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Keyway broaches

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Descriptors : cutting tools, slotting cutters, slitting saws, keys (engineering), broaches

Reference number : JIS B 4238 : 1999 (E)

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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 the Japanese Industrial Standards Committee, as the result of proposal for revision of Japanese Industrial Standard submitted by the Japan Small Tool Makers Association (JSTA)/the Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law. Consequently **JIS B 4238:1988** is replaced with this Standard.

For this revision, the contents were reviewed due to the revision of **JIS B 1301:1996**, but the dimensional specifications remain much the same.

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.

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Keyway broaches

Introduction This Japanese Industrial Standard was established in October 1972 for the purpose of standardization of broaches used mainly for keyway processing, and then revised twice in 1980 and 1988. This latest revision was prepared as a result of the revision of **JIS B 1301:1996**.

1 Scope This Standard specifies flat type keyway broaches used for processing keys of nominal dimensions from 3×3 to 16×10 specified in **JIS B 1301** (hereafter referred to as "broaches").

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

- JIS B 0175 *Broaches — Vocabulary*
- JIS B 0405 *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*
- JIS B 0601 *Surface roughness — Definitions and designation*
- JIS B 0659 *Roughness comparison specimens*
- JIS B 1301 *Keys and their corresponding keyways*
- JIS B 4237 *Dimensions of pull and follower ends of broach*
- JIS B 7502 *Micrometer callipers*
- JIS B 7503 *Dial gauges*
- JIS B 7513 *Precision surface plates*
- JIS B 7726 *Rockwell hardness test — Verification of testing machines*
- JIS B 7734 *Knoop hardness test — Verification of testing machines*
- JIS G 4403 *High speed tool steels*
- JIS Z 2245 *Rockwell hardness test — Test method*
- JIS Z 2251 *Knoop hardness test — Test method*

3 Definitions The definitions of the main terms used in this Standard shall be in accordance with **JIS B 0175**.

4 Classification Broaches shall be classified into the three classes; broaches for sliding type D10, broaches for normal type JS9 and broaches for fastening type P9, according to the tolerances on the tooth width t corresponding to the tolerances on the width of the keyway to be worked.

5 Shape and dimensions The shape and dimensions of broaches shall be as specified in Table 1.