



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS B 0161 : 1999

(ISO 6811 : 1998)

**Spherical plain bearings—
Vocabulary**

ICS 01.040.21; 21.100.10

Descriptors : bearings, plain bearings, sliding bearings, vocabulary

Reference number : JIS B 0161 : 1999 (E)

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law:

Date of Establishment: 1999-01-20

Date of Public Notice in Official Gazette: 1999-01-20

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

JIS B 0161 : 1999, First English edition published in 2002-05

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

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the original JIS is to be the final authority.

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Printed in Japan

Spherical plain bearings—Vocabulary

Introduction This Japanese Industrial Standard has been prepared based on ISO 6811 *Spherical plain bearings—Vocabulary* published in 1998 without modifying the technical contents.

1 Scope This Standard presents general terms and definitions relevant to the field of spherical plain bearings (hereafter referred to as “bearings”).

2 Principles and rules followed

2.1 Constitution of the vocabulary The vocabulary comprises

- a) terms, and definitions;
- b) figures;
- c) alphabetical index.

2.2 Constitution of terms and definitions The terms and definitions are given in groups and subgroups, arranged in systematic order.

A two-digit serial number is assigned to each group, e.g. 01, 02, etc.

Each group is divided into subgroups, to each of which is assigned a four-digit serial number, the first two digits being those of the group. Each entry (a term with its definition) is assigned a six-digit index number, the first four digits being those of the subgroup.

A term printed in **bold** typeface for the first entry in a definition is defined in another entry in this Standard.

2.3 Constitution of figures Each figure gives the index numbers of relevant terms.

A figure usually shows only one example of the several existing forms of a bearing or part. In most cases the figures are simplified and leave out unnecessary details.

2.4 Constitution of the index The alphabetical index refers to all terms and the index number of the entry in clause 3 where the term is defined.

3 Terms and definitions Terms and definitions are as follows:

01 bearings support or a guide by means of which a moving part is located with respect to other parts of a mechanism (**ISO 4378-1**)

01.01 plain bearings bearing in which only sliding friction takes place (**ISO 4378-1**)

No.	Term (Japanese character)	Reading	Definition	Figure No.	English equivalent (informative)
01.01.01	球面滑り軸受	KYŪMEN-SUBERI ZIKUUE	plain bearing , designed primarily for oscillatory, tilting and slow rotational movements, in which the sliding contact surfaces are spherical	1 to 6	spherical plain bearing
01.01.02	ラジアル球面滑り軸受	RAZIARU KYŪMEN-SUBERI ZIKUUE	spherical plain bearing intended to support primarily radial load	1 to 3, 6	radial spherical plain bearing
01.01.03	ラジアルコンタクト球面滑り軸受	RAZIARU KONTAKUTO KYŪMEN-SUBERI ZIKUUE	radial spherical plain bearing having a nominal contact angle of 0°	1, 6	radial contact spherical plain bearing
01.01.04	ボールスタッド付き球面滑り軸受	BÔRU SUTADDO-TUKI KYŪMEN-SUBERI ZIKUUE	spherical plain bearing in which a ball stud is mounted in place of an inner ring	6	spherical plain bearing outer ring with ball stud
01.01.05	スタッド付き球面滑り軸受	SUTADDO-TUKI KYŪMEN SUBERI ZIKUUE	spherical plain bearing in which a stud is mounted	7	spherical plain bearing with stud
01.01.06	アンギュラコンタクトラジアル球面滑り軸受	ANGYURA KONTAKUTO RAZIARU KYŪMEN-SUBERI ZIKUUE	radial spherical plain bearing having a nominal contact angle larger than 0° up to 30°	2, 3	angular contact radial spherical plain bearing
01.01.07	スラスト球面滑り軸受	SURASUTO KYŪMEN-SUBERI ZIKUUE	spherical plain bearing intended to support primarily axial load	4, 5	thrust spherical plain bearing
01.01.08	アキシアルコンタクト球面滑り軸受	AKISIARU KONTAKUTO KYŪMEN-SUBERI ZIKUUE	thrust spherical plain bearing having a nominal contact angle $\tau = 90^\circ$	4	axial contact spherical plain bearing

No.	Term (Japanese character)	Reading	Definition	Figure No.	English equivalent (informative)
01.01.09	アンギュラコンタクトスラスト球面滑り軸受	ANGYURA KONTAKUTO SURASUTO KYŪMEN-SUBERI ZIKUUE	thrust spherical plain bearing having a nominal contact angle larger than 30° but less than 90°	5	angular contact thrust spherical plain bearing

02 Spherical plain bearing features and parts

02.01 Features

No.	Term (Japanese character)	Reading	Definition	Figure No.	English equivalent (informative)
02.01.01	軸受内径面	ZIKUUE NAIKEI-MEN	inside surface of an inner ring or shaft washer of a spherical plain bearing	8 to 10	bearing bore
02.01.02	軸受外径面	ZIKUUE GAIKEI-MEN	outside surface of an outer ring or housing washer of a spherical plain bearing	8 to 10	bearing outside surface
02.01.03	球状外面	KYŪZYŌ GAIMEN	surface of an inner ring, shaft washer or ball stud intended to make sliding contact with the outer ring, housing washer or rod end eye and having a convex surface being part of a sphere	6, 8, 10, 23	sphered outer surface
02.01.04	球状内面	KYŪZYŌ NAIMEN	surface of an outer ring, housing washer or rod end eye intended to make sliding contact with the inner ring, shaft washer or ball stud and having a concave surface being part of a hollow sphere	6, 8 to 10, 23	sphered inner surface
02.01.05	滑り接触面	SUBERI SESSYOKU-MEN	those parts of the sphered outer surface and sphered inner surface of a spherical plain bearing which are in contact Note : The symbol γ is used.	1 to 6	sliding contact surface

No.	Term (Japanese character)	Reading	Definition	Figure No.	English equivalent (informative)
02.01.06	側面	SOKUMEN	that surface of an inner ring , outer ring , washer or rod end eye which is nominally perpendicular to the axis of the ring, washer or rod end eye	8, 23	face
02.01.07	背面	HAIMEN	that face of an angular contact radial spherical plain bearing or of an angular contact thrust spherical plain bearing which is intended to support axial load	9, 10	back face
02.01.08	正面	SYÔMEN	that face of an angular contact radial spherical plain bearing or of an angular contact thrust spherical plain bearing which is not intended to support axial load	9, 10	front face
02.01.09	支持面	SIZI-MEN	that face of a pad or cup which is intended to support axial load	4	support face
02.01.10	面取り	MENTORI	surface joining the bearing bore and one of the faces of an inner ring or shaft washer or the bearing outside surface and one of the faces of an outer ring or housing washer	8 to 10	chamfer
02.01.11	入れ溝	IRE-MIZO	pair of slots, diametrically opposite in the face of an outer ring or rod end eye to permit the insertion of the inner ring	14	filling slots
02.01.12	油溝	ABURA-MIZO	circumferential groove in the bore of an inner ring or in the outside surface of an outer ring intended for conveying lubricant	15	lubrication groove
02.01.13	油穴	ABURA-ANA	radial hole connecting a lubrication groove to the sliding contact surface or to the lubrication distribution groove	15	lubrication hole
02.01.14	潤滑剤分配溝	ZYUNKATU-ZAI BUNPAI-MIZO	groove in the sliding contact surface intended to distribute lubricant around or across the surface	15	lubrication distribution groove

No.	Term (Japanese character)	Reading	Definition	Figure No.	English equivalent (informative)
02.01.15	側面溝	SOKUMEN-MIZO	circumferential groove in the face of an outer ring to facilitate the retention of an outer ring in a housing	15	face groove
02.01.16	保持輪溝	HOZIWA-MIZO	groove(s) in the outside surface of a double-fractured or cut outer ring or a two-piece outer ring intended to accommodate ring(s) to hold the halves of the outer ring together during transit and to facilitate mounting	11, 16	retaining ring groove(s)

02.02 Rings and studs

No.	Term (Japanese character)	Reading	Definition	Figure No.	English equivalent (informative)
02.02.01	内輪	NAIRIN	that part of a radial spherical plain bearing which has a sphered outer surface	8, 9	inner ring
02.02.02	内輪背面	NAIRIN HAIMEN	that face of an inner ring which is intended to support axial load	9	inner ring back face
02.02.03	内輪正面	NAIRIN SYÔMEN	that face of an inner ring which is not intended to support axial load	9	inner ring front face
02.02.04	スタッド	SUTADDO	stud-shaped element, the head of which is cylindrical for mounting within the bore of a spherical plain bearing or inner ring of a spherical plain bearing	7, 26, 28	stud
02.02.05	ボールスタッド	BÔRU SUTADDO	stud-shaped element, the head of which is spherical and adapted for use in place of the inner ring of a spherical plain bearing	6, 25, 27	ball stud
02.02.06	外輪	GAIRIN	that part of a radial spherical plain bearing which has a sphered inner surface	6, 8, 9	outer ring