



SLOVENSKI STANDARD SIST EN ISO 7197:2025

01-januar-2025

Nadomešča:
SIST EN ISO 7197:2009

Nevrokirurški vsadki (implantati) - Sterilni hidrocefalni stiki (kretnice) za enkratno uporabo (ISO 7197:2024)

Neurosurgical implants - Sterile, single-use hydrocephalus shunts (ISO 7197:2024)

Neurochirurgische Implantate - Sterile Hydrozephalus-Shunts zum Einmalgebrauch und deren Bestandteile (ISO 7197:2024)

Implants neurochirurgicaux - Systèmes de dérivation stériles, non réutilisables, pour hydrocéphalie (ISO 7197:2024)

Ta slovenski standard je istoveten z: EN ISO 7197:2024

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ICS:

11.040.40	Implantanti za kirurgijo, protetiko in ortetiko	Implants for surgery, prosthetics and orthotics
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SIST EN ISO 7197:2025

en,fr,de

EUROPEAN STANDARD

EN ISO 7197

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2024

ICS 11.040.40

Supersedes EN ISO 7197:2009

English Version

Neurosurgical implants - Sterile, single-use hydrocephalus shunts (ISO 7197:2024)

Implants neurochirurgicaux - Systèmes de dérivation stériles, non réutilisables, pour hydrocéphalie (ISO 7197:2024)

Neurochirurgische Implantate - Sterile Hydrozephalus-Shunts zum Einmalgebrauch und deren Bestandteile (ISO 7197:2024)

This European Standard was approved by CEN on 28 July 2024.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword.....	3
Annex ZA (informative) Relationship between this European Standard the General Safety and Performance Requirements of Regulation (EU) 2017/745 aimed to be covered	4

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European foreword

This document (EN ISO 7197:2024) has been prepared by Technical Committee ISO/TC 150 "Implants for surgery" in collaboration with Technical Committee CEN/TC 285 "Non-active surgical implants" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2025, and conflicting national standards shall be withdrawn at the latest by May 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 7197:2009.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Endorsement notice

The text of ISO 7197:2024 has been approved by CEN as EN ISO 7197:2024 without any modification.

Annex ZA (informative)

Relationship between this European Standard the General Safety and Performance Requirements of Regulation (EU) 2017/745 aimed to be covered

This European Standard has been prepared under a Commission's standardization request "M/575" to provide one voluntary means of conforming to the General Safety and Performance Requirements of Regulation (EU) 2017/745 of 5 April 2017 concerning medical devices [OJ L 117].

Once this standard is cited in the Official Journal of the European Union under that Regulation, compliance with the normative clauses of this standard given in Table ZA.1 and application of the edition of the normatively referenced standards as given in Table ZA.2 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding General Safety and Performance Requirements of that Regulation, and associated EFTA regulations.

Where a definition in this standard differs from a definition of the same term set out in Regulation (EU) 2017/745, the differences shall be indicated in this Annex Z. For the purpose of using this standard in support of the requirements set out in Regulation (EU) 2017/745, the definitions set out in this Regulation prevail.

Where the European standard is an adoption of an International Standard, the scope of this standard can differ from the scope of the European Regulation that it supports. As the scope of the applicable regulatory requirements differ from nation to nation and region to region, the standard can only support European regulatory requirements to the extent of the scope of the European regulation for medical devices (EU) 2017/745).

NOTE 1 Where a reference from a clause of this standard to the risk management process is made, the risk management process needs to be in compliance with Regulation (EU) 2017/745. This means that risks have to be 'reduced as far as possible', 'reduced to the lowest possible level', 'reduced as far as possible and appropriate', 'removed or reduced as far as possible', 'eliminated or reduced as far as possible', 'removed or minimized as far as possible', or 'minimized', according to the wording of the corresponding General Safety and Performance Requirement.

NOTE 2 The manufacturer's policy for determining **acceptable risk** must be in compliance with General Safety and Performance Requirements 1, 2, 3, 4, 5, 8, 9, 10, 11, 14, 16, 17, 18, 19, 20, 21 and 22 of the Regulation.

NOTE 3 When a General Safety and Performance Requirement does not appear in Table ZA.1, it means that it is not addressed by this European Standard.

Table ZA.1 — Correspondence between this European Standard and Annex I of Regulation (EU) 2017/745 [OJ L 117] and to system or process requirements including those relating to quality management systems, risk management, post-market surveillance systems, clinical investigations, clinical evaluation or post-market clinical follow-up

General Safety and Performance Requirements of Regulation (EU) 2017/745	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
10.1 (f)	4.9, 4.11, 5.1.2	10.1 (f) is covered with respect to: dynamic breaking strength by 4.9. bursting pressure by 4.11. long term stability by 5.1.2 which specifies a test method and performance requirement for the valves.
10.1 (h)	4.2, 4.6	10.1 (h) is covered with respect to: radiopacity by 4.2. pressure-flow characteristics by 4.6.
10.2	7	10.2 is covered with respect to the material of the packaging being non-fibrous and lint-free by Clause 7.
11.1 (c)	4.4	11.1 (c) is covered with respect to resistance to leakage by 4.4.
14.2 (b)	4.10	14.2 (b) is covered with respect to magnetically induced forces, moments, and heating and with respect to image artefacts produced by the shunt under worst-case MR scanning conditions by 4.10.
23.1 (b)	6	23.1 (b) is covered with respect to marking indicating the intended direction of flow by Clause 6.
23.4 (e)	8.2 g), h), i), j) and k)	23.4 (e) is covered with respect to the flow characteristics of the valve by 8.2 g), h), i), j) and k).
23.4 (i)	8.2 a), b)	23.4 (i) is covered with respect to: instructions for assembly of the shunt system by 8.2 a). instructions for the pre and postoperative testing of the functionality of the shunt by 8.2 b).
23.4 (k)	8.2 b), c), e) and l)	23.4 (k) is covered with respect to: instructions for the pre and postoperative testing of the functionality of the shunt by 8.2 b) warning notices concerning the maximum

EN ISO 7197:2024 (E)

General Safety and Performance Requirements of Regulation (EU) 2017/745	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
		<p>positive and negative pressure that can be applied to the system without impairing its performance by 8.2 c).</p> <p>an indication regarding how the flow direction of the device can be determined by 8.2 e).</p> <p>an instruction if and how the shunt shall be tested and/or readjusted after MR examination by 8.2 l).</p>
23.4 (s)	8.3	23.4 (s) is covered with respect to warning against the hazards of exposure to magnetic fields by 8.3.

Table ZA.2 — Applicable Standards to confer presumption of conformity as described in this Annex ZA

Column 1 Reference in Clause 2	Column 2 International Standard Edition	Column 3 Title	Column 4 Corresponding European Standard Edition
ISO/TR 14283	ISO/TR 14283:2018	Implants for surgery — Essential principles of safety and performance	-
ISO 14630:2024	ISO 14630:2024	Non-active surgical implants — General requirements	EN ISO 14630:2024

The documents listed in the Column 1 of Table ZA.2, in whole or in part, are normatively referenced in this document, i.e. are indispensable for its application. The achievement of the presumption of conformity is subject to the application of the edition of Standards as listed in Column 4 or, if no European Standard Edition exists, the International Standard Edition given in Column 2 of Table ZA.2.

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.



**International
Standard**

ISO 7197

**Neurosurgical implants — Sterile,
single-use hydrocephalus shunts**

*Implants neurochirurgicaux — Systèmes de dérivation stériles,
non réutilisables, pour hydrocéphalie*

**Fourth edition
2024-07**

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