

STANDARD

8319-1

Second edition
1996-05-15

Orthopaedic instruments — Drive connections —

Part 1:

Keys for use with screws with hexagon socket heads

Instruments orthopédiques — Raccords d'entraînement —

Partie 1: Clés à utiliser pour les vis à tête à six pans creux



Reference number
ISO 8319-1:1996(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 8319-1 was prepared by Technical Committee ISO/TC 150, *Implants for surgery*, Subcommittee SC 5, *Osteosynthesis*.

This second edition cancels and replaces the first edition (ISO 8319-1:1986), which has been technically revised.

ISO 8319 consists of the following parts, under the general title *Orthopaedic instruments — Drive connections*:

- *Part 1: Keys for use with screws with hexagon socket heads*
- *Part 2: Screwdrivers for single slot head screws, screws with cruciate slot and cross-recessed head screws*

Annexes A and B of this part of ISO 8319 are for information only.

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Introduction

Essential requirements for all varieties of screw keys are that

- a) the working end of the screw key should accurately engage the head of the screw;
- b) the materials used for the manufacture of the screw keys should be satisfactory from all clinical aspects;
- c) the screw key should have adequate strength.

The purpose of this part of ISO 8319 is to ensure that this is achieved without imposing undue restriction on design features.

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Orthopaedic instruments — Drive connections —

Part 1:

Keys for use with screws with hexagon socket heads

1 Scope

This part of ISO 8319 specifies the dimensions, tolerances, mechanical properties and performance requirements of the working end of keys to be used for inserting and removing metal bone screws with hexagon drive sockets, used as surgical implants.

Screw keys with a working end specified in this part of ISO 8319 are suitable for use with screws that conform to ISO 5835.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 8319. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 8319 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 5832-5:1993, *Implants for surgery — Metallic materials — Part 5: Wrought cobalt-chromium-tungsten-nickel alloy.*

ISO 5835:1991, *Implants for surgery — Metal bone screws with hexagonal drive connection, spherical under-surface of head, asymmetrical thread — Dimensions¹⁾.*

ISO 6508:1986, *Metallic materials — Hardness test — Rockwell test (scales A - B - C - D - E - F - G - H - K).*

ISO 7153-1:1991, *Surgical instruments — Metallic materials — Part 1: Stainless steel.*

3 Dimensions and tolerances

The dimensions and tolerances shall be as specified in figure 1 and table 1.

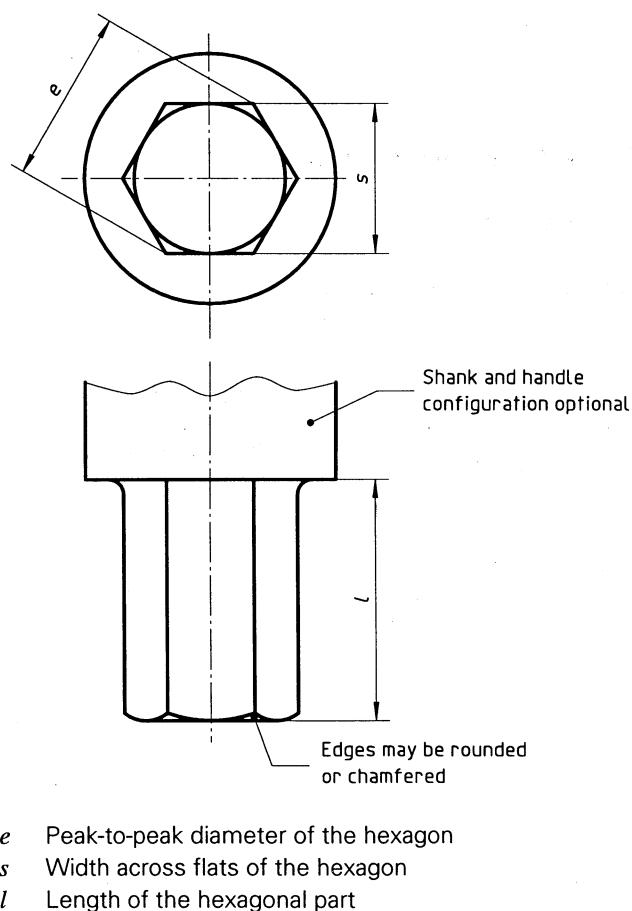


Figure 1 — Designation of dimensions of screw keys

1) See annex A for information on the interrelationship between International Standards dealing with bone screws, bone plates and relevant tools.