

SPECIFICATIONS

Steel Setting Rings

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

Inch										
Order No.	Nominal size ød	Dimensions (mm)			Type	Accuracy				
		øD	øE	T		Tolerance between the nominal size and the actual diameter (inch)	Uncertainty of marked diameter value (inch)* ¹	Roundness/ Cylindricity (inch)* ²	Distance from the side face H (mm)	Size of warranted calibration surface K (mm)
177-209	0.1 in	25	—	7	A	±0.0004	±0.00006	0.00004	1.7	3.6
177-206	0.16 in	25	—	7	A	±0.0004	±0.00006	0.00004	1.7	3.6
177-207	0.24 in	25	—	7	A	±0.0004	±0.00006	0.00004	1.7	3.6
177-281	0.275 in	25	—	7	A	±0.0004	±0.00006	0.00004	2.0	3.0
177-179	0.35 in	32	—	10	A	±0.0004	±0.00006	0.00004	2.0	6.0
177-283	0.425 in	32	—	10	A	±0.0004	±0.00006	0.00004	2.0	6.0
177-180	0.5 in	32	—	10	A	±0.0004	±0.00006	0.00004	2.0	6.0
177-181	0.6 in	38	—	10	A	±0.0004	±0.00006	0.00004	2.0	6.0
177-182	0.65 in	45	—	10	A	±0.0004	±0.00006	0.00004	2.0	6.0
177-183	0.7 in	45	—	10	A	±0.0004	±0.00006	0.00004	2.0	6.0
177-287	0.8 in	45	—	10	A	±0.0004	±0.00006	0.00004	2.0	6.0
177-184	1 in	53	—	15	A	±0.0004	±0.00006	0.00004	3.2	8.6
177-289	1.2 in	71	—	15	A	±0.0004	±0.00006	0.00004	3.2	8.6
177-185	1.4 in	71	—	15	A	±0.0004	±0.00006	0.00004	3.2	8.6
177-291	1.6 in	71	—	15	A	±0.0004	±0.00006	0.00004	3.2	8.6
177-186	1.8 in	85	—	15	A	±0.0004	±0.00006	0.00004	3.7	7.6

CERA Setting Rings

Metric										
Order No.	Nominal size ød	Dimensions (mm)			Type	Accuracy				
		øD	øE	T		Tolerance between the nominal size and the actual diameter (µm)	Uncertainty of marked diameter value (µm)* ¹	Roundness/ Cylindricity (µm)* ²	Distance from the side face H (mm)	Size of warranted calibration surface K (mm)
177-418	4 mm	25	—	7	A	±10	±1.5	1	1.7	3.6
177-420	6 mm	25	—	7	A	±10	±1.5	1	1.7	3.6
177-423	8 mm	32	—	10	A	±10	±1.5	1	2.0	6.0
177-424	10 mm	32	—	10	A	±10	±1.5	1	2.0	6.0
177-425	12 mm	32	—	10	A	±10	±1.5	1	2.0	6.0
177-427	16 mm	45	—	10	A	±10	±1.5	1	2.0	6.0
177-429	20 mm	45	—	10	A	±10	±1.5	1	2.0	6.0
177-430	25 mm	53	—	15	A	±10	±1.5	1	3.2	8.6
177-431	30 mm	71	—	15	A	±10	±1.5	1	3.2	8.6
177-432	35 mm	71	—	15	A	±10	±1.5	1	3.2	8.6
177-433	40 mm	71	—	15	A	±10	±1.5	1	3.2	8.6
177-434	45 mm	85	—	15	A	±10	±1.5	1	3.7	7.6

*1 Actual diameter is marked in 0.001 mm increments. (Dimension measuring position is the center of the height T.)

*2 Cylindricity is defined as per JIS B 0621 Definitions and designations of geometrical deviations, Section 4.4 "Cylindricity." Cylindricity is measured using three cross-sections between the top and bottom face of a ring, namely, close to the face near each side and the center.

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177-177	16 mm	45	—	10	A	±10	±1.5	1	2.0	6.0
177-133	17 mm	45	—	10	A	±10	±1.5	1	2.0	6.0
177-285	18 mm	45	—	10	A	±10	±1.5	1	2.0	6.0
177-286	20 mm	45	—	10	A	±10	±1.5	1	2.0	6.0
177-139	25 mm	53	—	15	A	±10	±1.5	1	3.2	8.6
177-288	30 mm	71	—	15	A	±10	±1.5	1	3.2	8.6
177-140	35 mm	71	—	15	A	±10	±1.5	1	3.2	8.6
177-290	40 mm	71	—	15	A	±10	±1.5	1	3.2	8.6
177-178	45 mm	85	—	15	A	±10	±1.5	1	3.7	7.6
177-146	50 mm	85	—	20	A	±20	±1.5	1	3.7	12.6
177-292	60 mm	112	—	20	A	±20	±1.5	1	3.7	12.6
177-314	62 mm	112	—	20	A	±20	±1.5	1.5	3.7	12.6
177-147	70 mm	112	—	20	A	±20	±1.5	1.5	3.7	12.6
177-316	75 mm	125	—	25	A	±20	±1.5	1.5	3.7	17.6
177-294	80 mm	125	—	25	A	±20	±1.5	1.5	4.2	16.6
177-318	87 mm	140	—	25	A	±20	±1.5	1.5	4.2	16.6
177-148	90 mm	140	—	25	A	±20	±1.5	1.5	4.2	16.6
177-296	100 mm	160	—	25	A	±20	±1.5	2	4.2	16.6
177-298	125 mm	210	168	38.1 (25.4)	B	±20	±2.5	2	5.3	27.5
177-300	150 mm	235	187		B	±20	±2.5	2	5.3	27.5
177-302	175 mm	260	215		B	±20	±2.5	2.5	5.3	27.5
177-304	200 mm	311	244		B	±20	±2.5	2.5	5.3	27.5
177-306	225 mm	337	264		B	±20	±2.5	2.5	5.3	27.5
177-308	250 mm	362	290		B	±20	±2.5	3	5.3	27.5
177-310	275 mm	413	321		B	±20	±2.5	3	5.3	27.5
177-312	300 mm	438	340		B	±20	±2.5	3	5.3	27.5

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177-187	2 in	85	—	20	A	±0.0008	±0.00006	0.00004	3.7	12.6
177-293	2.4 in	112	—	20	A	±0.0008	±0.00006	0.00004	3.7	12.6
177-315	2.5 in	112	—	20	A	±0.0008	±0.00006	0.00006	4.2	11.6
177-188	2.8 in	112	—	20	A	±0.0008	±0.00006	0.00006	4.2	11.6
177-317	3 in	125	—	25	A	±0.0008	±0.00006	0.00006	4.2	16.6
177-295	3.2 in	125	—	25	A	±0.0008	±0.00006	0.00006	4.2	16.6
177-319	3.5 in	140	—	25	A	±0.0008	±0.00006	0.00006	4.2	16.6
177-189	3.6 in	140	—	25	A	±0.0008	±0.00006	0.00006	4.2	16.6
177-297	4 in	160	—	25	A	±0.0008	±0.00006	0.00008	4.2	16.6
177-299	5 in	210	168	38.1	B	±0.0008	±0.00010	0.00008	5.3	27.5
177-301	6 in	235	187	38.1	B	±0.0008	±0.00010	0.00008	5.3	27.5
177-303	7 in	260	215	38.1	B	±0.0008	±0.00010	0.00010	5.3	27.5
177-305	8 in	311	244	38.1	B	±0.0008	±0.00010	0.00010	5.3	27.5
177-307	9 in	337	264	38.1	B	±0.0008	±0.00010	0.00010	5.3	27.5
177-309	10 in	362	290	38.1	B	±0.0008	±0.00010	0.00012	5.3	27.5
177-311	11 in	413	321	38.1	B	±0.0008	±0.00010	0.00012	5.3	27.5
177-313	12 in	438	340	38.1	B	±0.0008	±0.00010	0.00012	5.3	27.5

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177-518	0.16 in	25	—	7	A	±0.0004	±0.00006	0.00004	1.7	3.6
177-520	0.24 in	25	—	7	A	±0.0004	±0.00006	0.00004	1.7	3.6
177-522	0.275 in	25	—	7	A	±0.0004	±0.00006	0.00004	1.7	3.6
177-523	0.35 in	32	—	10	A	±0.0004	±0.00006	0.00004	2.0	6.0
177-524	0.425 in	32	—	10	A	±0.0004	±0.00006	0.00004	2.0	6.0
177-525	0.5 in	32	—	10	A	±0.0004	±0.00006	0.00004	2.0	6.0
177-527	0.65 in	45	—	10	A	±0.0004	±0.00006	0.00004	2.0	6.0
177-529	0.8 in	45	—	10	A	±0.0004	±0.00006	0.00004	2.0	6.0
177-530	1 in	53	—	15	A	±0.0004	±0.00006	0.00004	3.2	8.6
177-531	1.2 in	71	—	15	A	±0.0004	±0.00006	0.00004	3.2	8.6
177-532	1.4 in	71	—	15	A	±0.0004	±0.00006	0.00004	3.2	8.6
177-533	1.6 in	71	—	15	A	±0.0004	±0.00006	0.00004	3.2	8.6
177-534	1.8 in	85	—	15	A	±0.0004	±0.00006	0.00004	3.7	7.6