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VAHENDID

Personal fall protection equipment - Guided type fall arresters including an anchor line - Part 1: Guided type fall arresters including a rigid anchor line



#### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

|  | See Eesti standard EVS-EN                          | 353-1:2014+A1:2017   | This Estonian standard EVS-EN  |  |  |
|--|--|----------------------|--|--|--|
|  | sisaldab Euroopa                                   | standardi EN         | 353-1:2014+A1:2017 consists of the English text of   |  |  |
|  | 353-1:2014+A1:2017 inglish                         | keelset teksti.      | the European standard EN 353-1:2014+A1:2017.   |  |  |
|  | Standard on jõustunud<br>avaldamisega EVS Teatajas | sellekohase teate    | This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation. |  |  |
| Euroopa standardimisorganisatsioonid on teinud |  |                      | Date of Availability of the European standard is   |  |  |
|  | Euroopa standardi rahv                             | /uslikele liikmetele | 20.12.2017.  |  |  |
| kättesaadavaks 20.12.2017.                     |  |                      |  |  |  |
|  | Standard on kä                                     | ttesaadav Eesti      | The standard is available from the Estonian Centre   |  |  |
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#### ICS 13.340.60

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## EUROPEAN STANDARD

### NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

December 2017

EN 353-1:2014+A1

ICS 13.340.60

Supersedes EN 353-1:2014

#### **English Version**

# Personal fall protection equipment - Guided type fall arresters including an anchor line - Part 1: Guided type fall arresters including a rigid anchor line

Équipement de protection individuelle contre les chutes de hauteur - Antichutes mobiles incluant un support d'assurage - Partie 1 : Antichutes mobiles incluant un support d'assurage rigide Persönliche Schutzeinrichtung gegen Absturz -Mitlaufende Auffanggeräte einschließlich fester Führung - Teil 1: Mitlaufende Auffanggeräte einschließlich fester Führung

This European Standard was approved by CEN on 18 July 2014 and includes Amendment 1 approved by CEN on 7 September 2017.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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#### **European foreword**

This document (EN 353-1:2014+A1:2017) has been prepared by Technical Committee CEN/TC 160 "Protection against falls from height including working belts", the secretariat of which is held by DIN.

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 June 2018 and conflicting national standards shall be withdrawn at the latest by June 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document includes Amendment 1, approved by CEN on 2017-09-07.

This document supersedes  $\triangle$  EN 353-1:2014  $\triangle$ 1.

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

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 89/686/EEC.

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

Annex B provides details of significant technical changes between this document and EN 353-1:2002.

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

#### Introduction

This European Standard is intended to act as a complementary standard for existing European Standards covering other components used in personal fall protection systems.

The scope and the requirements are based on the philosophy that a guided type fall arrester including j r.
pers.
test me
ection syste a rigid anchor line is rated to sustain the maximum dynamic load generated in a fall from a height by the mass of one person, including any equipment carried. This European Standard provides requirements and test methods for guided type fall arresters including a rigid anchor line used in personal fall protection systems in accordance with EN 363.

#### 1 Scope

This European Standard specifies the requirements, test methods, marking, information supplied by the manufacturer and packaging for guided type fall arresters including a rigid anchor line. This anchor line is usually attached to or integrated in ladders or rungs adequately fixed to suitable structures. Guided type fall arresters including a rigid anchor line conforming to this European Standard are components of one of the fall arrest systems covered by EN 363.

This European Standard applies to rigid anchor lines which are intended to be installed vertically and/or with a combination of forward-leaning angle and/or sideways leaning angle between the true vertical and the vertical +15° (see Figure 2).

Multi-user applications, i.e. rigid anchor lines that allow more than one user to be attached at any one time, are not addressed in this document.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 361, Personal protective equipment against falls from a height — Full body harnesses

EN 362, Personal protective equipment against falls from a height — Connectors

EN 364:1992, Personal protective equipment against falls from a height — Test methods

EN 365, Personal protective equipment against falls from a height — General requirements for instructions for use, maintenance, periodic examination, repair, marking and packaging

EN 10264-2, Steel wire and wire products — Steel wire for ropes — Part 2: Cold drawn non alloy steel wire for ropes for general applications

EN 13411-5, Terminations for steel wire ropes — Safety — Part 5: U-bolt wire rope grips

EN ISO 9227, Corrosion tests in artificial atmospheres — Salt spray tests (ISO 9227)

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply (for examples see Figure 1).

#### 3.1

#### guided type fall arrester including a rigid anchor line

part of a fall arrest system, consisting of a guided type fall arrester and a rigid anchor line

Note 1 to entry: The guided type fall arrester and rigid anchor line form one product i.e. they are tested, certified and intended to be used together.

Note 2 to entry: An energy dissipating function may be part of the guided type fall arrester and/or the rigid anchor line.

#### 3.2

#### guided type fall arrester

device with a self-locking function, a guide facility, a connecting element for connection to the appropriate attachment element of a full body harness, which accompanies the user during both