
International Standard



8443

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Radial ball bearings with flanged outer ring — Flange dimensions

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

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Descriptors : bearings, rolling bearings, ball bearings, radial bearings, rings, flanges, dimensions.

Price based on 4 pages

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

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

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Radial ball bearings with flanged outer ring — Flange dimensions

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1 Scope and field of application

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 Addendum 1 to ISO 492. All other tolerances for the bearings are given in ISO 492 and ISO 582. For instrument precision bearings, all tolerances are specified in ISO 1224.

2 References

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

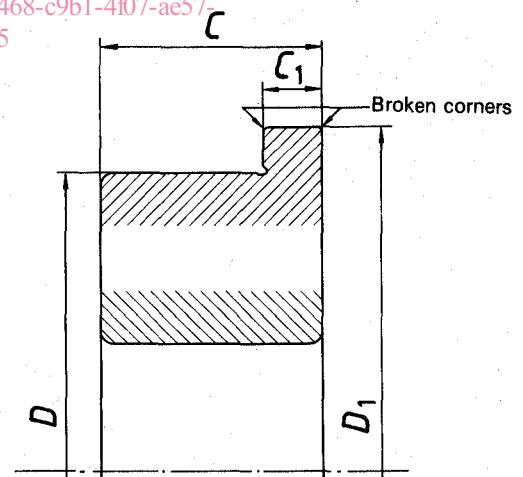
ISO 492, *Radial bearings — Tolerances.*

ISO 492/Add.1, *Radial bearings — Tolerances*
*ADDENDUM 1: Radial ball bearings with flanged outer ring — Flange tolerances.*¹⁾

ISO 582, *Rolling bearings — Metric series — Chamfer dimension limits.*

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

3 Symbols



D = bearing outside diameter, nominal
 D_1 = flange outside diameter, nominal
 C = outer ring width, nominal
 C_1 = flange width, nominal

1) At present at the stage of draft.

4 Dimensions

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

Table 1 – Diameter series 7
Dimensions in millimetres

D	D ₁	Dimension series	
		17	C ₁
		C ₁	
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	Dimension series		
		18	28	38
		C ₁		
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	0,7	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

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Table 3 – Diameter series 9
Dimensions in millimetres

D	D ₁	Dimension series	
		19	39
		C ₁	
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	Diameter series					
	0		2		3	
	Dimension series					
	10		02		03	
	D ₁	C ₁	D ₁	C ₁	D ₁	C ₁
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	—	—
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

Table 4 (concluded)

Dimensions in millimetres

D	Diameter series					
	0		2		3	
	Dimension series					
	10		02		03	
	D_1	C_1	D_1	C_1	D_1	C_1
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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