

Bore Gages for Blind Holes

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



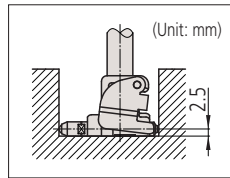
SMALL TOOL INSTRUMENTS AND DATA MANAGEMENT



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 the gage before making a measurement.
- Alternate 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 the standard accessory, or widen a measuring range by using multiple sub-anvils. (The measurement accuracy in such cases is not guaranteed.)

Recommended dial indicators

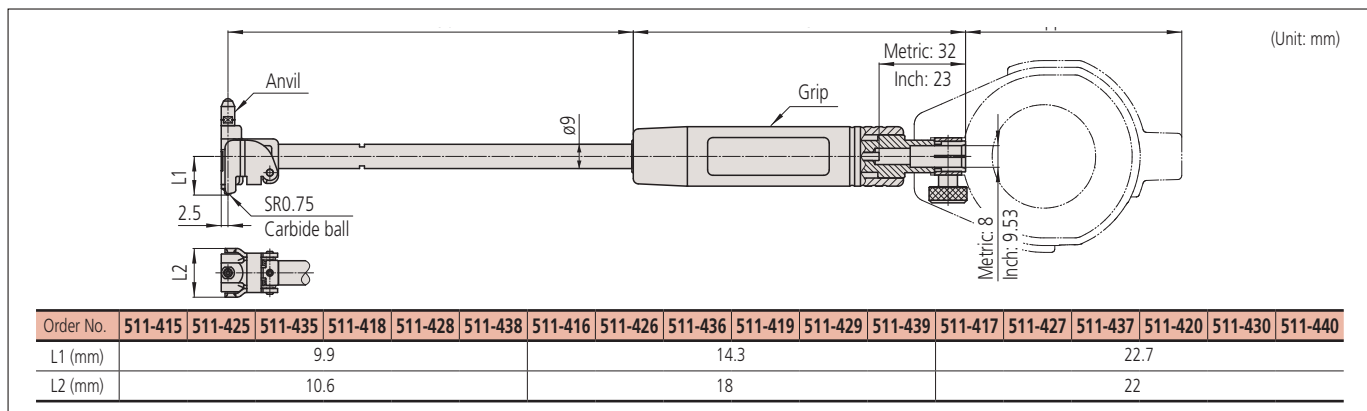
Metric : **2046SB** (0.01mm)
 models **2972TB** (0.01mm - One revolution type)
2109SB-10 (0.001mm)
2900SB-10 (0.001mm - One-revolution type)

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.

DIMENSIONS



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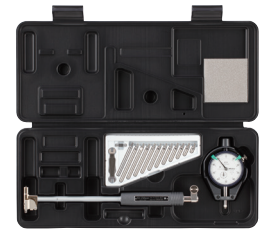
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511-426



511-427

For Bore Gage Applications



543-310B

Coordinate Measuring Machines

Vision Measuring Systems

Form Measurement

Optical Measuring

Sensor Systems

Test Equipment and Seismometers

Digital Scale and DRO Systems

Small Tool Instruments and Data Management