

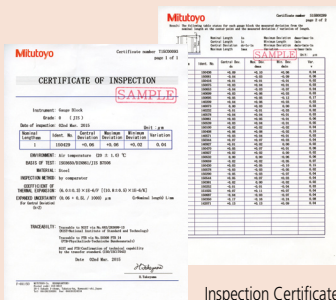


An inspection certificate is supplied as standard.  
Refer to page E-4 for details.

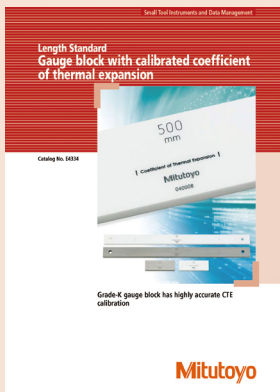
## Suffix Number\* (-■■■) for Selecting Standard Required

ISO/DIN/JIS			
Suffix No.	Grade	Inspection Certificate	Calibration Certificate
-01B	K	○	○
ASME			
Suffix No.	Grade	Inspection Certificate	Calibration Certificate
-51B	K	○	○
BS			
Suffix No.	Grade	Inspection Certificate	Calibration Certificate
-11B	K	○	○

\* Only for 100 mm type



Inspection Certificate



For details, please refer to Leaflet No. E4334 "Gauge Block with calibrated coefficient of thermal expansion".



An inspection certificate is supplied as standard.  
Refer to page E-4 for details.



For details, please refer to Leaflet No. E4331 "ZERO CERA BLOCK"

## Gauge Blocks with Calibrated Coefficient of Thermal Expansion

- Mitutoyo offers top-quality gauge blocks (steel and ceramic), superior to K class blocks due to their advanced manufacturing technologies.
- Features an accurately calibrated thermal expansion coefficient measured with a proprietary double-faced interferometer (DFI).
- Each gauge block is calibrated for length on a highly accurate gauge block interferometer (GBI) system.
- Available as rectangular gauge blocks in the range 100 to 500 mm.



### SPECIFICATIONS

Metric Blocks with CTE			Inch Blocks with CTE		
Order No. (steel)*	Order No. (CERA)*	Length (mm)	Order No. (steel)*	Order No. (CERA)*	Length (inch)
611681	613681	100	611204	613204	4
611802	613802	125	611205	613205	5
611803	613803	150	611206	613206	6
611804	613804	175	611207	613207	7
611682	613682	200	611208	613208	8
611805	613805	250	611222	613222	10
611683	613683	300	611223	613223	12
611684	613684	400	611224	613224	16
611685	613685	500	611225	613225	20
Grade			K class in JIS/ASME/ISO		
Uncertainty of thermal expansion coefficient			$0.035 \times 10^{-6}/K$ ( $k = 2$ )		
Uncertainty of length measurement			30 nm ( $k = 2$ ), for 100 mm block		

Note: An inspection certificate and a JCSS calibration certificate are supplied as standard.

A calibration report and a calibration certificate for the thermal expansion coefficient are also supplied as standard.

## ZERO CERA Blocks

- Thermal expansion in the temperature range  $20 \pm 1^\circ C$  is less than  $1/500$  that of steel ( $0 \pm 0.02 \times 10^{-6}/K(20^\circ C)$ )
- Almost no secular change both in dimension and coefficient of thermal expansion
- Complementary ultra-low thermal expansion and high specific rigidity (Young's modulus/specific gravity)



### SPECIFICATIONS

Metric Blocks			Length (mm)
JIS/ISO/DIN	BS	ASME	
617673-016	617673-116	617673-516	30
617675-016	617675-116	617675-516	50
617681-016	617681-116	617681-516	100
617682-016	617682-116	617682-516	200
617683-016	617683-116	617683-516	300
617684-016	617684-116	617684-516	400
617685-016	617685-116	617685-516	500
617840-016	617840-116	617840-516	600
617841-016	617841-116	617841-516	700
617843-016	617843-116	617843-516	800
617844-016	617844-116	617844-516	900
617845-016	617845-116	617845-516	1000
516-771-60	516-771-61	516-771-66	Above set