
**Round steel short link chains for
lifting purposes — Chain slings of
welded construction — Grade 8**

*Chaînes de levage en acier de section ronde à maillons courts —
Elingues en chaînes assemblées par soudure — Classe de qualité 8*

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Published in Switzerland

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 111, *Round steel link chains, chain slings, components and accessories*, Subcommittee SC 1, *Chains and chain slings*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This second edition cancels and replaces the first edition (ISO 4778:1981), which has been technically revised.

The main changes compared to the previous edition are as follows:

- omission of grades 4 and 6;
- increased range of nominal diameters from 4 mm to 45 mm;
- modernization of the document structure and layout, following the structure already implemented in the latest publications of ISO/TC 111/SC 1.

Round steel short link chains for lifting purposes — Chain slings of welded construction — Grade 8

1 Scope

This document specifies the requirements, methods of rating and testing of single, double, three and four leg welded chain slings of grade 8 using components such as sling chains according to ISO 3076 together with links according to ISO 16798, hooks according to ISO 7597 and forged components according to ISO 8539.

NOTE 1 For special lifting purposes not covered by this document, additionally intermediate links can be used, for example to connect components to each other having different working load limit.

The range of nominal diameter, d_n , covered by this document is from 4 mm to 45 mm.

Chain slings according to this document are for use in the temperature range $-40\text{ }^{\circ}\text{C}$ to $+400\text{ }^{\circ}\text{C}$ according to ISO 3056.

NOTE 2 Concerning the use and maintenance of chain slings of grade 8, see ISO 3056.

Chain slings according to this document comply with the general conditions of acceptance of ISO 1834 and are used for symmetrically distributed loads only.

NOTE 3 For rating of chain slings with asymmetrically distributed loads, see ISO 3056.

This document does not apply to mechanically joined chain slings.

NOTE 4 For mechanically joined chain slings, see ISO 7593.

2 Normative references

ISO 4778:2019

<https://standards.itec.ai/catalog/standards/iso/4427ff5d-f32e-4c96-a791-12472ca5cae6/iso-4778-2019>

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3076, *Round steel short link chains for general lifting purposes — Medium tolerance sling chains for chain slings — Grade 8*

ISO 7597, *Forged steel lifting hooks with latch, grade 8*

ISO 8539, *Forged steel lifting components for use with Grade 8 chain*

ISO 16798, *Links of Grade 8 for use with slings*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>