



International
Standard

ISO 19457

**Rolling bearings — Roller blocks
as subassemblies for linear motion
rolling bearings — Boundary
dimensions and tolerance values**

Roulements — Roulements pour mouvement linéaire, sous-ensembles, patin à rouleaux — Dimensions d'encombrement et valeurs de tolérance

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Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols	4
5 Designs and types	5
6 Boundary dimensions	7
7 Tolerance values	9
Annex A (informative) Roller block Type E and roller block Type F	11
Annex B (informative) Configurations of roller blocks	14
Annex C (informative) Recommendations on adjacent mounting surfaces	15
Bibliography	16

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Foreword

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This document was prepared by Technical Committee ISO/TC 4, *Rolling bearings*, Subcommittee SC 11, *Linear motion rolling bearings*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Linear motion rolling bearing subassemblies as standardized in this document are a product that has been on the market for several decades. It is projected that these products will become less important in future technology. However, in some application areas there is still a need for spare parts.

The designs with profiled rail guides and linear motion rolling bearings in ISO 12090-1 and ISO 12090-2 can replace the roller block design given in this document.

The title of this document applies the classification of linear motion rolling bearings as defined in ISO 24393:2008, Annex A.

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Rolling bearings — Roller blocks as subassemblies for linear motion rolling bearings — Boundary dimensions and tolerance values

1 Scope

This document specifies the boundary dimensions and tolerances for Types A to D of roller blocks.

Types E and F of roller blocks are given in [Annex A](#). They require fixing parts and are not yet produced on a broad manufacturer base.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 15241, *Rolling bearings — Symbols for physical quantities*

ISO 24393:2008, *Rolling bearings — Linear motion rolling bearings — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 24393:2008 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

roller block

linear roller bearing

linear bearing subassembly consisting of roller block body and a number of closed loops of recirculating rollers, which are designed to achieve unlimited motion along a flat rail or flat guideway

Note 1 to entry: An example of a roller block is illustrated in [Figure 1](#).

[SOURCE: ISO 24393:2008, 03.01.07]