
**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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Foreword

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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.

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