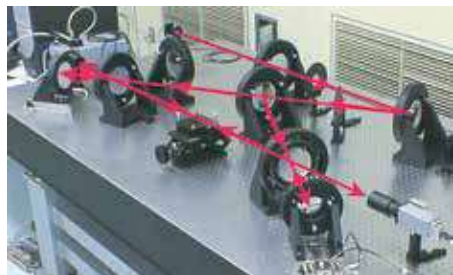


# Rectangular Gage Block with CTE

## Gage Blocks with Thermal Expansion Coefficient Data

### FEATURES

- Mitutoyo offers top-level gage blocks (steel and ceramic) which are superior to K class blocks.
- Comes with a highly accurate thermal expansion coefficient measured with a high-accuracy double-faced interferometer (DFI).
- The high-accuracy gage block interferometer (GBI) guarantees high dimensional accuracy.
- Mitutoyo offers rectangular gage blocks, having nominal values from 100 to 500mm  
Grade: K class in ASME  
Uncertainty of thermal expansion coefficient:  $0.035 \times 10^{-6}/K$  ( $k = 2$ )  
Uncertainty of dimension measurement: 30nm ( $k = 2$ ), for 100mm block



Double-faced interferometer (DFI)

### SPECIFICATIONS

Metric Block with CTE		
Length (mm)	Order No. Steel	Order No. CERA
100	611681-51B	613681-51B
125	611802-51B	613802-51B
150	611803-51B	613803-51B
175	611804-51B	613804-51B
200	611682-51B	613682-51B
250	611805-51B	613805-51B
300	611683-51B	613683-51B
400	611684-51B	613684-51B
500	611685-51B	613685-51B

Inch Block with CTE		
Length (inch)	Order No. Steel	Order No. CERA
4	611204-51B	613204-51B
5	611205-51B	613205-51B
6	611206-51B	613206-51B
7	611207-51B	613207-51B
8	611208-51B	613208-51B
10	611222-51B	613222-51B
12	611223-51B	613223-51B
16	611224-51B	613224-51B
20	611225-51B	613225-51B

### Suffix Number for Selecting Standard and Certificate Provided

ASME	
Grade K	Steel, CERA
	-51B

-51B: provided with JCSS Calibration Certificate and Inspection Certificate



Inspection Certificate

### ZERO CERA Blocks

- Thermal expansion in the temperature range  $20 \pm 1^\circ C$  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			
Order No.			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

