

INTERNATIONAL
STANDARD

ISO
5838-3

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**Implants for surgery — Skeletal pins and
wires —**

Part 3:
Kirschner skeletal wires

*Implants chirurgicaux — Fils et broches pour os —
Partie 3: Fils pour os de type Kirschner*



Reference number
ISO 5838-3:1993(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 5838-3 was prepared by Technical Committee ISO/TC 150, *Implants for surgery*, Sub-Committee SC 5, *Osteosynthesis*.

ISO 5838 consists of the following parts, under the general title *Implants for surgery — Skeletal pins and wires*:

- Part 1: *Material and mechanical requirements*
- Part 2: *Steinmann skeletal pins — Dimensions*
- Part 3: *Kirschner skeletal wires*

Annex A of this part of ISO 5838 is for information only.

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Implants for surgery — Skeletal pins and wires —

Part 3: Kirschner skeletal wires

1 Scope

This part of ISO 5838 specifies the characteristics of skeletal wires of the Kirschner type.

Material and mechanical requirements are covered by ISO 5838-1.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 5838. 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 5838 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 5838-1:1983, *Implants for surgery — Skeletal pins and wires — Part 1: Material and mechanical requirements.*

ISO 6018:1987, *Orthopaedic implants — General requirements for marking, packaging and labelling.*

3 Dimensions

The dimensions shall be in accordance with figures 1 and 2, and table 1.

4 Ends

One or both ends of the wire shall be formed into a point.

If the point is a trocar point, then the angles of the flats forming the point shall be as shown in figure 2.

NOTE 1 Annex A illustrates different points and blunt ends which may be used.

5 Marking and packaging

Skeletal wires of the Kirschner type shall be packaged and marked as specified in ISO 6018.

The packaging shall show the length and diameter of the wires, expressed in millimetres, and indicate the type of the ends.

Table 1 — Main dimensions of Kirschner wires
Dimensions in millimetres

Diameter	Length
$d \begin{smallmatrix} 0 \\ -0,04 \end{smallmatrix}$	$L \pm 2$
$0,8 \leq d \leq 1,3$	$70 \leq L \leq 310$
$1,4 \leq d \leq 2,5$	$150 \leq L \leq 310$
$d = 3,0$	$150 \leq L \leq 310$

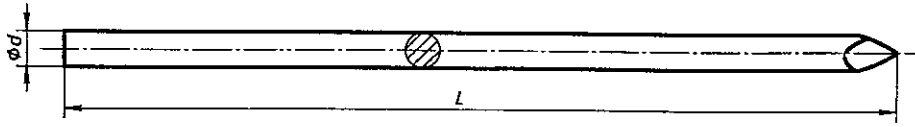


Figure 1 — Main dimensions of Kirschner wires

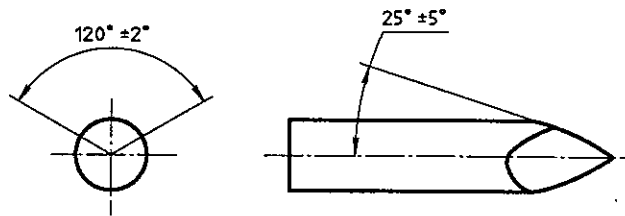


Figure 2 — Form A: trocar point

Annex A
(informative)

Points and blunt ends

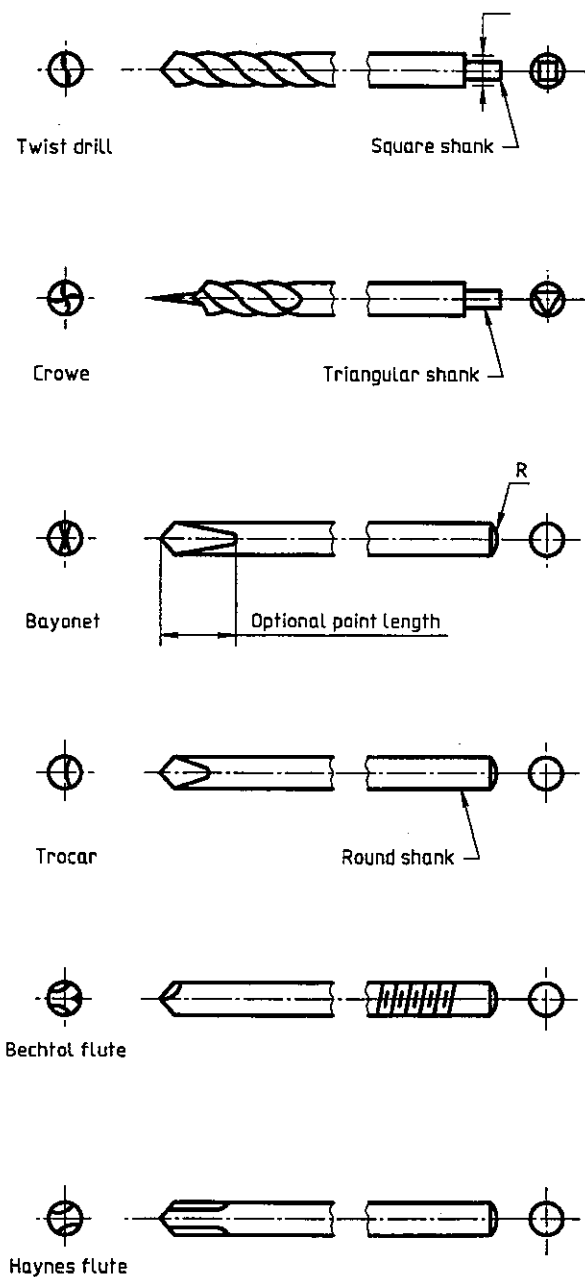


Figure A.1 — Points and blunt ends

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NOTES

- 2 Wires may be smooth shank or threaded.
- 3 Point angle and helix angle, where applicable, is as specified by the manufacturer.
- 4 Optional designs: both ends pointed or point with suture hole are also possible.

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