

Setting Rings

SERIES 177 — Accessories for Inside Micrometers, Holtest and Dial Bore Gages

FEATURES

- Used for quick and accurate setting of dial bore gages, Holtest, and inside micrometers.
- Actual calibration value for the diameter is marked on each ring.
- No anticorrosion treatment is required when handling Ceramic Setting Rings normally, resulting in simple maintenance and storage.

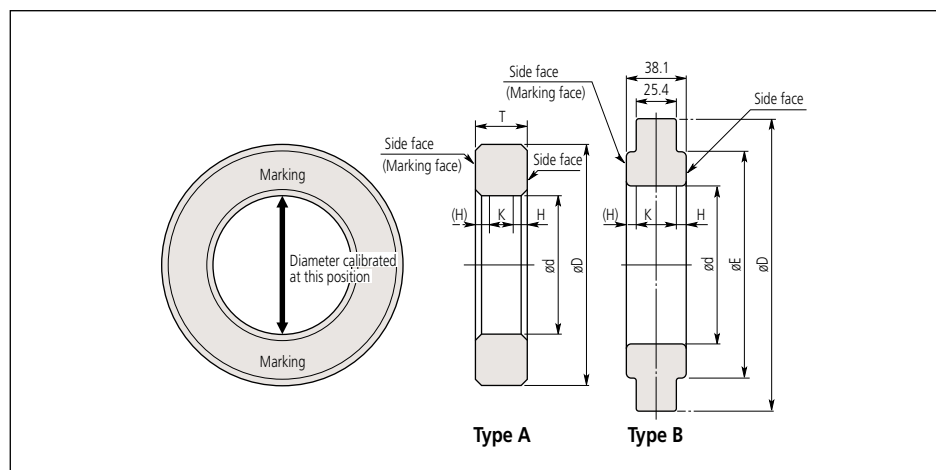
Steel Setting Rings



Ceramic Setting Rings



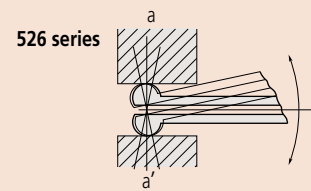
DIMENSIONS



Suffix

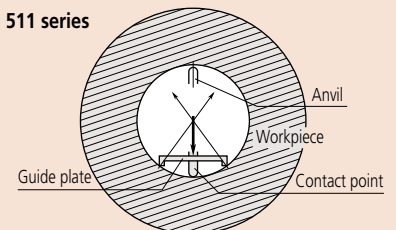
- 177-***-12:** With Inspection Certificate
177-*-62:** With Inspection Certificate and Calibration Certificate
177-*-82:** With Inspection Certificate, Calibration Certificate, and Traceability System Chart

Reading the indicated value



- The 526 series has a gage head with high curvature. Alignment with the diameter (a-a') is achieved by rotating the gage head in the direction indicated by the arrow, and the reading is the minimum value read from the dial indicator.

511 series



- The 511 series provides a guide plate to align the setting ring diameter with the measurement axis of the bore gage.

SPECIFICATION

Steel Setting Rings

Metric

Nominal size ød	Order No.	Dimensions (mm)			Type	Accuracy				
		øD	øE	T		Tolerance between the nominal size and the actual diameter (μm)	Uncertainty of marked dimension value (μm)	Roundness/Cylindricity (μm)	Distance from the side face H (mm)	Size of warranted calibration surface K (mm)
1mm	177-220	20	—	4	A	±10	±1.5	1	1.6	0.8
1.1mm	177-222	20	—	4	A	±10	±1.5	1	1.6	0.8
1.2mm	177-225	20	—	4	A	±10	±1.5	1	1.6	0.8
1.3mm	177-227	20	—	4	A	±10	±1.5	1	1.6	0.8
1.4mm	177-230	20	—	4	A	±10	±1.5	1	1.6	0.8
1.75mm	177-236	25	—	5	A	±10	±1.5	1	1.6	1.8
2mm	177-239	25	—	5	A	±10	±1.5	1	1.6	1.8
2.25mm	177-242	25	—	5	A	±10	±1.5	1	1.6	1.8
2.5mm	177-208	25	—	7	A	±10	±1.5	1	1.7	3.6
2.75mm	177-246	25	—	7	A	±10	±1.5	1	1.7	3.6
3mm	177-248	25	—	7	A	±10	±1.5	1	1.7	3.6
3.25mm	177-250	25	—	7	A	±10	±1.5	1	1.7	3.6
3.5mm	177-252	25	—	7	A	±10	±1.5	1	1.7	3.6
3.75mm	177-255	25	—	7	A	±10	±1.5	1	1.7	3.6
4mm	177-204	25	—	7	A	±10	±1.5	1	1.7	3.6
4.5mm	177-257	25	—	7	A	±10	±1.5	1	1.7	3.6
5mm	177-205	25	—	7	A	±10	±1.5	1	1.7	3.6
5.5mm	177-263	25	—	7	A	±10	±1.5	1	1.7	3.6
6mm	177-267	25	—	7	A	±10	±1.5	1	1.7	3.6
6.5mm	177-271	25	—	7	A	±10	±1.5	1	1.7	3.6
7mm	177-275	25	—	7	A	±10	±1.5	1	1.7	3.6
8mm	177-125	32	—	10	A	±10	±1.5	1	2.0	6.0
9mm	177-279	32	—	10	A	±10	±1.5	1	2.0	6.0
10mm	177-126	32	—	10	A	±10	±1.5	1	2.0	6.0
12mm	177-284	32	—	10	A	±10	±1.5	1	2.0	6.0
14mm	177-132	38	—	10	A	±10	±1.5	1	2.0	6.0

Nominal size ød	Order No.	Dimensions (mm)			Type	Accuracy				
		øD	øE	T		Tolerance between the nominal size and the actual diameter (μm)	Uncertainty of marked dimension value (μm)	Roundness/Cylindricity (μm)	Distance from the side face H (mm)	Size of warranted calibration surface K (mm)
16mm	177-177	45	—	10	A	±10	±1.5	1	2.0	6.0
17mm	177-133	45	—	10	A	±10	±1.5	1	2.0	6.0
18mm	177-285	45	—	10	A	±10	±1.5	1	2.0	6.0
20mm	177-286	45	—	10	A	±10	±1.5	1	2.0	6.0
25mm	177-139	53	—	15	A	±10	±1.5	1	3.2	8.6
30mm	177-288	71	—	15	A	±10	±1.5	1	3.2	8.6
35mm	177-140	71	—	15	A	±10	±1.5	1	3.2	8.6
40mm	177-290	71	—	15	A	±10	±1.5	1	3.2	8.6
45mm	177-178	85	—	15	A	±10	±1.5	1	3.7	7.6
50mm	177-146	85	—	20	A	±20	±1.5	1	3.7	12.6
60mm	177-292	112	—	20	A	±20	±1.5	1	3.7	12.6
62mm	177-314	112	—	20	A	±20	±1.5	1.5	3.7	12.6
70mm	177-147	112	—	20	A	±20	±1.5	1.5	3.7	12.6
75mm	177-316	125	—	25	A	±20	±1.5	1.5	4.2	16.6
80mm	177-314	125	—	25	A	±20	±1.5	1.5	4.2	16.6
87mm	177-318	140	—	25	A	±20	±1.5	1.5	4.2	16.6
90mm	177-148	140	—	25	A	±20	±1.5	1.5	4.2	16.6
100mm	177-296	160	—	25	A	±20	±1.5	2	4.2	16.6
125mm	177-298	210	168	38.1 (25.4)	B	±20	±1.5	2	5.3	27.5
150mm	177-300	235	187		B	±20	±1.5	2	5.3	27.5
175mm	177-302	260	215		B	±20	±1.5	2.5	5.3	27.5
200mm	177-304	311	244		B	±20	±1.5	2.5	5.3	27.5
225mm	177-306	337	264		B	±20	±1.5	2.5	5.3	27.5
250mm	177-308	362	290		B	±20	±1.5	3	5.3	27.5
275mm	177-310	413	321		B	±20	±1.5	3	5.3	27.5
300mm	177-312	438	340		B	±20	±1.5	3	5.3	27.5

Inch

Nominal size ød	Order No.	Dimensions (mm)			Type	Accuracy				
		øD	øE	T		Tolerance between the nominal size and the actual diameter (inch)	Uncertainty of marked dimension value (inch)	Roundness/Cylindricity (inch)	Distance from the side face H (inch)	Size of warranted calibration surface K (inch)
.1"	177-209	25	—	7	A	±.0004"	±.00006"	.00004"	.067"	.142"
.16"	177-206	25	—	7	A	±.0004"	±.00006"	.00004"	.067"	.142"
.24"	177-207	25	—	7	A	±.0004"	±.00006"	.00004"	.067"	.142"
.275"	177-281	25	—	7	A	±.0004"	±.00006"	.00004"	.079"	.118"
.35"	177-179	32	—	10	A	±.0004"	±.00006"	.00004"	.079"	.236"
.425"	177-283	32	—	10	A	±.0004"	±.00006"	.00004"	.079"	.236"
.5"	177-180	32	—	10	A	±.0004"	±.00006"	.00004"	.079"	.236"
.6"	177-181	38	—	10	A	±.0004"	±.00006"	.00004"	.079"	.236"
.65"	177-182	45	—	10	A	±.0004"	±.00006"	.00004"	.079"	.236"
.7"	177-183	45	—	10	A	±.0004"	±.00006"	.00004"	.079"	.236"
.8"	177-287	45	—	10	A	±.0004"	±.00006"	.00004"	.079"	.236"
1"	177-184	53	—	15	A	±.0004"	±.00006"	.00004"	.126"	.339"
1.2"	177-289	71	—	15	A	±.0004"	±.00006"	.00004"	.126"	.339"
1.4"	177-185	71	—	15	A	±.0004"	±.00006"	.00004"	.126"	.339"
1.6"	177-291	71	—	15	A	±.0004"	±.00006"	.00004"	.126"	.339"
1.8"	177-186	85	—	15	A	±.0004"	±.00006"	.00004"	.146"	.299"

Nominal size ød	Order No.	Dimensions (mm)			Type	Accuracy				
		øD	øE	T		Tolerance between the nominal size and the actual diameter (inch)	Uncertainty of marked dimension value (inch)	Roundness/Cylindricity (inch)	Distance from the side face H (inch)	Size of warranted calibration surface K (inch)
2"	177-187	85	—	20	A	±.0008"	±.00006"	.00004"	.146"	.496"
2.4"	177-293	112	—	20	A	±.0008"	±.00006"	.00004"	.146"	.496"
2.5"	177-315	112	—	20	A	±.0008"	±.00006"	.00006"	.165"	.457"
2.8"	177-188	112	—	20	A	±.0008"	±.00006"	.00006"	.165"	.457"
3"	177-317	125	—	25	A	±.0008"	±.00006"	.00006"	.165"	.654"
3.2"	177-295	125	—	25	A	±.0008"	±.00006"	.00006"	.165"	.654"
3.5"	177-319	140	—	25	A	±.0008"	±.00006"	.00006"	.165"	.654"
3.6"	177-189	140	—	25	A	±.0008"	±.00006"	.00006"	.165"	.654"
4"	177-297	160	—	25	A	±.0008"	±.00006"	.00008"	.165"	.654"
5"	177-299	210	168	38.1	B	±.0008"	±.00010"	.00008"	.209"	1.083"
6"	177-301	235	187	38.1	B	±.0008"	±.00010"	.00008"	.209"	1.083"
7"	177-303	260	215	38.1	B	±.0008"	±.00010"	.00010"	.209"	1.083"
8"	177-305	311	244	38.1	B	±.0008"	±.00010"	.00010"	.209"	1.083"
9"	177-307	337	264	38.1	B	±.0008"	±.00010"	.00010"	.209"	1.083"
10"	177-309	362	290	38.1	B	±.0008"	±.00010"	.00012"	.209"	1.083"
11"	177-311	413	321	38.1	B	±.0008"	±.00010"	.00012"	.209"	1.083"
12"	177-313	438	340	38.1	B	±.0008"	±.00010"	.00012"	.209"	1.083"

Cera Setting Rings

Metric

Nominal size ød	Order No.	Dimensions (mm)			Type	Accuracy				
		øD	øE	T		Tolerance between the nominal size and the actual diameter (μm)	Uncertainty of marked dimension value (μm)	Roundness/Cylindricity (μm)	Distance from the side face H (mm)	Size of warranted calibration surface K (mm)
4mm	177-418	25	—	7	A	±10	±1.5	1	1.7	3.6
6mm	177-420	25	—	7	A	±10	±1.5	1	1.7	3.6
8mm	177-423	32	—	10	A	±10	±1.5	1	2.0	6.0
10mm	177-424	32	—	10	A	±10	±1.5	1	2.0	6.0
12mm	177-425	45	—	10	A	±10	±1.5	1	2.0	6.0
16mm	177-427	45	—	10	A	±10	±1.5	1	2.0	6.0
20mm	177-429	45	—	10	A	±10	±1.5	1	2.0	6.0
25mm	177-430	53	—	15	A	±10	±1.5	1	3.2	8.6
30mm	177-431	71	—	15	A	±10	±1.5	1	3.2	8.6
35mm	177-432	71	—	15	A	±10	±1.5	1	3.2	8.6
40mm	177-433	71	—	15	A	±10	±1.5	1	3.2	8.6
45mm	177-434	85	—	15	A	±10	±1.5	1	3.2	8.6

Inch

Nominal size ød	Order No.	Dimensions (mm)			Type	Accuracy				
		øD	øE	T		Tolerance between the nominal size and the actual diameter (inch)	Uncertainty of marked dimension value (inch)	Roundness/Cylindricity (inch)	Distance from the side face H (inch)	Size of warranted calibration surface K (inch)
.16"	177-518	25	—	7	A	±.0004"	±.00006"	.00004"	.067"	.142"
.24"	177-520	25	—	7	A	±.0004"	±.00006"	.00004"	.067"	.142"
.275"	177-522	25	—	7	A	±.0004"	±.00006"	.00004"	.067"	.142"
.35"	177-523	32	—	10	A	±.0004"	±.00006"	.00004"	.079"	.236"
.425"	177-524	32	—	10	A	±.0004"	±.00006"	.00004"	.079"	.236"
.5"	177-525	32	—	10	A	±.0004"	±.00006"	.00004"	.079"	.236"
.65"	177-527	45	—	10	A	±.0004"	±.00006"	.00004"	.079"	.236"
.8"	177-529	45	—	10	A	±.0004"	±.00006"	.00004"	.079"	.236"
1"	177-530	53	—	15	A	±.0004"	±.00006"	.00004"	.126"	.339"
1.2"	177-531	71	—	15	A	±.0004"	±.00006"	.00004"	.126"	.339"
1.4"	177-532	71	—	15	A	±.0004"	±.00006"	.00004"	.126"	.339"
1.6"	177-533	71	—	15	A	±.0004"	±.00006"	.00004"	.126"	.339"

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