

This is a preview of "DS/EN ISO 10256-3:20...". Click here to purchase the full version from the ANSI store.

## Beskyttelsesudstyr til brug i ishockey – Del 3: Ansigtsbeskyttere til skatere

Protective equipment for use in ice hockey – Part 3: Face  
protectors for skaters (ISO 10256-3:2016)

**DANSK STANDARD**  
Danish Standards Association

Göteborg Plads 1  
DK-2150 Nordhavn

Tel: +45 39 96 61 01

Tel: +45 39 96 61 01

dansk.standard@ds.dk

www.ds.dk

This is a preview of "DS/EN ISO 10256-3:20...". Click here to purchase the full version from the ANSI store.

DS projekt: M299438  
ICS: 13.340.20; 97.220.20

**Første del af denne publikations betegnelse er:**

DS/EN ISO, hvilket betyder, at det er en international standard, der har status både som europæisk og dansk standard.

**Denne publikations overensstemmelse er:**

IDT med: ISO 10256-3:2016

IDT med: EN ISO 10256-3:2018

DS-publikationen er på engelsk.

Denne publikation erstatter: [DS/EN ISO 10256:2003](#)

---

### **DS-publikationstyper**

Dansk Standard udgiver forskellige publikationstyper.

Typen på denne publikation fremgår af forsiden.

Der kan være tale om:

#### **Dansk standard**

- standard, der er udarbejdet på nationalt niveau, eller som er baseret på et andet lands nationale standard, eller
- standard, der er udarbejdet på internationalt og/eller europæisk niveau, og som har fået status som dansk standard

#### **DS-information**

- publikation, der er udarbejdet på nationalt niveau, og som ikke har opnået status som standard, eller
- publikation, der er udarbejdet på internationalt og/eller europæisk niveau, og som ikke har fået status som standard, fx en teknisk rapport, eller
- europæisk præstandard

#### **DS-håndbog**

- samling af standarder, eventuelt suppleret med informativt materiale

#### **DS-hæfte**

- publikation med informativt materiale

Til disse publikationstyper kan endvidere udgives

- tillæg og rettelsesblade

### **DS-publikationsform**

Publikationstyperne udgives i forskellig form som henholdsvis

- fuldttekstpublikation (publikationen er trykt i sin helhed)
- godkendelsesblad (publikationen leveres i kopi med et trykt DS-omslag)
- elektronisk (publikationen leveres på et elektronisk medie)

### **DS-betegnelse**

Alle DS-publikationers betegnelse begynder med DS efterfulgt af et eller flere præfikser og et nr., fx **DS 383**, **DS/EN 5414** osv. Hvis der efter nr. er angivet et **A** eller **Cor**, betyder det, enten at det er et **tillæg** eller et **rettelsesblad** til hovedstandard, eller at det er indført i hovedstandard.

DS-betegnelse angives på forsiden.

### **Overensstemmelse med anden publikation:**

Overensstemmelse kan enten være IDT, EQV, NEQ eller MOD

- **IDT:** Når publikationen er identisk med en given publikation.
- **EQV:** Når publikationen teknisk er i overensstemmelse med en given publikation, men præsentationen er ændret.
- **NEQ:** Når publikationen teknisk eller præsentationsmæssigt ikke er i overensstemmelse med en given standard, men udarbejdet på baggrund af denne.
- **MOD:** Når publikationen er modificeret i forhold til en given publikation.

This is a preview of "DS/EN ISO 10256-3:20...". Click here to purchase the full version from the ANSI store.

EUROPÄISCHE NORM

April 2018

ICS 97.220.20; 13.340.20

English Version

## Protective equipment for use in ice hockey - Part 3: Face protectors for skaters (ISO 10256-3:2016)

Équipements de protection destinés à être utilisés en hockey sur glace - Partie 3: Protections faciales pour les skateurs (ISO 10256-3:2016)

Schutzausrüstung zum Gebrauch beim Eishockey - Teil 3: Gesichtsschützer für Eisläufer (ISO 10256-3:2016)

This European Standard was approved by CEN on 17 September 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

This is a preview of "DS/EN ISO 10256-3:20...". [Click here to purchase the full version from the ANSI store.](#)

## **Contents**

Page

<b>European foreword .....</b>	<b>3</b>
--------------------------------	----------

This is a preview of "DS/EN ISO 10256-3:20...". Click here to purchase the full version from the ANSI store.

## European foreword

This document ([EN ISO 10256-3:2018](#)) has been prepared by Technical Committee ISO/TC 83 "Sports and other recreational facilities and equipment" in collaboration with Technical Committee CEN/TC 158 "Head protection" the secretariat of which is held by BSI.

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 October 2018, and conflicting national standards shall be withdrawn at the latest by October 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of [ISO 10256-3:2016](#) has been approved by CEN as [EN ISO 10256-3:2018](#) without any modification.

This is a preview of "DS/EN ISO 10256-3:20...". [Click here to purchase the full version from the ANSI store.](#)

First edition  
2016-12-01

---

---

# Protective equipment for use in ice hockey —

## Part 3: Face protectors for skaters

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

*Partie : Protections faciales pour les skateurs*



Reference number  
ISO 10256-3:2016(E)

© ISO 2016

This is a preview of "DS/EN ISO 10256-3:20...". Click here to purchase the full version from the ANSI store.



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, 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  
Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
copyright@iso.org  
www.iso.org



This is a preview of "DS/EN ISO 10256-3:20...". Click here to purchase the full version from the ANSI store.

## Contents

	Page
<b>Foreword</b> .....	<b>v</b>
<b>Introduction</b> .....	<b>vi</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Types of face protectors</b> .....	<b>5</b>
<b>5 Requirements</b> .....	<b>5</b>
5.1 Innocuousness.....	5
5.2 Ergonomics.....	5
5.3 Attachment.....	5
5.4 Size and mass restriction (Type B2 only).....	5
5.5 Optical quality.....	5
5.5.1 Visual inspection.....	5
5.5.2 Test requirements.....	6
5.6 Field of vision.....	6
5.7 Penetration (Test blade).....	6
5.8 Puck impact resistance.....	6
5.8.1 Types B1, B2.....	6
5.8.2 Type C.....	7
5.9 Design.....	7
5.9.1 Types B1, B2.....	7
5.9.2 Type C.....	8
5.10 Protected area.....	8
5.10.1 Type B1 and B2 — Full-face protectors.....	8
5.10.2 Type C — Visors.....	8
<b>6 Test methods</b> .....	<b>9</b>
6.1 Sampling.....	9
6.1.1 Types.....	9
6.1.2 Quantity.....	9
6.1.3 Face-protector/helmet combination.....	9
6.2 Tolerances.....	9
6.3 Inspection and determination of mass (for helmet/B2 face protector combinations fitting EN 960 headform size 535 or smaller).....	9
6.4 Conditioning.....	9
6.5 Positioning.....	9
6.5.1 Determination of helmet-positioning index (HPI).....	9
6.5.2 Positioning of helmets with full face protectors.....	9
6.5.3 Positioning of helmets with visors.....	10
6.6 Determination of vision quality for face protectors.....	10
6.6.1 Optical quality within the field of vision.....	10
6.6.2 Peripheral field of vision.....	10
6.7 Determination of penetration.....	10
6.7.1 Test apparatus.....	10
6.7.2 Procedures.....	10
6.8 Determination of puck impact resistance — Face protectors.....	11
6.8.1 Equipment.....	11
6.8.2 Procedures.....	11
<b>7 Test report</b> .....	<b>12</b>
<b>8 Permanent marking</b> .....	<b>12</b>
<b>9 Information for users</b> .....	<b>12</b>

This is a preview of "DS/EN ISO 10256-3:20...". [Click here to purchase the full version from the ANSI store.](#)

<b>Annex A</b> (normative) <b>Optical quality test methods</b> .....	<b>21</b>
<b>Annex B</b> (normative) <b>Puck specifications</b> .....	<b>26</b>
<b>Bibliography</b> .....	<b>28</b>

This is a preview of "DS/EN ISO 10256-3:20...". Click here to purchase the full version from the ANSI store.

## 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](http://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](http://www.iso.org/patents)).

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

For an explanation on 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](http://www.iso.org/iso/foreword.html).

The committee responsible for this document is ISO/TC 83, *Sports and other recreational facilities and equipment*, Subcommittee SC 5, *Ice hockey equipment and facilities*.

This first edition of ISO 10256-3, together with ISO 10256-1, ISO 10256-2, ISO 10256-4, ISO 10256-5, and ISO 10256-6 cancels and replaces the ISO 10256:2003, which has been technically revised.

ISO 10256 consists of the following parts, under the general title *Protective equipment for use in ice hockey*:

- *Part 1: General requirements*
- *Part 2: Head protection for skaters*
- *Part 3: Face protectors for skaters*
- *Part 4: Head and face protection for goalkeepers*
- *Part 5: Neck laceration protection for ice hockey players*

The following parts are under preparation:

- *Part 6: Lower leg protectors for ice hockey players*

## **Introduction**

Ice hockey is a high speed, collision sport in which there is a risk of injury. The object of this part of ISO 10256 is to specify requirements for face protectors, taking into account the risks inherent in participating in the sport, many of which cannot be eliminated by protective equipment. By playing this sport, participants accept the risk of serious injury, paralysis, or death.

The intention of face protection is to reduce the frequency and severity of localized injuries to the head and that part of the face surrounded by the protector. The protective function is such that the force from impacts against the protector is distributed and dampened and the penetration of objects is counteracted.

Face protectors can consist of eye protectors (visors) or full face protectors. They are always worn in conjunction with an ice hockey helmet. Face protectors are tested and assessed together with the helmet or helmets for which the face protector is intended.

To achieve the performance of which it is capable, and to ensure stability on the head, a helmet and associated face protector is intended to be as closely fitting as possible consistent with comfort. In use it is essential that the helmet and associated face protector are securely fastened, with any chin strap or neck strap adjusted according to manufacturer's instructions.

This is a preview of "DS/EN ISO 10256-3:20...". Click here to purchase the full version from the ANSI store.

# Protective equipment for use in ice hockey —

## Part 3: Face protectors for skaters

### 1 Scope

This part of [ISO 10256](#) specifies performance requirements and test methods for face protectors (including visors) for use in ice hockey and is intended to be used in conjunction with [ISO 10256-1](#).

Requirements and the corresponding test methods, where appropriate, are given for the following:

- a) construction and area of coverage;
- b) resistance to puck impact;
- c) penetration;
- d) field of vision;
- e) geometric (visual) optics and acuity;
- f) transmittance and haze;
- g) marking and information.

This part of [ISO 10256](#) applies to face protectors worn by

- players other than goalkeepers, and
- certain functionaries (e.g. referees).

NOTE 1 — The requirements of a Clause take precedent over a figure.

NOTE 2 — The intent is to reduce the risk of injury to the face without compromising the form or appeal of the game.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

[ISO 10256-1:2016](#), *Protective equipment for use in ice hockey — Part 1: General requirements*

[ISO 10256-2:2016](#), *Protective equipment for use in ice hockey — Part 2: Head protection for skaters*

[EN 960](#), *Headforms for use in the testing of protective helmets*

[ASTM D 1003](#), *Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics*

[CSA Z262.6-14](#), *Specifications for facially featured headforms*