

ISIKLIKUD UJUVVAHENDID. OSA 10: ISIKLIKE
UJUVVAHENDITE JA TEISTE VASTAVATE VAHENDITE
VALIK JA KASUTAMINE

Personal flotation devices - Part 10: Selection and
application of personal flotation devices and other
relevant devices (ISO 12402-10:2020)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 12402-10:2020 sisaldab Euroopa standardi EN ISO 12402-10:2020 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 12402-10:2020 consists of the English text of the European standard EN ISO 12402-10:2020.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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ICS 13.340.70

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English Version

Personal flotation devices - Part 10: Selection and application of personal flotation devices and other relevant devices (ISO 12402-10:2020)

Équipements individuels de flottabilité - Partie 10:
Sélection et application des équipements individuels
de flottabilité et d'autres équipements pertinents (ISO
12402-10:2020)

Persönliche Auftriebsmittel - Teil 10: Auswahl und
Anwendung von persönlichen Auftriebsmitteln und
anderen entsprechenden Geräten (ISO 12402-
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This European Standard was approved by CEN on 10 June 2019.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

This document (EN ISO 12402-10:2020) has been prepared by Technical Committee ISO/TC 188 "Small craft" in collaboration with Technical Committee CEN/TC 162 "Protective clothing including hand and arm protection and lifejackets" the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by April 2021, and conflicting national standards shall be withdrawn at the latest by April 2021.

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.

This document supersedes EN ISO 12402-10:2006.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 12402-10:2020 has been approved by CEN as EN ISO 12402-10:2020 without any modification.

Contents

Page

Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Classification; risks and recommended areas of application	3
4.1 General	3
4.2 Performance criteria	5
4.3 Interaction with other devices or equipment	5
4.4 Performance levels	6
4.4.1 Level 50	6
4.4.2 Level 100	6
4.4.3 Level 150	6
4.4.4 Level 275	6
4.5 Selection and use	7
5 Essentials that should be observed	8
5.1 Personal flotation devices (PFDs)	8
5.1.1 General	8
5.1.2 Risk assessment	8
5.1.3 Interaction with clothing	9
5.2 Accessories	10
5.2.1 General	10
5.2.2 Location aids	10
5.2.3 Improved design	10
5.2.4 Harnesses	10
5.2.5 Sprayhood	10
5.3 Immersion suits	11
5.3.1 General	11
5.3.2 Rationale	12
6 Guidance for risk management	14
6.1 General	14
6.2 Description of operation and environment	14
6.3 Identification of risk areas and establishment of safety levels	14
6.4 Guidance for the identification of risk managing measures	14
6.4.1 General	14
6.4.2 Measures to reduce risk	14
6.4.3 Measures to reduce consequences	14
6.4.4 Safety level management	15
6.5 Guidance for the selection of a risk management	15
6.5.1 General	15
6.5.2 Training	15
6.5.3 Personal protective equipment	15
6.5.4 Rescue services	15
6.6 Guidance for the selection of personal protective equipment	15
6.7 Checklist	16
6.7.1 Typical exposure hazards	16
6.7.2 Constant use comfort and ergonomics	16
6.7.3 Basic in-water safety functions	17
6.7.4 Search-and-rescue functions	17
6.7.5 Additional hazards by emergency donning	17
6.7.6 Factors that reduce performance	17
6.8 Example: evaluation of PPE for offshore workers, based on risk assessment	17

Bibliography	19
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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).

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 188, Subcommittee *Small craft*, SC 1, *Personal safety equipment*.

This second edition cancels and replaces the first edition (ISO 12402-10:2006), which has been technically revised.

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

- the document has been updated to be consistent with ISO 12402-2:2020 to ISO 12402-9:2020 (second editions).

A list of all parts in the ISO 12402 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

ISO 12402 (all parts):2020 has been prepared to give guidance on the design and application of personal flotation devices (hereafter referred to as PFDs) and immersion suits according to ISO 15027 (all parts):2012. This document deals with personal floatation devices for persons engaged in activities, whether in relation to their work or their leisure, in or near water. PFDs manufactured, selected, and maintained to this International Standard give a reasonable level of safety against drowning.

Based on a risk assessment, a PFD according to ISO 12402 (all parts):2020 can be used in combination with other personal protection equipment (PPE) according to the European PPE Regulation (EU) 2016/425.

ISO 12402 (all parts):2020 and ISO 15027 (all parts):2012 neither cover life saving appliances (LSA) on commercial vessels, which are regulated by the International Maritime Organisation (IMO)¹⁾ under the International Convention for the Safety of Life at Sea (SOLAS), nor devices used in aircraft, which are under IATA rules. All those devices are equipment on board used in case of emergency and not suitable for permanent use.

Rescue devices, throwable devices and flotation cushions are also not covered in ISO 12402 (all parts):2020.

Devices under ISO 12402-2:2020 to ISO 12402-10:2020 and ISO 15027-1:2012 to ISO 15027-3:2012 are regarded as personal protective equipment.

Performance criteria

PFDs can be divided into the following two main classes, based on their performance:

- **lifejackets**, providing face-up in-water support to the user regardless of physical conditions, and
- **buoyancy aids**, requiring swimming and other movements to keep the user with airways free out of the water.

"**Buoyancy**" is a main criterion to meet those basic performances.

The ISO 12402 series:2020 encourages manufacturers to adopt innovative designs of PFDs providing buoyancy by a wide variety of materials, devices and performance levels.

Buoyancy can be provided by means requiring preparation before entering the water (e.g. inflation of chambers by gas) or inherent materials.

"**Inherently buoyant**" provide permanent buoyancy; the user needs only to don the PFD to achieve full performance.

"**Inflatable PFDs**" provide full buoyancy without further intervention other than arming. They can be operated in fully automatic mode or require initiating the inflation (manual mode).

"**Hybrid PFDs**" provide some minimum inherent buoyancy but rely on additional inflatable buoyancy, such as inflatable PFDs, to achieve full buoyancy.

1) The International Maritime Organization (IMO) is an institution with domicile in London issuing regulations which are then published as laws by its Member States.

Personal flotation devices —

Part 10:

Selection and application of personal flotation devices and other relevant devices

1 Scope

This document provides requirements and recommendations for the selection and application of both personal flotation devices (PFD) complying with the relevant Parts of the ISO 12402 series:2020, and immersion suits according to ISO 15027 (all parts):2012.

It is intended to assist manufacturers, suppliers, users and regulators in the appropriate selection and application of those garments for the circumstances in which they will be used.

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 12401:2009, *Small craft — Deck safety harness and safety line — Safety requirements and test methods*

ISO 12402-2:2020, *Personal flotation devices — Part 2: Lifejackets, performance level 275 — Safety requirements*

ISO 12402-3:2020, *Personal flotation devices — Part 3: Lifejackets, performance level 150 — Safety requirements*

ISO 12402-8:2020, *Personal flotation devices — Part 8: Accessories — Safety requirements and test methods*

ISO 12402-9:2020, *Personal flotation devices — Part 9: Evaluation*

ISO 15027-1:2012, *Immersion suits — Part 1: Constant wear suits, requirements including safety*

ISO 15027-2:2012, *Immersion suits — Part 2: Abandonment suits, requirements including safety*

ISO 15027-3:2012, *Immersion suits — Part 3: Test methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 15027-1:2012 and the following apply.

Where terms are defined below and in ISO 15027-1:2012, the definitions given below 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 <http://www.electropedia.org/>