Optional Accessories

SERIES 177 – Steel Setting Rings for Inside Micrometers, Holtest and Dial Bore Gauges

- Used for quick and accurate setting of dial bore gauges, Holtest, and inside micrometers.
- A setting ring should be selected that is closest in size to the dimension to be measured and that falls within the measuring range of the instrument.

177-205 177-139 177-146 177-147

177-300

C

SPECIFICATIONS

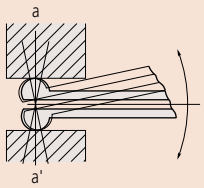
Inch

Code No.	Nominal size ød	Dimensions (mm)			Type	Accuracy					Price
		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	.1"	25	—	7	A	±.0004"	±.00006"	.00004"	1.5	4.0	**£82.30**
177-206	.16"	25	—	7	A	±.0004"	±.00006"	.00004"	1.5	4.0	**£82.30**
177-207	.24"	25	—	7	A	±.0004"	±.00006"	.00004"	1.5	4.0	**£82.30**
177-281	.275"	25	—	7	A	±.0004"	±.00006"	.00004"	1.8	3.4	**£82.30**
177-179	.35"	32	—	10	A	±.0004"	±.00006"	.00004"	1.8	6.4	**£82.30**
177-283	.425"	32	—	10	A	±.0004"	±.00006"	.00004"	1.8	6.4	**£82.30**
177-180	.5"	32	—	10	A	±.0004"	±.00006"	.00004"	1.8	6.4	**£82.30**
177-181	.6"	38	—	10	A	±.0004"	±.00006"	.00004"	1.8	6.4	**£82.30**
177-182	.65"	45	—	10	A	±.0004"	±.00006"	.00004"	1.8	6.4	**£82.30**
177-183	.7"	45	—	10	A	±.0004"	±.00006"	.00004"	1.8	6.4	**£82.30**
177-287	.8"	45	—	10	A	±.0004"	±.00006"	.00004"	1.8	6.4	**£88.00**
177-184	1"	53	—	15	A	±.0004"	±.00006"	.00004"	3.0	9.0	**£95.00**
177-289	1.2"	71	—	15	A	±.0004"	±.00006"	.00004"	3.0	9.0	**£110.00**
177-185	1.4"	71	—	15	A	±.0004"	±.00006"	.00004"	3.0	9.0	**£140.00**
177-291	1.6"	71	—	15	A	±.0004"	±.00006"	.00004"	3.0	9.0	**£130.00**
177-186	1.8"	85	—	15	A	±.0004"	±.00006"	.00004"	3.5	8.0	**£140.00**
177-187	2"	85	—	20	A	±.0008"	±.00006"	.00004"	3.5	13.0	**£140.00**
177-293	2.4"	112	—	20	A	±.0008"	±.00006"	.00004"	3.5	13.0	**£172.00**
177-315	2.5"	112	—	20	A	±.0008"	±.00006"	.00006"	4.0	12.0	**£220.00**
177-188	2.8"	112	—	20	A	±.0008"	±.00006"	.00006"	4.0	12.0	**£190.00**
177-317	3"	125	—	25	A	±.0008"	±.00006"	.00006"	4.0	17.0	**£228.00**
177-295	3.2"	125	—	25	A	±.0008"	±.00006"	.00006"	4.0	17.0	**£214.00**
177-319	3.5"	140	—	25	A	±.0008"	±.00006"	.00006"	4.0	17.0	**£300.00**
177-189	3.6"	140	—	25	A	±.0008"	±.00006"	.00006"	4.0	17.0	**£255.00**
177-297	4"	160	—	25	A	±.0008"	±.00006"	.00008"	4.0	17.0	**£341.00**
177-299	5"	210	168	38.1	B	±.0008"	±.00010"	.00008"	5.0	28.1	**£630.00**
177-301	6"	235	187	38.1	B	±.0008"	±.00010"	.00008"	5.0	28.1	**£680.00**
177-303	7"	260	215	38.1	B	±.0008"	±.00010"	.00010"	5.0	28.1	**£960.00**
177-305	8"	311	244	38.1	B	±.0008"	±.00010"	.00010"	5.0	28.1	**£1230.00**
177-307	9"	337	264	38.1	B	±.0008"	±.00010"	.00010"	5.0	28.1	**£1390.00**
177-309	10"	362	290	38.1	B	±.0008"	±.00010"	.00012"	5.0	28.1	**£1500.00**
177-311	11"	413	321	38.1	B	±.0008"	±.00010"	.00012"	5.0	28.1	**£1730.00**
177-313	12"	438	340	38.1	B	±.0008"	±.00010"	.00012"	5.0	28.1	**£2110.00**

*1 Actual diameter is marked in 0.00001" increments.
*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 centre.

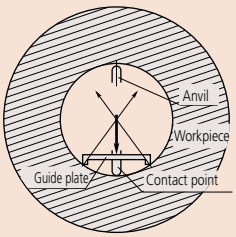
How to measure a hole diameter

Series 526



The 526 series has a gauge head with high curvature to ensure accurate reading in use. Aligning the measuring direction of the gauge with the diameter (a-a') is achieved by rocking the gauge head within the hole as indicated, and the required diameter is the minimum value seen (at the reversal point) on the dial indicator.

Series 511



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

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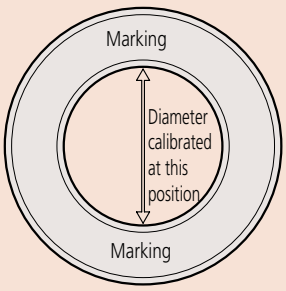
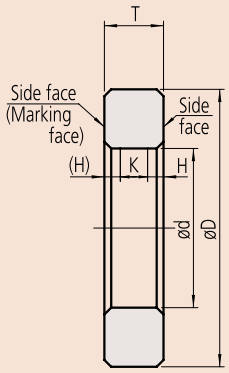
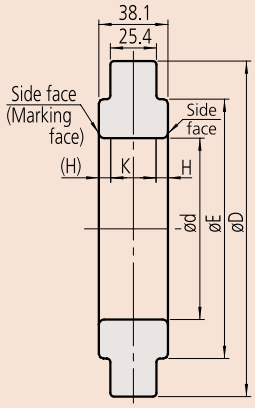
Dimensions

Unit: mm





Type A



Type B

SPECIFICATIONS

Metric

Code No.	Nominal size ød	Dimensions (mm)			Type	Accuracy					Price
		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	**£82.30**
177-222	1.1 mm	20	—	4	A	±10	±1.5	1	1.6	0.8	**£82.30**
177-225	1.2 mm	20	—	4	A	±10	±1.5	1	1.6	0.8	**£82.30**
177-227	1.3 mm	20	—	4	A	±10	±1.5	1	1.6	0.8	**£82.30**
177-230	1.4 mm	20	—	4	A	±10	±1.5	1	1.6	0.8	**£82.30**
177-236	1.75 mm	25	—	5	A	±10	±1.5	1	1.6	1.8	**£82.30**
177-239	2 mm	25	—	5	A	±10	±1.5	1	1.6	1.8	**£82.30**
177-242	2.25 mm	25	—	5	A	±10	±1.5	1	1.6	1.8	**£82.30**
177-208	2.5 mm	25	—	7	A	±10	±1.5	1	1.7	3.6	**£82.30**
177-246	2.75 mm	25	—	7	A	±10	±1.5	1	1.7	3.6	**£82.30**
177-248	3 mm	25	—	7	A	±10	±1.5	1	1.7	3.6	**£82.30**
177-250	3.25 mm	25	—	7	A	±10	±1.5	1	1.7	3.6	**£82.30**
177-252	3.5 mm	25	—	7	A	±10	±1.5	1	1.7	3.6	**£82.30**
177-255	3.75 mm	25	—	7	A	±10	±1.5	1	1.7	3.6	**£82.30**
177-204	4 mm	25	—	7	A	±10	±1.5	1	1.7	3.6	**£82.30**
177-257	4.5 mm	25	—	7	A	±10	±1.5	1	1.7	3.6	**£82.30**
177-205	5 mm	25	—	7	A	±10	±1.5	1	1.7	3.6	**£82.30**
177-263	5.5 mm	25	—	7	A	±10	±1.5	1	1.7	3.6	**£82.30**
177-267	6 mm	25	—	7	A	±10	±1.5	1	1.7	3.6	**£82.30**
177-271	6.5 mm	25	—	7	A	±10	±1.5	1	1.7	3.6	**£82.30**
177-275	7 mm	25	—	7	A	±10	±1.5	1	1.7	3.6	**£82.30**
177-125	8 mm	32	—	10	A	±10	±1.5	1	2.0	6.0	**£82.30**
177-279	9 mm	32	—	10	A	±10	±1.5	1	2.0	6.0	**£82.30**
177-126	10 mm	32	—	10	A	±10	±1.5	1	2.0	6.0	**£82.30**
177-284	12 mm	32	—	10	A	±10	±1.5	1	2.0	6.0	**£82.30**
177-132	14 mm	38	—	10	A	±10	±1.5	1	2.0	6.0	**£82.30**
177-177	16 mm	45	—	10	A	±10	±1.5	1	2.0	6.0	**£82.30**
177-133	17 mm	45	—	10	A	±10	±1.5	1	2.0	6.0	**£82.30**
177-285	18 mm	45	—	10	A	±10	±1.5	1	2.0	6.0	**£90.00**
177-286	20 mm	45	—	10	A	±10	±1.5	1	2.0	6.0	**£88.00**
177-139	25 mm	53	—	15	A	±10	±1.5	1	3.2	8.6	**£95.00**
177-288	30 mm	71	—	15	A	±10	±1.5	1	3.2	8.6	**£110.00**
177-140	35 mm	71	—	15	A	±10	±1.5	1	3.2	8.6	**£140.00**
177-290	40 mm	71	—	15	A	±10	±1.5	1	3.2	8.6	**£130.00**
177-178	45 mm	85	—	15	A	±10	±1.5	1	3.7	7.6	**£140.00**
177-146	50 mm	85	—	20	A	±20	±1.5	1	3.7	12.6	**£140.00**
177-292	60 mm	112	—	20	A	±20	±1.5	1	3.7	12.6	**£172.00**
177-314	62 mm	112	—	20	A	±20	±1.5	1.5	3.7	12.6	**£185.00**
177-147	70 mm	112	—	20	A	±20	±1.5	1.5	3.7	12.6	**£190.00**
177-316	75 mm	125	—	25	A	±20	±1.5	1.5	4.2	16.6	**£230.00**
177-294	80 mm	125	—	25	A	±20	±1.5	1.5	4.2	16.6	**£214.00**
177-318	87 mm	140	—	25	A	±20	±1.5	1.5	4.2	16.6	**£250.00**
177-148	90 mm	140	—	25	A	±20	±1.5	1.5	4.2	16.6	**£255.00**
177-296	100 mm	160	—	25	A	±20	±1.5	2	4.2	16.6	**£341.00**
177-298	125 mm	210	168	38.1 (25.4)	B	±20	±2.5	2	5.3	27.5	**£630.00**
177-300	150 mm	235	187		B	±20	±2.5	2	5.3	27.5	**£650.00**
177-302	175 mm	260	215		B	±20	±2.5	2.5	5.3	27.5	**£780.00**
177-304	200 mm	311	244		B	±20	±2.5	2.5	5.3	27.5	**£1230.00**
177-306	225 mm	337	264		B	±20	±2.5	2.5	5.3	27.5	**£1390.00**
177-308	250 mm	362	290		B	±20	±2.5	3	5.3	27.5	**£1500.00**
177-310	275 mm	413	321		B	±20	±2.5	3	5.3	27.5	**£1730.00**
177-312	300 mm	438	340		B	±20	±2.5	3	5.3	27.5	**£2110.00**

*1 Actual diameter is marked in 0.001 mm increments.

*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 centre.

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