

**Lühikeste lülidega tõstekett. Ohutus. Osa 4:
Tõstetropid. Klass 8**

Short link chain for lifting purposes - Safety - Part 4:
Chain slings - Grade 8

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 818-4:1999 sisaldab Euroopa standardi EN 818-4:1996 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 818-4:1999 consists of the English text of the European standard EN 818-4:1996.</p> <p>This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>See Euroopa standardi osa määrab kindlaks nõuded, mis on seotud ühe-, kahe-, kolme-, neljajahulisest ja otsteta tõsteketist valmistatud tõstetropi ohutuse, hindamis- ja katsemeetoditega, kui tõstetropp on valmistatud: a) mehaanilistelt ühendatud lülidest; b) keevitamisega, kasutades lühilülilist eelstandardi prEN 818 osa 2 nõuetele vastavat keskmise tolerantsiga 8. klassi tõsteketti koos sobivate samasse klassi kuuluvate koostisosadega.</p>	<p>Scope:</p>
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Võtmesõnad: arvutus, katsed, keevitatud ketid, ketilülid, kontrollimine, konveieriketid, lubatav koormus, mõõtmed, mõõtmete tolerantsid, märgistamine, ohud, ohutus, tõstetropid, õnnetuste vältimine

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English version

Short link chains for lifting purposes

Safety

Part 4: Chain slings, grade 8

Chaînes de levage à maillons courts;
sécurité. Partie 4: Elingues en chaînes,
classe 8

Kurzgliedrige Rundstahlketten für
Hebezwecke; Sicherheit. Teil 4:
Anschlagketten, Güteklasse 8

This European Standard was approved by CEN on 1996-03-07.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 168 "Chains, ropes, webbing, slings and accessories - Safety" the secretariat of which is held by BSI.

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 December 1996, and conflicting national standards shall be withdrawn at the latest by December 1996.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

The other parts of EN 818 are:

Part 1: General conditions of acceptance.

Part 2: Medium tolerance chain for chain slings - Grade 8.

Part 3: Medium tolerance chain for chain slings - Grade 4.

Part 5: Chain slings - Grade 4.

Part 6: Chain slings - Instructions for use and maintenance

A further part or parts will cover fine tolerance chains for chain hoists and other lifting appliances.

This is the first edition of this part of EN 818.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

0 Introduction

This European Standard has been prepared to be a harmonised standard to provide one means of conforming with the essential safety requirements of the Machinery Directive.

The Directive stipulates that where chain with welded links is used for lifting accessories it is to be of short line type and for the purposes of this standard this is chain having a ratio of nominal pitch to nominal size of 3 : 1.

The extent to which hazards are covered is indicated in the scope of this Part of EN 818. In addition, lifting equipment shall comply as appropriate with EN 292 for hazards which are not covered by this standard.

Annex C gives a designation system for recording the identifying features of grade 8 chain slings. Since this system is not widely used it has been included in this first edition of this standard as an informative annex, however should its use become more generally accepted then the status of the information would need to be reviewed.

1 Scope

This European Standard specifies the requirements related to safety, methods of rating and testing of single-, two-, three-, four-leg and endless chain slings assembled by:

- a) mechanical joining devices;
- b) welding

using short link grade 8 medium tolerance lifting chain conforming to EN 818-2 together with the appropriate range of components of the same grade.

NOTE: Instructions for use and maintenance of chain slings is covered by prEN 818-6.

The hazards covered by this European Standard are identified in clause 4.

Bases for the calculation of working load limits are given in annex B.

Annex C gives an example of a designation system for chain slings.

2 Normative reference

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated, references, subsequent amendments to, or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 292-1	Safety of machinery - Basic concepts - General principles for design Part 1: Basic terminology, methodology
EN 292-2: 1991	Safety of machinery - Basic concepts - General principles for design Part 2: Technical principles and specifications
EN 292-2: 1991/A1:1995	Safety of machinery - Basic concepts - General principles for design Part 2: Technical principles and specifications (Amendment 1:1995)
EN 818-1	Short link chain for lifting purposes - Safety Part 1: General conditions of acceptance

EN 818-2	Short link chain for lifting purposes - Safety Part 2: Medium tolerance chain for chain slings - Grade 8.
prEN 818-6	Short link chain for lifting purposes - Safety Part 6: Chain slings - Instructions for use and maintenance
prEN 1050	Safety of Machinery - Risk assessment
prEN 1677-1	Components for slings - Safety Part 1: Forged steel components - Grade 8.
prEN 1677-2	Components for slings - Safety Part 2: Forged steel lifting hooks with latch - Grade 8.
prEN 1677-4	Components for slings - Safety Part 4: Links - Grade 8.
EN ISO 9001: 1994	Quality systems - Model for quality assurance in design/development, production, installation and servicing.

3 Definitions

For the purposes of this Part of EN 818 the following definitions apply.

3.1 chain sling: An assembly consisting of chain or chains joined to upper and lower terminals suitable according to the requirements of this European Standard for attaching loads to the hook of a crane or other lifting machine. (See figures 1 to 4).

3.2 nominal size of sling: The nominal size of short link chain, in millimetres, used in the manufacture of the sling.

3.3 nominal grade of sling: For the purpose of designation in accordance with annex C, is the same as the grade of the short link chain used in the manufacture of the sling i.e. 8.

3.4 master link: A link forming the upper terminal of a chain by means of which the sling is attached to the hook of a crane or other lifting machine. (See figures 1 to 4).

3.5 length of a leg: For a finished sling, is the length from the lower bearing point of the lower terminal to the upper bearing point of the upper terminal (see figures 1 to 4 as examples).

3.6 intermediate master link: A link used to connect one or two legs of a sling to a master link.

3.7 lower terminal: A link, hook or other device fitted at the end of a leg of a sling, remote from the master link or upper terminal.