

Digimatic Carbon-Fiber Caliper

SERIES 552 — with Optional Jaw Attachments

ABSOLUTE®
Absolute System Patented by MITUTOYO

FEATURES

- Lightweight Digimatic Calipers 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.



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: unlimited
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 3,000 hours in continuous use



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

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
** Attachment clamps and attachments are not available for long jaw type calipers

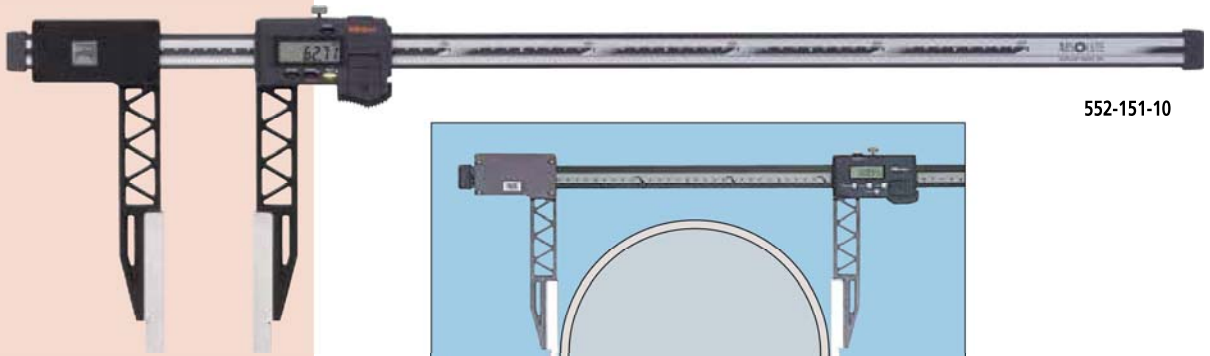


Centerline Attachments

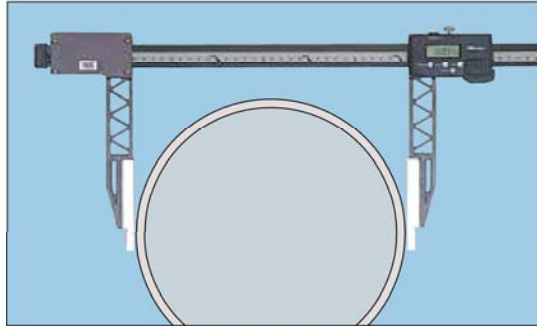
Pointed ID Measuring Attachments



Attachment Clamps



552-151-10



Ceramic jaws



Centerline attachments



ID point attachments

DIMENSIONS AND MASS

Unit: mm

Standard models
Ceramic jaw models
Long jaw models

Pointed ID Measuring Attachments

Unit: mm

Centerline Attachments

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

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

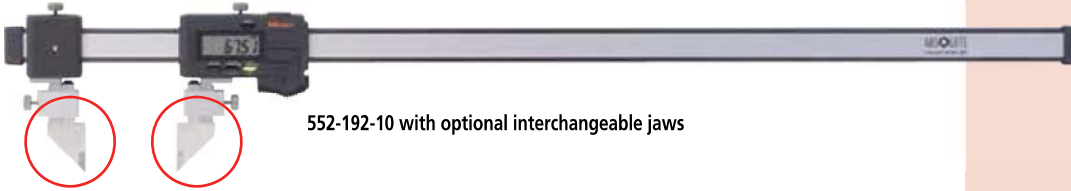
() : inch/mm models

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 change 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)

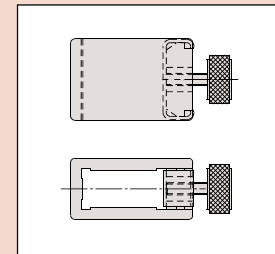
Standard type		Inside point type		Standard Type			
				Order No.	Components	a	b
				07CZA056	Right (07CAA044), Left (07CAA045)	28mm (1.1")	30mm (1.2")
				Inside Point Type			
				Order No.	Components	a	b
				07CZA058	07CZA041 x 2pcs.	25mm	50mm
				07CZA059	07CZA048 x 2pcs.	1"	2"
Surface Plate Type		Scriber Type		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	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"

Unit: mm



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)

