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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Foreword

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

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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.

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