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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 3.

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.

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

This second edition cancels and replaces the first edition (ISO 8443:1985) which has been technically revised. In particular references to a revised version of ISO 492 have been updated.

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International Organization for Standardization  
Case postale 56 • CH-1211 Genève 20 • Switzerland  
Internet iso@iso.ch

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

## 1 Scope

This International Standard lays down flange dimensions for a selection of single-row radial or angular contact groove 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.

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## 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members ISO and IEC maintain registers of currently valid International Standards.

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

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

ISO 1224, *Rolling bearings — Instrument precision bearings.*

## 3 Symbols

See Figure 1.

$C$	width of outer ring
$C_1$	width of outer ring flange
$D$	outside diameter of bearing
$D_1$	outside diameter of outer ring flange

## 4 Dimensions

Tables 1 to 4 give flange dimensions for radial ball bearings grouped by diameter series and dimension series in accordance with ISO 15.

These dimensions, which correspond to those shown in Figure 1, are nominal.

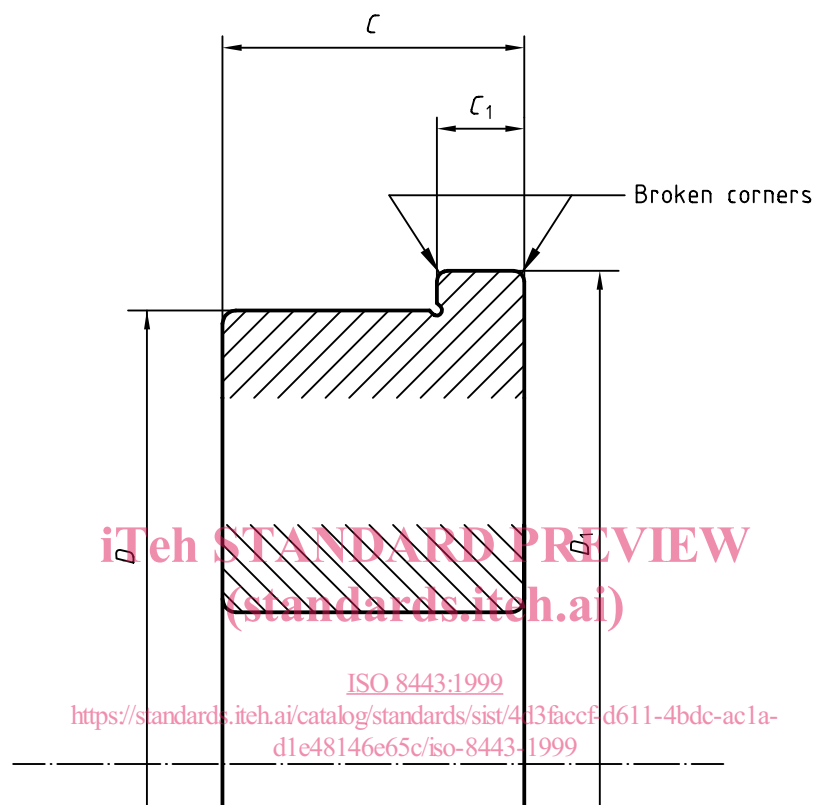


Figure 1 — Bearing with outer ring flange

**Table 1 — Diameter series 7**

Dimensions in millimetres

<i>D</i>	<i>D</i> <sub>1</sub>	Dimension series	
		17	
		<i>C</i> <sub>1</sub>	
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

<i>D</i>	<i>D</i> <sub>1</sub>	Dimension series		
		18	28	38
		<i>C</i> <sub>1</sub>		
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

<i>D</i>	<i>D</i> <sub>1</sub>	Dimension series	
		19	39
		<i>C</i> <sub>1</sub>	
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

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Table 4 — Diameter series 0, 2, and 3

Dimensions in millimetres

D	Diameter series					
	0		2		3	
	Dimension series					
	10		02		03	
	D <sub>1</sub>	C <sub>1</sub>	D <sub>1</sub>	C <sub>1</sub>	D <sub>1</sub>	C <sub>1</sub>
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	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	—	—
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	—	—

Table 4 (continued)

Dimensions in millimetres

<i>D</i>	Diameter series					
	0		2		3	
	Dimension series					
	10		02		03	
	<i>D</i> <sub>1</sub>	<i>C</i> <sub>1</sub>	<i>D</i> <sub>1</sub>	<i>C</i> <sub>1</sub>	<i>D</i> <sub>1</sub>	<i>C</i> <sub>1</sub>
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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