



# SLOVENSKI STANDARD

## SIST ISO 3030:2015

01-marec-2015

Nadomešča:  
SIST ISO 3030:2001

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**Kotalni ležaji - Radialni sestav igličastih kotalk s kletko - Glavne mere in tolerance**

Rolling bearings - Radial needle roller and cage assemblies - Boundary dimensions and tolerances

**iTeh STANDARD PREVIEW**

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Roulements - Cages à aiguilles radiales - Dimensions d'encombrement et tolérances

**Ta slovenski standard je istoveten z: ISO 3030:2011**

[SIST ISO 3030:2015](#)

[http://www.sist.si/standards/standards/ISO3030:2011/16-4e82-b397-](#)

[7776c7050915/sist-iso-3030-2015](#)

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**ICS:**

21.100.20      Kotalni ležaji      Rolling bearings

**SIST ISO 3030:2015**      en,fr

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SIST ISO 3030:2015

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# INTERNATIONAL STANDARD

**ISO  
3030**

Third edition  
2011-10-01

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## Rolling bearings — Radial needle roller and cage assemblies — Boundary dimensions and tolerances

*Roulements — Cages à aiguilles radiales — Dimensions  
d'encombrement et tolérances*

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Reference number  
ISO 3030:2011(E)

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Published in Switzerland

## 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 3030 was prepared by Technical Committee ISO/TC 4, *Rolling bearings*, Subcommittee SC 5, *Needle roller bearings*.

This third edition cancels and replaces the second edition (ISO 3030:1996), which has been technically revised.

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# Rolling bearings — Radial needle roller and cage assemblies — Boundary dimensions and tolerances

## 1 Scope

This International Standard specifies the boundary dimensions for radial needle roller and cage assemblies.

In addition, it gives the tolerances for the cage width and method of functional gauging of smallest single bore diameter of needle roller complement.

Informative values for the tolerances of shaft raceway, housing raceway and raceway widths are given in Annex A.

## 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 referenced document (including any amendments) applies.

ISO 1132-1, *Rolling bearings — Tolerances — Part 1: Terms and definitions*

ISO 1132-2:2001, *Rolling bearings — Tolerances — Part 2: Measuring and gauging principles and methods*

ISO 3096, *Rolling bearings — Needle rollers — Dimensions and tolerances*

ISO 5593, *Rolling bearings — Vocabulary*

ISO 15241, *Rolling bearings — Symbols for quantities*

## 3 Terms and definitions

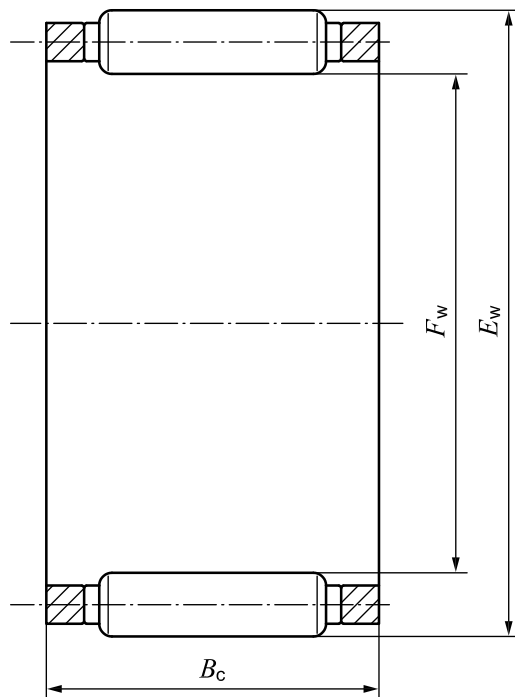
For the purposes of this document, the terms and definitions given in ISO 1132-1 and ISO 5593 apply.

## 4 Symbols

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

The symbols (except those for tolerances) shown in Figure 1 and the values given in Tables 1 to 4 denote nominal dimensions unless specified otherwise.

$B_c$	cage width
$E_w$	outside diameter of needle roller complement
$F_w$	bore diameter of needle roller complement
$\Delta_{B_{CS}}$	deviation of a single cage width



NOTE Radial needle roller and cage assemblies can also be with two rows of needle roller or split-type.

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**Figure 1 — Radial needle roller and cage assembly**  
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## 5 Boundary dimensions

The general plan is given in Tables 1 and 2.

Table 1 — Diameter series 1C and 2C

Dimensions in millimetres

$F_w$	Diameter series 1C								Diameter series 2C							
	$E_w$	$B_c$							$E_w$	$B_c$						
		Dimension series								Dimension series						
		11C	21C	31C	41C	51C	61C	71C		12C	22C	32C	42C	52C	62C	72C
4	7	6	8	10	—	—	—	—	—	—	—	—	—	—	—	—
5	8	6	8	10	13	—	—	—	9	8	10	13	—	—	—	—
6	9	6	8	10	13	15	—	—	10	8	10	13	15	—	—	—
7	10	6	8	10	13	15	17	—	11	8	10	13	15	17	—	—
8	11	6	8	10	13	15	17	—	12	8	10	13	15	17	20	—
9	12	6	8	10	13	15	17	—	13	8	10	13	15	17	20	—
10	13	6	8	10	13	15	17	—	14	8	10	13	15	17	20	—
12	15	6	8	10	13	15	17	—	16	8	10	13	15	17	20	—
14	18	8	10	13	15	17	20	23	19	10	13	15	17	20	23	27
15	19	8	10	13	15	17	20	23	20	10	13	15	17	20	23	27
16	20	8	10	13	15	17	20	23	21	10	13	15	17	20	23	27
17	21	8	10	13	15	17	20	23	22	10	13	15	17	20	23	27
18	22	8	10	13	15	17	20	23	23	10	13	15	17	20	23	27
20	24	8	10	13	15	17	20	23	25	10	13	15	17	20	23	27
22	26	8	10	13	15	17	20	23	27	10	13	15	17	20	23	27
25	29	8	10	13	15	17	20	23	30	10	13	15	17	20	23	27
28	33	10	13	15	17	20	23	27	34	12	15	17	20	25	30	35
30	35	10	13	15	17	20	23	27	36	12	15	17	20	25	30	35
32	37	10	13	15	17	20	23	27	38	12	15	17	20	25	30	35
35	40	10	13	15	17	20	23	27	41	12	15	17	20	25	30	35
38	43	10	13	15	17	20	23	27	44	12	15	17	20	25	30	35
40	45	10	13	15	17	20	23	27	46	12	15	17	20	25	30	35
42	47	10	13	15	17	20	23	27	48	12	15	17	20	25	30	35
45	50	10	13	15	17	20	23	27	51	12	15	17	20	25	30	35
50	55	10	13	15	17	20	23	27	56	12	15	17	20	25	30	35
55	61	12	15	17	20	25	30	35	62	16	20	25	30	35	40	—
60	66	12	15	17	20	25	30	35	67	16	20	25	30	35	40	—
65	71	12	15	17	20	25	30	35	72	16	20	25	30	35	40	—
70	76	12	15	17	20	25	30	35	77	16	20	25	30	35	40	—
75	81	12	15	17	20	25	30	35	82	16	20	25	30	35	40	—
80	86	12	15	17	20	25	30	35	87	16	20	25	30	35	40	—
85	92	16	20	25	30	35	40	—	93	20	25	30	35	40	45	—
90	97	16	20	25	30	35	40	—	98	20	25	30	35	40	45	—
95	102	16	20	25	30	35	40	—	103	20	25	30	35	40	45	—
100	107	16	20	25	30	35	40	—	108	20	25	30	35	40	45	—