
**Rolling bearings — Load ratings for
hybrid bearings with rolling elements
made of ceramic —**

**Part 2:
Static load ratings**

*Roulements — Charges de base pour roulements hybrides avec
éléments roulants en céramique —*

Partie 2: Charges statiques

ITeH Standards
(<https://standards.iteh.ai>)
Document Preview

[ISO 20056-2:2017](https://standards.iteh.ai/catalog/standards/iso/6a5644f7-c464-466c-af7c-0e4725839ea2/iso-20056-2-2017)

<https://standards.iteh.ai/catalog/standards/iso/6a5644f7-c464-466c-af7c-0e4725839ea2/iso-20056-2-2017>



iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[ISO 20056-2:2017](https://standards.iteh.ai/catalog/standards/iso/6a5644f7-c464-466c-af7c-0e4725839ea2/iso-20056-2-2017)

<https://standards.iteh.ai/catalog/standards/iso/6a5644f7-c464-466c-af7c-0e4725839ea2/iso-20056-2-2017>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Symbols.....	2
5 Static load rating.....	3
5.1 General.....	3
5.2 Basic static radial load rating of radial ball bearings.....	3
5.3 Basic static axial load rating of thrust ball bearings.....	4
5.4 Basic static radial load rating of radial roller bearings.....	5
5.5 Basic static axial load rating of thrust roller bearings.....	5
5.6 Discontinuities in load ratings.....	5
5.7 Consideration of special material properties.....	5
6 Static equivalent load.....	5
6.1 General.....	5
6.2 Radial ball bearings.....	5
6.3 Thrust ball bearings.....	5
6.4 Radial roller bearings.....	5
6.5 Thrust roller bearings.....	5
7 Static safety factor.....	6
Annex A (informative) Calculation of the Hertzian parameters for point contact.....	7
Annex B (informative) Guide values of the factor f_0 for ball bearings.....	8
Annex C (informative) Discontinuities in the calculation of basic static load ratings.....	10
Annex D (informative) Material properties and material classification.....	11
Bibliography.....	13

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).

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).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, 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.

This document was prepared by Technical Committee ISO/TC 4, *Rolling bearings*, Subcommittee SC 8, *Load ratings and life*.

A list of all the parts in the ISO 20056 series can be found on the ISO website.

[ISO 20056-2:2017](https://standards.iteh.ai/ISO/20056-2:2017)

<https://standards.iteh.ai/catalog/standards/iso/6a5644f7-c464-466c-af7c-0e4725839ea2/iso-20056-2-2017>