Bore Gages

For easy and accurate measurement of inside diameters

Bore Gages SERIES 511

- Longer plunger stroke with no affect on accuracy.
- Carbide is used for the contact point ensuring high durability and wear resistance.
- This model reduces the influence of heat from the operator's hand by 50% by increasing the grip size and making the grip hollow-structured, thereby retaining high-accuracy 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.
- Optional extension rods can be attached for measuring deep holes. (For details, refer to page C-45.)
- A Bore Gage Checker and a range of Setting Rings are available to aid in accurately setting a gage before making a measurement. (For details, refer to pages C-46 and C-47.)





Dial indicators and protection covers are optional.

SPECIFICATIONS

| Metric | | | | | | | | | | | | |
|--------------------|------------------------|-------------------------|-----------------|-------------|--------------------|--|-----------------------|---------|------------------------|----------------|--------------|-------|
| | Range | Stroke of contact point | Measuring force | Guide force | Content of set | | | | | | | |
| | Marige | | | | Bore gage | Dial indicator | Dial protection cover | Anvil | Interchangeable Washer | Sub-Anvil | Spanner | depth |
| 511-701 | 18-35mm | 1.2mm | 4N or less | 6N or less | 511-701 | Not supplied | Not supplied | 9 pcs. | 4 pcs. | Not supplied | 1 pc. | 100mm |
| 511-702 | 35-60mm | | | | 511-702 | | | 6 pcs. | | | | 150mm |
| 511-703 | 50-150mm | 1.6mm | 5N or less | 10N or less | 511-703 | | | 11 pcs. | | 1 pc. | | |
| 511-704 | 100-160mm | | | | 511-704 | | | 13 pcs. | | Not supplied | Not supplied | |
| 511-705 | 160-250mm | | 6N or less | 15N or less | 511-705 | | | 6 pcs. | 7 pcs. | | | 250mm |
| 511-706 | 250-400mm | | 011 01 1033 | | 511-706 | | | 5 pcs. | · | 1 pc. | | |
| 511-721 | 18-35mm | 1.2mm | 4N or less | 6N or less | 511-701 | 2109SB-10 (Graduation: 0.001mm) | 21DZA000 | 9 pcs. | 2 pcs. | Not supplied | 1 pc. | 100mm |
| 511-722 | 35-60mm | 1.211111 | 114 01 1633 | 014 01 1033 | 511-702 | | | 6 pcs. | | | Not supplied | 150mm |
| 511-723 | 50-150mm | 1.6mm | 5N or less | 10N or less | 511-703 | | | 11 pcs. | CS. 7 pcs. | 1 pc. | | |
| 511-724 | 100-160mm | | | | 511-704 | | | 13 pcs. | | Not supplied . | | |
| 511-725 | 160-250mm | | 6N or less | 15N or less | 511-705 | | | 6 pcs. | | | | 250mm |
| 511-726 | 250-400mm | | | | 511-706 | | | 5 pcs. | | 1 pc. | | 1100 |
| 511-711 | 18-35mm | 1.2mm | 4N or less | 6N or less | 511-701 | 2046SB (Graduation: 0.01mm) | 21DZA000 | 9 pcs. | 2 pcs. 4 pcs. | Not supplied | 1 pc. | 100mm |
| 511-712 | 35-60mm | | | | 511-702 | | | 6 pcs. | | | | 150 |
| 511-713 | 50-150mm | 1.6mm | 5N or less | 10N or less | 511-703 | | | 11 pcs. | | 1 pc. | Not supplied | 150mm |
| 511-714 511-715 | 100-160mm 160-250mm | | | | 511-704 511-705 | | | 13 pcs. | 5. 7 ncs | Not supplied | | |
| | | | 6N or less | 15N or less | 511-705 | | | 6 pcs. | | | | 250mm |
| 511-716 511-921 | 250-400mm | | | | 511-706 | | | 5 pcs. | | 1 pc. | | _ |
| 511-921 | 10 1E0mm | | | | 511-701 | 2046SB | 21074000 | | | | | |
| 511-922 | 18-150mm | _ | _ | _ | 511-702 | 2109SB-10 543-310B | 21DZA000 | _ | _ | _ | _ | |
| 211-322-10 | | | | | 311-/05 | | | | | | | |

| Inch | ı | | | | | | | | | | | | |
|------------|------------|-------------------------|-----------------|-------------|------------------------|---------------------------------------|-----------------------|---------|------------------------|---------------|--------------|----------|--|
| Order No. | Range | Stroke of contact point | Measuring force | Guide force | Content of set Probing | | | | | | | | |
| | | | | | Bore gage | Dial indicator | Dial protection cover | Anvil | Interchangeable Washer | Sub-Anvil | Spanner | depth | |
| 511-731 | .7-1.4" | .047" | 4N or less | 6N or less | 511-731 | Not supplied | Not supplied | 9 pcs. | 4 pcs. | Not supplied | 1 pc. | 4" | |
| 511-732 | 1.4-2.5" | | | | 511-732 | | | 6 pcs. | | | _ | 10" | |
| 511-733 | 2.0-6.0" | .063" | 5N or less | 10N or less | 511-733 | | | 11 pcs. | | 1 pc. | | | |
| 511-734 | 4.0-6.5" | | | | 511-734 | | | 13 pcs. | | Not supplied | Not supplied | | |
| 511-735 | 6.5-10.0" | | 6N or less | 15N or less | 511-735 | | | 6 pcs. | 7 pcs. | 140t supplied | | | |
| 511-736 | 10.0-16.0" | | | | 511-736 | | | 5 pcs. | | 1 pc. | | | |
| 511-751 | .7-1.4" | .047" | 4N or less | 6N or less | 511-731 | 2923SB-10 (Graduation: .0001") | 21DZA000 | 9 pcs. | 2 pcs. | Not supplied | 1 pc. | 4" | |
| 511-752 | 1.4-2.5" | .047 | 414 01 1033 | | 511-732 | | | 6 pcs. | _ | | | | |
| 511-753 | 2.0-6.0" | .063" | 5N or less | 10N or less | 511-733 | | | 11 pcs. | i i | 1 pc. | Not supplied | 6" | |
| 511-754 | 4.0-6.5" | | | | 511-734 | | | 13 pcs. | | Not supplied | | | |
| 511-755 | 6.5-10.0" | | 6N or less | 15N or less | 511-735 | | | 6 pcs. | | - '' | | 10" | |
| 511-756 | 10.0-16.0" | | | | 511-736 | | | 5 pcs. | ' | 1 pc. | | | |
| 511-741 | .7-1.4" | .047" | 4N or less | 6N or less | 511-731 | 29225B (Graduation: .0005") | 21DZA000 | 9 pcs. | 2 pcs. | Not supplied | _ | 4" | |
| 511-742 | 1.4-2.5" | 10 17 | | | 511-732 | | | 6 pcs. | | | | 6" | |
| 511-743 | 2.0-6.0" | .063″ | 5N or less | 10N or less | 511-733 | | | 11 pcs. | 4 pcs. 7 pcs. | 1 pc. | | | |
| 511-744 | 4.0-6.5" | | | | 511-734 | | | 13 pcs. | | Not supplied | Not supplied | <u> </u> | |
| 511-745 | 6.5-10.0" | | 6N or less | 15N or less | 511-735 | | | 6 pcs. | | | | 10" | |
| 511-746 | 10.0-16.0" | | | | 511-736 | | | 5 pcs. | | 1 pc. | | | |
| 511-931 | .7-6.0" | _ | _ | _ | 511-731 | 2922SB | 21DZA000 | | | _ | _ | _ | |
| 511-932 | | | | | 511-732 | 2923SB-10 543-312B | | | _ | | | | |
| 511-935-10 | | | | | 511-733 | | | | | | | | |

Notes: 1) A 50mm sub-anvil is supplied with 511-703, and a 75mm sub-anvil is supplied with 511-706.

- 2) A 2" sub-anvil is supplied with 511-733, and a 3" sub-anvil is supplied with 511-736.
- 3) 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.)

