



Gage Block Tolerances: B89.1.9

Inch System: Tolerances expressed in microinches (.000001") 1 millionth of an inch

	Order Webber Grade LM			Order Webber Grade AA B89.1.9 Grade 00			Order Webber Grade A1 B89.1.9 Grade 0		
	Size Tolerance	Variation in Length Tolerance	Flatness Tolerance	Size Tolerance	Variation in Length Tolerance	Flatness Tolerance	Size Tolerance	Variation in Length Tolerance	Flatness Tolerance
Thru .050"	+1.2/-1.2	1.2	1.2	+4/-4	2	2	+6/-6	4	4
Thru .400"	+1.2/-1.2	1.2	1.2	+3/-3	2	2	+5/-5	4	4
Thru 1"	+1.2/-1.2	1.2	1.2	+3/-3	2	2	+6/-6	4	4
Thru 2"	+2.0/-2.0	1.2	1.2	+4/-4	2	2	+8/-8	4	4
Thru 3"	+3.0/-3.0	1.2	1.2	+5/-5	3	Rect (2) Sq. (3)	+10/-10	4	4
Thru 4"	+4.0/-4.0	1.2	1.2	+6/-6	3	Rect (2) Sq. (3)	+12/-12	5	4
Thru 5"				+8/-8	3	Rect (2) Sq. (3)	+16/-16	5	4
Thru 6"				+8/-8	3	Rect (2) Sq. (3)	+16/-16	5	4
Thru 7"				+10/-10	4	4	+20/-20	6	6
Thru 8"				+10/-10	4	4	+20/-20	6	6
Thru 10"				+12/-12	4	4	+24/-24	6	6
Thru 12"				+14/-14	4	4	+28/-28	7	6
Thru 16"				+18/-18	5	4	+36/-36	8	6
Thru 20"				+20/-20	6	4	+44/-44	10	6

	Not Available from Webber B89.1.9 Grade AS1			Not Available from Webber B89.1.9 Grade AS2		
	Size Tolerance	Variation in Length Tolerance	Flatness Tolerance	Size Tolerance	Variation in Length Tolerance	Flatness Tolerance
Thru .050"	+12/-12	6	6	+24/-24	12	10
Thru .400"	+8/-8	6	6	+18/-18	12	10
Thru 1"	+12/-12	6	6	+24/-24	12	10
Thru 2"	+16/-16	6	6	+32/-32	12	10
Thru 3"	+20/-20	6	6	+40/-40	14	10
Thru 4"	+24/-24	8	6	+48/-48	14	10
Thru 5"	+32/-32	8	6	+64/-64	16	10
Thru 6"	+32/-32	8	6	+64/-64	16	10
Thru 7"	+40/-40	10	7	+80/-80	16	10
Thru 8"	+40/-40	10	7	+80/-80	16	10
Thru 10"	+48/-48	10	7	+104/-104	18	10
Thru 12"	+56/-56	10	7	+112/-112	20	10
Thru 16"	+72/-72	12	7	+144/-144	20	10
Thru 20"	+88/-88	14	7	+176/-176	24	10

**Suggested Replacement Grades
for GGG-G-15C**

GGG-G-15C Grade	Webber Grade	B89.1.9 Grade
0.5	LM	—
1	AA	00
2	A1	0
3	A	AS1

NOTE: The above replacement grades are suggested in B89.1.9. However, the tolerances specified in GGG-G-15C and B89.1.9 are not exactly the same. Gage blocks meeting B89.1.9 specifications may not meet GGG-G-15C requirements and vice versa.

◆ B89.1.9 Grade 00 exceeds DIN, ISO, BS Grades K

MATERIAL COEFFICIENTS OF THERMAL EXPANSION ARE:

Chromium Carbide 4.7 x 10⁻⁶ inch/°F per inch

SAE 52100 Steel 6.4 x 10⁻⁶ inch/°F per inch

Ceramic 5.5 x 10⁻⁶ inch/°F per inch