

Gauge Blocks

Length Standards Brought to You by Mitutoyo



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

Metric/Inch Square Gauge Block Sets SERIES 516 — Metric Block Sets, Long Block Sets, Wear Block Sets

- Square gauge block sets have several unique characteristics (refer to page E-4 for details.). A wide choice is provided to best match the target applications: sets containing from 2 to 112 blocks are available.
- Mitutoyo accessory sets are available for expanding the range of square gauge block applications, especially for rapid assembly of precision gages.



Steel 112-block set



Steel 103-block set



Steel 76-block set



Steel 47-block set



Steel 32-block set

Wear block set



Tungsten Carbide

Long block set



Steel 8-block set

The wear to a frequently used square gauge block set can be drastically reduced by using tungsten-carbide wear blocks on the ends of a stack. There are two types available, of nominal dimensions 1 mm and 2 mm. These blocks are much more wear-resistant than steel blocks, and they also absorb most of the wear that would otherwise occur to the blocks in the set due to contact, and therefore maximize the set's longevity. Wear blocks are relatively inexpensive and can be readily discarded when no longer serviceable. To achieve maximum protection, the same face of each wear block should always be wrung to a set block, so the opposite, wearing, face never touches a set block.



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***Suffix Number (■) for Selecting Standard and Certificate Provided**

ISO/DIN/JIS

Suffix No.	Inspection Certificate	Calibration Certificate	
		JCSS	
1	✓	—	
6	✓	✓	

ASME

Suffix No.	Inspection Certificate	Calibration Certificate	
		JCSS	
1	✓	—	



Inspection Certificate

SPECIFICATIONS

Blocks per set	Order No.		Standard/grade available and Suffix No.*		Blocks included in set		
	Steel	CERA	ISO/DIN/JIS	ASME	Size (mm)	Step (mm)	Qty.
112	516-437	—	—	00: -■6	1.005	—	1
	516-438	—	0: -■0	0: -■6	1.001 - 1.009	0.001	9
	516-439	—	1: -■0	1: -■6	1.01 - 1.49	0.01	49
	516-440	—	2: -■0	2: -■6	0.5 - 24.5	0.5	49
	—	—	—	—	25 - 100	25	4
103	516-441	—	—	00: -■6	1.005	—	1
	516-442	—	0: -■0	0: -■6	1.01 - 1.49	0.01	49
	516-443	—	1: -■0	1: -■6	0.5 - 24.5	0.5	49
	516-444	—	2: -■0	2: -■6	25 - 100	25	4
76	516-449	—	—	00: -■6	1.005	—	1
	516-450	—	0: -■0	0: -■6	1.01 - 1.49	0.01	49
	516-451	—	1: -■0	1: -■6	0.5 - 9.5	0.5	19
	516-452	—	2: -■0	2: -■6	10 - 40	10	4
	—	—	—	—	50 - 100	25	3
47	516-457	—	—	00: -■6	1.005	—	1
	516-458	—	0: -■0	0: -■6	1.01 - 1.09	0.01	9
	516-459	—	1: -■0	1: -■6	1.1 - 1.9	0.1	9
	516-460	—	2: -■0	2: -■6	1 - 24	1	24
	—	—	—	—	25 - 100	25	4
32	516-465	—	—	00: -■6	1.005	—	1
	516-466	—	0: -■0	0: -■6	1.01 - 1.09	0.01	9
	516-467	—	1: -■0	1: -■6	1.1 - 1.9	0.1	9
	516-468	—	2: -■0	2: -■6	1 - 9	1	9
	—	—	—	—	10 - 30	10	3
—	—	—	—	60	—	1	

Metric Long Block Sets

Blocks per set	Order No.		Standard/grade available and Suffix No.*		Blocks included in set		
	Steel	CERA	ISO/DIN/JIS	ASME	Size (mm)	Step (mm)	Qty.
8	516-751	—	—	00: -■6	125, 150, 175	25	3
	516-752	—	0: -■0	0: -■6	200, 250	50	2
	516-753	—	1: -■0	1: -■6	300, 400, 500	100	3
	516-754	—	2: -■0	2: -■6	—	—	—
	—	—	—	—	—	—	—

Metric Wear Block Sets

Blocks per set	Order No.		Standard/grade available and Suffix No.*		Blocks included in set		
	Steel	CERA	ISO/DIN/JIS	ASME	Size (mm)	Step (mm)	Qty.
2	516-820	—	0: -■0	—	1	—	2
	516-821	—	1: -■0	—	—	—	—
2	516-822	—	0: -■0	—	2	—	2
	516-823	—	1: -■0	—	—	—	—

Inch Block Sets

Blocks per set	Order No.		Standard/grade available and Suffix No.*		Blocks included in set		
	Steel	CERA	ISO/DIN/JIS	ASME	Size (in)	Step (in)	Qty.
81	516-401	516-201	—	00: -■6	0.1001 - 0.1009	0.0001	9
	516-402	516-202	—	0: -■6	0.101 - 0.149	0.001	49
	516-403	516-203	—	1: -■6	0.05 - 0.95	0.05	19
	516-404	516-204	—	2: -■6	1 - 4	1	4
36	516-421	516-221	—	00: -■6	0.05 in	—	1
	516-422	516-222	—	0: -■6	0.1001 - 0.1009	0.0001	9
	516-423	516-223	—	1: -■6	0.101 - 0.109	0.001	9
	516-424	516-224	—	2: -■6	0.11 - 0.19	0.01	9
	—	—	—	—	0.1 - 0.5	0.1	5
28	516-417	—	—	00: -■6	0.02005	—	1
	516-418	—	—	0: -■6	0.0201-0.0209	0.0001	9
	516-419	—	—	1: -■6	0.021-0.029	0.001	9
	516-420	—	—	2: -■6	0.010-0.090	0.01	9
	—	—	—	—	—	—	—

Inch Long Block Sets

Blocks per set	Order No.		Standard/grade available and Suffix No.*		Blocks included in set		
	Steel	CERA	ISO/DIN/JIS	ASME	Size (in)	Step (in)	Qty.
8	516-762	—	—	0: -■0	5 - 7	1	3
	516-763	—	—	1: -■0	8, 10, 12	2	3
	—	—	—	—	16, 20	4	2

Inch Wear Block Sets

Blocks per set	Order No.		Standard/grade available and Suffix No.*		Blocks included in set		
	Carbide	CERA	ISO/DIN/JIS	ASME	Size (in)	Step (in)	Qty.
2	516-824	516-846	—	0: -■0	0.05	—	2
	516-825	516-847	—	1: -■0	—	—	—
2	516-826	516-844	—	0: -■0	0.1	—	2
	516-827	516-845	—	1: -■0	—	—	—