

**Terastraadist trosside tropid. Ohutus.  
Osa 3: Kaitserõngad ja  
kaablikinnitusega tropid**

Steel wire rope slings - Safety - Part 3: Grommets  
and cable-laid slings

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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| <p>Käesolev Eesti standard EVS-EN 13414-3:2003 sisaldab Euroopa standardi EN 13414-3:2003+AC:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 14.10.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN 13414-3:2003 consists of the English text of the European standard EN 13414-3:2003+AC:2004.</p> <p>This document is endorsed on 14.10.2003 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><b>Käsitlusala:</b><br/>This European Standard specifies the construction requirements, calculation of WLL, testing and certification of steel wire rope grommets, cable-laid grommets and cable-laid slings using strand and wire rope conforming to EN 12385-4</p> | <p><b>Scope:</b><br/>This European Standard specifies the construction requirements, calculation of WLL, testing and certification of steel wire rope grommets, cable-laid grommets and cable-laid slings using strand and wire rope conforming to EN 12385-4</p> |
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**Võtmesõnad:** cables, inspect, lifting equipment, load capacity, ropes, safety, safety engineering, safety requirements, specification (approval), specifications, steel wires, steel-wire ropes, terminal fittings (ropes), testing, wire rope, wire rope slings, wire ropes

ICS 53.020.30

**English version**

**Steel wire rope slings – Safety**

**Part 3: Grommets and cable-laid slings**

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Kabelschlag-Anschlagseile

This European Standard was approved by CEN on 2003-03-25.

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

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**CEN**

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

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## Foreword

This document (EN 13414-3:2003) has been prepared by Technical Committee CEN/TC 168 "Chains, ropes, webbings, 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 March 2004, and conflicting national standards shall be withdrawn at the latest by March 2004.

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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

The other parts of this European Standard are:

Part 1 Slings for general lifting service

Part 2 Specification for information for use and maintenance to be provided by the manufacturer

This is the first edition of this Part of this standard.

Annexes A to F are normative. Annex G is informative.

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

## Introduction

This Part of the standard has been prepared to provide a means of complying with the essential safety requirements of the Machinery Directive and associated EFTA regulations.

Purchasers are advised to specify in their purchasing contract that the supplier operates a quality management system applicable to this standard (e.g. ISO EN 9001) to ensure that products claimed to comply consistently achieve the required level of quality.

The coefficient of utilization ( $Z_p$ ) used in this standard for slings with a diameter greater than 60 mm is lower than that normally used for general service wire rope slings. This is justified for the following reasons.

- a) Slings over 60 mm diameter are not intended for general service and are subjected to special conditions relating to design, construction, frequency of use, service and discard.
- b) The mass of the load is generally calculated or measured with considerable accuracy and as such slings are usually specially manufactured for one or a limited number of special lifts.
- c) The lifting operation is controlled and supervised.
- d) The dynamic factors, e.g. shock loading, are limited.

These factors reduce the unknown aspects which dictate that slings in general service require a higher coefficient of utilization; lower coefficients have been and are used with confidence.

## 1 Scope

This European Standard specifies the construction requirements, calculation of WLL, testing and certification of steel wire rope grommets, cable-laid grommets and cable-laid slings using strand and wire rope conforming to EN 12385-4.

The hazards covered by this standard are identified in clause 4.

This standard covers ferrule-secured cable-laid slings up to 60mm.

## 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.

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

*EN 12385-4 : 2000 Steel wire ropes – Safety – Part 4. Stranded ropes for general lifting applications*

*prEN 13411-3 Terminations for steel wire ropes – Safety – Part 3 : Ferrules and ferrule securing*