

## CERAMIC BLOCK GAUGE SET (GRADE 0)



HOW TO MOVE

Free from rust and corrosion, and easy maintenance



## USE

- As reference standard and for general measurement work
- As spacer and prefinished sub-assembly components

## MATERIAL

- Ceramic (Zirconia)

## FEATURES

- Abrasion resistant
- Free from rust and corrosion, and easy maintenance
- Ceramic material is less susceptible to abrasion and aged deterioration than steel
- Non-magnetic
- Conforms to JIS (Grade 0)
- Provided with inspection report

## SPECIFICATIONS

- Section size: 10mm or under: 30(0~-0.3)×9(-0.05~-0.2)mm  
Over 10mm: 35(0~-0.3)×9(-0.05~-0.2)mm
- Coefficient of thermal expansion:  $(9.5 \pm 1) \times 10^{-6} / K$
- ※ Calibration and custom size production are NOT available

## SPECIFICATIONS

| Size (mm) |          | Grade 0               |                                   |
|-----------|----------|-----------------------|-----------------------------------|
| Over      | Or under | Tolerance ( $\mu m$ ) | Dimensional Deviation ( $\mu m$ ) |
| —         | 10       | $\pm 0.12$            | 0.10                              |
| 10        | 25       | $\pm 0.14$            | 0.10                              |
| 25        | 50       | $\pm 0.20$            | 0.10                              |
| 50        | 75       | $\pm 0.25$            | 0.12                              |
| 75        | 100      | $\pm 0.30$            | 0.12                              |

## Comparison between steel and ceramic materials

| Material                         |             | Ceramics (Zirconia) | Steel   |
|----------------------------------|-------------|---------------------|---------|
| Item                             |             |                     |         |
| Hardness                         | HV          | 1,250               | 650~720 |
| Coefficient of thermal expansion | $10^{-6}/K$ | 7~8                 | 11      |
| Specific Gravity                 |             | 6                   | 7.8     |
| Heat conductivity                | W/m·K       | 3                   | 54.4    |

## SET Item

| Order No. | Model No. | Pieces per set | Step (mm) | Nominal Size (mm) | Number of piece | Weight |
|-----------|-----------|----------------|-----------|-------------------|-----------------|--------|
| 150770    | BC-032    | 32             | —         | 1.005             | 1               | 950g   |
|           |           |                | 0.01      | 1.01·1.02...1.09  | 9               |        |
|           |           |                | 0.1       | 1.1·1.2...1.9     | 9               |        |
|           |           |                | 1         | 1·2·3...9         | 9               |        |
|           |           |                | 10        | 10·20·30          | 3               |        |
| 150771    | BC-047    | 47             | —         | 50                | 1               | 2.25kg |
|           |           |                | —         | 1.005             | 1               |        |
|           |           |                | 0.01      | 1.01·1.02...1.09  | 9               |        |
|           |           |                | 0.1       | 1.1·1.2...1.9     | 9               |        |
|           |           |                | 1         | 1·2·3...24        | 24              |        |
|           |           |                | 25        | 25·50·75·100      | 4               |        |

## SINGLE Item

| Order No. | Model No. | Size (mm) | Order No. | Model No. | Size (mm) |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 150720    | BC0-100   | 1         | 150745    | BC0-700   | 7         |
| 150721    | BC0-1-005 | 1.005     | 150746    | BC0-800   | 8         |
| 150722    | BC0-101   | 1.01      | 150747    | BC0-900   | 9         |
| 150723    | BC0-102   | 1.02      | 150748    | BC0-1000  | 10        |
| 150724    | BC0-103   | 1.03      | 150749    | BC0-1100  | 11        |
| 150725    | BC0-104   | 1.04      | 150750    | BC0-1200  | 12        |
| 150726    | BC0-105   | 1.05      | 150751    | BC0-1300  | 13        |
| 150727    | BC0-106   | 1.06      | 150752    | BC0-1400  | 14        |
| 150728    | BC0-107   | 1.07      | 150753    | BC0-1500  | 15        |
| 150729    | BC0-108   | 1.08      | 150754    | BC0-1600  | 16        |
| 150730    | BC0-109   | 1.09      | 150755    | BC0-1700  | 17        |
| 150731    | BC0-110   | 1.1       | 150756    | BC0-1800  | 18        |
| 150732    | BC0-120   | 1.2       | 150757    | BC0-1900  | 19        |
| 150733    | BC0-130   | 1.3       | 150758    | BC0-2000  | 20        |
| 150734    | BC0-140   | 1.4       | 150759    | BC0-2100  | 21        |
| 150735    | BC0-150   | 1.5       | 150760    | BC0-2200  | 22        |
| 150736    | BC0-160   | 1.6       | 150761    | BC0-2300  | 23        |
| 150737    | BC0-170   | 1.7       | 150762    | BC0-2400  | 24        |
| 150738    | BC0-180   | 1.8       | 150763    | BC0-2500  | 25        |
| 150739    | BC0-190   | 1.9       | 150764    | BC0-3000  | 30        |
| 150740    | BC0-200   | 2         | 150765    | BC0-5000  | 50        |
| 150741    | BC0-300   | 3         | 150766    | BC0-6000  | 60        |
| 150742    | BC0-400   | 4         | 150767    | BC0-7500  | 75        |
| 150743    | BC0-500   | 5         | 150768    | BC0-10000 | 100       |
| 150744    | BC0-600   | 6         |           |           |           |