
Kolesa - Varnostne zahteve za kolesa - 4. del: Preskusne metode za zavore
(ISO/DIS 4210-4:2021)

Cycles - Safety requirements for bicycles - Part 4: Braking test methods (ISO/DIS 4210-4:2021)

Fahrräder - Sicherheitstechnische Anforderungen an Fahrräder - Teil 4: Prüfverfahren für Bremsen (ISO/DIS 4210-4:2021)

Cycles - Exigences de sécurité des bicyclettes - Partie 4 : Méthodes d'essai de freinage (ISO/DIS 4210-4:2021)

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Ta slovenski standard je istoveten z: prEN ISO 4210-4

ICS:

43.150

Kolesa

Cycles

oSIST prEN ISO 4210-4:2022**en,fr,de**

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DRAFT INTERNATIONAL STANDARD

ISO/DIS 4210-4

ISO/TC 149/SC 1

Secretariat: JISC

Voting begins on:
2021-11-05Voting terminates on:
2022-01-28

Cycles — Safety requirements for bicycles —

Part 4: Braking test methods

*Cycles — Exigences de sécurité des bicyclettes —**Partie 4: Méthodes d'essai de freinage*

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Reference number
ISO/DIS 4210-4:2021(E)

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Published in Switzerland

Contents

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To update the Table of Contents please select it and press "F9".

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Test methods	1
4.1 Brake lever grip dimensions	1
4.1.1 Test method for the brake lever similar to type A or type B	1
4.1.2 Test method for the brake lever similar to type C	3
4.2 Brake levers — Position of applied force	5
4.2.1 Type A and B brake levers	5
4.2.2 Type C brake levers	5
4.3 Brake-block and brake-pad assemblies — Security test	6
4.4 Hand-operated braking-system — Strength test	7
4.5 Back-pedal braking system — Strength test	7
4.6 Braking performance	8
4.6.1 Test bicycle	8
4.6.2 Secondary brake levers	8
4.6.3 Track test method	8
4.6.4 Back-pedal brake linearity test	18
4.6.5 Machine test method	19
4.7 Brakes — Heat-resistance test	25
Annex A (informative) Explanation of the method of least squares for obtaining the line of best fit and ± 20 % limit lines for braking performance linearity	27
Bibliography	30

ISO/DIS 4210-4:2021(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 149, *Cycles*, Subcommittee SC 1, *Cycles and major sub-assemblies*.
oSIST prEN ISO 4210-4:2022

This **second** edition cancels and replaces the **first** edition (ISO 4210-4:2014), which has been technically revised.
<https://standards.iteh.ai/catalog/standards/sist/e450b7c4-e593-459e-a9f1->

The main changes compared to the previous edition are as follows:

— **xxx xxxxxxxx xxx xxx**

A list of all parts in the ISO 4210 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This International Standard has been developed in response to the demand throughout the world. The aim is to ensure that bicycles manufactured in compliance with this International Standard will be as safe as is practically possible. The tests are designed to ensure the strength and durability of individual parts as well as of the bicycle as a whole, demanding high quality throughout and consideration of safety aspects from the design stage onwards.

The scope is limited to safety considerations, and has specifically avoided standardization of components.

If the bicycle is to be used on public roads, national regulations apply.

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1 Cycles — Safety requirements for bicycles — Part 4: Braking test 2 methods

3 1 Scope

4 This part of ISO 4210 specifies the braking test methods for ISO 4210-2.

5 2 Normative references

6 The following documents are referred to in the text in such a way that some or all of their content
7 constitutes requirements of this document. For dated references, only the edition cited applies. For
8 undated references, the latest edition of the referenced document (including any amendments) applies.

9 ISO 4210-1, *Cycles — Safety requirements for bicycles — Part 1: Terms and definitions*

10 ISO 4210-2, *Cycles — Safety requirements for bicycles — Part 2: Requirements for city & trekking, young
11 adult, mountain and racing bicycles*

12 3 Terms and definitions

13 For the purposes of this document, the terms and definitions given in ISO 4210-1 apply.

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

15 — ISO Online browsing platform: available at <https://www.iso.org/obp>

16 — IEC Electropedia: available at <http://www.electropedia.org/>
17 <https://standards.itec.org/catalog/standards/sist/e-45067c74-0593-459e-a9f1-ba830dda091a/osist-pren-iso-4210-4-2022>

17 4 Test methods

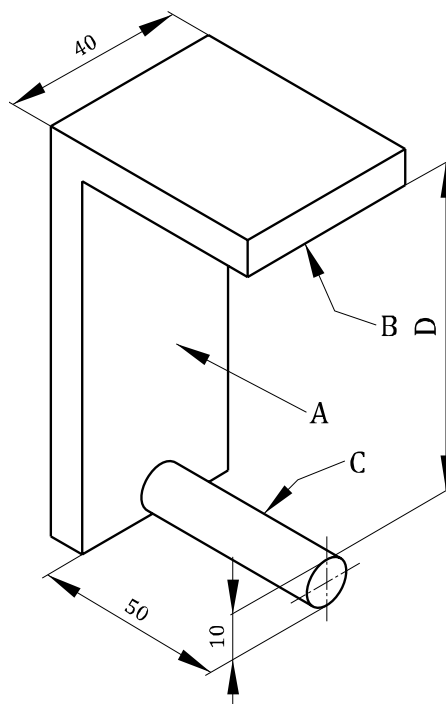
18 4.1 Brake lever grip dimensions

19 4.1.1 Test method for the brake lever similar to type A or type B

20 Fit the gauge illustrated in Figure 1 over the handlebar grip or the handlebar (when the manufacturer
21 does not fit a grip) and the brake lever as shown in Figure 2 so that face A is in contact with the handlebar
22 or grip and the side of the brake lever. Ensure that face B spans an area of that part of the brake lever
23 which is intended for contact with the rider's fingers without the gauge causing any movement of the
24 brake lever towards the handlebar or grip. Measure the distance, a , the distance between the last part of
25 the lever intended for contact with the rider's fingers and the end of the lever. The measurement should
26 be conducted only on a fully assembled bicycle.

27

Dimensions in millimetres



28

29

Key

- A face A
- B face B
- C rod
- D 75 mm or 90 mm

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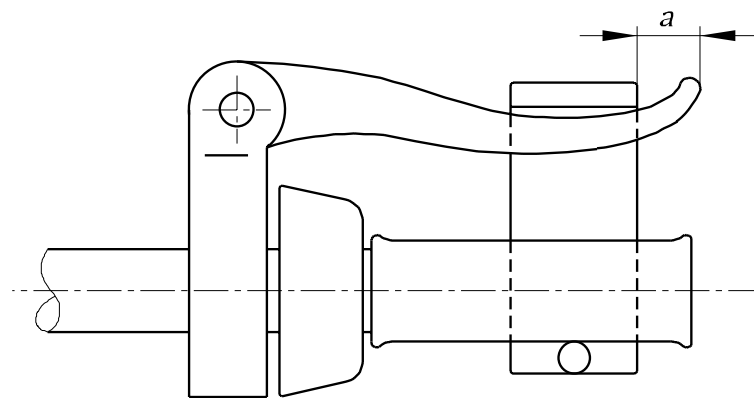
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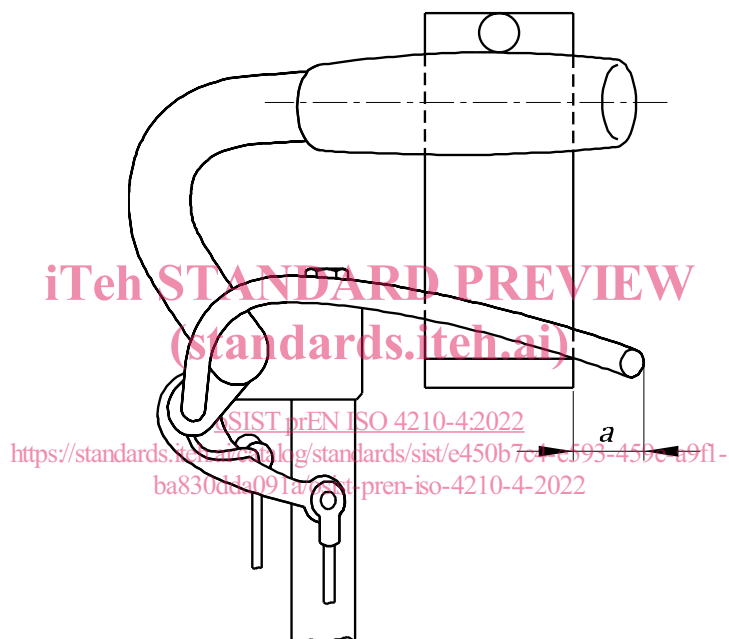
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30

Figure 1 — Brake lever grip dimension gauge for type A and type B



a) Type A



b) Type B

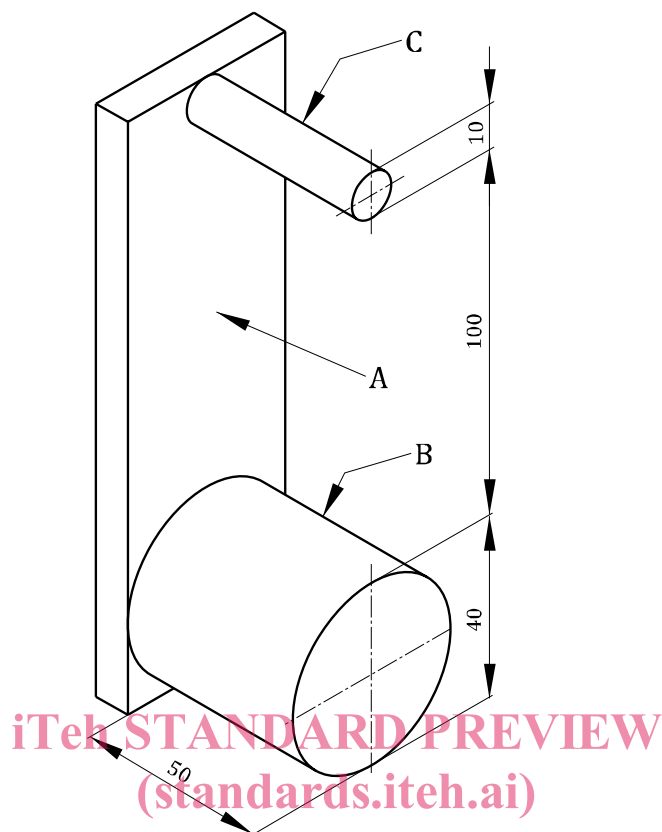
31 **Figure 2 — Method of fitting the gauge to the brake lever and handlebar**

32 **4.1.2 Test method for the brake lever similar to type C**

33 Fit the gauge illustrated in Figure 3 over the handlebar and brake lever as shown in Figure 4 so that face
 34 A is in contact with the handlebar or handlebar grip and the brake lever. Put the face of cylinder B in
 35 contact with the part of the grip intended for contact with the rider's hand and check if the requirements
 36 are met. In the case of brake lever with position adjustment, check if the requirements are met in a specific
 37 range of the adjustable range.

38

Dimensions in millimetres

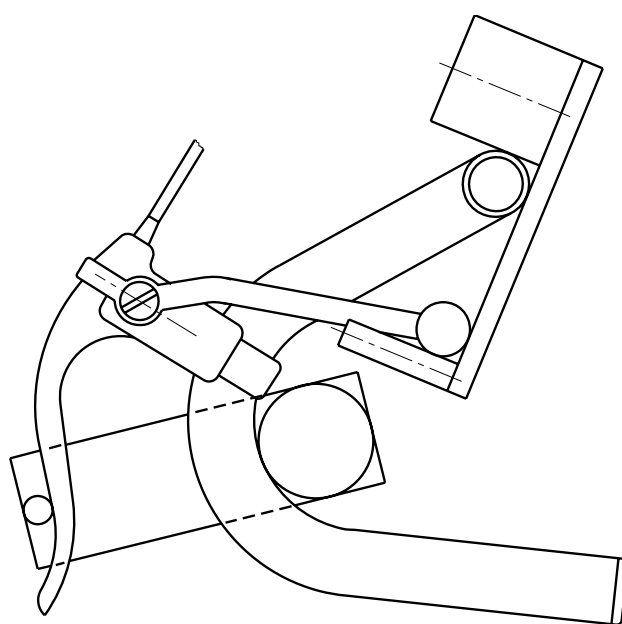


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- 39
40 **Key**
A face A
B face of cylinder
C rod

41 **Figure 3 — Brake lever grip-dimension gauge for type C**



42
43 **Figure 4 — Method of fitting the gauge to the brake lever and handlebar for type C**