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Rolling bearings — Single-row cylindrical roller bearings — Chamfer dimensions for loose rib and non-rib sides

Roulements — Roulements à rouleaux cylindriques à une rangée — Dimensions des arrondis des rondelles d'épaulement et des bagues côté sans épaulement

Reference number
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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

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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 12043 was prepared by Technical Committee ISO/TC 4, *Rolling bearings*.

This second edition cancels and replaces the first edition (ISO 12043:1995), which has been technically revised.

Rolling bearings — Single-row cylindrical roller bearings — Chamfer dimensions for loose rib and non-rib sides

1 Scope

This International Standard specifies the minimum chamfer dimensions for loose rib and non-rib sides of single-row cylindrical roller bearings of diameter series 0, 2, 3, and 4 (except dimension series 24) as specified in ISO 15. Indication is given for those minimum chamfer dimensions that are identical to those in ISO 15.

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 reference document (including any amendments) applies.

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

ISO 582, *Rolling bearings — Chamfer dimensions — Maximum values*

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

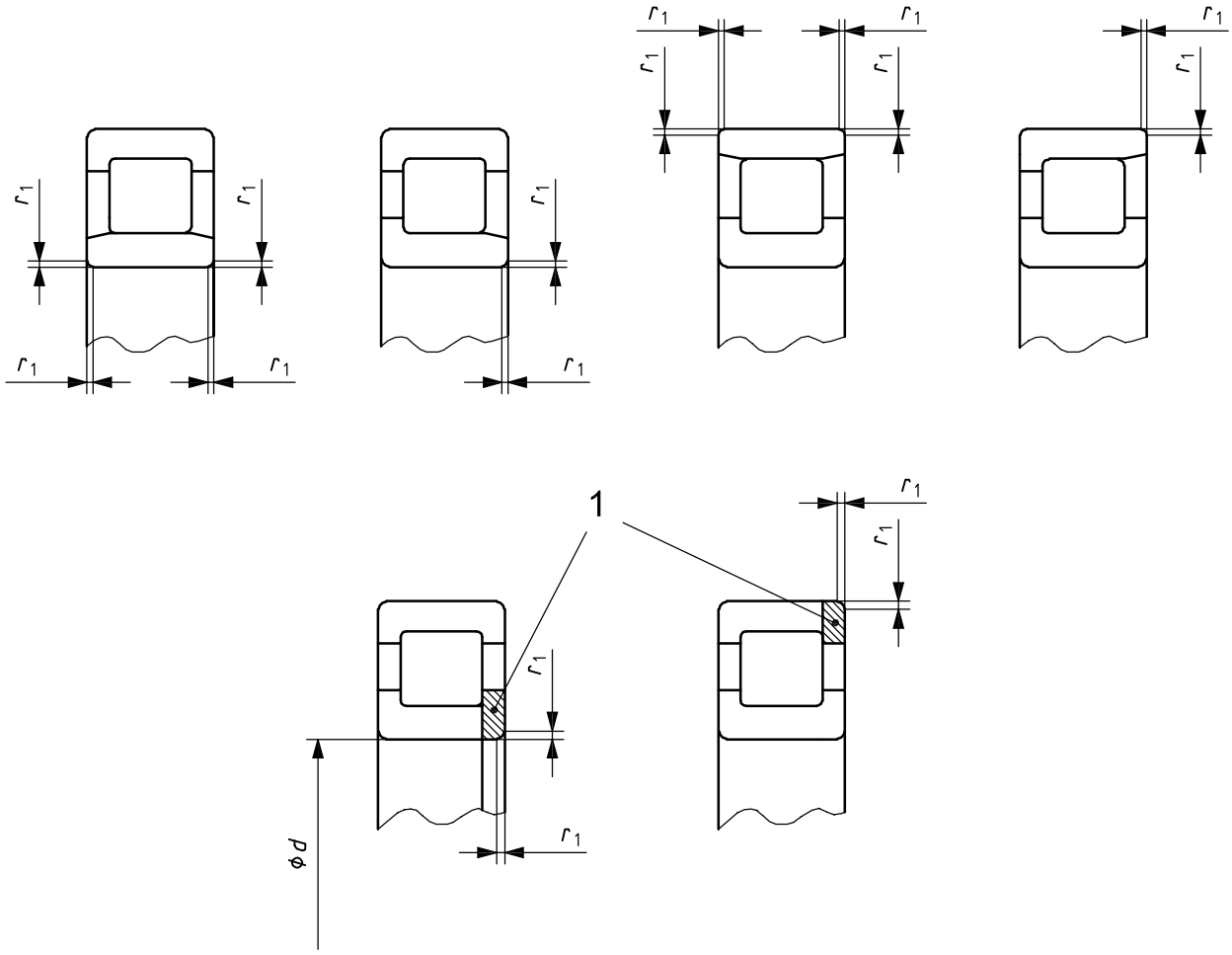
For the purposes of this document, the symbols given in ISO 15241 and the following apply.

The symbols shown in Figure 1 and the values given in Table 1 denote nominal dimensions unless specified otherwise.

d bore diameter

r_1 chamfer dimension

$r_{1s\ min}$ smallest single chamfer dimension



Key

1 loose rib

Figure 1 — Chamfer dimensions for loose rib and non-rib sides of single-row cylindrical roller bearings

5 Dimensions

Chamfer dimensions for loose rib and non-rib sides of cylindrical roller bearings of diameter series 0, 2, 3, and 4 are given in Table 1.

The values given in Table 1 are valid for cylindrical roller bearings of standard design and E-design.

NOTE For radial cylindrical roller bearings, the E signifies that they are of the design having reinforced roller and cage assembly and increased radial load-carrying capacity.

Table 1 — Chamfer dimensions

Dimensions in millimetres

d	Diameter series			
	0	2	3	4[c]
	$r_{1s\,min}$[a]			
15	—	0,3	0,6	—
17	—	0,3	0,6	—
20	0,3	0,6	0,6	—
25	0,3	0,6	1,1[b]	1,5[b]
30	0,6	0,6	1,1[b]	1,5[b]
35	0,6	0,6	1,1	1,5[b]
40	0,6	1,1[b]	1,5[b]	2[b]
45	0,6	1,1[b]	1,5[b]	2[b]
50	0,6	1,1[b]	2[b]	2,1[b]
55	1	1,1	2[b]	2,1[b]
60	1	1,5[b]	2,1[b]	2,1[b]
65	1	1,5[b]	2,1[b]	2,1[b]
70	1	1,5[b]	2,1[b]	3[b]
75	1	1,5[b]	2,1[b]	3[b]
80	1	2[b]	2,1[b]	3[b]
85	1	2[b]	3[b]	4[b]
90	1,1	2[b]	3[b]	4[b]
95	1,1	2,1[b]	3[b]	4[b]
100	1,1	2,1[b]	3[b]	4[b]
105	1,1	2,1[b]	3[b]	4[b]
110	1,1	2,1[b]	3[b]	4[b]
120	1,1	2,1[b]	3[b]	5[b]
130	1,1	3[b]	4[b]	—
140	1,1	3[b]	4[b]	—
150	1,5	3[b]	4[b]	—
160	1,5	3[b]	4[b]	—
170	2,1[b]	4[b]	4[b]	—
180	2,1[b]	4[b]	4[b]	—
190	2,1[b]	4[b]	5[b]	—
200	2,1[b]	4[b]	5[b]	—
220	3[b]	4[b]	5[b]	—
240	3[b]	4[b]	5[b]	—
260	4[b]	5[b]	6[b]	—
280	4[b]	5[b]	6[b]	—
300	4[b]	5[b]	—	—
320	4[b]	5[b]	—	—
340	5[b]	—	—	—
360	5[b]	—	—	—
380	5[b]	—	—	—
400	5[b]	—	—	—
420	5[b]	—	—	—
440	6[b]	—	—	—
460	6[b]	—	—	—
480	6[b]	—	—	—
500	6[b]	—	—	—

[a] Maximum chamfer dimensions are given in ISO 582.

[b] Chamfer dimension in accordance with the $r_{s\,min}$ value in ISO 15.

[c] Except dimension series 24.

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