

# Digimatic Carbon Fiber Caliper

**SERIES 552 — with optional jaw attachments**

**ABSOLUTE®**  
Absolute System Patented by MITUTOYO

## 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.

**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



## SPECIFICATIONS

### Metric

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

\*( ): Minimum dimension in ID measurement

### Inch/Metric

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

\*( ): Minimum dimension in ID measurement

## Function

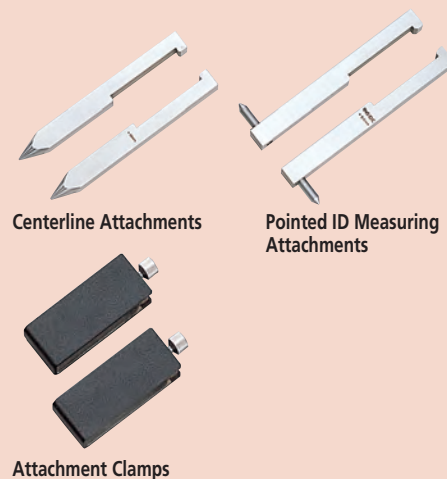
Origin-set, Zero-setting, Presetting, Offsetting, Data hold, Data output, inch/mm conversion (on inch/metric models only)  
Alarm: Low voltage, Counting value composition error

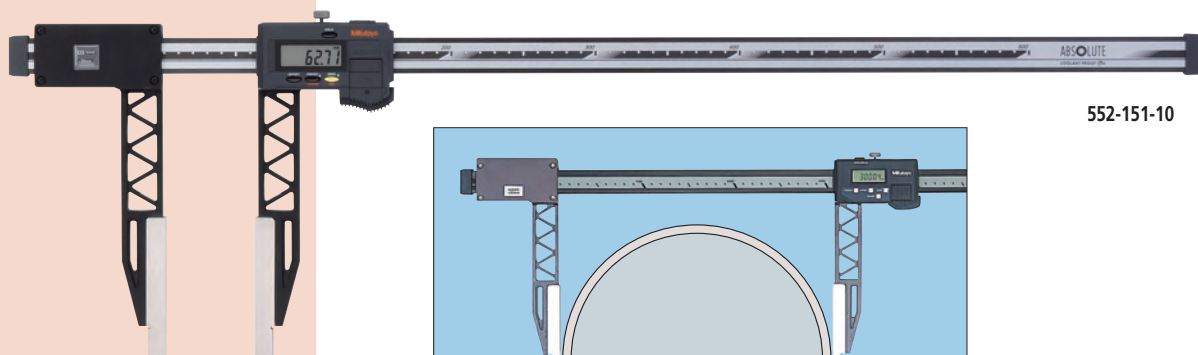
## Optional Accessories

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

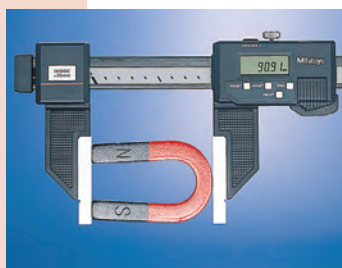
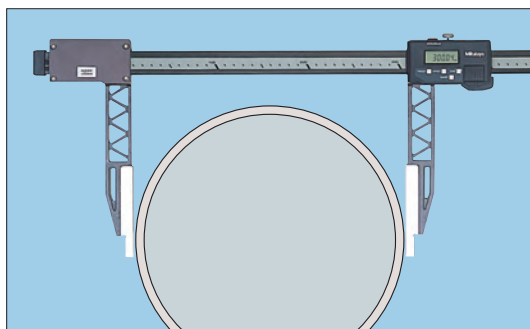
**914055:** Centerline attachments (mm)\*  
**914056:** Centerline attachments (inch)\*  
**914057:** Pointed ID measuring attachments (mm)\*  
**914058:** Pointed ID measuring attachments (inch)\*  
**914053:** Attachment clamps (for models up to 24" / 600mm range)  
**914054:** Attachment clamps (for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

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

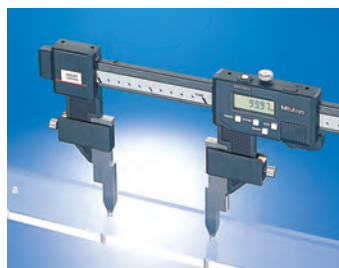




552-151-10



Ceramic jaws



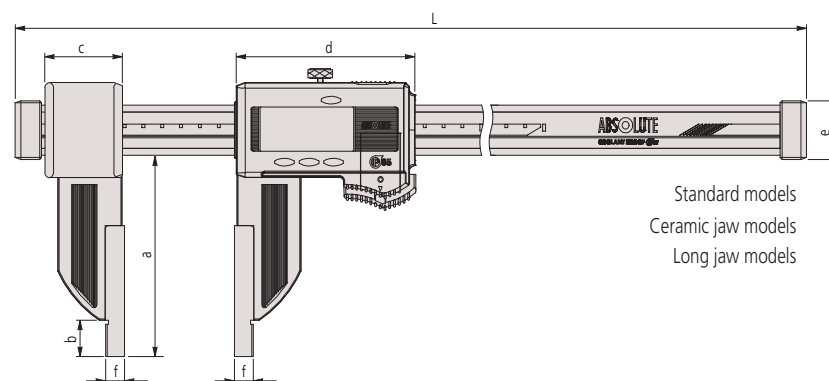
Centerline attachments



ID point attachments

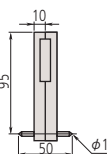
## DIMENSIONS AND MASS

Unit: mm



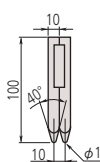
Standard models  
Ceramic jaw models  
Long jaw models

Pointed  
ID Measuring  
Attachments



Unit: mm

Centerline  
Attachments



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

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