INTERNATIONAL STANDARD

**ISO 12312-3**

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# Eye and face protection — Sunglasses and related eyewear —

## Part 3: Sunglasses for running, cycling and similar active lifestyles

*Protection des yeux et du visage — Lunettes de soleil et articles de lunetterie associés —*

*Partie 3: Lunettes de soleil pour la course à pied, le cyclisme et les pratiques similaires associées à un mode de vie actif*

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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 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 94, *Personal safety – Personal protective equipment*, Subcommittee SC 6, *Eye and face protection*.

This document differs from ISO 12312-1 in that the requirements for mechanical strength given in 7.2, 7.3 and 7.4 are mandatory (see 3.1), whereas they are optional in ISO 12312-1.

A list of all parts in the ISO 12312 series can be found on the ISO website.


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# Eye and face protection — Sunglasses and related eyewear —

# Part 3: Sunglasses for running, cycling and similar active lifestyles

## 1 Scope

This document is applicable to all nominally afocal (plano power) sunglasses for protection against environmental elements, such as solar radiation, wind, dust and rain when running, cycling and following similar active lifestyle recreational activities but not intended for competitive sporting activities where enhanced impact resistance is required.

The document specifies additional material, design, performance and marking requirements. The other applicable requirements are given in ISO 12312-1.

This type of sunglass is designed to reduce secondary hazards to the wearer in an accident rather than to provide high amounts of impact protection which may be difficult in a spectacle format.

This document is not applicable to:

a) eyewear for protection against radiation from artificial light sources, such as those used in solaria;

b) eye protectors intended for specific sports, e.g. ski goggles or other types – see ISO 18527 (all parts);

c) eye protectors for sports that include the use of a ball, stick, bat, racquet or other implement;

d) sunglasses that have been medically prescribed for attenuating solar radiation;

e) products intended for direct observation of the sun, such as for viewing a partial or annular solar eclipse, for which ISO 12312-2 applies;

f) products intended for occupational eye protection – for example, see ISO 16321 (all parts).

## 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 12312-1:2022, *Eye and face protection — Sunglasses and related eyewear — Part 1: Sunglasses for general use*

ISO 4007, *Personal protective equipment — Eye and face protection — Vocabulary*

ISO 18526-3:2020, *Eye and face protection — Test methods — Part 3: Physical and mechanical properties*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4007, ISO 12312-1 and the following apply.

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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**
**sunglasses for active lifestyles**
sunglasses for protection against solar radiation, for active lifestyle recreational activities such as running and cycling where increased robustness and durability are preferred

## 4 Construction and materials

All requirements of ISO 12312-1:2022, Clause 4 shall apply.

## 5 Transmittance

All requirements of ISO 12312-1:2022, Clause 5 shall apply.

## 6 Refractive power

All requirements of ISO 12312-1:2022, Clause 6 shall apply.

## 7 Robustness

### 7.1 Frame deformation and retention of filters

The requirement of ISO 12312-1:2022, 7.2, shall apply.

### 7.2 Increased endurance of sunglasses

The requirement of ISO 12312-1:2022, 7.4, shall apply, whereas it is optional in ISO 12312-1.

### 7.3 Resistance to perspiration

The requirement of ISO 12312-1:2022, 7.5, shall apply, whereas it is optional in ISO 12312-1.

### 7.4 Increased robustness of the sunglass, strength level 2

The requirement of ISO 12312-1:2022, 7.6, shall apply, whereas it is optional in ISO 12312-1.

The test shall be made as specified in ISO 18526-3.

### 7.5 Impact resistance of the filter, strength level 3 (optional requirement)

If impact resistance of strength level 3 is claimed, the requirement of ISO 12312-1:2022, 7.6, shall apply.

The test shall be made as specified in ISO 18526-3.

If a sunglass passes strength level 3, there is no need to test for strength level 2.

## 8 Resistance to solar radiation

The requirements of ISO 12312-1:2022, Clause 8, shall apply.


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