INTERNATIONAL STANDARD

ISO 3408-2

First edition
1991-06-01

Ball screws —

Part 2:
Nominal diameters and nominal leads — Metric series

Vis à billes —

Partie 2: Diamètres et pas hélicoïdaux, nominaux — Série métrique

Reference number
ISO 3408-2 : 1991 (E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 3408-2 was prepared by Technical Committee ISO/TC 39, *Machine tools*.

This first edition of ISO 3408-2 cancels and replaces ISO 3408 : 1975 to which the nominal leads 1 mm, 25 mm, 32 mm and 40 mm have been added and from which the inch series of nominal diameters and basic leads has been deleted.

ISO 3408 will consist of the following parts, under the general title *Ball screws*:

— *Part 1: Vocabulary and designation*

— *Part 2: Nominal diameters and nominal leads — Metric series*

— *Part 3: Acceptance conditions and acceptance tests*

— *Part 4: Ball screw axial rigidity*

— *Part 5: Distribution of static and dynamic loads and operational life*

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Printed in Switzerland

Ball screws —

Part 2 :
Nominal diameters and nominal leads — Metric series

1 Scope

This part of ISO 3408 specifies the nominal diameters and nominal leads, metric series, for ball screws. It also gives preferred combinations of nominal diameter and nominal lead and a general plan which includes additional combinations to be used when it becomes necessary to deviate from the preferred combinations.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 3408. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 3408 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3408-1 : 1991, *Ball screws — Part 1: Vocabulary and designation.*

3 Definitions

For the purposes of this part of ISO 3408, the definitions given in ISO 3408-1 apply.

4 Nominal diameters

The following series of nominal diameters, in millimetres, shall be used :

6 — 8 — 10 — 12 — 16 — 20 — 25 — 32 — 40 — 50 — 63 — 80 — 100 — 125 — 160 and 200.

5 Nominal leads

The following series of nominal leads, in millimetres, shall be used :

1 — 2 — 2,5 — 3 — 4 — 5 — 6 — 8 — 10 — 12 — 16 — 20 — 25 — 32 and 40.

Where possible, preference shall be given to the following nominal leads, in millimetres :

2,5 — 5 — 10 — 20 and 40.

6 Combinations of nominal diameters and nominal leads

6.1 Preferred combinations

See table 1.

6.2 General plan

See table 2.

For preferred combinations, use the nominal lead values which are underlined. When it becomes necessary to deviate from the preferred combinations, use the nominal lead values which are not underlined.