

Bore Gages for Blind Holes

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



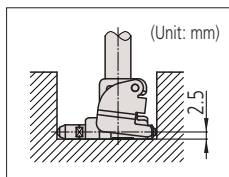
SMALL TOOL INSTRUMENTS AND DATA MANAGEMENT



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

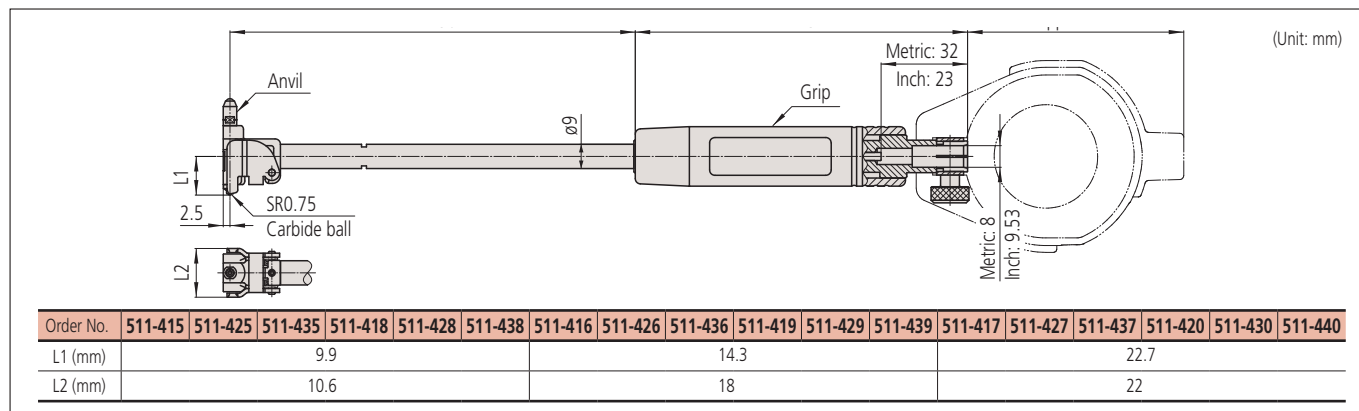
Metric : **2046SB** (0.01mm)
models **2972TB** (0.01mm - One revolution type)
2109SB-10 (0.001mm)
2900SB-10 (0.001mm - One-revolution type)

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



Mitutoyo

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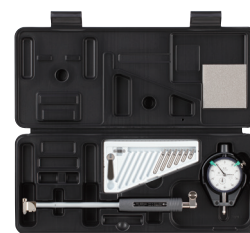
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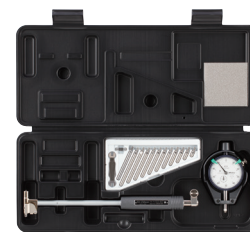
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511-426



511-427

For Bore Gage Applications



NEW
Products

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



Mitutoyo America Corporation

Date: 8/15 Doc No.: PD-DP2015_003

NEW PRODUCT ANNOUNCEMENT

New Part #	Description	List Price	Previous Part #
511-415	Bore Gage, Blind-Hole, 15-35mm, No Indicator	388.00	511-401
511-425	Bore Gage, Blind-Hole, 15-35mm, w/ 2046SB(0.01mm)	454.00	511-411
511-435	Bore Gage, Blind-Hole, 15-35mm, w/ 2109SB-10(0.001mm)	475.00	511-421
511-416	Bore Gage, Blind-Hole, 35-60mm, No Indicator	388.00	511-402
511-426	Bore Gage, Blind-Hole, 35-60mm, w/ 2046SB(0.01mm)	454.00	511-412
511-436	Bore Gage, Blind-Hole, 35-60mm, w/ 2109SB-10(0.001mm)	475.00	511-422
511-417	Bore Gage, Blind-Hole, 50-150mm, No Indicator	395.00	511-404
511-427	Bore Gage, Blind-Hole, 50-150mm, w/ 2046SB(0.01mm)	485.00	511-414
511-437	Bore Gage, Blind-Hole, 50-150mm, w/ 2109SB-10(0.001mm)	510.00	511-424
511-418	Bore Gage, Blind-Hole, 0.6-1.4", No Indicator	425.00	511-406
511-428	Bore Gage, Blind-Hole, 0.6-1.4", w/ 2922SB(.0005")	525.00	511-431
511-438	Bore Gage, Blind-Hole, 0.6-1.4", w/ 2923SB-10(.0001")	555.00	511-441
511-419	Bore Gage, Blind-Hole, 1.4-2.4", No Indicator	435.00	511-407
511-429	Bore Gage, Blind-Hole, 1.4-2.4", w/ 2922SB(.0005")	535.00	511-432
511-439	Bore Gage, Blind-Hole, 1.4-2.4", w/ 2923SB-10(.0001")	555.00	511-442
511-420	Bore Gage, Blind-Hole, 2-6", No Indicator	470.00	511-409
511-430	Bore Gage, Blind-Hole, 2-6", w/ 2922SB(.0005")	570.00	511-434
511-440	Bore Gage, Blind-Hole, 2-6", w/ 2923SB-10(.0001")	605.00	511-444

Discontinued Bore Gages with Recommended Replacements

It is recommended to replace previous 50-100mm and 2-4" models with current 50-150mm and 2-6" models

Recommended Replacement	Previous Part Number
511-417	511-403
511-427	511-413
511-437	511-423
511-420	511-408
511-430	511-433
511-440	511-443

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