INTERNATIONAL STANDARD

ISO 8443

Third edition
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Rolling bearings — Radial ball bearings with flanged outer ring — Flange dimensions

Roulements — Roulements à billes avec bague extérieure à collet — Dimensions de collet

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 8443 was prepared by Technical Committee ISO/TC 4, *Rolling bearings*.

This third edition cancels and replaces the second edition (ISO 8443:1999), of which it constitutes a minor revision, mainly incorporating updated references and terminology.

Rolling bearings — Radial ball bearings with flanged outer ring — Flange dimensions

1 Scope

This International Standard specifies flange dimensions of single-row radial ball bearings with flanged outer ring and single-row angular contact ball bearings with flanged outer ring. All other boundary dimensions for complete bearings are given in ISO 15.

Tolerances for the flanges are given in ISO 492. For instrument precision bearings, all tolerances are specified in ISO 1224-1.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 15, *Rolling bearings — Radial bearings — Boundary dimensions, general plan*

ISO 492, *Rolling bearings — Radial bearings — Tolerances*

ISO 1224-1, *Rolling bearings — Instrument precision bearings — Part 1: Boundary dimensions, tolerances and characteristics of metric series bearings*

ISO 5593, *Rolling bearings — Vocabulary*

ISO 15241, *Rolling bearings — Symbols for quantities*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5593 apply.

4 Symbols

For the purposes of this document, the symbols given in ISO 15241 and the following apply.

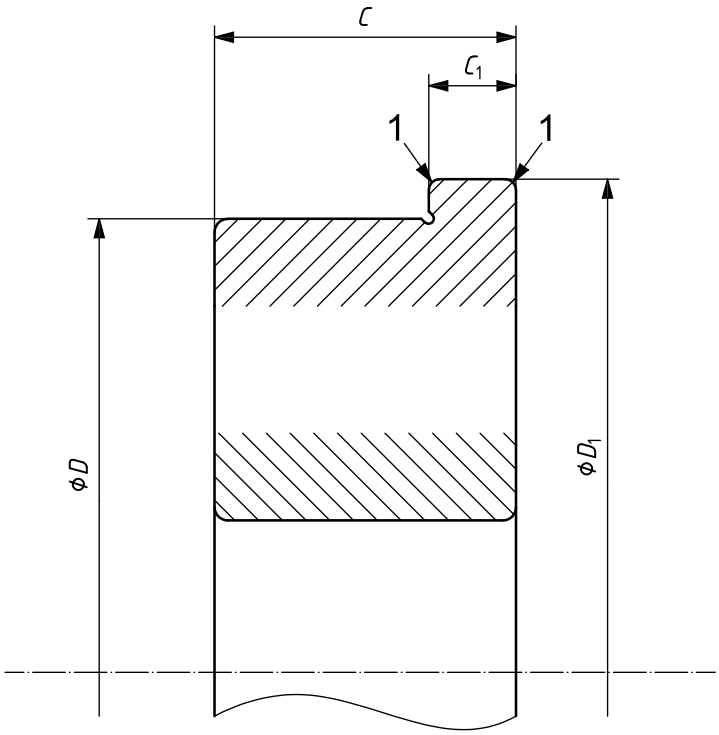
The symbols shown in Figure 1 and the values given in Tables 1 to 4 denote nominal dimensions, unless specified otherwise.

C outer ring width

C_1 outer ring flange width

D outside diameter of outer ring

D_1 outside diameter of outer ring flange



Key

1 broken corners

Figure 1 — Bearing with flanged outer ring

5 Flange dimensions

Flange dimensions for single-row radial ball bearings with flanged outer ring and single-row angular contact ball bearings with flanged outer ring grouped by diameter series and dimension series in accordance with ISO 15 are given in Tables 1 to 4.

Table 1 — Diameter series 7

Dimensions in millimetres

D	D_1	C_1
		Dimension series 17
4	4,8	0,35
5	6	0,4
6	7,2	0,6
7	8,2	0,6
8	9,2	0,6
10	11,2	0,6
11	12,2	0,6
12	13,2	0,6
14	15,5	0,8
15	16,5	0,8

Table 2 — Diameter series 8

Dimensions in millimetres

D	D_1	C_1		
		Dimension series		
		18	28	38
2,5	3,3	0,3	—	—
3	3,8	0,3	—	0,45
4	5	0,4	—	0,6
5	6,1	0,5	—	0,6
6	7,1	0,5	—	0,8
7	8,1	0,5	—	0,8
9	10,3	0,6	1	1
11	12,5	0,8	1	1
13	15	1	1,1	1,1
14	16	1	1,1	1,1
16	18	1	1,1	1,3
17	19	1	1,1	1,3
19	21	1	1,3	1,5

Table 3 — Diameter series 9

Dimensions in millimetres

D	D_1	C_1	
		Dimension series	
		19	39
4	5	0,5	0,6
5	6,5	0,6	0,8
6	7,5	0,6	0,8
7	8,5	0,7	0,9
8	9,5	0,7	0,9
11	12,5	1	1,2
13	15	1	1,2
15	17	1,2	1,5
17	19	1,2	1,5
19	22	1,5	1,8
20	23	1,5	1,8
22	25	1,5	2

Table 4 — Diameter series 0, 2 and 3

Dimensions in millimetres

D	D_1	C_1	D_1	C_1	D_1	C_1
	Diameter series					
	0		2		3	
	Dimension series					
	10		02		03	
6	7,5	0,6	—	—	—	—
7	8,5	0,7	—	—	—	—
8	9,5	0,7	—	—	—	—
9	10,5	0,7	—	—	—	—
10	—	—	11,5	1	—	—
12	13,5	1	—	—	—	—
13	—	—	15	1	15	1
14	16	1	—	—	—	—
16	—	—	18	1	18	1
17	19	1,2	—	—	—	—
19	22	1,5	22	1,5	22	1,5
22	25	1,5	25	1,5	25	1,5
24	27	1,5	26	2	—	—
26	28	2	28	2	29	2
28	30	2	—	—	30,25	2,25
30	—	—	32,25	2,25	32,5	2,5
32	34,25	2,25	34,5	2,5	—	—
35	37,5	2,5	37,75	2,75	37,75	2,75
37	—	—	—	—	40	3
40	—	—	43	3	—	—
42	45	3	—	—	45	3
44	47	3	—	—	—	—
47	50	3	50,5	3,5	50,5	3,5
50	—	—	53,5	3,5	—	—
52	55	3	55,75	3,75	55,75	3,75
55	58,25	3,25	—	—	—	—
56	—	—	—	—	60	4
58	61,25	3,25	62	4	—	—
62	65,5	3,5	66	4	66	4
65	—	—	69,25	4,25	—	—

Table 4 (*continued*)

Dimensions in millimetres

D	D_1	C_1	D_1	C_1	D_1	C_1
	Diameter series					
	0		2		3	
	Dimension series					
	10		02		03	
68	71,75	3,75	—	—	72,25	4,25
72	—	—	76,25	4,25	76,5	4,5
75	79	4	—	—	79,5	4,5
80	84	4	84,5	4,5	85	5
85	—	—	89,75	4,75	—	—
90	94,5	4,5	95	5	95	5
95	99,5	4,5	—	—	—	—
100	104,5	4,5	105,5	5,5	105,5	5,5
110	115	5	115,5	5,5	115,5	5,5
115	120	5	—	—	—	—
120	—	—	126	6	126	6
125	130,5	5,5	131	6	—	—
130	135,5	5,5	136,5	6,5	136,5	6,5
140	146	6	146,5	6,5	147	7
145	151	6	—	—	—	—
150	156	6	157	7	157,5	7,5
160	166,5	6,5	167,5	7,5	167,5	7,5
170	177	7	178	8	178,5	8,5
180	187	7	188,5	8,5	188,5	8,5
190	—	—	199	9	199	9
200	208,5	8,5	209,5	9,5	209,5	9,5
210	218,5	8,5	—	—	—	—
215	—	—	225	10	225	10
225	234	9	—	—	236	11
230	—	—	240	10	—	—
240	249,5	9,5	—	—	251	11
250	—	—	261	11	—	—
260	270,5	10,5	–	–	272	12
270	—	—	282	12	—	—
280	291,5	11,5	—	—	294	14

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