

# JIS

JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

---

**JIS B 1540** : 2010

(JBIA)

**Rolling bearings—Aligning thrust  
ball bearings and aligning seat  
washers—Boundary dimensions**

---

ICS 21.100.20

Reference number : **JIS B 1540 : 2010 (E)**

B 1540 : 2010

Date of Establishment: 2010-03-23

Date of Public Notice in Official Gazette: 2010-03-23

Investigated by: Japanese Industrial Standards Committee  
Standards Board

Technical Committee on Machine Elements

---

JIS B 1540:2010, First English edition published in 2011-03

Translated and published by: Japanese Standards Association  
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

---

In the event of any doubts arising as to the contents,  
the original JIS is to be the final authority.

© JSA 2011

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

KA/AT

PROTECTED BY COPYRIGHT

## Contents

	Page
Introduction.....	1
1 Scope.....	1
2 Normative references .....	1
3 Terms and definitions .....	2
4 Symbols .....	2
5 Boundary dimensions.....	5
5.1 General.....	5
5.2 Single-direction aligning thrust ball bearings and single-direction aligning thrust ball bearings with aligning seat washer .....	5
5.3 Double-direction aligning thrust ball bearings and double-direction aligning thrust ball bearings with aligning seat washers .....	9
Annex JA (informative) Comparison table between JIS and corresponding International Standard .....	12

## Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japanese Industrial Standard submitted by the Japan Bearing Industrial Association (JBIA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

This **JIS** document is protected by the Copyright Law.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

# Rolling bearings—Aligning thrust ball bearings and aligning seat washers— Boundary dimensions

## Introduction

This Japanese Industrial Standard has been prepared based on the first edition of **ISO 20516** published in 2007 with some modifications of the technical contents, adding some terms and definitions not given in the original International Standard.

The portions with continuous sidelines or dotted underlines are the matters in the contents of the corresponding International Standard have been modified. A list of modifications with explanations is given in Annex JA.

## 1 Scope

This Standard specifies the boundary dimensions of the single-direction aligning thrust ball bearing, single-direction aligning thrust ball bearing with aligning seat washer, double-direction aligning thrust ball bearing and double-direction aligning thrust ball bearing with aligning seat washers.

NOTE : The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows:

ISO 20516:2007 *Rolling bearings—Aligning thrust ball bearings and aligning seat washers—Boundary dimensions* (MOD)

The symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 0104 *Rolling bearings—Vocabulary*

NOTE : Corresponding International Standard: ISO 5593:1997 *Rolling bearings—Vocabulary* (MOD)

JIS B 0124 *Rolling bearings—Symbols for quantities*

NOTE : Corresponding International Standard: ISO 15241:2001 *Rolling bearings—Symbols for quantities* (MOD)

JIS B 1514-3 *Rolling bearings—Tolerances of bearings—Part 3: Chamfer dimensions—Maximum values*

NOTE : Corresponding International Standard: ISO 582:1995 *Rolling bearings—Chamfer dimensions—Maximum values* (IDT)