

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

ICS 21.100.20

National foreword

This British Standard is the UK implementation of ISO 12043:2007. It supersedes BS ISO 12043:1995 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MCE/7, Rolling bearings.

A list of organizations represented on this committee can be obtained on request to its secretary.

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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
ISO 12043:2007(E)

Foreword

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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

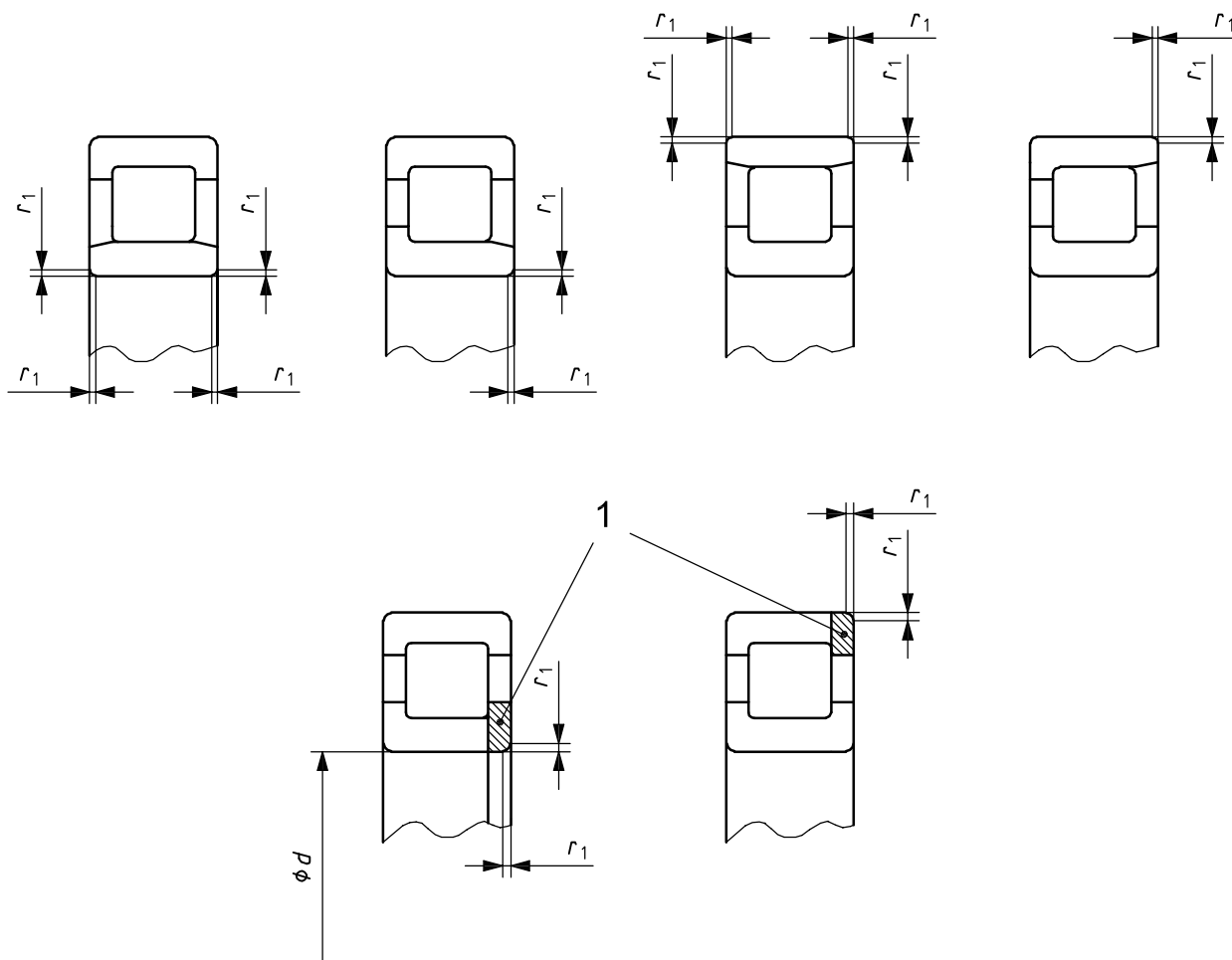
For the purposes of this document, the terms and definitions given in ISO 5593 apply.

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
$r_{1s \text{ min}}$	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

<i>d</i>	Diameter series			
	0	2	3	4 ^c
	<i>r</i> _{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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