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Dimensions of cylindrical worm gears

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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 Gear Manufacturers Association (JGMA)/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 1723:1977** is replaced with this Standard.

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Dimensions of cylindrical worm gears

1 Scope

This Japanese Industrial Standard specifies the general-use cylindrical worm gears with an axial module of 1 mm to 25 mm and a centre distance of 40 mm to 500 mm used for power transmission.

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 0102-1 *Vocabulary of gear terms — Part 1 : Definitions related to geometry*

JIS B 0102-2 *Vocabulary of gear terms — Part 2 : Definitions related to worm gear geometry*

3 Terms and definitions

For the purpose of this Standard, the terms and definitions given in JIS B 0102-1 and JIS B 0102-2 apply.

4 Symbols and units

The symbols and units used in this Standard shall be as given in Table 1.

Table 1 Symbols

Symbol	Term	Unit
a	Centre distance	mm
b_1	Cylindrical worm facewidth	mm
b_2	Wormwheel facewidth	mm
d_{a1}	Cylindrical worm tip diameter	mm
d_{a2}	Wormwheel tip diameter	mm
d_{f1}	Cylindrical worm root diameter	mm
d_{f2}	Wormwheel root diameter	mm
d_{m1}	Cylindrical worm reference diameter	mm
d_{m2}	Wormwheel reference diameter	mm
d_T	Throat diameter	mm
d_{w1}	Cylindrical worm pitch diameter	mm
d_{w2}	Wormwheel pitch diameter	mm
u	Gear ratio	—
m_{x1}	Axial module	mm
P_{x1}	Axial pitch	mm
q_1	Diameter quotient	—
r_t	Throat form radius	mm