

## Gauge Blocks

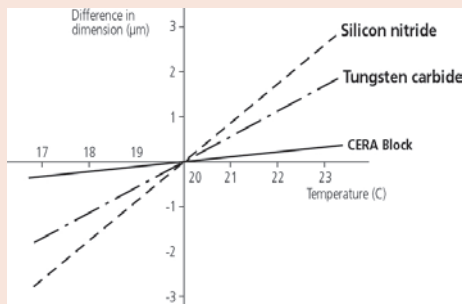
### Series 516

#### 9. Closest Expansion Coefficient to Steel

The thermal expansion coefficient of a CERA Block is quite similar to that of a steel gauge block.

#### 10. Highly Resistant to Dropping and Impact

The CERA Block material is one of the toughest ceramics. It is extremely difficult to crack a CERA block in normal use.



Differences in the dimension between some materials and steel that are obtained when measuring testpieces with a length of 100 mm at each temperature.

### Grade and Application

The following information can be used to select the gauge block grade according to usage (specified by DIN861, BS4311, JIS B 7506 and EN ISO 3650).

#### Grade 2:

These gauge blocks are intended for shop floor use to set and calibrate fixtures as well as precision instruments.

#### Grade 1:

This grade is used within an inspection area to verify the accuracy of plug and snap gauges as well as for setting electronic measuring devices.

#### Grade 0:

These higher accuracy gauges are intended for use within a controlled environment by skilled inspection staff. Mainly used as reference standards for setting high precision measuring equipment and for the calibration of lower grade gauge blocks.

#### Grade K:

Gauge blocks of this accuracy are intended for use within a temperature controlled inspection room or calibration laboratory. They should be used as masters with certificates against other gauge blocks which are calibrated by comparison.

### Certificates

#### ILAC

The International Laboratory Accreditation Cooperation is an international cooperation of laboratory and inspection accreditation bodies. The member bodies signed the ILAC Mutual Recognition Arrangement (MRA) which guarantees a cross approval of certificates from accredited laboratories from other countries. The Signatories to the ILAC arrangement are almost all European countries.

#### JCSS

Mitutoyo Gauge Block Sets can be delivered with a JCSS Certificate of Calibration (Japan Calibration Service System). A JCSS Certificate of Calibration is comparable with e.g. DAKKS, COFRAC, RvA or UKAS Certificate of Calibration. Refer to ILAC this calibration result may be accepted internationally.