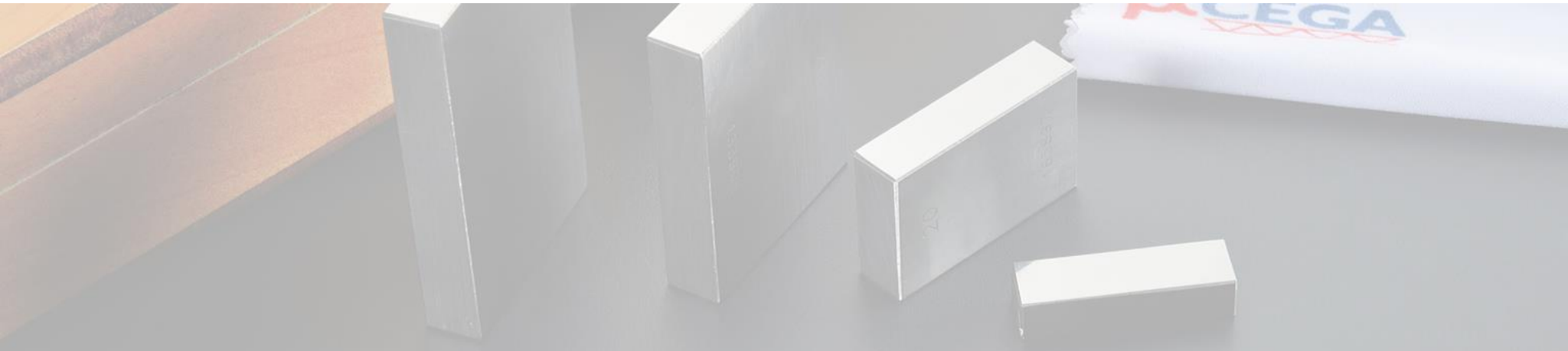


Focus on 0.0000mm.

Gauge Block





■ Application

■ As standard part, using comparison method to measure the size, or used for calibration and adjustment of measurement instrument;

■ Used for measure size directly ;

■ Used in the adjustment of precision machines and precision mark during machining ;

■ As length standard, passing the measurement of size ;

Used for inspecting the error of instrument.



Level & Application

		Level
Workshop	Installation tools and cutting tools	2
	Production Counter	1 or 2
	Calibration instrument	
Inspection	Inspection of mechanical parts , tools and etc	1 or 2
	Check accuracy of measurement instrument	0 or 1
	Calibration instrument	
Calibration	Check accuracy of block gauge in workshop	K or 0
	Inspect block gauge	
	Check the instrument accuracy	
Benchmark	Calibration block gauge	k
	Academic research	

Level 2:

This kind of block gauge used in the workshop, used to adjust or check fixture or calibrate precision instruments.

Level 1:

This kind of block gauge used in the inspection area, used to validate or adjust the precision measurement instruments quickly.

Level 0:

This kind of high precision block gauge used by senior inspector in a controlled environment, mainly as the adjustment of high precision measuring equipment and calibration the benchmark of lower level gauge block.

Level k:

This kind of gauge block used in temperature controlled Checkout room or calibration laboratory, mainly used as calibration gauges, to calibrate other block gauge by comparing.

80010- YK-516



GAUGE BLOCK METAL

Features :Metal

Proportion :7.8

Hardness :HRC62-64°C

Thermal expansion degree :11.5



Characteristic

■ Gauge is frequently-used tool for linear measurement. Used to adjust, inspect precision products and instrument.

■ Gauge can be used individually or combined, hardness is HRC62-64°C.

■ Gauge is non-magnetic and with special heat treatment to stabilize the size.

Parameter

Order No	Model	Blocks per set	Precision Grade	Nominal dimensions(mm)	Dimensional Increment(mm)	Qty. of each type of block	USA
80010-32-0	YK-516-32-H0	32	0	1.005	/	1	475
80010-32-1	YK-516-32-H1	32	1	1.01~1.09	0.01	9	294
80010-32-2	YK-516-32-H2	32	2	1.1~1.9	0.1	9	163
				1~10	1	10	
				20,30,50	/	3	
80010-38-0	YK-516-38-H0	38	0	1.005	/	1	600
80010-38-1	YK-516-38-H1	38	1	1.01~1.09	0.01	9	373
80010-38-2	YK-516-38-H2	38	2	1.1~1.9	0.1	9	210
				1~10	1	10	
				20~100	10	9	
80010-47-0	YK-516-47-H0	47	0	1.005	/	1	670
80010-47-1	YK-516-47-H1	47	1	1.01~1.19	0.01	19	420
80010-47-2	YK-516-47-H2	47	2	1.2~1.9	0.1	8	238
				1~10	1	10	
				20~100	10	9	
80010-87-0	YK-516-87-H0	87	0	1.001~1.009	0.001	9	1091
80010-87-1	YK-516-87-H1	87	1	1.01~1.49	0.01	49	670
80010-87-2	YK-516-87-H2	87	2	0.5~9.5	0.5	19	374
				10~100	10	10	
80010-103-0	YK-516-103-H0	103	0	1.005	/	1	1309
80010-103-1	YK-516-103-H1	103	1	1.01~1.49	0.01	49	804
80010-103-2	YK-516-103-H2	103	2	0.5~24.5	0.5	49	453
				25~100	25	4	
80010-112-0	YK-516-112-H0	112	0	1.005	/	1	1633
80010-112-1	YK-516-112-H1	112	1	1.001~1.009	0.001	9	1004
80010-112-2	YK-516-112-H2	112	2	1.01~1.49	0.01	49	531
				0.5~24.5	0.5	49	
				25~100	25	4	
80010-122-0	YK-516-122-H0	122	0	1	-	1	1778
				1.0005	-	1	
				1.001~1.009	0.001	9	
80010-122-1	YK-516-122-H1	122	1	1.01~1.49	0.01	49	1094
				1.5~1.9	0.1	5	
				2~25	0.5	47	
80010-122-2	YK-516-122-H2	122	2	30~70	10	5	578
				75	-	1	
				80~100	10	3	

80020-YK516



GAUGE BLOCK TUNGSTEN CARBIDE

Features :Tungsten Carbide

Proportion:15.0

Hardness:HRA91

Themal expansion degree 5.5



Characteristic

- Gauge is frequently-used tool for linear measurement. Used to adjust, inspect precision products and instrument.
- Gauge can be used individually or combined.
- Gauge is made from tungsten steel material, through special processing, hardness HRA91
- High hardness and wear resistance, not easy deformation and high precision.

Parameter

Order No	Model	Blocks per set	Precision Grade	Nominal dimensions (mm)	Dimensional Increment (mm)	Qty. of each type of block	USA
80020-32-0	YK-516-32-C0	32	0	1.005	/	1	1135
80020-32-1	YK-516-32-C1	32	1	1.01~1.09	0.01	9	907
80020-32-2	YK-516-32-C2	32	2	1.1~1.9	0.1	9	860
				1~10	1	10	
				20,30,50	/	3	
80020-38-0	YK-516-38-C0	38	0	1.005	/	1	2062
80020-38-1	YK-516-38-C1	38	1	1.01~1.09	0.01	9	1719
80020-38-2	YK-516-38-C2	38	2	1.1~1.9	0.1	9	1595
				1~10	1	10	
				20~100	10	9	
80020-47-0	YK-516-47-C0	47	0	1.005	/	1	2448
80020-47-1	YK-516-47-C1	47	1	1.01~1.19	0.01	19	2097
80020-47-2	YK-516-47-C2	47	2	1.2~1.9	0.1	8	1091
				1~10	1	10	
				20~100	10	9	
80020-87-0	YK-516-87-C0	87	0	1.001~1.009	0.001	9	3135
80020-87-1	YK-516-87-C1	87	1	1.01~1.49	0.01	49	2510
80020-87-2	YK-516-87-C2	87	2	0.5~9.5	0.5	19	2304
				10~100	10	10	
80020-103-0	YK-516-103-C0	103	0	1.005	/	1	3475
80020-103-1	YK-516-103-C1	103	1	1.01~1.49	0.01	49	2750
80020-103-2	YK-516-103-C2	103	2	0.5~24.5	0.5	49	2489
				25~100	25	4	
80020-112-0	YK-516-112-C0	112	0	1.005	/	1	3654
80020-112-1	YK-516-112-C1	112	1	1.001~1.009	0.001	9	2888
80020-112-2	YK-516-112-C2	112	2	1.01~1.49	0.01	49	2750
				0.5~24.5	0.5	49	
				25~100	25	4	
80020-122-0	YK-516-122-C0	122	0	1	-	1	3980
				1.0005	-	1	
				1.001~1.009	0.001	9	
80020-122-1	YK-516-122-C1	122	1	1.01~1.49	0.01	49	3055
				1.5~1.9	0.1	5	
				2~25	0.5	47	
80020-122-2	YK-516-122-C2	122	2	30~70	10	5	2915
				75	-	1	
				80~100	10	3	

80030- YK-516



GAUGE BLOCK CERAMIC

Features: Ceramic

Proportion: 6.0

Hardness: HV1200

Thermal expansion degree : 11



Characteristic

- High wear resistance, service life is 5~10 times of steel.
- Strong corrosion resistance, no special protection in using and less maintenance. Long service time for precision measurement.
- Microcrystalline materials, Surface with the ultra-precision processing to ensure stability. Tiny affected by temperature, it's unique advantage.

Parameter

Order No	Model	Quantity(pcs)	Precision Grade	Nominal dimensions(mm)	Dimensional Increment (mm)	Qty. of each type of block	USA
80030-32-0	YK-516-32-D0	32	0	1.005 1.01~1.09 1.1~1.9 1~10	/ 0.01 0.1 1	1 9 9 10	3388
80030-32-1	YK-516-32-D1	32	1	20,30,50	/	3	1694
80030-38-0	YK-516-38-D0	38	0	1.005 1.01~1.09 1.1~1.9 1~10	/ 0.01 0.1 1	1 9 9 10	3987
80030-38-1	YK-516-38-D1	38	1	20~100	10	9	1994
80030-47-0	YK-516-47-D0	47	0	1.005 1.01~1.19 1.2~1.9 1~10	/ 0.01 0.1 1	1 19 8 10	4773
80030-47-1	YK-516-47-D1	47	1	20~100	10	9	2387
80030-87-0	YK-516-87-D0	87	0	1.001~1.009 1.01~1.49 0.5~9.5 10~100	0.001 0.01 0.5 10	9 49 19 10	7531
80030-87-1	YK-516-87-D1	87	1			10	3766
80030-103-0	YK-516-103-D0	103	0	1.005 1.01~1.49 0.5~24.5 25~100	/ 0.01 0.5 25	1 49 49 4	8638
80030-103-1	YK-516-103-D1	103	1				4319
80030-112-0	YK-516-112-D0	112	0	1.005 1.001~1.009 1.01~1.49 0.5~24.5 25~100	/ 0.001 0.01 0.5 25	1 9 49 49 4	9308
80030-112-1	YK-516-112-D1	112	1				4654
80010-122-2	YK-516-122-H0	122	0	1 1.0005 1.001~1.009	- - 0.001	1 1 9	10556
80030-122-0	YK-516-122-H1	122	1	1.01~1.49 1.5~1.9 2~25 30~70 75 80~100	0.01 0.1 0.5 10 - 10	49 5 47 5 1 3	5278

■Block Gauge Feature

■Lock Gauges With Center Holes

Use connecting rod through center holes and nuts to lock block gauges.

■Set Height Datum

Using flat measurement claw and gauges to make precise height datum simply.

■Make Measurement Clamp

Make special clamp simply for repeated measurement instrument.

■Can measure section size(Max 24.1*24.1)

Block gauge and keep location of crosswise and lengthway . There are many applications such as location of cutting tools, measure angle combined with sine rod, inspect taper combined with roller as well as calibration of Measurement micrometer.

■Tolerance Table of Block Gauge

Precision Standard:GB6093-2003(China)20°C Accuracy(μm)

Precision Standard:DIN861-1980(Germany)20°C Accuracy(μm)



Nominal length(μinch)	Lever K***	Lever 0	Lever 1	Lever 2
	Limit of Tolerance (±)			
0.5~10	0.20	0.12	0.20	0.45
10~25	0.30	0.14	0.30	0.60
25~50	0.40	0.20	0.40	0.80
50~75	0.50	0.25	0.50	1.00
75~100	0.60	0.30	0.60	1.20
100~150	0.80	0.40	0.80	1.60
150~200	1.00	0.50	1.00	2.00
200~250	1.20	0.60	1.20	2.40
250~300	1.40	0.70	1.40	2.80
300~400	1.80	0.90	1.80	3.60
400~500	2.20	1.10	2.20	4.40
500~600	2.60	1.30	2.60	5.00
600~700	3.00	1.50	3.00	6.00
700~800	3.40	1.70	3.40	6.50
800~900	3.80	1.90	3.80	7.50
900~1000	4.20	2.00	4.20	8.00

Precision Standard:DIN861-1980(Germany)20°C Accuracy(μm)



Nominal length(μinch)	Lever K***	Lever 0	Lever 1	Lever 2
	Limit of Tolerance (±)			
0.5~10	±0.15	±0.12	±0.25	±0.50
10~25	±0.15	±0.15	±0.30	±0.60
25~50	±0.20	±0.20	±0.40	±0.80
50~75	±0.25	±0.25	±0.50	±1.00
75~100	±0.30	±0.30	±0.60	±1.20

Precision Standard:DIN861-1980(Germany)20°C Accuracy(μm)



Nominal length(μinch)	Lever K***	Lever 0	Lever 1	Lever 2
	极限公差			
0.5~10	±0.05	±0.1	±0.15	±0.25
01"~2"	±2	±4	±6	±10
50~150mm	±0.05	±0.10	±0.15	±0.25
2"~6"	±2	±4	±6	±10
150~500mm	0.1	0.15	0.18	0.25
6"~20"	±4	±6	±7	±10
500~1000mm	±0.15	±0.18	±0.20	±0.25
20"~40"	±6	±7	±8	±10