

ABSOLUTE DIGIMATIC BORE GAGE

CATALOG No. E4208-511



Deep-bore measuring with extreme accuracy!

Mitutoyo

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FEATURES

The unit features a compact digital detector head that eliminates the need for mechanical conversion such as a can mechanism, and the measured value is digitally transmitted to the display unit.

- The Digimatic Bore Gage achieves 0.003mm wide-range accuracy, the highest in Mitutoyo's Bore Gage Series!
- A variety of display and measurement functions.
- Absolute encoders with absolute origin and high sampling frequency (50 times/sec.) are used for superior reliability.
- The Digimatic Bore Gage features a dust/water protection level of IP53.



- Display is 320° rotation and 90° inclination, and grip is 320° rotation.



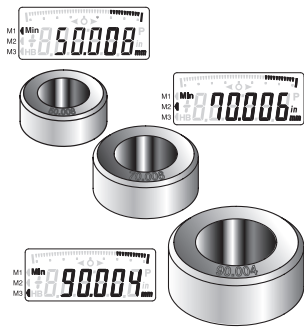
- Digimatic Bore Gage detects the minimum position (diameter) and holds that value automatically



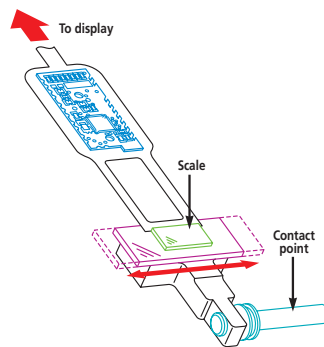
- Easy to read, thanks to digital and analog displays.



- Capable of presetting three reference (master) values, with upper/lower tolerance limits set for each.



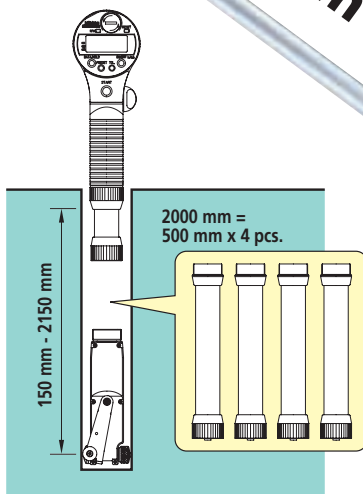
- Long extension is achieved without a loss in accuracy, thanks to electronic connection.



Example of application



Max. 2150mm (84.6")



Bore measurement up to 2150mm (84.6") is realized!

Up to four extension rod [500mm (20") or 250mm (10")] can be used.

SPECIFICATIONS

Order No.	511-521	511-522	511-501	511-502
Measuring range	45-100mm/1.8"-4"	100-160mm/4"-6.4"	45-100mm	100-160mm
Effective stroke of anvil	1.2mm/.048"		1.2mm	
Resolution	0.001mm/0.00005"		0.001mm	
Wide range accuracy* ¹	0.003mm/0.00012" or less		0.003mm or less	
Adjacent error	0.002mm/0.00008" or less		0.002mm or less	
Repeatability	+/-1 count			
Quantization error	+/-1 count			
Measuring force	5N or less			
LCD panel	Seven-segment, six-digit minus sign, in/mm decimal, tolerance-judgment display, analog display			
Data output	SPC			
Battery	Silver oxide cell SR-44(2pcs)			
Battery life	About 9 month for normal use			
Measuring system	Electrostatic capacitance absolute linear encoder			
Sampling frequency	50 times/sec			
Dust/water protection level* ²	IP53			
Operating temperature	0°C to 40°C			
Storage temperature	-10°C to 60°C			
Standard accessories	Anvil: 12pcs (for mm), 13pcs (for inch/mm), changing washer: 4pcs., Allen Wrench: 1pc, SR-44 (938882) 2pcs			
Mass	500g/1.1lbs.	570g/1.2lbs.	500g/1.1lbs.	570g/1.2lbs.

*1 Quantization error is not included.

*2 The dust/water protection level is based on IEC, 529 / JIS, D0207 and C0920.

OPTIONAL ACCESSORIES

21DZA089: Extension rod
250mm/(10")

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250mm/(10")

254-504: DP-VR (100V)

254-504A: DP-1VR (120V)

254-504D: DP-1VR (220V)

254-504E: DP-1VR (230/240V)

905338: SPC cable 1m/(40")

905409: SPC cable 2m/(80")

516-118: Rectangular gauge
block set for master setting



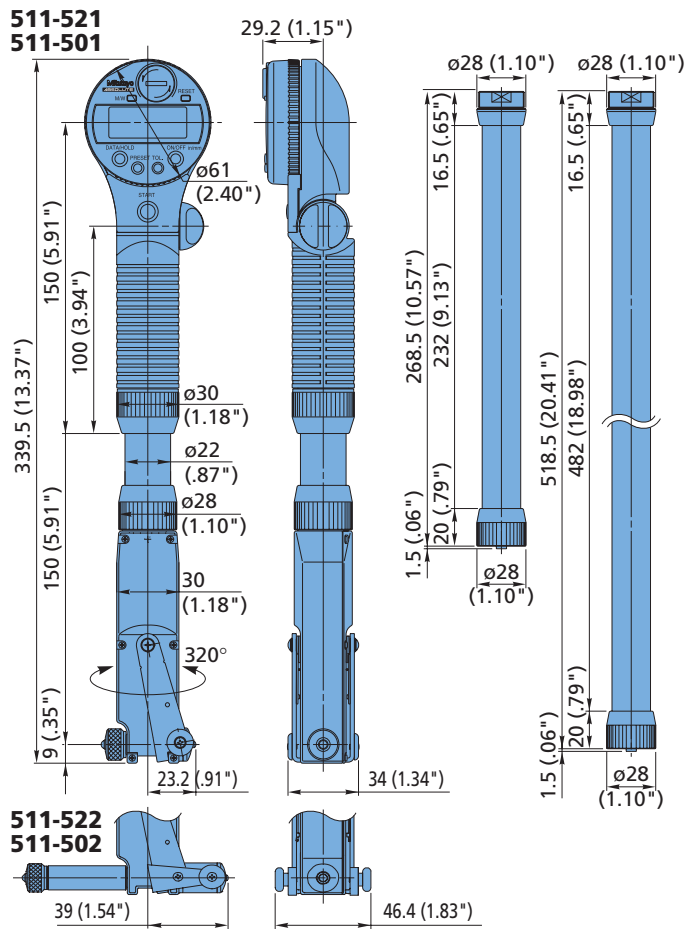
516-119: Square gauge
block set for master setting



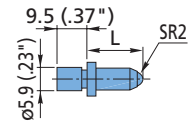
DP-1VR
and SPC cable

Dimensions

Unit: mm (inch)

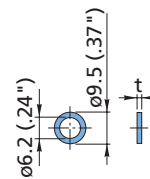


Anvil



Parts no. (mm)	L (mm)	Parts No. (mm)	L (inch/mm)
206945	5.5	207523	0.24"/6.06
206946	10.5	207524	0.44"/11.14
206947	15.5	207525	0.64"/16.22
206948	20.5	207526	0.84"/21.30
206949	25.5	207527	1.04"/26.38
206950	30.5	207528	1.24"/31.46
206951	35.5	207529	1.44"/36.54
206952	40.5	207530	1.64"/41.62
206953	45.5	207531	1.84"/46.70
206954	50.5	207532	2.04"/51.78
206955	55.5	207533	2.24"/56.86
206956	60.5	207534	2.44"/61.94
207119	65.5	207535	2.64"/67.02

Washer



t(mm)	No.
0.5	205457
1	205458
2	205459
3	205460



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Mitutoyo Corporation

20-1, Sakado 1-Chome,
 Takatsu-ku, Kawasaki-shi,
 Kanagawa 213-8533, Japan
 T +81 (0) 44 813-8230
 F +81 (0) 44 813-8231
<http://www.mitutoyo.co.jp>

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