ±0.14mm

* () : Minimum dimension in inside measurement

Inch/Metric		
Order No. (standard / long jaws / ceramic jaws)	Range*	Accuracy (standard / long jaws / ceramic jaws)
552-160-10	0 (.5") - 18"	±.002" / ±.0025" / ±.002"
552-161-10	0 (.5") - 24"	
552-162-10	0 (1") - 40"	±.002" / ±.003"
552-163-10	0 (1") - 60"	±.004" / ±.0045"
552-164-10	0 (1") - 80"	±.005" / ±.0055"

* () : Minimum dimension in inside measurement

DIMENSIONS



() : Inch/Metric type

ABSOLUTE

(Refer to page VIII for details.)

IP66

(Refer to page VIII for details.)



• Dust- and watertight
IP67

(Refer to page IX for details.)

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
Battery life: Approx. 5,000 hours in continuous use
Dust/Water protection level: IP66*
Standard accessory: Jaw clamps (2 pcs.), 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

For details, refer to page A-15.
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

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
Battery life: Approx. 5,000 hours in continuous use
Dust/Water protection level: IP66*
Standard accessory: Jaw clamps (2 pcs.), 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

For details, refer to page A-15.
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

ABSOLUTE Coolant Proof Carbon Fiber Caliper SERIES 552

- IP66 Absolute Digital Caliper (Refer to page D-8 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-3.
- Zirconia ceramics are applied to the measuring surface.
- Rust-free due to the nonmagnetism and the insulation quality: most suitable for measuring magnetic parts.



552-156-10



SPECIFICATIONS

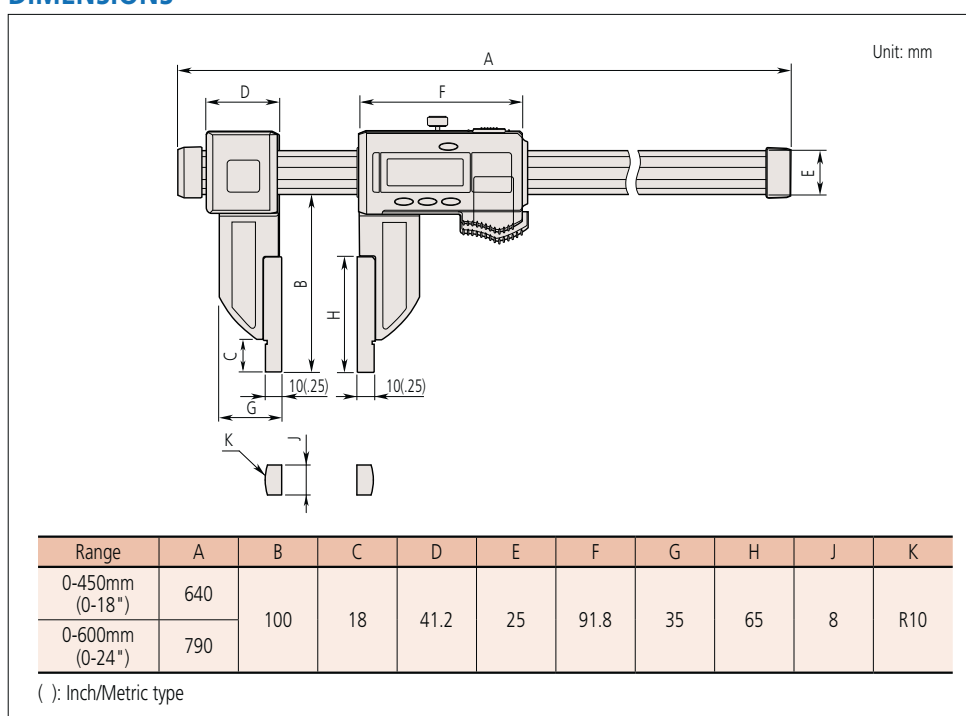
Metric		
Order No. (standard / long jaws / ceramic jaws)	Range*	Accuracy (standard / long jaws / ceramic jaws)
552-155-10	0 (20) - 450mm	±0.04mm / ±0.06mm / ±0.04mm
552-156-10	0 (20) - 600mm	

* () : Minimum dimension in inside measurement

Inch/Metric		
Order No. (standard / long jaws / ceramic jaws)	Range*	Accuracy (standard / long jaws / ceramic jaws)
552-165-10	0 (.5") - 18"	±.002" / ±.0025" / ±.002"
552-166-10	0 (.5") - 24"	

* () : Minimum dimension in inside measurement

DIMENSIONS

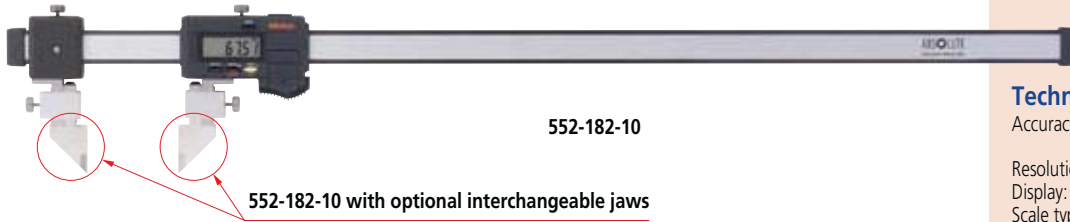


Calipers

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ABSOLUTE Coolant Proof Carbon Fiber Caliper SERIES 552

- IP66 Absolute Digital Caliper (Refer to page D-8 for a description of Absolute measurement.)
- The range of applications can be expanded by using interchangeable jaws (optional).
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-3.
- Provided with preset function for setting a desired starting point, which allows direct readout of offset measurement.



SPECIFICATIONS

Metric			Inch/Metric		
Order No.	Range	Accuracy	Order No.	Range	Accuracy
552-181-10	0 - 450mm	±0.04mm	552-191-10	0 - 18"	±.002"
552-182-10	0 - 600mm		552-192-10	0 - 24"	
552-183-10	0 - 1000mm	±0.05mm	552-193-10	0 - 40"	±.004"
552-184-10	0 - 1500mm	±0.09mm	552-194-10	0 - 60"	
552-185-10	0 - 2000mm	±0.12mm	552-195-10	0 - 80"	±.005"

ABSOLUTE

(Refer to page VIII for details.)

IP66

(Refer to page VIII for details.)



• Dust- and watertight
IP67

(Refer to page IX for details.)

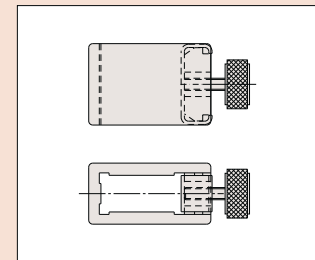
Technical Data

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
Battery life: Approx. 5,000 hours in continuous use
Dust/Water protection level: IP66*
Standard accessory: Jaw clamps (2 pcs.), 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)

Standard accessories (2 pcs)



Jaw clamps: No.05GZA033

Optional accessories

For details, refer to page A-15.
Connecting cables for IT/DP/MUX
05CZA624: SPC cable with data button (1m)
05CZA625: SPC cable with data button (2m)



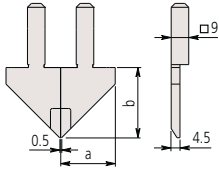
USB Input Tool Direct
06ADV380A: SPC cable for USB-ITN-A (2m)
Connecting cables for U-WAVE-T
02AZD790A: SPC cable for U-WAVE with data button
(160mm)
02AZE140A: SPC cable for footswitch

Optional accessories

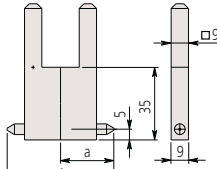
Interchangeable jaws

SPECIFICATIONS

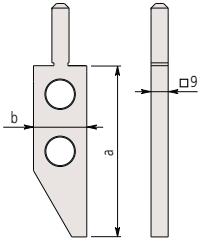
Standard type



Inside point type

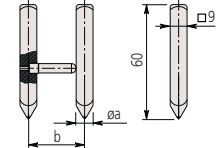


Surface Plate Type

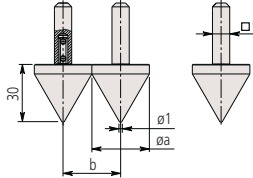


Unit: mm

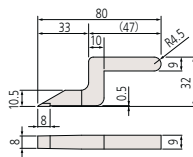
Scriber Type



Centerline Type



Scriber for height gages



Standard Type

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

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	Right (07CZA042), Left (07CZA043)	8mm	30mm
07CZA061	Right (07CZA042), Left (07CZA049)	0.31"	1.2"

Surface Plate Type

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

Centerline Type

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

Scriber for height gages

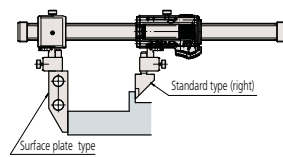
Order No.
07GZA000

Type	Applicable calipers	Range	Accuracy when attached to the caliper
Standard type	552-181-10 (552-191-10)	0 - 450mm (0-18")	±0.06mm (±0.0025")
	552-182-10 (552-192-10)	0 - 600mm (0-24")	±0.07mm (±0.0030")
	552-183-10 (552-193-10)	0 - 1000mm (0-40")	±0.07mm (±0.0030")
	552-184-10 (552-194-10)	0 - 1500mm (0-60")	±0.11mm (±0.0045")
Inside point type	552-185-10 (552-195-10)	0 - 2000mm (0-80")	±0.14mm (±0.0055")
	552-181-10 (552-191-10)	Inside: 50 - 500mm (2-20") Outside: 0 - 450mm (0-18")	±0.09mm (±0.0035")
	552-182-10 (552-192-10)	Inside: 50 - 650mm (2-26") Outside: 0 - 600mm (0-24")	±0.10mm (±0.0040")
	552-183-10 (552-193-10)	Inside: 50 - 1050mm (2-42") Outside: 0 - 1000mm (0-40")	±0.14mm (±0.0055")
Centerline type	552-184-10 (552-194-10)	Inside: 50 - 1550mm (2-62") Outside: 0 - 1500mm (0-60")	±0.17mm (±0.0070")
	552-185-10 (552-195-10)	Inside: 50 - 2050mm (2-82") Outside: 0 - 2000mm (0-80")	±0.20mm (±0.0080")
	552-181-10 (552-191-10)	30 - 480mm (1.2-19.2")	±0.08mm (±0.0030")
	552-182-10 (552-192-10)	30 - 630mm (1.2-25.2")	±0.09mm (±0.0035")
Scriber type	552-183-10 (552-193-10)	30 - 1030mm (1.2-41.2")	±0.09mm (±0.0035")
	552-184-10 (552-194-10)	30 - 1530mm (1.2-61.2")	±0.13mm (±0.0055")
	552-185-10 (552-195-10)	30 - 2030mm (1.2-81.2")	±0.16mm (±0.0065")
	552-181-10 (552-191-10)	30 - 2030mm (1.2-81.2")	±0.16mm (±0.0065")
Surface plate type + Scriber type for height gages	552-182-10 (552-192-10)	30 - 480mm (1.2-19.2")	±0.10mm (±0.0040")
	552-183-10 (552-193-10)	30 - 630mm (1.2-25.2")	±0.11mm (±0.0045")
	552-184-10 (552-194-10)	30 - 1030mm (1.2-41.2")	±0.15mm (±0.0060")
	552-185-10 (552-195-10)	30 - 2030mm (1.2-81.2")	±0.18mm (±0.0070")
Surface plate type + Inside point type	552-181-10 (552-191-10)	0 - 450mm (0-17.7")	±0.10mm (±0.0040")
	552-182-10 (552-192-10)	0 - 600mm (0-23.7")	±0.11mm (±0.0045")
	552-183-10 (552-193-10)	0 - 1000mm (0-39.4")	±0.11mm (±0.0045")
	552-184-10 (552-194-10)	0 - 1500mm (0-59.4")	±0.15mm (±0.0060")
Surface plate type + Centerline type	552-185-10 (552-195-10)	0 - 2000mm (0-79.6")	±0.18mm (±0.0070")
	552-181-10 (552-191-10)	Inside: 25 - 475mm (1-19") Outside: 0 - 450mm (1-18")	±0.12mm (±0.0050")
	552-182-10 (552-192-10)	Inside: 25 - 625mm (1-25") Outside: 0 - 600mm (1-24")	±0.13mm (±0.0055")
	552-183-10 (552-193-10)	Inside: 25 - 1025mm (1-41") Outside: 0 - 1000mm (1-40")	±0.17mm (±0.0070")
Surface plate type + Scriber for height gages	552-184-10 (552-194-10)	Inside: 25 - 1525mm (1-62") Outside: 0 - 1500mm (1-60")	±0.20mm (±0.0080")
	552-185-10 (552-195-10)	Inside: 25 - 2025mm (1-81") Outside: 0 - 2000mm (1-80")	±0.20mm (±0.0080")
	552-181-10 (552-191-10)	15 - 465mm (0.6-18.6")	±0.11mm (±0.0045")
	552-182-10 (552-192-10)	15 - 615mm (0.6-24.6")	±0.12mm (±0.0050")
Surface plate type + Centerline type	552-183-10 (552-193-10)	15 - 1015mm (0.6-40.6")	±0.12mm (±0.0050")
	552-184-10 (552-194-10)	15 - 1515mm (0.6-60.6")	±0.16mm (±0.0065")
	552-185-10 (552-195-10)	15 - 2015mm (0.6-80.6")	±0.19mm (±0.0075")

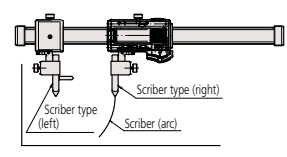
(): Inch/Metric models

Application examples

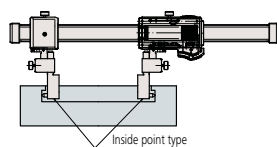
Surface plate type + Standard type



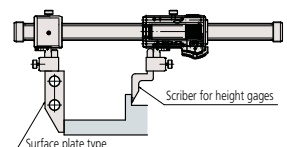
Scriber type



Inside point type



Surface plate type + Scriber for height gages



Surface plate type + Centerline type

