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## Personal flotation devices —

Part 10:

### **Selection and application of personal flotation devices and other relevant devices**

*Équipements individuels de flottabilité —*

*Partie 10: Sélection et application des équipements individuels de flottabilité et d'autres équipements pertinents*



Reference number  
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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](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 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](http://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](http://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)<sup>1)</sup> 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.

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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.