

## **Mägironimisvarustus. Plokid. Ohutusnõuded ja katsemeetodid**

Mountaineering equipment - Pulleys - Safety  
requirements and test methods

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12278:1999 sisaldab Euroopa standardi EN 12278:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12278:1999 consists of the English text of the European standard EN 12278:1998.</p> <p>This document is endorsed on 23.11.1999 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> Käesolev standard määrab kindlaks ohutusnõuded ja testimismeetodid mägironimisel ja alpinismis kasutatavatele plokkidele.</p>	<p><b>Scope:</b></p>
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**Võtmesõnad:** informatsioon, mehaaniline tugevus, mägironimine, märgistus, määratlused, ohutus, plokid, seadmete tehnilised andmed, spordivarustus, tehnilised andmed, testimine

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Descriptors: Mountaineering equipment, pulleys, safety requirements, testing.

**English version**

**Mountaineering equipment**

**Pulleys – Safety requirements and test methods**

Équipement d'alpinisme et d'escalade – Poulies – Exigences de sécurité et méthodes d'essai

Bergsteigerausrüstung – Seilrollen – Sicherheitstechnische Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 1998-05-01.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

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

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## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 136 "Sports, playground and other recreational equipment", 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 November 1998, and conflicting national standards shall be withdrawn at the latest by November 1998.

This European Standard 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 standard.

This standard is one of a series of standards for mountaineering equipment, see annex A.

Annexes A and ZA of this European Standard are for information only.

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, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This standard specifies safety requirements and test methods for pulleys for use in mountaineering including climbing.

## 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 564

Mountaineering equipment – Accessory cord – Safety requirements and test methods

EN 892

Mountaineering equipment – Dynamic mountaineering ropes – Safety requirements and test methods

prEN 12275

Mountaineering equipment – Connectors – Safety requirements and test methods

## 3 Definitions

For the purposes of this standard, the following definitions apply:

**3.1 pulley:** One or more sheaves mounted in a block or a body, which can be used to link a rope (in accordance with EN 892) or an accessory cord (in accordance with EN 564) to a connector (in accordance with prEN 12275) to safeguard a mountaineer, and which reduces the friction while the rope or accessory cord is moving under load.

**3.2 sheave:** Grooved wheel to locate the rope.

## 4 Safety requirements

### 4.1 Design

**4.1.1** Pulleys shall have a means for attachment of a connector which is large enough to accommodate a pin of diameter 12 mm. Testing in accordance with 5.3.1.1.

**4.1.2** The pulley, particularly its sheaves, shall be large enough to accommodate a rope or an accessory cord of such diameter as marked on the pulley. Testing in accordance with 5.3.1.2.

**4.1.3** All edges of the pulley, which come into contact with fingers, shall be free from burrs.

**4.1.4** If any sheave axle is secured by nuts or screws, when tested in accordance with 5.3.1.4, the nuts and/or screws shall not come undone by more than one complete turn.

### 4.2 Strength

**4.2.1** When tested in accordance with 5.3.2, the sheave(s) shall be capable of rotation in either direction under a force of 2 kN, applied to each sheave individually.