

## Technical Data

|                        |                                       |
|------------------------|---------------------------------------|
| Accuracy*:             | 3 μm / .00012"                        |
| Repeatability:         | 2 μm / .00008"                        |
| Narrow-range accuracy: | 2 μm / .00008"                        |
| Scale type:            | ABSOLUTE electrostatic linear encoder |
| Max. response speed:   | Unlimited                             |
| Battery:               | SR44 (2 pcs.), <b>938882</b>          |
| Battery life:          | Approx. 2000 hours under normal use   |

\* Excluding quantizing error

## Functions

Presetting  
 Preset  
 Power on/off  
 Inch/mm conversion  
 Data output  
 GO/±NG tolerance judgement  
 Min value holding  
 Data hold  
 Alarm: Low battery voltage, scale contamination, overflow error, tolerance limit setting error



## Optional Accessories

| Code No.   | Description   |
|------------|---|
| 516-118-10 | Setup metric rectangular gauge block set                    |
| 905338     | SPC data cable (1 m)  |
| 905409     | SPC data cable (2 m)  |
| 02AZD790F  | U-WAVE-T data cable (160 mm)                                |
| 02AZE140F  | U-WAVE-T data cable with footswitch connection (160/500 mm) |
| 06AFM380F  | USB input tool direct (2 m)                                 |
| 21DZA081   | Extension rod 500 mm (20")                                  |
| 21DZA089   | Extension rod 250 mm (10")                                  |



Setting the Bore Gauge to a master value using a gauge block set.

## SERIES 511 – ABSOLUTE Digimatic Bore Gauge

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

**ABSOLUTE**



511-521

With optional extension rods

- This ABSOLUTE Digimatic bore gauge is exclusively designed for inside diameter measurement.
- Up to four extension rods (250 mm or 500 mm) can be used for measuring at the bottom of a hole 2 m deep.
- The display and grip can be rotated up to 320° and the display can be inclined up to 90°, so that it is easily readable from any direction.
- The minimum value holding function provides easy measurement of hole diameter.
- Interchangeable washers are supplied as standard accessories to enable setting in small steps.
- Setting the bore gauge to a master value using a gauge block set allows quick and accurate setting.
- An optional inside-length standard, such as a setting ring or Inside Micro Checker (see pages C-37 to C-38 or page C-24, respectively), is required for accurately setting the gauge before measurement.



## Specifications

Inch/Metric

| Code No. | Range                            | Measuring force | Resolution           | Anvils  | Probing depth  |
|----------|----------------------------------|-----------------|----------------------|---------|----------------|
| 511-521  | 1.8 - 4.0"<br>(45.72 - 101.6 mm) | 5 N or less     | .0005"<br>(0.001 mm) | 12 pcs. | 6"<br>(150 mm) |
| 511-522  | 4.0 - 6.5"<br>(101.6 - 165.1 mm) |                 |                      | 13 pcs. |                |

## Dimensions

