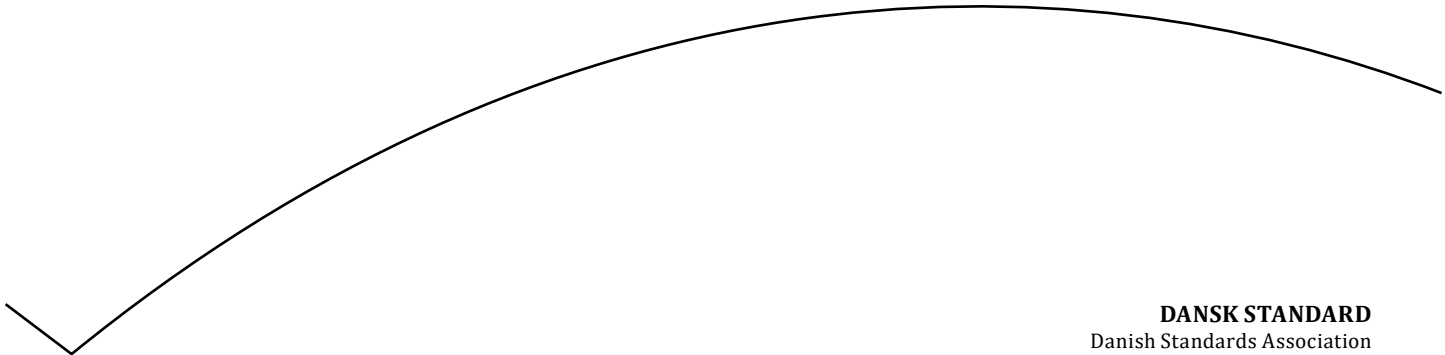


Ståltove – Sikkerhed – Del 5: Flerstrengede tove til elevatorer

Steel wire ropes – Safety – Part 5: Stranded ropes for lifts



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DS projekt: M393130
ICS: 77.140.65

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EUROPÄISCHE NORM

April 2025

ICS 77.140.65

English Version

Steel wire ropes - Safety - Part 5: Stranded ropes for lifts

Câbles en acier - Sécurité - Partie 5 :
Câbles à torons pour ascenseurs

Drahtseile aus Stahldraht - Sicherheit
- Teil 5: Litzenseile für Aufzüge

This European Standard was approved by CEN on 15 February 2021 and includes Corrigendum 1 issued by CEN on 10 November 2021 and Amendment 1 approved by CEN on 28 October 2024.

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European foreword

This document ([EN 12385-5:2021+A1:2025](#)) 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of an identical text or by endorsement, at the latest by October 2025, and conflicting national standards shall be withdrawn at the latest by October 2025.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 includes the corrigendum [EN 12385-5:2021/AC:2021](#) issued by CEN on 10 November 2021, which replaces typical examples for ropes "6 x 9 W" with "6 x 19 W" in [Table 6](#) and "6 x 6 WS" with "6 x 36 WS" in [Table 9](#).

The start and finish of text introduced or altered by corrigendum is indicated in the text by tags AC AC.

This document includes Amendment 1 approved by CEN on 28 October 2024.

This document supersedes A1 [EN 12385-5:2021+AC:2021](#) A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

A1 [EN 12385-5:2021+A1:2025](#) includes the following significant technical changes with respect to [EN 12385-5:2021+AC:2021](#):

- added in [5.3.3.2](#) in list item b) rope with fibre core/steel core 1570;
- added in [5.3.3.3](#) rope grade 1960;
- added rope grade 1960 in Table 8;
- deletion of Annex ZA, covering the Lifts Directive 2014/33/EU;
- deletion of Annex ZB, covering the Machinery Directive 2006/42/EC. A1

A1 *deleted text* A1

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A1 *deleted text* A1

The other Parts of [EN 12385](#) are:

- *Part 1: General requirements;*
- *Part 2: Definitions, designation and classification;*
- *Part 3: Information for use and maintenance;*
- *Part 4: Stranded ropes for general lifting applications;*
- *Part 6: Stranded ropes for mine shafts;*
- *Part 7: Locked coil ropes for mine shafts;*
- *Part 8: Stranded hauling and carrying-hauling ropes for cableway installations designed to carry persons;*
- *Part 9: Locked coil carrying ropes for cableway installations designed to carry persons;*
- *Part 10: Spiral ropes for general structural applications.*

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Part 1 provides the general requirements of Parts 4 to 10.

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

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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.

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Introduction

This document is a type C standard as stated in [EN ISO 12100](#).

A1 *deleted text* **A1**

During the preparation of this standard, it was assumed that a negotiation would take place between the purchaser and the manufacturer concerning the intended purpose of the rope.

Although tables of breaking forces and masses are provided for a number of the more common classes, diameters and rope grades, this Part of this standard is not limited to those given, providing all of the other requirements are met.

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 wire ropes that have been designed and produced according to the provisions of this type C standard.

Steel wire ropes – Safety –

Part 5: Stranded ropes for lifts

1 Scope

This document specifies the particular materials, manufacturing and testing requirements for stranded ropes for suspension, compensating and governor duties for traction drive and hydraulic lifts moving between guides and similar applications.

The particular hazards covered by this Part are identified in [Clause 4](#).

This document does not establish requirements for information for use other than those given in [Clause 7](#) of Part 1. Neither does it cover the requirements for ropes fitted with terminations.

Minimum breaking force values for the more common classes, sizes and grades of rope are provided in [Tables 6](#) to [10](#).

2 Normative references

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.

[EN 10264-2:2012](#), *Steel wire and wire products — Steel wire for ropes — Part 2: Cold drawn non alloy steel wire for ropes for general applications*

[EN 12385-1:2002+A1:2008](#), *Steel wire ropes — Safety — Part 1: General requirements*

[EN 12385-2:2002+A1:2008](#), *Steel wire ropes — Safety — Part 2: Definitions, designation and classification*

[EN ISO 12100:2010](#), *Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100:2010)*

[ISO 4346:1977](#), *Steel wire ropes for general purposes — Lubricants — Basic requirements*