SLOVENSKI STANDARD
SIST EN 353-2:2025

01-februar-2025

Nadomešča:
SIST EN 353-2:2002

Osebna oprema za varovanje pred padci - 2. del: Drseče naprave za zaustavljanje na gibljivem vodilu

Personal fall protection equipment - Part 2: Guided type fall arresters including a flexible anchor line

Persönliche Absturzschutzausrüstung - Teil 2: Mitlaufende Auffanggeräte einschließlich beweglicher Führung

Équipement de protection individuelle contre les chutes de hauteur - Partie 2 : Antichutes mobiles incluant un support d'assurage flexible

Ta slovenski standard je istoveten z: **EN 353-2:2024**

ICS:

13.340.60	Zaščita pred padci in zdrsi	Protection against falling and slipping

SIST EN 353-2:2025 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 353-2

September 2024

ICS 13.340.60

Supersedes EN 353-2:2002

English Version

Personal fall protection equipment - Part 2: Guided type fall arresters including a flexible anchor line

Équipement de protection individuelle contre les chutes de hauteur - Partie 2 : Antichutes mobiles incluant un support d'assurage flexible

Persönliche Absturzschutzausrüstung - Teil 2: Mitlaufende Auffanggeräte einschließlich beweglicher Führung

This European Standard was approved by CEN on 21 July 2024.

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

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Ref. No. EN 353-2:2024 E

Contents

Page

European foreword

This document (EN 353-2:2024) 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of an identical text or by endorsement, at the latest by March 2025, and conflicting national standards shall be withdrawn at the latest by March 2025.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 supersedes EN 353-2:2002.

Annex B provides details of significant changes between this European Standard and the previous edition EN 353-2:2002.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

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

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.

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Introduction

This document 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 a flexible 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 document provides requirements and test methods for guided type fall arresters including a flexible anchor line used in personal fall protection systems in accordance with EN 363:2018.

1 Scope

This document specifies requirements, test methods, marking, manufacturer's instructions and information and packaging for guided type fall arresters including a flexible anchor line forming a single product. This anchor line is attached to an upper anchor point for vertical and inclined applications; for horizontal applications, the anchor point can be located at the user's foot level. Guided type fall arresters including a flexible anchor line conforming to this document are components of one of the fall arrest systems covered by EN 363:2018. Other types of fall arresters are specified in EN 353-1:2014+A1:2017 or EN 360:2023.

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 362:2004, *Personal protective equipment against falls from a height — Connectors*

EN 363:2018, *Personal fall protection equipment — Personal fall protection systems*

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

EN 365:2004, *Personal protective equipment against falls from a height — General requirements for instructions for use, maintenance, periodic examination, repair, marking and packaging*

EN 564:2023, *Mountaineering equipment — Accessory cords — Safety requirements and test methods*

EN 10025-2:2019, *Hot rolled products of structural steels — Part 2: Technical delivery conditions for non-alloy structural steels*

EN 10278:2023, *Dimensions and tolerances of bright steel products of stainless and other special steels*

EN 13411-5:2003+A1:2008, *Terminations for steel wire ropes — Safety — Part 5: U-bolt wire rope grips*

EN ISO 683-1:2018, *Heat-treatable steels, alloy steels and free-cutting steels — Part 1: Non-alloy steels for quenching and tempering (ISO 683-1:2016)*

EN ISO 7500-1:2018, *Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system (ISO 7500-1:2018)*

EN ISO 9227:2022, *Corrosion tests in artificial atmospheres — Salt spray tests (ISO 9227:2022)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 363:2018 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at https://www.electropedia.org/

3.1
guided type fall arrester including a flexible anchor line
component of a fall arrest system consisting of a self-locking guided type fall arrester and a flexible anchor line to which it is attached

Note 1 to entry: An energy dissipating element can be part of the guided type fall arrester and/or the flexible anchor line.

3.2
guided type fall arrester
GTFA
device with a self-locking function, a guide facility and a connection element which accompanies the user along the line without requiring manual adjustment, except for some specific activities in horizontal/inclined applications which may require manual adjustment, and locks automatically on the flexible anchor line when a fall occurs

Note 1 to entry: See Figure 1 and Figure 2.

3.3
connection element
permanent or removable element of the GTFA permitting connection to the appropriate fall arrest attachment point of a suitable full body harness, e.g. a full body harness conforming to EN 361:2002

Note 1 to entry: The connection element can be an energy dissipating element.

3.4
flexible anchor line
man-made fibre rope or wire rope, without pre-tension, for use with the GTFA and fixed at its top termination to an upper anchor point which allows lateral movement of the user

3.5
energy dissipating element
element or component of a fall arrest system which is designed to dissipate the kinetic energy developed during a fall from a height

3.6
manual locking feature
specific feature to prevent the GTFA from moving away from the anchor point under its own weight, in order to limit potential fall distance whilst the user is stationary

3.7
length of connection element
length L in metres from one load bearing point to the other load bearing point measured in an unloaded, but taut condition of the connection element

3.8
arrest distance
H_{AD}
vertical distance measured between the initial and final positions of the test mass in the dynamic performance and function tests

Note 1 to entry: Arrest distance is expressed in metres.

3.9
locking distance
H_{LD}
vertical distance measured between the initial and final positions of the guided type fall arrester in the override function test

Note 1 to entry: Locking distance is expressed in metres.

3.10
maximum rated load
maximum mass of the person, including tools and equipment carried, as specified by the manufacturer

Note 1 to entry: Maximum rated load is expressed in kilograms.

3.11
minimum rated load
minimum mass of the person, excluding tools and equipment carried, as specified by the manufacturer

Note 1 to entry: Minimum rated load is expressed in kilograms.

3.12
deviation device
device (e.g., a pulley) that changes the direction of the flexible anchor line between the top termination of the flexible anchor line and the GTFA

Note 1 to entry: See Figure 1b.

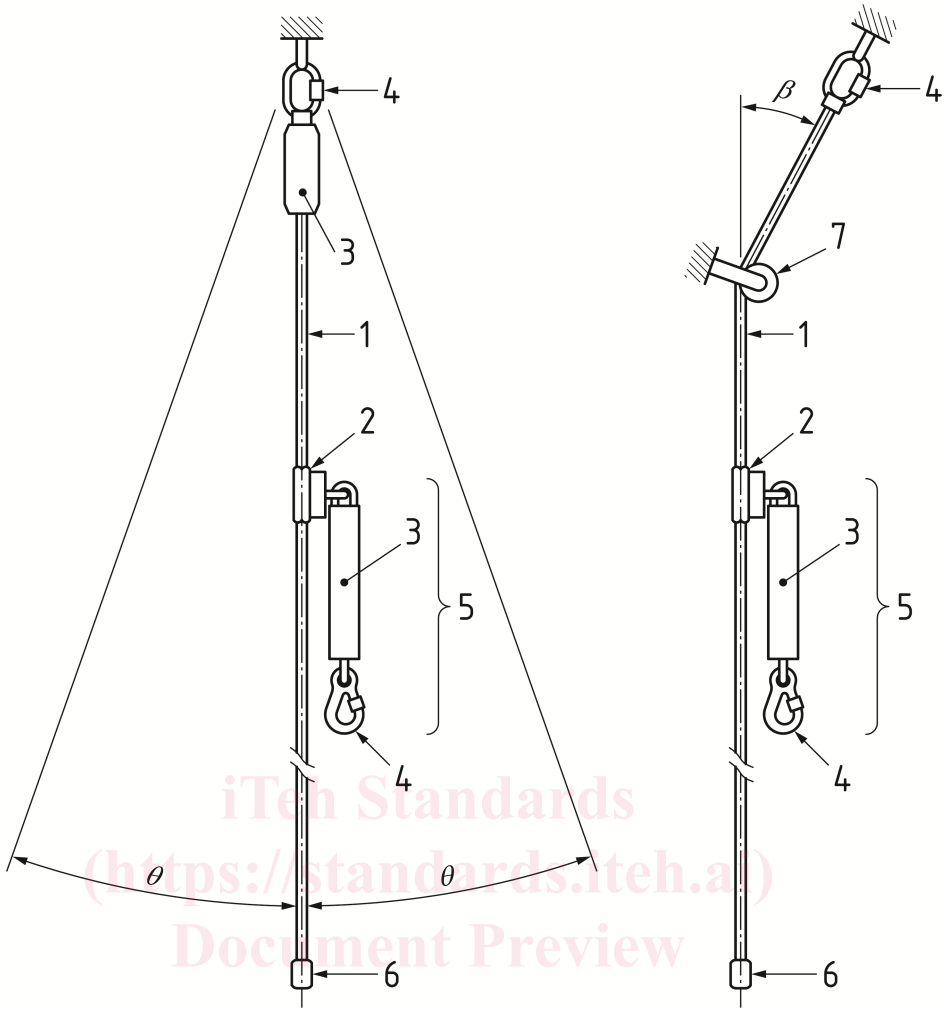
3.13
man-made fibre
fibre obtained by a manufacturing process

Note 1 to entry: Man-made fibres refer to ISO/TR 11827:2012.

3.14
override function
capability to initiate locking of the GTFA when struck by a user's hand in the event of a fall when grabbing the flexible anchor line above the GTFA

3.15
vertical application
flexible anchor line installed within a maximum angle of 15° from the true vertical

Note 1 to entry: Maximum angle from true vertical shown in Figure 1a.

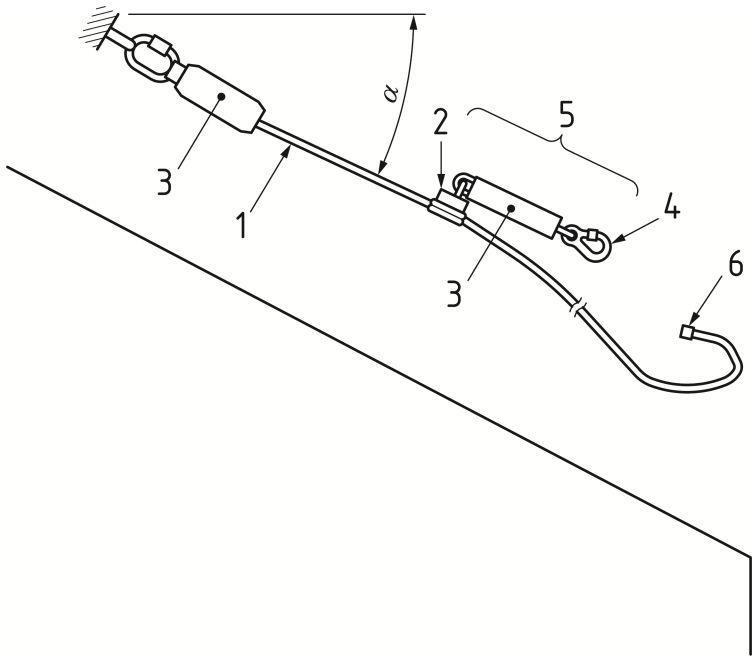


a) b)

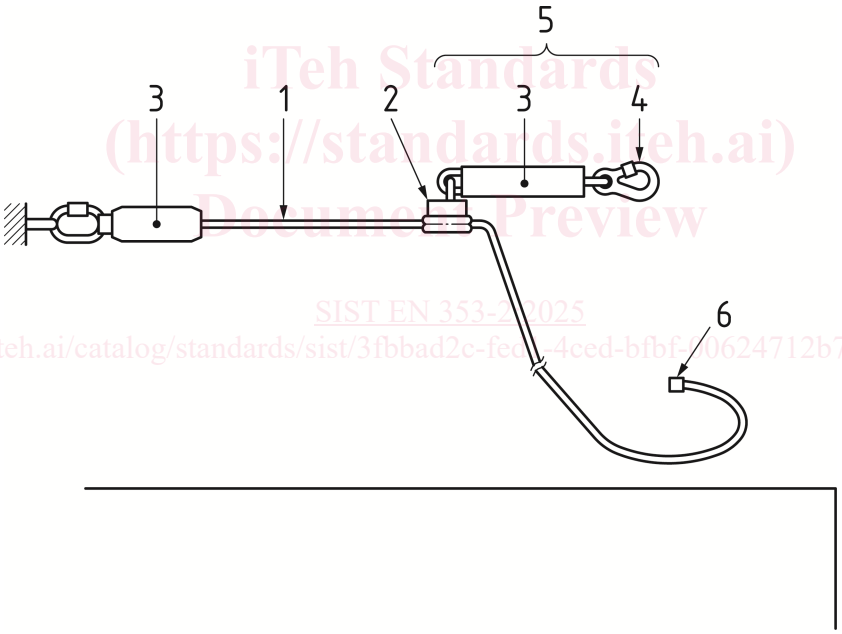
Key

1 flexible anchor line
2 guided type fall arrester
3 energy dissipating element (if applicable)
4 connector
5 connection element
6 end stop
7 deviation device
θ angle from the true vertical max 15°
ß deviation angle of flexible anchor line

Figure 1 — Examples of a GTFA including a flexible anchor line in a vertical application with and without a deviation device



a) Example of a GTFA including a flexible anchor line in an inclined application



b) Example of a GTFA including a flexible anchor line in a horizontal application

Key

1	flexible anchor line	5	connection element
2	guided type fall arrester	6	end stop
3	energy dissipating element (if applicable)	α	angle of inclination of flexible anchor line from the horizontal
4	connector		

Figure 2 — Examples of a GTFA and flexible line in an inclined and horizontal application