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(JFPA/JSA)

**Hydraulic fluid power— Dimensions and
identification code for mounting flanges
and shaft ends of displacement pumps
and motors— Part 1 : Inch series shown
in metric units**

ICS 23.100.10

Reference number : JIS B 2292-1 : 2005 (E)

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95

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 Japan Fluid Power Association (JFPA)/ 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 2292-1:2000 is replaced with this Standard.

This revision has been made based on ISO 3019-1:2001 *Hydraulic fluid power—Dimensions and identification code for mounting flanges and shaft ends of displacement pumps and motors—Part 1 : Inch series shown in metric units* for the purpose of making it easier to compare this Standard with International Standard; to prepare Japanese Industrial Standard conforming with International Standard; and to propose a draft of an International Standard which is based on Japanese Industrial Standard.

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.

JIS B 2292 consists of the following 2 parts, under the general title *Hydraulic fluid power—Dimensions and identification code for mounting flanges and shaft ends of displacement pumps and motors* :

— *Part 1 : Inch series shown in metric units*

— *Part 2 : Metric series*

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

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Contents

	Page
Introduction	1
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Dimensions and geometric tolerances	2
4.1 Tolerances	2
4.2 Selection of mounting flanges and shaft ends	2
4.3 Mating components	2
5 Identification code	2
5.1 Mounting flanges	2
5.2 Shaft ends	2
6 Flange/shaft end combinations	2
7 Flange/shaft end concentricity and perpendicularity	3
8 Identification statement	3
Annex A (normative) ISO inch screw threads—Basic dimensions	11
Annex B (informative) Bibliography	12

Hydraulic fluid power— Dimensions and identification code for mounting flanges and shaft ends of displacement pumps and motors— Part 1 : Inch series shown in metric units

Introduction This Japanese Industrial Standard has been prepared based on the second edition of ISO 3019-1, *Hydraulic fluid power—Dimensions and identification code for mounting flanges and shaft ends of displacement pumps and motors—Part 1: Inch series shown in metric units* published in 2001 without modifying the technical content.

1 Scope This part of JIS B 2292 specifies for inch series of the two- and four-bolt mounting flanges (hereafter referred to as “flanges”) and the shaft ends relating to positive-displacement, rotary hydraulic fluid power pumps (hereafter referred to as “pumps”) and motors (hereafter referred to as “motors”).

This part of JIS B 2292 specifies sizes and dimensions and establishes an identification code for cylindrical keyed shaft ends with an external thread, as well as those without a thread, conical keyed shaft ends with an external thread and 30° involute spline shaft ends.

NOTES 1 Involute spline is in accordance with SAE J 744 : 1996, *Hydraulic pump and motor mounting and drive dimensions*.

2 The International Standard corresponding to this part of JIS B 2292 is as follows.

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

ISO 3019-1:2001 *Hydraulic fluid power—Dimensions and identification code for mounting flanges and shaft ends of displacement pumps and motors —Part 1: Inch series shown in metric units* (IDT)

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 0021 *Geometrical product specifications (GPS)—Geometrical tolerancing—Tolerancing of form, orientation, location and run-out*

Remarks : ISO/DIS 1101 Geometrical Product Specifications (GPS)—Geometrical tolerancing—Tolerances of form, orientation, location and run-out is equivalent to the said standard.

JIS B 0142 *Glossary of terms for oil hydraulics and pneumatics*

Remarks : ISO 5598 *Fluid power systems and components—Vocabulary* is equivalent to the said standard.

ISO 68-2 *ISO general-purpose screw threads—Basic profile—Part 2:Inch screw threads*

3 Terms and definitions For the purposes of this part of JIS B 2292, the terms and definitions given in JIS B 0142 apply.

4 Dimensions and geometric tolerances

4.1 Tolerances Dimensions shown without tolerances are nominal. Tolerances of form and position are shown in accordance with JIS B 0021.

4.2 Selection of mounting flanges and shaft ends Select flange and shaft dimensions for pumps and motors from attached figures 1 to 6 and attached tables 1 to 6. Shaft ends according to attached figure 3 and attached figure 6 may be provided with a tapped hole.

4.3 Mating components The dimension and related tolerances of the mating components shall be compatible with the dimensions and tolerances specified in this part of JIS B 2292, thus avoiding undue body strain as well as transverse loads on shafts in excess of those permitted by the pump or motor manufacturer.

5 Identification code

5.1 Mounting flanges Use the mounting flange identification code given in attached table 1 and attached table 2.

The number preceding the hyphen (–) is a value rounded to millimetres, of the mounting flange pilot diameter.

The number following the hyphen (–) is the number of mounting bolt holes in the flange.

The number following the hyphen (–) is arbitrarily assigned as follows :

5.2 Shaft ends The shaft end identification codes are shown in attached tables 3 to 6.

The number preceding the hyphen (–) is a value rounded to millimetres, of the shaft major diameter.