



JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

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JIS B 2294 : 2022

(JVSS/JVIA/JSA)

**Vacuum technology — Dimensions of  
knife-edge flanges**

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ICS 23.040.60 ; 23.160

Reference number : JIS B 2294 : 2022 (E)

Date of Establishment: 2022-10-20

Date of Public Notice in Official Gazette: 2022-10-20

Investigated by: Japanese Industrial Standards Committee  
Standards Board for ISO area

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JIS B 2294 : 2022, First English edition published in 2024-01

Translated and published by: Japanese Standards Association  
Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

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Printed in Japan

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## Foreword

This Japanese Industrial Standard has been 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 Society of Vacuum and Surface Science (JVSS)/Japan Vacuum Industry Association (JVIA)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act.

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# Vacuum technology — Dimensions of knife-edge flanges

## Introduction

This Japanese Industrial Standard has been prepared based on **ISO 3669** : 2020, Edition 3 (incorporating the correction of error included in the Corrected version published in 2020), with some modifications of the technical contents to reflect the unique conditions in Japan.

Annex JA and Annex JB are unique to **JIS** and not given in the corresponding International Standard. The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JC.

## 1 Scope

This Standard specifies the dimensions of fixed or rotatable bolted knife-edge flanges used in vacuum systems for pressures ranging from atmospheric to as low as  $10^{-11}$  Pa.

NOTE 1 Knife-edge flanges were originally developed as ConFlat® flanges by the American company, Varian, Inc.

NOTE 2 ConFlat® is the trademark of a product supplied by Varian, Inc. This information is given for the convenience of users of the corresponding International Standard and this Standard, and does not constitute an endorsement by **JIS** of the product named.

NOTE 3 Prior to the establishment of this Standard, the Vacuum Society of Japan (now The Japan Society of Vacuum and Surface Science) standard **JVIS 003**-1982 was traditionally used as the standard for knife-edge flanges [10].

NOTE 4 The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 3669 : 2020 *Vacuum technology — Dimensions of knife-edge flanges* (MOD)

In addition, 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

Part or all of the provisions of the following standards, 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 0209-1 *ISO general purpose metric screw threads — Tolerances — Part 1 : Principles and basic data*