

# Digimatic Caliper Gages

## SERIES 209 — Internal Tube Thickness Measurement Type

Versatile ID measuring gages for holes diameters, groove thickness, tube thickness, and hard-to-reach dimensions. The Digimatic

Caliper Gages provide error-free LCD readings as well as data output for SPC analysis.

### Internal measurement type

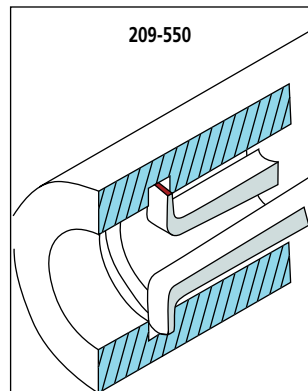
209-552



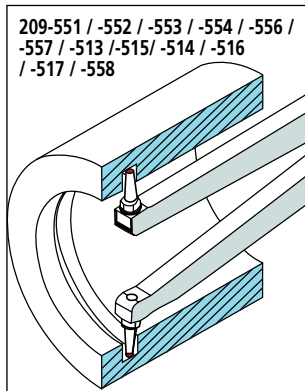
### SPECIFICATIONS

#### Inch / Metric

| Range                     | Order No. | Resolution       | Accuracy         | Max. Measuring Depth L | Max. Groove Depth A | Min. Groove Width B | Type of Measuring Contact | Mass(g) |
|---------------------------|-----------|------------------|------------------|------------------------|---------------------|---------------------|---------------------------|---------|
| .10 - .49" / 2.5 - 12.5mm | 209-550   | .0002" / 0.005mm | .0008" / 0.015mm | .47" / 12mm            | .027" / 0.7mm       | .023" / 0.5mm       | Chisel R .0039" / 0.1mm   | 225     |
| .20 - .59" / 5 - 15mm     | 209-551   | .0002" / 0.005mm | .0008" / 0.015mm | 1.37" / 35mm           | .09" / 2.3mm        | .032" / 0.8mm       | Ball .024" / 0.6mm dia.   | 230     |
| .39 - 1.18" / 10 - 30mm   | 209-552   | .0005" / 0.01mm  | .0015" / 0.03mm  | 3.3" / 85mm            | .19" / 5.2mm        | .06" / 1.2mm        | Ball .04" / 1mm dia.      | 250     |
| .79 - 1.58" / 20 - 40mm   | 209-553   | .0005" / 0.01mm  | .0015" / 0.03mm  | 3.3" / 85mm            | .26" / 7mm          | .06" / 1.2mm        | Ball .04" / 1mm dia.      | 250     |
| 1.18 - 1.97" / 30 - 50mm  | 209-554   | .0005" / 0.01mm  | .0015" / 0.03mm  | 3.3" / 85mm            | .26" / 7mm          | .06" / 1.2mm        | Ball .04" / 1mm dia.      | 255     |
| 1.58 - 2.36" / 40 - 60mm  | 209-555   | .0005" / 0.01mm  | .0015" / 0.03mm  | 3.3" / 85mm            | .31" / 8.3mm        | .06" / 1.2mm        | Ball .04" / 1mm dia.      | 265     |
| 1.97 - 2.75" / 50 - 70mm  | 209-556   | .0005" / 0.01mm  | .0015" / 0.03mm  | 3.3" / 85mm            | .31" / 8.3mm        | .06" / 1.2mm        | Ball .04" / 1mm dia.      | 265     |
| 2.36 - 3.15" / 60 - 80mm  | 209-557   | .0005" / 0.01mm  | .0015" / 0.03mm  | 3.3" / 85mm            | .31" / 8.3mm        | .06" / 1.2mm        | Ball .04" / 1mm dia.      | 270     |
| 2.75 - 3.54" / 70 - 90mm  | 209-558   | .0005" / 0.01mm  | .0015" / 0.03mm  | 3.3" / 85mm            | .31" / 8.3mm        | .06" / 1.2mm        | Ball .04" / 1mm dia.      | 270     |
| .60 - 2.17" / 15 - 55mm   | 209-505   | .001" / 0.02mm   | .002" / 0.04mm   | 4.49" / 115mm          | .177" / 5mm         | .10" / 1.8mm        | Ball .059" / 1.5mm dia.   | 360     |
| 1.38 - 2.95" / 35 - 75mm  | 209-511   | .001" / 0.02mm   | .002" / 0.04mm   | 4.49" / 115mm          | .315" / 8mm         | .157" / 2.2mm       | Ball .079" / 2.0mm dia.   | 380     |
| 2.17 - 3.74" / 55 - 95mm  | 209-513   | .001" / 0.02mm   | .002" / 0.04mm   | 4.49" / 115mm          | .315" / 8mm         | .157" / 2.2mm       | Ball .079" / 2.0mm dia.   | 380     |
| 2.95 - 4.52" / 75 - 115mm | 209-514   | .001" / 0.02mm   | .002" / 0.04mm   | 4.49" / 115mm          | .315" / 8mm         | .157" / 2.2mm       | Ball .079" / 2.0mm dia.   | 380     |
| 3.75 - 5.32" / 95 - 135mm | 209-515   | .001" / 0.02mm   | .002" / 0.04mm   | 4.49" / 115mm          | .315" / 8mm         | .157" / 2.2mm       | Ball .079" / 2mm dia.     | 380     |
| .60 - 2.95" / 15 - 75mm   | 209-516   | .001" / 0.02mm   | .003" / 0.06mm   | 6.89" / 175mm          | .196" / 5mm         | .07" / 1.8mm        | Ball .059" / 1.5mm dia.   | 440     |
| 1.57 - 3.94" / 40 - 100mm | 209-517   | .001" / 0.02mm   | .003" / 0.06mm   | 7.77" / 195mm          | .315" / 8mm         | .086" / 2.2mm       | Ball .079" / 2.0mm dia.   | 440     |



Edge R 0.1 mm



Ball  $\phi$  0.6mm,  $\phi$  1mm,  $\phi$  1.5mm and  $\phi$  2mm



### Technical Data

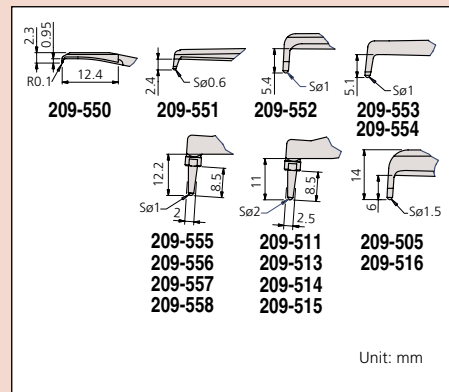
|                                       |                                                        |
|---------------------------------------|--------------------------------------------------------|
| Accuracy:                             | Refer to the list of specifications                    |
| Resolution:                           | .001", .0005", or .0002"<br>0.01mm, 0.02mm, or 0.005mm |
| Display:                              | LCD Analog / Digital                                   |
| Power Supply:                         | AA Battery (1pc)                                       |
| Battery life:                         | Approx. 350 hours                                      |
| Measuring Force:                      | 0.7 - 1.7N                                             |
| Dust/Water protection level:          | IP67                                                   |
| Provided with inspection certificate. |                                                        |

### Function

Zeraset, Preset, Auto power OFF, Inch/Metric, conversion Data hold, Max/Min value holding, Data output

### Optional Accessories

**21JAA300D:** SPC cable kit (80" / 2m)  
for 209-505, 209-511, 209-513, 209-514, 209-515, 209-516, 209-517



Unit: mm

