

Mitutoyo
Gauge block set Ceramic, tolerance class 1, Number of gauge blocks: 47

Order data

Order number	481310 47
GTIN	4946368220123
Item class	44A

Description
Version:

Made of ultra-pure ceramic zirconium dioxide (ZrO_2) manufactured in a sintering process.

- **Hardness: With approx. 1350 HV about twice as hard as steel.**
- **Tensile strength: Up to approx. 70 % of the flexural strength of steel. Insensitive to shock and impact.**
- **Wear resistance: Lasts about 10 times longer than steel. No burr formation. No plastic deformation. Scratches and small defects have no influence on the measured result. The surface remains slip capable longer than steel.**
- **Handling / care: Highly resistant to alkalis, acids, oil, and grinding water. No need for time-intensive degreasing before use and re-greasing after use which is required for steel. Low weight is an advantage for large sizes.**
- **Temperature characteristics: Coefficient of expansion $(9.5 \pm 1.0) 10^{-6} K^{-1}$ similar to that of steel. Low thermal conductivity.**
- **Anti-magnetic: Cannot be magnetised.**
- **Slip capability: The homogeneous, high density structure gives optimum holding, even to steel, and easy slip capability. Galling is excluded.**
- **Test certificate: Each gauge block is provided with its own unique identity number. The actual deviation from the nominal dimensions is recorded in the test certificate. The absolute actual dimension is therefore known. Manufacturer's test certificate traceable back to national standards.**

Application:

Tolerance class 1 as working and adjusting master for gauge checking. For inspection rooms.

Content:

1 pc. each of size: 1.005; 20; 30; 40; 50; 60; 70; 80; 90; 100 mm
 Graduation 0.01: 21 pcs. 1.00 – 1.20 mm
 Graduation 0.1: 8 pcs. 1.3 – 2.0 mm
 Graduation 1.0: 8 pcs. 3 – 10 mm

Technical description

Number of gauge blocks	47
Standard	DIN EN ISO 3650
Tolerance class	1
Hardness	1350 HV
Material	Zirconium Oxide (ZrO ₂) ceramic material
Test certificate	Manufacturer's test certificate
Packaging	sturdy box
Calibration	S17
Type of product	Gauge block

Services

CalibrationGauge block set, steel / ceramic Set contents 47	020850 47
DAkkS calibrationGauge block set, ceramic Set contents 47	020870 47