

# Calipers

## SERIES 552 – ABSOLUTE Digimatic Coolant Proof Interchangeable Jaw Carbon Fibre Caliper

- A lightweight Digimatic caliper that uses CFRP (Carbon Fibre Reinforced Plastics) in the beam and jaws.
- Provided with preset function for setting a desired starting point, which allows direct readout of offset measurement.
- The range of applications can be expanded by using interchangeable jaws (optional).
- Data output function allows integration into statistical process control and measurement systems.

MeasurLink<sup>®</sup> ENABLED  
Data Management Software by Mitutoyo

ABSOLUTE

IP66



552-192-10

Optional interchangeable jaws

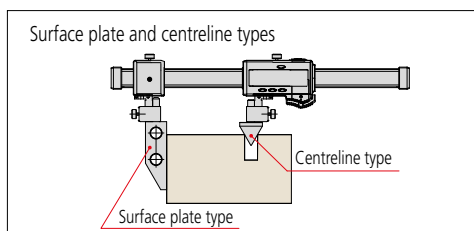
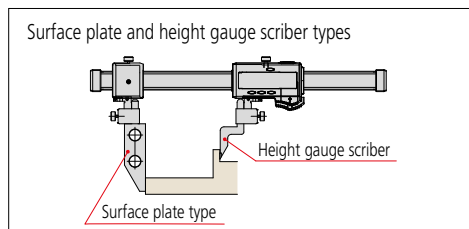
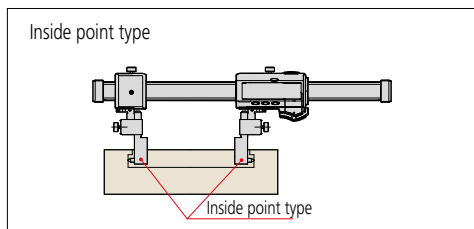
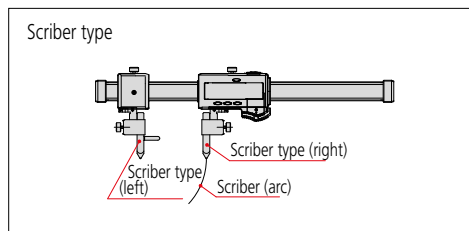
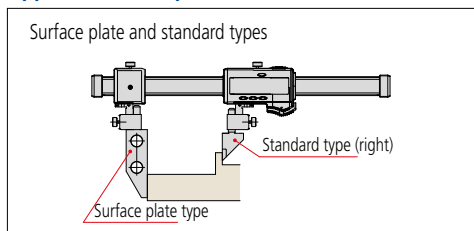
### Specifications

Inch/Metric

Code No.	Range	Resolution	Accuracy* <sup>1</sup>
552-191-10	0 - 450 mm / 0 - 18"	0.01 mm / .0005"	±0.04 mm / ±.002"
552-192-10	0 - 600 mm / 0 - 24"		
552-193-10	0 - 1000 mm / 0 - 40"		
552-194-10	0 - 1500 mm / 0 - 60"		
552-195-10	0 - 2000 mm / 0 - 80"		

\*<sup>1</sup> Excluding quantizing error.

### Application Examples



### Technical Data

Scale type:	ABSOLUTE electromagnetic induction linear encoder
Max. response speed:	Unlimited
Battery:	SR44 (1 pc.), <b>938882</b>
Battery life:	Approx. 5,000 hours in continuous use
Dust/water protection level:	IP66* <sup>2</sup>
Standard accessory:	Jaw clamps (2 pcs.), <b>05GZA033</b>

\*<sup>2</sup> Rustproofing treatment to be applied after use.

### Functions

#### ABSOLUTE system measurement:

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

#### Zero-setting (INC measurement mode):

Displayed value can be set to zero at any arbitrary position of the slider for comparative measurements.

#### Auto ON/OFF:

The reading on the LCD disappears after this instrument is idle for a short time, but the origin point is retained. Moving the slider causes the reading on the LCD to reappear.

#### Data output:

Models equipped with this function have an output port for transferring measurement data to a Statistical Process Control (SPC) system.

#### Data hold:

By using the data button the displayed value can be held.

#### Presetting (ABS INC measurement mode):

Displayed value can be set to any arbitrary value.

#### Offsetting:

Automatically adds the thickness of the inside jaws to the measured value so that the result can be read directly, without calculation.

#### Inch/mm selection:

Switches the units of measurement (at any time).

#### Alerts:

In the unlikely event of a display overflow or calculation error, an error message is displayed and measurement stops. Measurement cannot continue until the error is corrected. If the battery voltage drops below a certain point, the battery indicator will turn on before measurement becomes impossible, warning the user that the battery needs to be replaced. If contamination on the surface of the scale causes a calculation error, an error message is displayed and measurement stops.

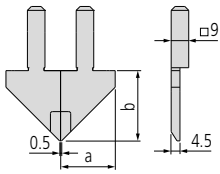
### Optional Accessories

Code No.	Description
02AZD790A	U-WAVE-T data cable with pushbutton (160 mm)
02AZE140A	U-WAVE-T data cable with pushbutton and footswitch connection (160/500 mm)
05CZA624	SPC data cable with pushbutton (1 m)
05CZA625	SPC data cable with pushbutton (2 m)
06AFM380A	USB Input Tool Direct USB-ITN-A (2 m)

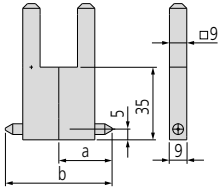
## Interchangeable Jaw Dimensions

Unit: mm

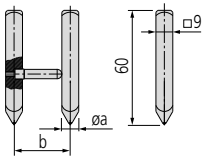
### Standard type



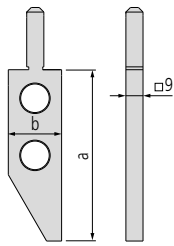
### Inside point type



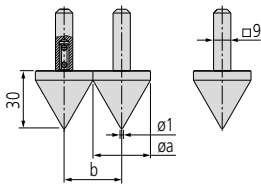
### Scriber type



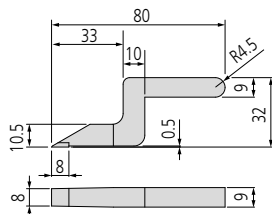
### Surface plate type



### Centreline type



### Height gauge scriber



## Interchangeable Jaw Specifications

Code No.	Components	a	b
<b>Standard type</b>			
07CZA056*	2 pcs.	28 mm	30 mm
<b>Inside point type</b>			
07CZA058*	2 pcs.	25 mm	50 mm
07CZA059*	2 pcs.	1"	2"
<b>Scriber type</b>			
07CZA055*	2 pcs.	8 mm	30 mm
07CZA061*	2 pcs.	.031"	1.2"

\* Individual components available, price on application.

Code No.	Components	a	b
<b>Surface plate type</b>			
07CZA044	1 pc.	90 mm	28 mm
<b>Centreline type</b>			
07CZA057*	2 pcs.	30 mm	30 mm
07CZA060*	2 pcs.	1.2"	1.2"
<b>Height gauge scriber type</b>			
07GZA000	1 pc.	—	—

Interchangeable Jaw	Applicable calipers	Range	Accuracy when attached to the caliper
Standard type	552-191-10	0-450 mm (0-18")	±0.06 mm (±.0025")
	552-192-10	0-600 mm (0-24")	
	552-193-10	0-1000 mm (0-40")	±0.07 mm (±.0030")
	552-194-10	0-1500 mm (0-60")	±0.11 mm (±.0045")
	552-195-10	0-2000 mm (0-80")	±0.14 mm (±.0055")
Inside point type	552-191-10	Inside: 50-500 mm (2-20")	±0.09 mm (±.0035")
		Outside: 0-450 mm (0-18")	
	552-192-10	Inside: 50-650 mm (2-26")	
		Outside: 0-600 mm (0-24")	
	552-193-10	Inside: 50-1050 mm (2-42")	
Outside: 0-1000 mm (0-40")			
552-194-10	Inside: 50-1550 mm (2-62")	±0.14 mm (±.0055")	
	Outside: 0-1500 mm (0-60")		
552-195-10	Inside: 50-2050 mm (2-82")	±0.17 mm (±.0070")	
	Outside: 0-2000 mm (0-80")		
Centreline type	552-191-10	30-480 mm (1.2-19.2")	±0.08 mm (±.0030")
	552-192-10	30-630 mm (1.2-25.2")	
	552-193-10	30-1030 mm (1.2-41.2")	±0.09 mm (±.0035")
	552-194-10	30-1530 mm (1.2-61.2")	±0.13 mm (±.0055")
	552-195-10	30-2030 mm (1.2-81.2")	±0.16 mm (±.0065")
Scriber type	552-191-10	30-480 mm (1.2-19.2")	±0.10 mm (±.0040")
	552-192-10	30-630 mm (1.2-25.2")	
	552-193-10	30-1030 mm (1.2-41.2")	±0.11 mm (±.0045")
	552-194-10	30-1530 mm (1.2-61.2")	±0.15 mm (±.0060")
	552-195-10	30-2030 mm (1.2-81.2")	±0.18 mm (±.0070")
Surface plate and height gauge scriber types	552-191-10	0-450 mm (0-17.7")	±0.10 mm (±.0040")
	552-192-10	0-600 mm (0-23.7")	
	552-193-10	0-1000 mm (0-39.4")	±0.11 mm (±.0045")
	552-194-10	0-1500 mm (0-59.4")	±0.15 mm (±.0060")
	552-195-10	0-2000 mm (0-79.6")	±0.18 mm (±.0070")
Surface plate and inside point types	552-191-10	Inside: 25-475 mm (1-19")	±0.12 mm (±.0050")
		Outside: 0-450 mm (1-18")	
	552-192-10	Inside: 25-625 mm (1-25")	
		Outside: 0-600 mm (1-24")	
	552-193-10	Inside: 25-1025 mm (1-41")	
Outside: 0-1000 mm (1-40")			
552-194-10	Inside: 25-1525 mm (1-62")	±0.17 mm (±.0070")	
	Outside: 0-1500 mm (1-60")		
552-195-10	Inside: 25-2025 mm (1-81")	±0.20 mm (±.0080")	
	Outside: 0-2000 mm (1-80")		
Surface plate and centreline types	552-191-10	15-465 mm (0.6-18.6")	±0.11 mm (±.0045")
	552-192-10	15-615 mm (0.6-24.6")	
	552-193-10	15-1015 mm (0.6-40.6")	±0.12 mm (±.0050")
	552-194-10	15-1515 mm (0.6-60.6")	±0.16 mm (±.0065")
	552-195-10	15-2015 mm (0.6-80.6")	±0.19 mm (±.0075")