



JAPANESE INDUSTRIAL STANDARD

Translated and Published by
Japanese Standards Association

JIS B 1182 : 2009

(JFRI/JSA)

Square head bolts

ICS 21.060.10

Reference number : **JIS B 1182 : 2009 (E)**

PROTECTED BY COPYRIGHT

AVA Documents
Document Sharing Hub

95

Date of Establishment: 1961-12-01

Data of Revision: 2009-11-20

Date of Public Notice in Official Gazette: 2009-11-20

Investigated by: Japanese Industrial Standards Committee

Standards Board

Technical Committee on Machine Elements

JIS B 1182 : 2009, First English edition published in 2010-03

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 2010

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

PROTECTED BY COPYRIGHT

Contents

	Page
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Classification	1
5 Shapes and dimensions	2
6 Screw threads	2
7 Mechanical properties	2
8 Material	3
9 Surface condition	3
9.1 Surface roughness	3
9.2 Appearance	3
10 Surface treatment	3
11 Test and inspection	3
11.1 Shapes and dimensions	3
11.2 Screw threads	3
11.3 Mechanical properties	4
11.4 Surface condition	4
12 Designation	4
13 Marking	4
13.1 Marking on products	4
13.2 Marking on packaging	5

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by The Japan Research Institute for Screw Threads and Fasteners (JFRI)/ Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently JIS B 1182: 1995 is replaced with this Standard.

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.

Square head bolts

1 Scope

This Japanese Industrial Standard specifies characteristics of steel-made square head bolts (hereafter referred to as “bolts”) for general use.

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 0101 *Screw threads and fasteners — Vocabulary*

JIS B 0205-3 *ISO general purpose metric screw threads — Part 3 : Selected sizes for screws, bolts and nuts*

JIS B 0209-3 *ISO general purpose metric screw threads — Tolerances — Part 3 : Deviations for constructional screw threads*

JIS B 0601 *Geometrical Product Specifications (GPS) — Surface texture : Profile method — Terms, definitions and surface texture parameters*

JIS B 1010 *Designation system for fasteners*

JIS B 1044 *Fasteners — Electroplated coatings*

JIS B 1051 *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1 : Bolts, screws and studs*

JIS B 1071 *Method of verification for size and geometry of threaded fasteners*

3 Terms and definitions

For the purposes of this Standard, the terms and definitions given in JIS B 0101 apply.

4 Classification

The bolts shall be classified into two types of the square head bolts and large size square head bolts according to the dimensions of the width across flats (s) relative to the nominal diameter (d) of the screw threads.

In addition, the value s/d of the square head bolts shall be 1.45 or over to and excl. 2, and the value s/d of the large size square head bolts shall be 2 or over.