INTERNATIONAL STANDARD

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Rolling bearings — Single-row angular contact ball bearings — Chamfer dimensions for outer ring non-thrust side

Roulements — Roulements à billes à contact oblique à une rangée — Dimensions des arrondis des bagues côté non chargé

Reference number
ISO 12044:1995(E)

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.

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.

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Rolling bearings — Single-row angular contact ball bearings — Chamfer dimensions for outer ring non-thrust side

1 Scope

This International Standard specifies the minimum chamfer dimensions for the non-thrust side of single-row angular contact ball bearing outer rings where the minimum dimensions differ from those specified in ISO 15. It is applicable for bearings in the diameter series 9, 0 and 2 for contact angles up to and including 30°, and in the diameter series 2 and 3 for contact angles over 30°.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

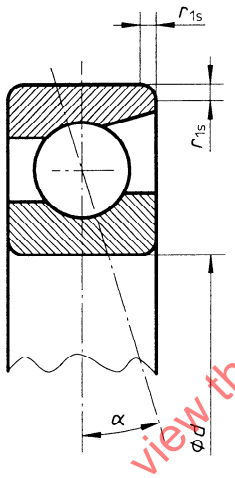
ISO 15:1981, *Rolling bearings — Radial bearings — Boundary dimensions — General plan.*

ISO 582:1995, *Rolling bearings — Chamfer dimensions — Maximum values.*

3 Symbols and dimensions

See figure 1 and table 1.

The dimensions given in table 1 corresponding to the symbols shown in figure 1 are nominal dimensions unless specified otherwise.



d = bore diameter

r_{1s} = single chamfer dimension

α = contact angle

NOTE — For tandem mounting, check that there is sufficient contact area between the mating ring faces.

Figure 1

Table 1 — Chamfer dimensions

Dimensions in millimetres

d	Diameter series 9	Diameter series 0	Diameter series 2	Diameter series 2	Diameter series 3
	$\alpha \leqslant 30°$			$\alpha > 30°$	
	$r_{1s\,min}$ [1), 2)]				
8		0,1			
9		0,1			
10	0,1	0,1	0,3	0,3	0,3
12	0,1	0,1	0,3	0,3	0,6
15	0,1	0,1	0,3	0,3	0,6
17	0,1	0,1	0,3	0,6	0,6
20	0,15	0,3	0,3	0,6	0,6
25	0,15	0,3	0,3	0,6	0,6
30	0,15	0,3	0,3	0,6	0,6
35	0,15	0,3	0,3	0,6	1
40	0,15	0,3	0,6	0,6	1
45	0,15	0,3	0,6	0,6	1
50	0,15	0,3	0,6	0,6	1
55	0,3	0,6	0,6	1	1
60	0,3	0,6	0,6	1	1,1
65	0,3	0,6	0,6	1	1,1
70	0,3	0,6	0,6	1	1,1
75	0,3	0,6	0,6	1	1,1
80	0,3	0,6	1	1	1,1
85	0,6	0,6	1	1	1,1
90	0,6	0,6	1	1	1,1
95	0,6	0,6	1,1	1,1	1,1
100	0,6	0,6	1,1	1,1	1,1
105	0,6	1	1,1	1,1	1,1
110	0,6	1	1,1	1,1	1,1
120	0,6	1	1,1	1,1	1,1
130	0,6	1	1,1	1,1	1,5
140	0,6	1		1,1	1,5
150	1	1		1,1	1,5
160	1	1		1,1	1,5
170	1	1,1		1,5	1,5
180	1	1,1		1,5	2
190	1	1,1		1,5	2
200	1	1,1		1,5	
220	1	1,1		1,5	
240		1,1		1,5	

1) Smallest permissible single chamfer dimension of r_{1s}. The corresponding maximum chamfer dimensions are given in ISO 582.

2) Where no values are given the chamfer dimensions are in accordance with the $r_{s\,min}$ values in ISO 15.

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