

# JIS

JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

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JIS B 0203 : 1999

Taper pipe threads

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**ICS** 21.040.30

**Descriptors** : taper threads, pipe fittings

**Reference number** : JIS B 0203 : 1999 (E)

B 0203 : 1999

## Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently **JIS B 0203 : 1982** is replaced with **JIS B 0203 : 1999**.

Date of Establishment: 1952-03-08

Date of Revision: 1999-03-20

Date of Public Notice in Official Gazette: 1999-03-23

Investigated by: Japanese Industrial Standards Committee  
Divisional Council on Machine Elements

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JIS B 0203 : 1999, First English edition published in 1999-09

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

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## Taper pipe threads

**Introduction :** This Japanese Industrial Standard is based on ISO 7-1, *Pipe threads where pressure-tight joints are made on the threads—Part 1 : Dimensions, tolerances and designation*, which was published in 1994 as the third edition, without any change of technical contents of the International Standard (except the specification for the position of internal thread gauge plane) for its text. And the Annex (normative) specifies the types and those forms, dimensions, designation and testing methods, which were specified in the former Japanese Industrial Standard.

The side lined parts in this Standard are not specified in the corresponding International Standard.

**1. Scope** This Standard specifies taper pipe threads and is applicable to the threads<sup>(1)</sup> used mainly for pressure-tight joints on the threads for jointing the pipes, pipefittings, fluid machinery, etc. The taper pipe thread of PT 3-1/2 and PT 7 to PT 12 in thread designation and the parallel pipe thread of PS 3-1/2 and PS 7 to PS 12 shall be as specified in Annex (normative).

Note<sup>(1)</sup> : Not to be applied to the screw threads for oil-well pipes and other special products.

Remarks 1. Threads specified in the text of this Standard shall be given priority for use.

2. The corresponding International Standard is as follows.

ISO 7-1 : 1994 *Pipe threads where pressure-tight joints are made on the threads—Part 1 : Dimensions, tolerances and designation*

**2. Normative Reference** The following standards constitute a part of this Standard by being quoted in this Standard. These applicable standards shall be used the newest edition (including amendments).

JIS B 0101 *Screw threads and fasteners—Vocabulary*

JIS B 0202 *Parallel pipe threads*

JIS B 0253 *Gauges for taper pipe threads*

**3. Definitions** The definitions of main vocabularies used in this Standard shall be as follows, in addition to JIS B 0101.

a) **gauge diameter** : Major diameter of the thread, whether external or internal, at the gauge plane.

b) **major cone** : Imaginary cone which just touches the crests of a taper external thread or the roots of a taper internal thread.

c) **gauge plane** : Plane, perpendicular to the axis of the taper thread, at which the major cone has the gauge diameter.

Remarks : For external threads the gauge plane is located at a distance equal to the nominal gauge length from the small end of the thread. For internal threads the gauge plane is located at the entrance of the threaded part.

d) **gauge length** : The distance from the gauge plane of an external thread to the small end of the thread.

e) **reference plane** : Visible surface of each of the internally and externally threaded parts, which facilitates the reading of the gauge when the thread is inspected.

For internal threads it is the face of the internally threaded part, for external threads it is the small end of the externally threaded part.

f) **complete thread** : That part of the thread which is fully formed at both crest and root.

Remarks : When there is a chamfer at the start of the thread not exceeding one pitch in length, this is included in the length of complete thread.

g) **incomplete thread** : The part of the thread which is fully formed at the root, but truncated at the crest by its intersection with the cylindrical surface of the product.

h) **washout thread ; vanish thread** : That part of the thread which is not fully formed at the root.