

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 Rectangular Gauge Block Sets SERIES 516

- Mitutoyo provides a wide selection of boxed sets of gauge blocks to meet the various needs of industry. Selecting the best set, or sets, to acquire usually depends on the accuracy required by the target applications, the level of convenience desired (larger sets offer more combination possibilities) and the environmental conditions in which they will be used.

Steel 1 mm Base Block Sets



Steel 112-block set



Steel 103-block set



Steel 76-block set



Steel 56-block set



Steel 47-block set



Steel 46-block set



Steel 34-block set



Steel 32-block set

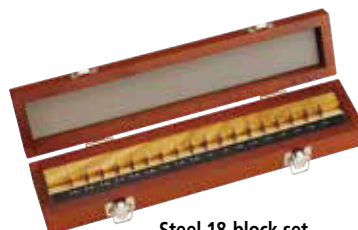
Steel 0.001 mm Step Block Sets



Steel 9-block set
(1.001 - 1.009 mm)



Steel 9-block set
(0.991 - 0.999 mm)



Steel 18-block set

Steel Long Block Sets



Steel 8-block set

Steel Wear Block Sets



Steel (1 mm)

Steel Thin Block Sets



Steel 9-block set

Note: Details of the contents of any particular set are given on page E-9.



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CERA 1 mm Base Block Sets



CERA 112-block set



CERA 103-block set



CERA 76-block set



CERA 56-block set



CERA 47-block set



CERA 46-block set



CERA 34-block set



CERA 32-block set

CERA 0.001 mm Step Block Sets



CERA 9-block set
(1.001 - 1.009 mm)



CERA 9-block set
(0.991 - 0.999 mm)

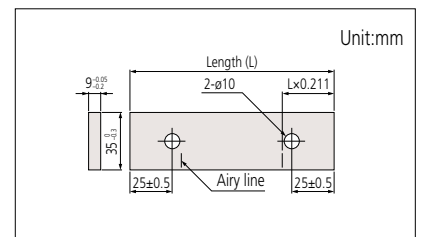


CERA 18-block set

CERA Long Block Sets



CERA 8-block set



CERA Wear Block Sets



CERA (1 mm)

Note: Details of the contents of any particular set are given on page E-10.

Gauge Blocks

Length Standards Brought to You by Mitutoyo

SPECIFICATIONS

1 mm Base Block Sets

Blocks per set	Order No.		Standard/grade available and Suffix No.*			Blocks included in set		
	Steel	CERA	ISO/DIN/JIS	ASME	BS	Size (mm)	Step (mm)	Qty.
122	—	—	—	—	—	1.0005	—	1
	516-596	—	K: -H0	—	—	1.001 - 1.009	0.001	9
	516-597	—	O: -H0	—	—	1.01 - 1.49	0.01	49
	516-598	—	1: -H0	—	—	1.6 - 1.9	0.1	4
	516-599	—	2: -H0	—	—	0.5 - 24.5 30 - 100 25, 75	0.5 10	49 8 2
112	516-531	516-541	—	—	K: -H6	1.0005	—	1
	516-937	516-337	K: -H0	00: -H6	K: -H1	1.001 - 1.009	0.001	9
	516-938	516-338	O: -H0	0: -H6	O: -H1	1.01 - 1.49	0.01	49
	516-939	516-339	1: -H0	1: -H6	1: -H1	0.5 - 24.5	0.5	49
	516-940	516-340	2: -H0	2: -H6	2: -H1	25 - 100	25	4
103	516-533	516-542	—	—	K: -H6	1.005	—	1
	516-941	516-341	K: -H0	00: -H6	K: -H1	1.01 - 1.49	0.01	49
	516-942	516-342	O: -H0	0: -H6	O: -H1	0.5 - 24.5	0.5	49
	516-943	516-343	1: -H0	1: -H6	1: -H1	25 - 100	25	4
	516-944	516-344	2: -H0	2: -H6	2: -H1	—	—	—
88	—	—	—	—	—	1.0005	—	1
	516-969	516-369	—	—	K: -H1	1.001 - 1.009	0.001	9
	516-970	516-370	O: -H0	—	O: -H1	1.01 - 1.49	0.01	49
	516-971	516-371	1: -H0	—	1: -H1	0.5 - 9.5	0.5	19
	516-972	516-372	2: -H0	—	2: -H1	10 - 100	10	10
87	516-535	515-543	—	—	K: -H6	1.001 - 1.009	0.001	9
	516-945	516-345	K: -H0	00: -H6	K: -H1	1.01 - 1.49	0.01	49
	516-946	516-346	O: -H0	0: -H6	O: -H1	0.5 - 9.5	0.5	19
	516-947	516-347	1: -H0	1: -H6	1: -H1	10 - 100	10	10
	516-948	516-348	2: -H0	2: -H6	2: -H1	—	—	—
76	—	—	—	—	—	1.005	—	1
	516-949	516-349	K: -H0	—	—	1.01 - 1.49	0.01	49
	516-950	516-350	O: -H0	—	—	0.5 - 9.5	0.5	19
	516-951	516-351	1: -H0	—	—	10 - 40	10	4
	516-952	516-352	2: -H0	—	—	50 - 100	25	3
56	516-536	516-544	—	—	K: -H6	0.5	—	1
	516-953	516-353	K: -H0	00: -H6	—	1.001 - 1.009	0.001	9
	516-954	516-354	O: -H0	0: -H6	—	1.01 - 1.09	0.01	9
	516-955	516-355	1: -H0	1: -H6	—	1.1 - 1.9	0.1	9
	516-956	516-356	2: -H0	2: -H6	—	1 - 24 25 - 100	1 25	24 4
47	516-537	516-545	—	—	K: -H6	1.005	—	1
	516-957	516-357	K: -H0	00: -H6	—	1.01 - 1.09	0.01	9
	516-958	516-358	O: -H0	0: -H6	—	1.1 - 1.9	0.1	9
	516-959	516-359	1: -H0	1: -H6	—	1 - 24	1	24
	516-960	516-360	2: -H0	2: -H6	—	25 - 100	25	4
47	—	—	—	—	—	1.005	—	1
	516-961	516-361	K: -H0	—	K: -H1	1.01 - 1.19	0.01	19
	516-962	516-362	O: -H0	—	O: -H1	1.2 - 1.9	0.1	8
	516-963	516-363	1: -H0	—	1: -H1	1 - 9	1	9
	516-964	516-364	2: -H0	—	2: -H1	10 - 100	10	10
46	516-994	516-394	K: -H0	—	—	1.001 - 1.009	0.001	9
	516-995	516-395	O: -H0	—	—	1.01 - 1.09	0.01	9
	516-996	516-396	1: -H0	—	—	1.1 - 1.9	0.1	9
	516-997	516-397	2: -H0	—	—	1 - 9 10 - 100	1 10	9 10
	34	—	—	—	—	—	1.0005	—
516-128		516-178	K: -H0	—	K: -H1	1.001 - 1.009	0.001	9
516-129		516-179	O: -H0	—	O: -H1	1.01 - 1.09	0.01	9
516-130		516-180	1: -H0	—	1: -H1	1.1 - 1.9	0.1	9
516-131		516-181	2: -H0	—	2: -H1	1 - 5 10	1	5 1
32	—	—	—	—	—	1.005	—	1
	516-965	516-365	K: -H0	—	K: -H1	1.01 - 1.09	0.01	9
	516-966	516-366	O: -H0	—	O: -H1	1.1 - 1.9	0.1	9
	516-967	516-367	1: -H0	—	1: -H1	1 - 9	1	9
	516-968	516-368	2: -H0	—	2: -H1	10 - 30 60	10	3 1

Thin Block Sets

Blocks per set	Order No.		Standard/grade available and Suffix No.*			Blocks included in set		
	Steel	CERA	ISO/DIN/JIS	ASME	BS	Size (mm)	Step (mm)	Qty.
9	516-990	—	O: -H0	—	—	0.10 - 0.50	0.05	9
	516-991	—	1: -H0	—	—	—	—	—
	516-992	—	2: -H0	—	—	—	—	—

Note: Details of the overall sizes for forms of block are given on page E-3 and the accuracy standards to which they are manufactured are given on page E-5.



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

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

ISO/DIN/JIS		
Suffix No.	Inspection Certificate	Calibration Certificate JCSS
1	✓	—
6	✓	✓

Suffix No. 1: Not available for Grade K sets.

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

Suffix No. 1: Not available for Grade K sets.
Suffix No. 6: Only for Grade K sets.

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

Suffix No. 1: Not available for Grade K sets.
Suffix No. 6: Only for Grade K sets.

Inspection Certificate





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

SPECIFICATIONS

0.001 mm Step Block Sets

Blocks per set	Order No.		Standard/grade available and Suffix No.*			Blocks included in set		
	Steel	CERA	ISO/DIN/JIS	ASME	BS	Size (mm)	Step (mm)	Qty.
18	516-973	516-373	K: -#0	—	—	0.991 - 0.999	0.001	9
	516-974	516-374	0: -#0	—	—	1.001 - 1.009	0.001	9
	516-975	516-375	1: -#0	—	—	—	—	—
	516-976	516-376	2: -#0	—	—	—	—	—
9	516-981	516-381	K: -#0	—	K: -#1	1.001 - 1.009	0.001	9
	516-982	516-382	0: -#0	—	0: -#1	—	—	—
	516-983	516-383	1: -#0	—	1: -#1	—	—	—
	516-984	516-384	2: -#0	—	2: -#1	—	—	—
9	516-985	516-385	K: -#0	—	—	0.991 - 0.999	0.001	9
	516-986	516-386	0: -#0	—	—	—	—	—
	516-987	516-387	1: -#0	—	—	—	—	—
	516-988	516-388	2: -#0	—	—	—	—	—

Long Block Sets

Blocks per set	Order No.		Standard/grade available and Suffix No.*			Blocks included in set		
	Steel	CERA	ISO/DIN/JIS	ASME	BS	Size (mm)	Step (mm)	Qty.
8	516-540	516-546	—	K: -#6	—	125 - 175	25	3
	516-701	516-731	K: -#0	00: -#6	—	200 - 250	50	2
	516-702	516-732	0: -#0	0: -#6	—	300 - 500	100	3
	516-703	516-733	1: -#0	1: -#6	—	—	—	—
	516-704	516-734	2: -#0	2: -#6	—	—	—	—

Wear Block Sets

Blocks per set	Order No.		Standard/grade available and Suffix No.*			Blocks included in set		
	Carbide	CERA	ISO/DIN/JIS	ASME	BS	Size (mm)	Step (mm)	Qty.
2	516-807	516-832	0: -#0	0: -#6	—	1	—	2
	516-806	516-833	1: -#0	1: -#6	—	—	—	—
2	516-803	516-830	0: -#0	0: -#6	—	2	—	2
	516-802	516-831	1: -#0	1: -#6	—	—	—	—

Inch Block Sets

Blocks per set	Order No.		Standard/grade available and Suffix No.*			Blocks included in set		
	Steel	CERA	ISO/DIN/JIS	ASME	BS	Size (in)	Step (in)	Qty.
82	516-548	516-556	—	K: -#6	—	0.10005	—	1
	516-905	516-305	—	00: -#6	—	0.1001 - 0.1009	0.0001	9
	516-906	516-306	—	0: -#6	0: -#1	0.101 - 0.149	0.001	49
	516-907	516-307	—	1: -#6	1: -#1	0.05 - 0.95	0.05	19
	516-908	516-308	—	2: -#6	2: -#1	1 - 4	1	4
81	516-549	516-557	—	K: -#6	—	0.1001 - 0.1009	0.0001	9
	516-901	516-301	—	00: -#6	—	0.101 - 0.149	0.001	49
	516-902	516-302	—	0: -#6	0: -#1	0.05 - 0.95	0.05	19
	516-903	516-303	—	1: -#6	1: -#1	1 - 4	1	4
	516-904	516-304	—	2: -#6	2: -#1	—	—	—
49	—	—	—	—	—	0.1001 - 0.1009	0.0001	9
	516-910	—	—	—	—	0.101 - 0.109	0.001	9
	516-911	—	—	—	0: -#1	0.01 - 0.19	0.01	19
	516-912	—	—	—	1: -#1	0.2 - 0.9	0.1	8
	—	—	—	—	2: -#1	1 - 4	1	4
35	516-550	516-558	—	K: -#6	—	0.10005	—	1
	516-913	516-313	—	00: -#6	—	0.1001 - 0.1009	0.0001	9
	516-914	516-314	—	0: -#6	0: -#1	0.101 - 0.109	0.001	9
	516-915	516-315	—	1: -#6	1: -#1	0.11 - 0.19	0.01	9
	516-916	516-316	—	2: -#6	2: -#1	0.1 - 0.3	0.1	3
—	—	—	—	—	0.5, 1, 2, 4	—	4	

Thin Block Sets

Blocks per set	Order No.		Standard/grade available and Suffix No.*			Blocks included in set		
	Steel	CERA	ISO/DIN/JIS	ASME	BS	Size (in)	Step (in)	Qty.
28	516-551	—	—	K: -#6	—	0.02005	—	1
	516-917	—	—	00: -#6	—	0.0201 - 0.0209	0.0001	9
	516-918	—	—	0: -#6	—	0.021 - 0.029	0.001	9
	516-919	—	—	1: -#6	—	0.01 - 0.09	0.01	9
	516-920	—	—	2: -#6	—	—	—	—
10	516-926	—	—	0: -#6	0: -#1	0.005 - 0.050	0.005	10
	516-927	—	—	1: -#6	1: -#1	—	—	—
	516-928	—	—	—	2: -#1	—	—	—

Long Block Sets

Blocks per set	Order No.		Standard/grade available and Suffix No.*			Blocks included in set		
	Steel	CERA	ISO/DIN/JIS	ASME	BS	Size (in)	Step (in)	Qty.
8	—	516-564	—	K: -#6	—	5 - 7	1	3
	—	516-741	—	00: -#6	—	8, 10, 12	2	3
	516-712	516-742	—	0: -#6	—	16, 20	4	2
	516-713	516-743	—	1: -#6	—	—	—	—

Wear Block Sets

Blocks per set	Order No.		Standard/grade available and Suffix No.*			Blocks included in set		
	Carbide	CERA	ISO/DIN/JIS	ASME	BS	Size (in)	Step (in)	Qty.
2	516-809	516-836	—	0: -#6	—	0.05	—	2
	516-808	516-837	—	1: -#6	—	—	—	—
2	516-805	516-834	—	0: -#6	—	0.1	—	2
	516-804	516-835	—	1: -#6	—	—	—	—

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