

# Mountaineering equipment — Connectors — Safety requirements and test methods

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British Standard

ICS 97.220.40

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# National foreword

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The UK participation in its preparation was entrusted by Technical Committee SW/136, Sports, playground and other recreational equipment, to Subcommittee SW/136/5, Mountaineering equipment, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
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## Summary of pages

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English version

## Mountaineering equipment — Connectors — Safety requirements and test methods

Équipement d'alpinisme et d'escalade —  
Connecteurs — Exigences de sécurité et  
méthodes d'essai

Bergsteigerausrüstung — Karabiner —  
Sicherheitstechnische Anforderungen und  
Prüfverfahren

This European Standard was approved by CEN on 22 July 1998.

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**CEN**

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

**Central Secretariat: rue de Stassart 36, B-1050 Brussels**

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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of an identical text or by endorsement, at the latest by February 1999, and conflicting national standards shall be withdrawn at the latest by February 1999.

The text is based on UIAA-Standard C (Union Internationale des Associations d'Alpinisme), which has been prepared with international participation.

This standard is one of a package of standards for mountaineering equipment, see annex B.

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.

Annexes A, B 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.

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## 1 Scope

This standard specifies safety requirements and test methods for connectors 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 20139, *Textiles — Standard atmospheres for conditioning and testing*.  
(ISO 139:1973).

## 3 Definitions

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

### 3.1

#### **connector**

openable device, which enables a mountaineer to link himself directly or indirectly to an anchor

### 3.2

#### **self-closing connector**

connector with a self-closing gate

### 3.3

#### **basic connector (type B)**

self-closing connector with adequate strength for use anywhere in a belay system, see Figure 1

### 3.4

#### **HMS connector (type H)**

self-closing connector — generally pear shaped — intended to be used primarily for dynamic belaying, for example using an “Italian hitch” (HMS), see Figure 2

### 3.5

#### **Klettersteig connector (type K)**

self-closing connector intended to be used primarily for linking a mountaineer to a Klettersteig anchor (via ferrata) system, see Figure 3

### 3.6

#### **directional connector (type D)**

self-closing connector, or a combination of one or more self-closing connectors and slings, designed to ensure loading in a predetermined direction, see Figure 4

### 3.7

#### **specific anchor connector (type A)**

self-closing connector designed only to be linked directly to a specific type of anchor, see Figure 5

### 3.8

#### **screwed-closure connector (Quicklink; type Q)**

connector which is closed by a screw-motion gate, which is a load bearing part of the connector when fully screwed up, see Figure 6

### 3.9

#### **oval connector (type X)**

self-closing connector designed for lower loads, which is not designed to give full protection in the event of a fall, see Figure 7

### 3.10

#### **gate**

part of the connector which can be moved to open it. The gate can move by pivoting about a hinge (hinged gate), or by a sliding motion (sliding gate) or by a screw motion (screw-motion gate)

### 3.11

#### **self-closing gate**

gate which moves automatically to the closed position when released from any open position, or when unlatched, if there is a gate-open latch

### 3.12

#### **gate-locking device**

mechanism which reduces the possibility of a closed gate being opened inadvertently. A gate-locking device can operate automatically (to the locked position) or be operated manually

### 3.13

#### **gate-open latch**

device which holds the gate in the fully-open position and is actuated by a deliberate manual action

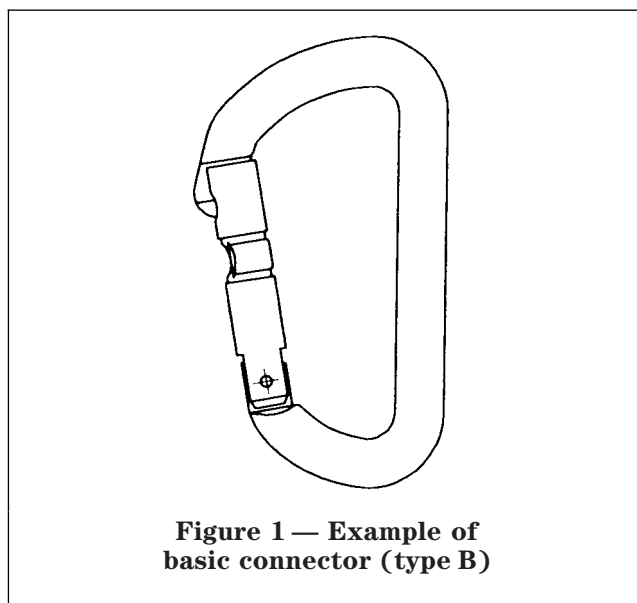


Figure 1 — Example of basic connector (type B)