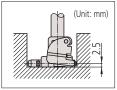
# **Bore Gages for Blind Holes**

#### **FEATURES**

- Capable of ID (inside diameter) measurement close to the bottom of a hole.
- Pendulum guide structure improves sliding.
- Carbide contact faces for durability.

**SPECIFICATIONS** 

- · 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 thegage 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.



511-426



511-427

#### 511-415 | 511-425 | 511-435 | 511-416 | 511-426 | 511-436 | 511-417 | 511-427 | 511-437 Order No. Measuring range

Indicators (low/high resolution)		_	2046SB	2109SB-10	_	2046SB	2109SB-10	_	2046SB	2109SB-10
	Wide-range accuracy					4µm				
Accuracy	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"		

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)

: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.

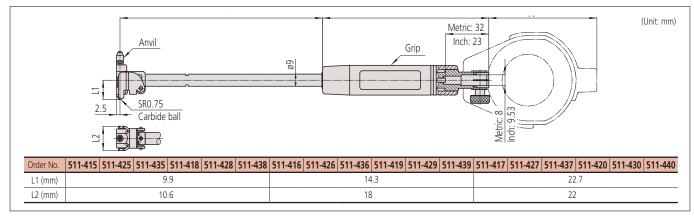
## For Bore Gage Applications





543-310B

## **DIMENSIONS**







# Find additional product literature and our product catalog

www.mitutoyo.com

Note: All information regarding our products, and in particular the illustrations, drawings, dimensional and performance data contained in this printed matter as well as other technical data are to be regarded as approximate average values. We therefore reserve the right to make changes to the corresponding designs. The stated standards, similar technical regulations, descriptions and illustrations of the products were valid at the time of printing. In addition, the latest applicable version of our General Trading Conditions will apply. Only quotations submitted by ourselves may be regarded as definitive. Specifications are subject to change without notice.

Mitutoyo products are subject to US Export Administration Regulations (EAR). Re-export or relocation of our products may require prior approval by an appropriate governing authority

#### Trademarks and Registrations

Designations used by companies to distinguish their products are often claimed as trademarks. In all instances where Mitutoyo America Corporation is aware of a claim, the product names appear in initial

Coordinate Measuring Machines Vision Measuring Systems orm Measurement Sensor Systems Test Equipment Digital Scale and DRO System **Small Tool Instruments** and Data Management

0815-06 August 2015