Digimatic Carbon Fiber Caliper

SERIES 552 — with optional jaw attachments

FEATURES

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

ABSOLUTE® Absolute System Patented by MITUTOYO

SPC

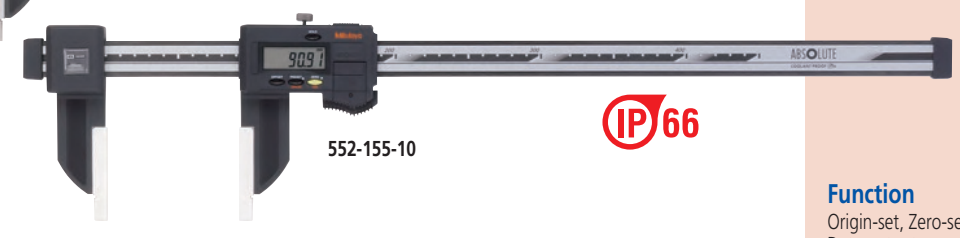
IP66

Technical Data

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

552-314-10

IP66



552-155-10

IP66

Function

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

Optional Accessories

05CZA624: SPC cable with data switch (40"/ 1m)
05CZA625: SPC cable with data switch (80"/ 2m)

914055: Centerline attachments (mm)*
914056: Centerline attachments (inch)*
914057: Pointed ID measuring attachments (mm)*
914058: Pointed ID measuring attachments (inch)*
914053: Attachment clamps (for models up to 24" / 600mm range)
914054: Attachment clamps (for models over 24" / 600mm range)

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

SPECIFICATIONS

Metric

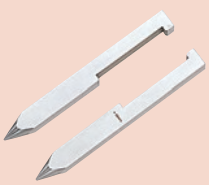
Range*	Order No.	Accuracy	Resolution	Remarks
0(20)-450mm	**552-302-10**	+/-0.04mm	0.01mm	
0(20)-450mm	**552-150-10**	+/-0.06mm	0.01mm	long jaws 200mm
0(20)-450mm	**552-155-10**	+/-0.04mm	0.01mm	ceramic jaws
0(20)-600mm	**552-303-10**	+/-0.04mm	0.01mm	
0(20)-600mm	**552-151-10**	+/-0.06mm	0.01mm	long jaws 200mm
0(20)-600mm	**552-156-10**	+/-0.04mm	0.01mm	ceramic jaws
0(20)-1000mm	**552-304-10**	+/-0.05mm	0.01mm	
0(20)-1000mm	**552-152-10**	+/-0.07mm	0.01mm	long jaws 200mm
0(20)-1500mm	**552-305-10**	+/-0.09mm	0.01mm	
0(20)-1500mm	**552-153-10**	+/-0.11mm	0.01mm	long jaws 200mm
0(20)-2000mm	**552-306-10**	+/-0.12mm	0.01mm	
0(20)-2000mm	**552-154-10**	+/-0.14mm	0.01mm	long jaws 200mm

*( ): Minimum dimension in ID measurement

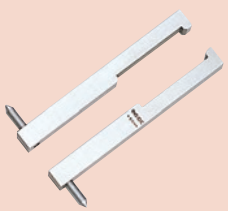
Inch/Metric

Range*	Order No.	Accuracy	Resolution	Remarks
0(.5")-18"	**552-312-10**	+/-.002"	.0005"/0.01mm	
0(.5")-18"	**552-160-10**	+/-.0025"	.0005"/0.01mm	long jaws 7.9"
0(.5")-18"	**552-165-10**	+/-.002"	.0005"/0.01mm	ceramic jaws
0(.5")-24"	**552-313-10**	+/-.002"	.0005"/0.01mm	
0(.5")-24"	**552-161-10**	+/-.0025"	.0005"/0.01mm	long jaws 7.9"
0(.5")-24"	**552-166-10**	+/-.002"	.0005"/0.01mm	ceramic jaws
0(1")-40"	**552-314-10**	+/-.002"	.0005"/0.01mm	
0(1")-40"	**552-162-10**	+/-.003"	.0005"/0.01mm	long jaws 7.9"
0(1")-60"	**552-315-10**	+/-.004"	.0005"/0.01mm	
0(1")-60"	**552-163-10**	+/-.0045"	.0005"/0.01mm	long jaws 7.9"
0(1")-80"	**552-316-10**	+/-.005"	.0005"/0.01mm	
0(1")-80"	**552-164-10**	+/-.0055"	.0005"/0.01mm	long jaws 7.9"

*( ): Minimum dimension in ID measurement

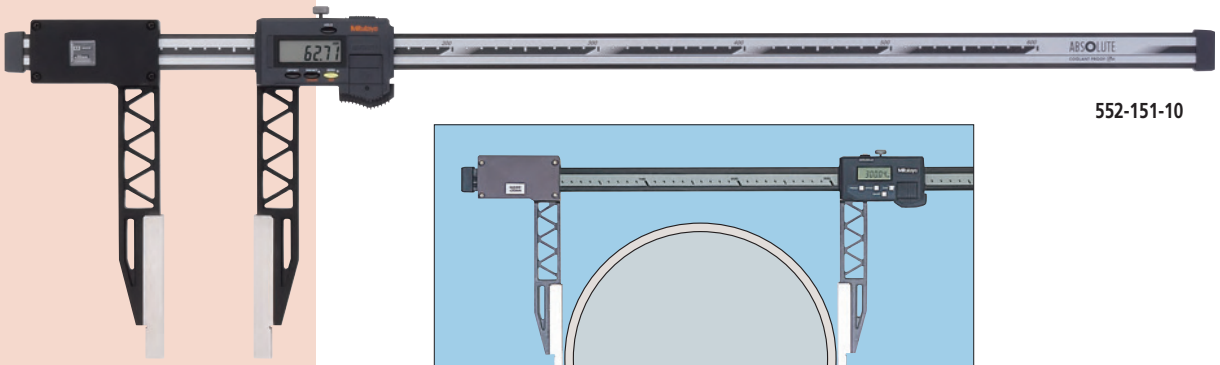


Centerline Attachments

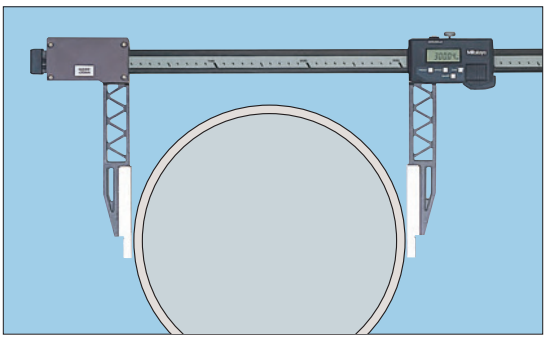


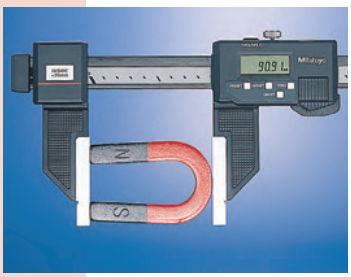
Pointed ID Measuring Attachments

Attachment Clamps

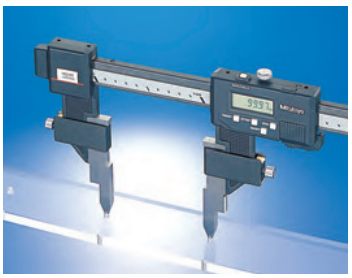


552-151-10





Ceramic jaws

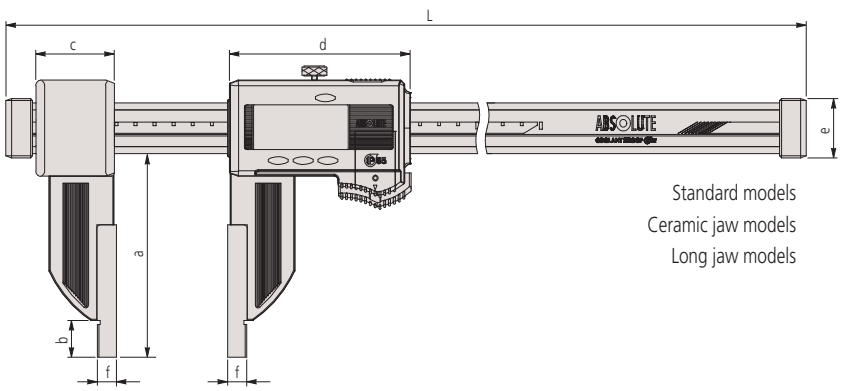


Centerline attachments

ID point attachments

DIMENSIONS AND MASS

Unit: mm

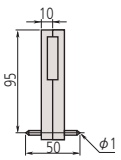


Standard models, Ceramic jaw models

Range	L	a	b	c	d	e	f	Mass (g)
0 - 18" / 0 - 450mm	640	100	18	41.2	91.8	25	10 (.25")	715
0 - 24" /0 - 600mm	790	100	18	41.2	91.8	25	10 (.25")	790
0 - 40" / 0 - 1000mm	1230	150	24	62.8	113.8	32	10 (.5")	1,760
0 - 60" / 0 - 1500mm	1740	150	24	62.8	113.8	32	10 (.5")	2,160
0 - 80" / 0 - 2000mm	2250	150	24	62.8	113.8	32	10 (.5")	2,560

( ): inch/mm models

Pointed ID Measuring Attachments



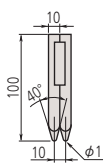
Unit: mm

Long jaw models

Range	L	a	b	c	d	e	f	Mass (g)
0 - 18" / 0 - 450mm	680	200	24	89	91.8	25	10 (.25")	1,215
0 - 24" / 0 - 600mm	830	200	24	89	91.8	25	10 (.25")	1,290
0 - 40" / 0 - 1000mm	1280	200	24	110	113.8	32	10 (.5")	2,090
0 - 60" / 0 - 1500mm	1790	200	24	110	113.8	32	10 (.5")	2,490
0 - 80" / 0 - 2000mm	2300	200	24	110	113.8	32	10 (.5")	2,890

( ): inch/mm models

Centerline Attachments



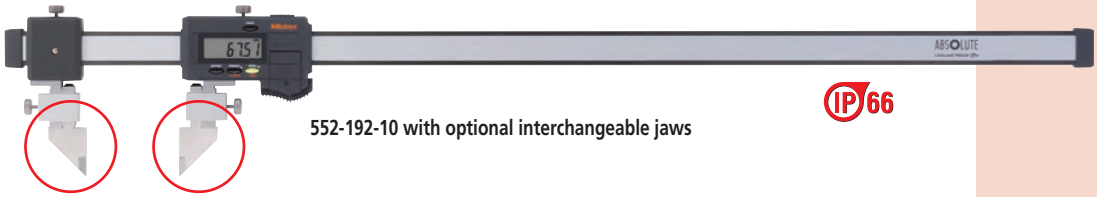
Mitutoyo

ABSOLUTE Coolant Proof Carbon Fiber Caliper

SERIES 552 — with Interchangeable Jaws

FEATURES

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



552-192-10 with optional interchangeable jaws

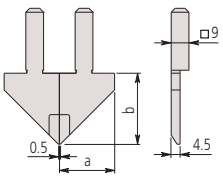
SPECIFICATIONS

Inch/Metric

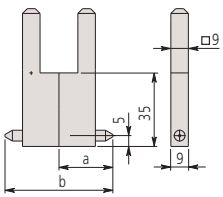
Range	Order No.	Accuracy	Mass(g)
0 - 18" / 0 - 450mm	**552-191-10**	±.002"	650
0 - 24" / 0 - 600mm	**552-192-10**	±.002"	725
0 - 40" / 0 - 1000mm	**552-193-10**	±.002"	1480
0 - 60" / 0 - 1500mm	**552-194-10**	±.004"	1880
0 - 80" / 0 - 2000mm	**552-195-10**	±.005"	2280

Interchangeable Jaws (Optional)

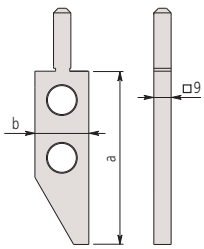
Standard type



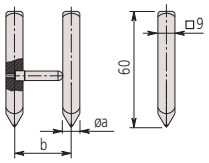
Inside point type



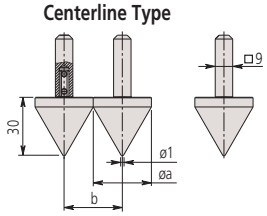
Surface Plate Type



Scriber Type



Centerline Type



Unit: mm

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

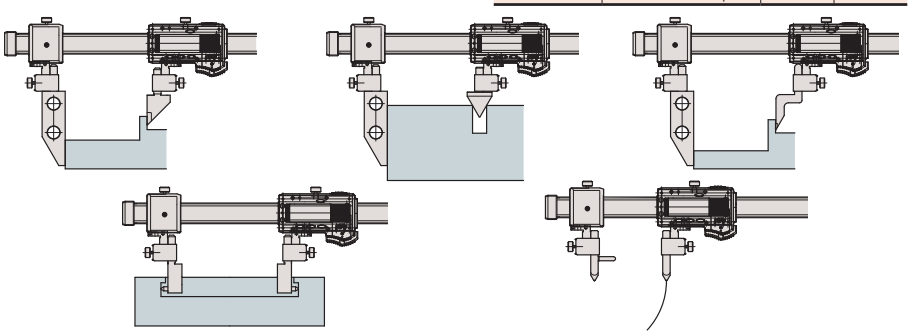
Order No.	Components	a	b
07CZA055	Right (**07CZA042**), Left (**07CZA043**)	8mm	30mm
07CZA061	Right (**07CZA042**), Left (**07CZA049**)	031"	1.2"

Surface Plate Type

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

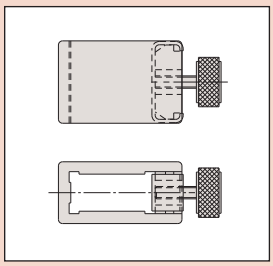
Centerline Type

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



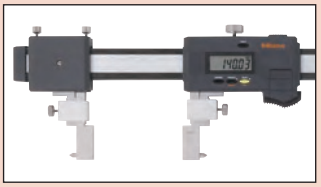
Technical Data

Accuracy: Refer to the list of specifications.
Resolution: .0005"/0.01mm
Display: LCD
Scale type: ABSOLUTE electromagnetic 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**



Functions

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

Optional Accessories

05CZA624: SPC cable with data switch (40" / 1m)
05CZA625: SPC cable with data switch (80" / 2m)
02AZD790A: SPC cable for U-WAVE w/ data switch (160mm)