

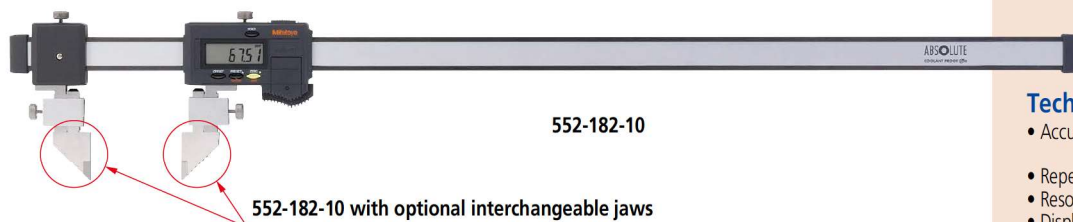
Calipers

An industry standard measuring tool

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

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

- IP66 Absolute Digital Caliper (Refer to page D-6 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.)
- The PRESET function enables quick and easy scale resetting to match the jaws when they are changed.



SPECIFICATIONS

Metric			Inch / Metric		
Order No.	Range (mm)	Accuracy (mm)	Order No.	Range (in)	Accuracy (in)
552-181-10	0 - 450	±0.04	552-191-10	0 - 18	±0.002
552-182-10	0 - 600		552-192-10	0 - 24	
552-183-10	0 - 1000	±0.05	552-193-10	0 - 40	
552-184-10	0 - 1500	±0.09	552-194-10	0 - 60	±0.004
552-185-10	0 - 2000	±0.12	552-195-10	0 - 80	±0.005

Note: A constant-force mechanism is used in the finger rest; however, this is only an auxiliary mechanism to avoid measurement error caused by excessive measuring force. To measure with good accuracy, use the minimum necessary measuring force for the caliper measuring faces to make sufficient contact with the workpiece. Refer to page D-40 for details.

Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink (refer to page A-5 for details).

ABSOLUTE[™]

IP 66



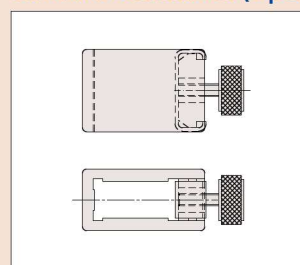
Technical Data

- Accuracy: Refer to the list of specifications. (excluding quantizing error)
 - Repeatability: 0.01 mm
 - Resolution: 0.01 mm or 0.0005 in/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. 5,000 hours in continuous use
 - Dust/Water protection level: IP66 (IEC 60529)*
 - Standard accessory: Jaw clamps (2 pcs.), 05GZA033
- * Rustproofing shall be applied after use if caliper was in contact with coolant.

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: 05GZA033

Optional Accessories

For details, refer to page A-27.

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

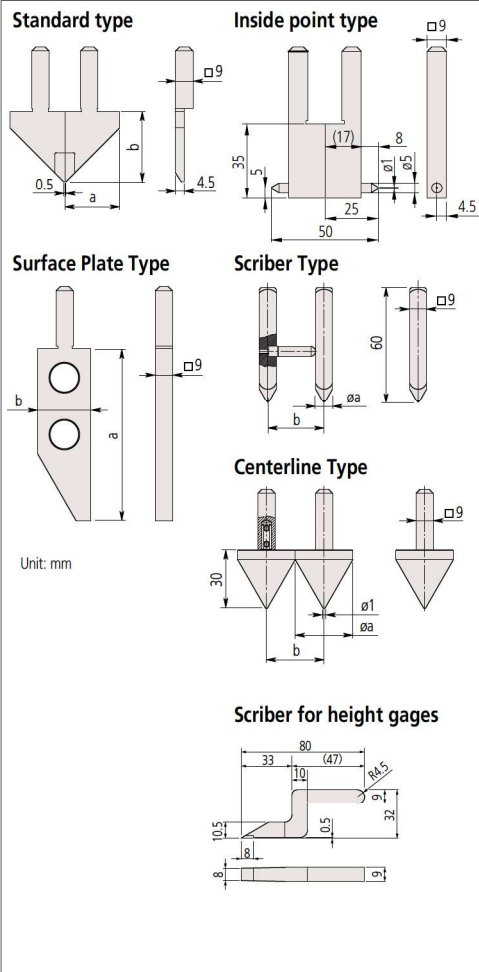


- USB Input Tool Direct
06AFM380A: SPC cable for **USB-ITN-A** (2 m)
- Connecting cables for **U-WAVE-T**
02AZD790A: SPC cable with data button (160 mm)
02AZE140A: SPC cable for foot switch

Optional accessories

Interchangeable jaws

SPECIFICATIONS



Standard Type

Order No.	Components	a	b
07CZA056	Right (07CAA044), Left (07CAA045)	28 mm (1.1 in)	36 mm (1.2 in)

Note: 1 set

Inside Point Type

Order No.	Components	a	b
07CZA058	07CZA041x2 pcs.	25 mm	50 mm
07CZA059	07CZA048x2 pcs.	1 in	2 in

Scriber Type

Order No.	Components	a	b
07CZA055	Right (07CZA042), Left (07CZA043)	8 mm	30 mm
07CZA061	Right (07CZA042), Left (07CZA049)	0.31 in	1.2 in

Surface Plate Type

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

Centerline Type

Order No.	Components	a	b
07CZA057	07CZA039x2 pcs.	30 mm	30 mm
07CZA060	07CZA047x2 pcs.	1.2 in	1.2 in

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

Type	Applicable calipers	Range	Accuracy when attached to the caliper
Standard type	552-181-10 (552-191-10)	0 - 450 mm (0 - 18 in)	±0.06 mm (±0.0025 in)
	552-182-10 (552-192-10)	0 - 600 mm (0 - 24 in)	±0.07 mm (±0.0030 in)
	552-183-10 (552-193-10)	0 - 1000 mm (0 - 40 in)	±0.07 mm (±0.0030 in)
	552-184-10 (552-194-10)	0 - 1500 mm (0 - 60 in)	±0.11 mm (±0.0045 in)
Inside point type	552-185-10 (552-195-10)	0 - 2000 mm (0 - 80 in)	±0.14 mm (±0.0055 in)
	552-181-10 (552-191-10)	Inside: 50.1 - 500 mm (2.004 - 20 in) Outside: 0 - 450 mm (0 - 18 in)	±0.09 mm (±0.0035 in)
	552-182-10 (552-192-10)	Inside: 50.1 - 650 mm (2.004 - 26 in) Outside: 0 - 600 mm (0 - 24 in)	±0.10 mm (±0.0040 in)
	552-183-10 (552-193-10)	Inside: 50.1 - 1050 mm (2.004 - 42 in) Outside: 0 - 1000 mm (0 - 40 in)	±0.10 mm (±0.0040 in)
Centerline type	552-184-10 (552-194-10)	Inside: 50.1 - 1550 mm (2.004 - 62 in) Outside: 0 - 1500 mm (0 - 60 in)	±0.14 mm (±0.0055 in)
	552-185-10 (552-195-10)	Inside: 50.1 - 2050 mm (2.004 - 82 in) Outside: 0 - 2000 mm (0 - 80 in)	±0.17 mm (±0.0070 in)
	552-181-10 (552-191-10)	30.1 - 480 mm (1.204 - 19.2 in)	±0.08 mm (±0.0030 in)
	552-182-10 (552-192-10)	30.1 - 630 mm (1.204 - 25.2 in)	±0.09 mm (±0.0035 in)
Scriber type	552-183-10 (552-193-10)	30.1 - 1030 mm (1.204 - 41.2 in)	±0.09 mm (±0.0035 in)
	552-184-10 (552-194-10)	30.1 - 1530 mm (1.204 - 61.2 in)	±0.13 mm (±0.0055 in)
	552-185-10 (552-195-10)	30.1 - 2030 mm (1.204 - 81.2 in)	±0.16 mm (±0.0065 in)
	552-181-10 (552-191-10)	30.1 - 480 mm (1.204 - 19.2 in)	±0.10 mm (±0.0040 in)
Surface plate type + Scriber type for height gages	552-182-10 (552-192-10)	30.1 - 630 mm (1.204 - 25.2 in)	±0.11 mm (±0.0045 in)
	552-183-10 (552-193-10)	30.1 - 1030 mm (1.204 - 41.2 in)	±0.11 mm (±0.0045 in)
	552-184-10 (552-194-10)	30.1 - 1530 mm (1.204 - 61.2 in)	±0.15 mm (±0.0060 in)
	552-185-10 (552-195-10)	30.1 - 2030 mm (1.204 - 81.2 in)	±0.18 mm (±0.0070 in)
Surface plate type	552-181-10 (552-191-10)	0 - 450 mm (0 - 17.7 in)	±0.10 mm (±0.0040 in)
	552-182-10 (552-192-10)	0 - 600 mm (0 - 23.7 in)	±0.11 mm (±0.0045 in)
	552-183-10 (552-193-10)	0 - 1000 mm (0 - 39.4 in)	±0.11 mm (±0.0045 in)
	552-184-10 (552-194-10)	0 - 1500 mm (0 - 59.4 in)	±0.15 mm (±0.0060 in)
Surface plate type + Inside point type	552-185-10 (552-195-10)	0 - 2000 mm (0 - 79.6 in)	±0.18 mm (±0.0070 in)
	552-181-10 (552-191-10)	Inside: 60 - 450 mm (1.004 - 19 in) Outside: 0 - 450 mm (1 - 18 in)	±0.12 mm (±0.0050 in)
	552-182-10 (552-192-10)	Inside: 60 - 600 mm (1.004 - 25 in) Outside: 0 - 600 mm (1 - 24 in)	±0.13 mm (±0.0055 in)
	552-183-10 (552-193-10)	Inside: 60 - 1000 mm (1.004 - 41 in) Outside: 0 - 1000 mm (1 - 40 in)	±0.13 mm (±0.0055 in)
Surface plate type + Centerline type	552-184-10 (552-194-10)	Inside: 60 - 1500 mm (1.004 - 62 in) Outside: 0 - 1500 mm (1 - 60 in)	±0.17 mm (±0.0070 in)
	552-185-10 (552-195-10)	Inside: 60 - 2000 mm (1.004 - 81 in) Outside: 0 - 2000 mm (1 - 80 in)	±0.20 mm (±0.0080 in)
	552-181-10 (552-191-10)	15.1 - 465 mm (0.6 - 18.6 in)	±0.11 mm (±0.0045 in)
	552-182-10 (552-192-10)	15.1 - 615 mm (0.6 - 24.6 in)	±0.12 mm (±0.0050 in)
	552-183-10 (552-193-10)	15.1 - 1015 mm (0.6 - 40.6 in)	±0.12 mm (±0.0050 in)
	552-184-10 (552-194-10)	15.1 - 1515 mm (0.6 - 60.6 in)	±0.16 mm (±0.0065 in)
	552-185-10 (552-195-10)	15.1 - 2015 mm (0.6 - 80.6 in)	±0.19 mm (±0.0075 in)

(): Inch/Metric models

Typical applications

Surface plate type + Standard type	Scriber type
Inside point type	Surface plate type + Scriber for height gages
Surface plate type + Centerline type	The above combinations are examples only. Contact us for advice on accuracy when using a contact point in a combination other than as shown above.