



Bore Gages for Blind Holes

New model measures blind-hole diameter with high accuracy and high durability



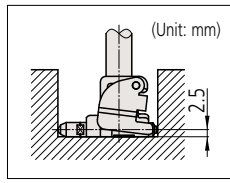
SMALL TOOL INSTRUMENTS AND DATA MANAGEMENT

NEW
Products

Bore Gages for Blind Holes

FEATURES

- Capable of ID (inside diameter) measurement close to the bottom of a hole.
- Pendulum guide structure improves sliding.
- Carbide contact faces for durability.
- Grip is large and hollow to reduce effect of body heat on high-accuracy measurements.
- Extension rods (optional) can be attached for measuring deep holes.



- A Bore Gage Checker and a range of Setting Rings are available to aid in accurately setting a gage before making a measurement.
- Alternative indicators may be used in place of those recommended*.

* Some indicators and protection covers cannot be used with these bore gages. Contact a Mitutoyo sales office if considering the use of Dial or Digimatic indicators other than the recommended models.

SPECIFICATIONS

| Order No. | 511-415 | 511-425 | 511-435 | 511-416 | 511-426 | 511-436 | 511-417 | 511-427 | 511-437 |
|----------------------------------|---------------------|---------|-----------|---------|---------|-----------|----------|---------|-----------|
| Measuring range | 15-35mm | | | 35-60mm | | | 50-150mm | | |
| Indicators (low/high resolution) | - | 2046SB | 2109SB-10 | - | 2046SB | 2109SB-10 | - | 2046SB | 2109SB-10 |
| Accuracy | Wide-range accuracy | | | 4µm | | | | | |
| | Repeatability | | | 1µm | | | | | |
| | Adjacent error | | | 1µm | | | | | |
| Effective stroke of contact rod | | | | 1.2mm | | | | | |
| No. of anvils | 11 | | | 6 | | | 11 | | |
| No. of replacement washers | 1 | | | 4 | | | 4 | | |

| Order No. | 511-418 | 511-428 | 511-438 | 511-419 | 511-429 | 511-439 | 511-420 | 511-430 | 511-440 |
|----------------------------------|---------------------|---------|-----------|-----------|---------|-----------|---------|---------|-----------|
| Measuring range | 6"-1.4" | | | 1.4"-2.4" | | | 2"-6" | | |
| Indicators (low/high resolution) | - | 2922SB | 2923SB-10 | - | 2922SB | 2923SB-10 | - | 2922SB | 2923SB-10 |
| Accuracy | Wide-range accuracy | | | .00016" | | | | | |
| | Repeatability | | | .00004" | | | | | |
| | Adjacent error | | | .00004" | | | | | |
| Effective stroke of contact rod | | | | .047" | | | | | |
| No. of anvils | 11 | | | 6 | | | 11 | | |
| No. of replacement washers | 1 | | | 4 | | | 4 | | |

Notes: 1) A 10mm (.4") sub-anvil is supplied with **511-415/425/435/418/428/438** and a 50mm (2") sub-anvil is supplied with **511-417/427/437/420/430/440**.

2) It is not permissible to use a sub-anvil other than as supplied as a standard accessory, or widen a measuring range by using multiple sub-anvils. (The measurement accuracy in such cases is not guaranteed.)

Recommended dial indicators

Metric : **2046SB** (0.01mm)
 models **2972TB** (0.01mm - One revolution type)
2109SB-10 (0.001mm)
2900SB-10 (0.001mm - One-revolution type)

Inch : **2922SB** (.0005")
 models **2977TB** (.0005" - One-revolution type)
2923SB-10 (.0001")
2910SB-10 (.0001" - One-revolution type)

Recommended digimatic indicators

Metric models: **543-310B** (0.001mm)
 Inch models: **543-312B** (0.001mm/.00005")
 Note: Indicators equipped with rubber bellows, such as waterproof types, cannot be used.



511-426



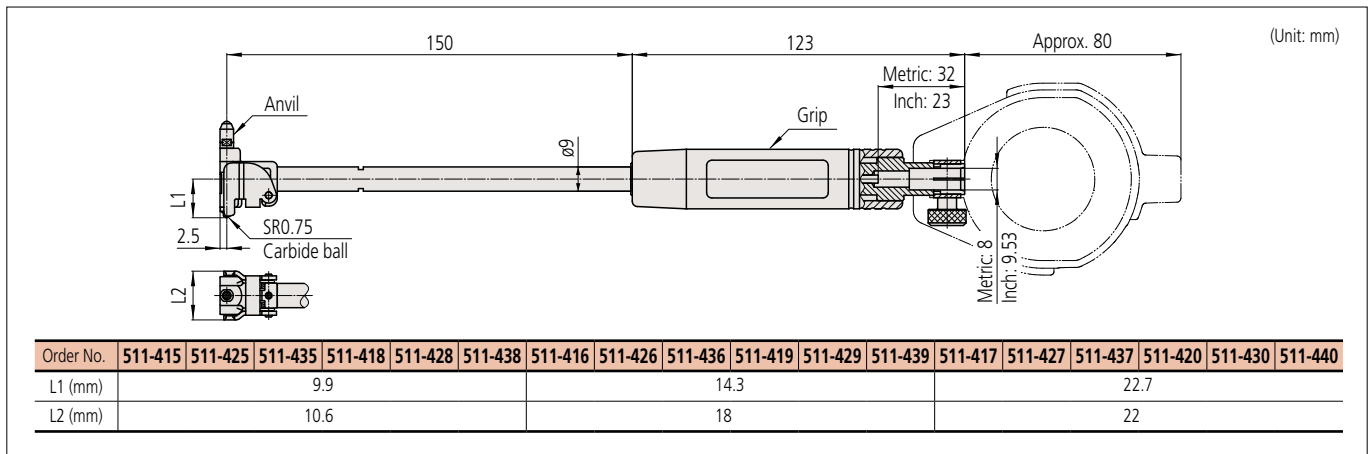
511-427

For Bore Gage Applications



543-310B

DIMENSIONS



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