International Standard

ISO 10256-3

Second edition
2024-07

Protective equipment for use in ice hockey —

Part 3: Face and eye protectors for skaters

Équipements de protection destinés à être utilisés en hockey sur glace —

Partie 3: Protections faciales et oculaires pour les patineurs

Reference number
ISO 10256-3:2024(en)

© ISO 2024



COPYRIGHT PROTECTED DOCUMENT

© ISO 2024

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword ..... **v**
Introduction ..... **vi**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
4 Requirements **4**
4.1 Types of eye or face protectors 4
4.2 Ergonomics 4
4.3 Innocuousness 4
4.3.1 Materials 4
4.3.2 Design 4
4.4 Markings and information 5
4.5 Protected area 5
4.5.1 Type B1 and B2 — Face protectors 5
4.5.2 Type C — Eye protectors 6
4.6 Penetration (test blade) 6
4.7 Puck impact resistance 6
4.7.1 Types B1, B2 6
4.7.2 Type C 7
4.8 Field of vision 7
4.9 Optical quality 7
4.9.1 Visual inspection 7
4.9.2 Luminous transmittance 7
4.9.3 Haze 7
4.9.4 Optical power requirements 8
5 Test methods **8**
5.1 General 8
5.1.1 Tolerances 8
5.1.2 Sampling 8
5.1.3 Determination of mass 9
5.1.4 Conditioning 9
5.1.5 Placing and adjusting head protectors 9
5.2 Ergonomics 9
5.3 Innocuousness 9
5.3.1 Materials 9
5.3.2 Design 9
5.4 Markings and information 10
5.5 Protected area 10
5.5.1 Type B1 and B2 10
5.5.2 Type C 10
5.6 Penetration (test blade) 10
5.6.1 Test apparatus 10
5.6.2 Procedures 10
5.7 Puck impact resistance 11
5.7.1 Test apparatus 11
5.7.2 Procedures 11
5.8 Field of vision test 12
5.9 Optical quality 12
5.9.1 Visual inspection 12
5.9.2 Luminous transmittance 12
5.9.3 Haze 13
5.9.4 Optical power 13
6 Test report **14**

© ISO 2024 – All rights reserved

7 Markings **14**
8 Information for users **14**
Annex A (normative) **Puck specifications requirements** **25**

© ISO 2024 – All rights reserved

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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 83, *Sports and other recreational facilities and equipment*, Subcommittee SC 5, *Ice hockey equipment and facilities,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 158, *Head protection,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 10256-3:2016), which has been technically revised.

The main changes are as follows:

— Clause 3 has been edited and re-ordered and new definitions have been added;

— Clause 4 has been revised;

— Clause 5 has been revised and clarified to reflect the changes in Clause 4;

— Clause 7 has been revised to include Ice Hockey designation;

— Clause 8 has been expanded to provide more information regarding assembly and use;

— Table 2 has been expanded and Table 3 has been added, to include the protocol and sequencing of all tests for the eye and face protectors;

— Figures 1, 2, 4, 6 and 7 have been revised for clarity and Figures 9 and 10 have been added.

A list of all parts in the ISO 10256 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.

© ISO 2024 – All rights reserved

Introduction

Ice hockey is a high-speed, collision sport in which there is a risk of injury. By playing this sport, participants accept the risk of serious injury, paralysis, or death.

The intention of eye and face protectors is to reduce the frequency and severity of localized injuries to the eyes and face.

Protectors can consist of eye or face protectors worn in conjunction with an ice hockey head protector.

Two types of face protector and one type of eye protector are designated.

© ISO 2024 – All rights reserved

Protective equipment for use in ice hockey —

Part 3:
Face and eye protectors for skaters

1 Scope

This document specifies performance requirements and test methods for eye and face protectors for use in ice hockey only.

This document is applicable to eye and face protectors worn by ice hockey players other than goalkeepers and by referees.

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 10256-1:2024, *Protective equipment for use in ice hockey — Part 1: General requirements*

ISO 10256-2:2024, *Protective equipment for use in ice hockey — Part 2: Head protectors for skaters*

EN 960:2006, *Headforms for use in the testing of protective helmets*

ISO 13468-2:2021, *Plastics — Determination of the total luminous transmittance of transparent materials*

ISO 14782:2021, *Plastics — Determination of haze for transparent materials*

CSA Z262.6-14, *Specifications for facially featured headforms*

ASTM D 2240-15, *Test Method for Rubber Property—Durometer Hardness*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 10256-1:2024 and the following apply.

ISO and IEC maintain terminology 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
eye protector
visor
device intended to reduce the risk of injury to the eyes of ice hockey participants

3.2
face protector
device intended to reduce the risk of injury to the eyes and face of ice hockey participants

© ISO 2024 – All rights reserved