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**Plain bearings — Hydrodynamic plain  
thrust pad bearings under steady-  
state conditions —**

**Part 2:  
Functions for the calculation of thrust  
pad bearings**

*Paliers lisses — Butées hydrodynamiques à patins géométrie fixe  
fonctionnant en régime stationnaire —*

*Partie 2: Fonctions pour le calcul des butées à segments*

ISO 12131-2:2016

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## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

The committee responsible for this document is ISO/TC 123, *Plain bearings*.

This second edition cancels and replaces the first edition (ISO 12131-2:2001), of which it constitutes a minor revision.

ISO 12131 consists of the following parts, under the general title *Plain bearings — Hydrodynamic plain thrust pad bearings under steady-state conditions*:

- *Part 1: Calculation of thrust pad bearings*
- *Part 2: Functions for the calculation of thrust pad bearings*
- *Part 3: Guide values for the calculation of thrust pad bearings*

## Introduction

Assuming hydrodynamic conditions with full lubrication, the functions of the type covered by this part of ISO 12131 are necessary for the calculation of oil-lubricated pad thrust bearings in accordance with ISO 12131-1. They are based on the premises and boundary conditions specified. The values necessary for the calculation can be determined by means of the given formulae, as well as from diagrams and tables. The formulae in this part of ISO 12131 are approximations of the numerically determined values traced as curves according to Reference [2]. The explanation of the symbols, as well as examples for the calculation, are included in ISO 12131-1.

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