BS ISO 6742-4:2023

BSI Standards Publication

Cycles — Lighting and retro-reflective devices

Part 4: Lighting systems powered by the cycle's movement

bsi.

National foreword

This British Standard is the UK implementation of ISO 6742-4:2023. It supersedes BS ISO 6742-4:2015, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GME/25, Cycles.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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INTERNATIONAL STANDARD

ISO 6742-4

Second edition
2023-08-31

Cycles — Lighting and retro-reflective devices —

Part 4: Lighting systems powered by the cycle's movement

Cycles — Éclairage et dispositifs rétroréfléchissants —

Partie 4: Systèmes d'éclairage alimentés par dynamo

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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 document 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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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 149, *Cycles*, Subcommittee SC 1, *Cycles and major sub-assemblies*.

This second edition cancels and replaces the first edition (ISO 6742-4:2015), which has been technically revised.

The main changes are as follows:

— terms and definitions: “open system” and “closed system” were added;

— overall structure changes to clarify requirements and test methods;

— addition of “6 V/3 W with electric load” positive drive generators;

— changes in generator characteristic requirements;

— clarify test methods and improvement of requirements for open systems;

— changes in closed system requirements and test methods;

— improvement of Clause 8;

— improvement of Clause 9;

— improvement of Annex A;

— improvement of Annex B;

— improvement of Annex C.

A list of all parts in the ISO 6742 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.

INTERNATIONAL STANDARD **ISO 6742-4:2023**

Cycles — Lighting and retro-reflective devices —

Part 4: Lighting systems powered by the cycle's movement

1 Scope

This document is applicable to lighting systems used on cycles intended to be used on public roads and, especially, bicycles complying with ISO 4210[1] and ISO 8098[2].

This document specifies requirements and test methods for the performance of lighting systems powered by the cycle's movement. It applies to lighting and light signalling devices complying with ISO 6742-1. Lighting systems include lighting and light signalling devices and power supplied by cycle's movement such as generator.

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.

ISO 6742-1:2023, *Cycles — Lighting and retro-reflective devices — Part 1: Lighting and light signalling devices*

ISO 6742-3:2023, *Cycles — Lighting and retro-reflective devices — Part 3: Installation and use of lighting and retro-reflective devices*

ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6742-1 and the following apply.

ISO and IEC maintain terminological 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
frictional drive generator
generator for which the rotor or stator is linked to a pulley which press against the driving wheel over a swivel bearing through force

3.2
positive drive generator
generator which is not concerned by the definition of *frictional drive generator* (3.1)