

**Lühikeste lülidega tõstekett. Ohutus. Osa 3:
Keskmise tolerantsiga kett tõstetroppide
valmistamiseks. Klass 4 KONSOLIDEERITUD
TEKST**

Short link chain for lifting purposes - Safety - Part 3:
Medium tolerance chain for chain slings - Grade 4
CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 818-3:1999+A1:2008 sisaldab Euroopa standardi EN 818-3:1999+A1:2008 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 19.05.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 02.04.2008.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 818-3:1999+A1:2008 consists of the English text of the European standard EN 818-3:1999+A1:2008.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 19.05.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 02.04.2008.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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English Version

Short link chain for lifting purposes - Safety - Part 3: Medium tolerance chain for chain slings - Grade 4

Chaînes de levage à maillons courts - Sécurité - Partie 3:
Chaînes de tolérance moyenne pour élingues en chaînes -
Classe 4

Kurzgliedrige Rundstahlketten für Hebezwecke - Sicherheit
- Teil 3: Mitteltolerierte Rundstahlketten für Anschlagketten
- Güteklasse 4

This European Standard was approved by CEN on 16 April 1999 and includes Amendment 1 approved by CEN on 10 February 2008.

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Foreword

This document (EN 818-3:1999+A1:2008) 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of an identical text or by endorsement, at the latest by October 2008 and conflicting national standards shall be withdrawn at the latest by October 2008.

This document includes Amendment 1, approved by CEN on 2008-02-10.

This document supersedes EN 818-3:1999.

The start and finish of text introduced or altered by amendment is indicated in the text by tags $\boxed{A1}$ $\boxed{A1}$.

This document 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).

$\boxed{A1}$ For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. $\boxed{A1}$

The other Parts of EN 818 are:

- Part 1 : General conditions of acceptance
- Part 2 : Medium tolerance chain for chain slings - Grade 8
- Part 4 : Chain slings - Grade 8
- Part 5 : Chain slings - Grade 4
- Part 6 : Chain slings - Specification for information for use and maintenance to be provided by the manufacturer
- Part 7 : Fine tolerance chains for hoists, Grade T (types T, DAT, DT).

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

This European Standard has been prepared to be a harmonized standard to provide one means of conforming with the essential safety requirements of the Machinery Directive and associated EFTA regulations.

The Directive stipulates that where chain with welded links is used for lifting accessories it is to be of short link 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. In addition, lifting equipment shall conform as appropriate to A_1 EN ISO 12100 A_1 for hazards which are not covered by this standard.

A_1 This standard is a Type C standard as stated in EN ISO 12100.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for equipment that have been designed and built according to the provisions of this type C standard. A_1

1 Scope

A_1 This part of EN 818 specifies the requirements related to safety for short link chains, grade 4, of medium tolerance for use in chain slings to EN 818-4:1996+A1 and for general lifting purposes. A_1 The standard is applicable to electrically welded round steel short link chains, conforming to A_1 EN 818-1:1996+A1 A_1 , which are intended for lifting objects, materials or goods.

The range of nominal sizes of chain covered by this Part of EN 818 is from 7 mm to 45 mm.

The hazards covered by this Part of EN 818 are identified in clause 4.

Annex A contains the bases for calculation of tabulated values for dimensions, working load limits and mechanical properties.

Annex B gives information on the mass/metre of chain.

Annex C gives an example of a designation system for chains of grade 4.

Annex ZA gives the relationship with EU Directives.

2 Normative references

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.

A_1 *deleted text* A_1

A_1 EN 818-1:1996+A1:2008 A_1 , *Short link chain for lifting purposes - Safety – Part 1: General conditions of acceptance*

EN 818-6:2000+A1, *Short link chain for lifting purposes - Safety – Part 6: Chain slings - Specification for information for use and maintenance to be provided by the manufacturer*

EN 1050:1996, *Safety of machinery – Principles for risk assessment*

EN 10025 (all parts), *Hot rolled products of structural steels*

EN 10088-3, *Stainless steels – Part 3: Technical delivery conditions for semi-finished products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes*

EN ISO 12100-1, *Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology (ISO 12100-1:2003)*

EN ISO 12100-2, *Safety of machinery - Basic concepts, general principles for design - Part 2: Technical principles (ISO 12100-2:2003)*

ISO 643, *Steels - Micrographic determination of the ferritic or austenitic grain size*

3 Terms and definitions

For the purposes of this document, the terms, definitions and symbols given in EN 818-1:1996+A1 and the following apply.

4 Hazards

Accidental release of a load, or release of a load due to failure of lifting accessories such as chain slings or their component parts puts at risk either directly or indirectly the safety or health of those persons within the danger zone of lifting equipment.

In order to provide the necessary strength and durability of lifting accessories this Part of EN 818 lays down requirements for the design, manufacture and testing to ensure that specified levels of performance are met.

Fatigue failure has not been identified as being a hazard when chain, having the specified levels of performance given in this Part of EN 818, is used in general lifting service.

Since failure can be caused by the incorrect choice of grade and specification of lifting accessories this Part of EN 818 also gives the requirements for marking and the manufacturer's certificate.

Those aspects of safe use associated with good practice are given in EN 818-6:2000+A1.

Table 1 contains those hazards, which require action to reduce risk identified by risk assessment as being specific and significant for short link chain (medium tolerance) grade 4.