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*Incorporating corrigendum November 2014*



**BSI Standards Publication**

## **Inflatable boats**

Part 4: Boats with a hull length of between 8 m and 24 m with a motor power rating of 15 kW and greater (ISO 6185-4:2011)

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This British Standard is the UK implementation of EN ISO 6185-4:2011.

The UK participation in its preparation was entrusted to Technical Committee GME/33, Small craft.

A list of organizations represented on this committee can be obtained on request to its secretary.

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**Compliance with a British Standard cannot confer immunity from legal obligations.**

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## EUROPÄISCHE NORM

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English Version

## Inflatable boats - Part 4: Boats with a hull length of between 8 m and 24 m with a motor power rating of 15 kW and greater (ISO 6185-4:2011, Corrected version 2014-08-01)

Bateaux pneumatiques - Partie 4: Bateaux d'une longueur de coque comprise entre 8 m et 24 m et d'une puissance moteur nominale supérieure ou égale à 15 kW (ISO 6185-4:2011, Version corrigée 2014-08-01)

Aufblasbare Boote - Teil 4: Boote mit einer Gesamtlänge zwischen 8 m und 24 m mit einer Motorleistung von 15 kW und mehr (ISO 6185-4:2011, korrigierte Fassung 2014-08-01)

This European Standard was approved by CEN on 25 June 2011.

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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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## Foreword

The text of ISO 6185-4:2011 has been prepared by Technical Committee ISO/TC 188 "Small craft".

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of an identical text or by endorsement, at the latest by January 2012, and conflicting national standards shall be withdrawn at the latest by January 2012.

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

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directives.

For relationship with EU Directives, see informative Annex ZA, which is an integral part of this document.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

### Endorsement notice

The text of ISO 6185-4:2011, Corrected version 2014-08-01 has been approved by CEN as a EN ISO 6185-4:2011 without any modification.

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**Annex ZA**  
(informative)

**Relationship between this European Standard and  
the Essential Requirements of EU Directive 94/25/EC as amended by  
Directive 2003/44/EC**

This European Standard has been prepared under a mandate given to CEN by the European Commission to provide a means of conforming to Essential Requirements of the New Approach Directive 94/25/EC as amended by Directive 2003/44/EC.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

**WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.**

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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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 188, *Small craft*.

This first edition, together with ISO 6185-1, ISO 6185-2 and ISO 6185-3, cancels and replaces ISO 6185:1982, which has been technically revised.

ISO 6185 consists of the following parts, under the general title *Inflatable boats*:

- *Part 1: Boats with a maximum motor power rating of 4,5 kW*
- *Part 2: Boats with a maximum motor power rating of 4,5 kW to 15 kW inclusive*
- *Part 3: Boats with a maximum motor power rating of 15 kW and greater*
- *Part 4: Boats with a hull length of between 8 m and 24 m with a motor power rating of 15 kW and greater*

This corrected version of ISO 6185-4:2011 incorporates the following corrections:

- A cross-reference to [5.2.2.7](#) has been added in [Table 1](#), row 3.
- The formula in [5.2.2.7](#) has been replaced and the unit for  $d$  in [Table 1](#) has been changed to mm.

In addition, [Figure A.1](#) has been rotated through 90°.



## Introduction

ISO 6185 is subdivided into four parts as shown in [Figure 1](#).

It excludes

- a) single-chamber boats,
- b) boats of less than 1 800 N buoyancy, and
- c) boats made from unsupported materials of more than 12 kN inflated buoyancy and powered by motors of power  $P > 4,5$  kW.

It is not applicable to aquatic toys, nor to inflatable liferafts which are specified in ISO 9650.

ISO 6185-1:

- Type I Boats with  $L_H < 8$  m propelled exclusively by manual means.
- Type II Powered boats with  $L_H < 8$  m with a power  $P \leq 4,5$  kW.
- Type III Canoes and kayaks with  $L_H < 8$  m.
- Type IV Sail boats with  $L_H < 8$  m with a sail area less than or equal to  $6 \text{ m}^2$ .

ISO 6185-2:

- Type V Powered boats with  $L_H < 8$  m with a power  $4,5 \text{ kW} < P \leq 15 \text{ kW}$ .
- Type VI Sail boats with  $L_H < 8$  m with a sail area greater than  $6 \text{ m}^2$ .

ISO 6185-3:

- Type VII Powered boats with  $L_H < 8$  m with a power  $P \geq 15 \text{ kW}$ .
- Type VIII Powered boats with  $L_H < 8$  m with a power  $P \geq 75 \text{ kW}$ .

ISO 6185-4:

- Type IX Powered boats (design categories C and D) with  $8 \text{ m} < L_H \leq 24 \text{ m}$  with power  $P \geq 15 \text{ kW}$ .
- Type X Powered boats (design category B) with  $8 \text{ m} < L_H \leq 24 \text{ m}$  with power  $P \geq 75 \text{ kW}$ .

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	ISO 6185-1	ISO 6185-2	ISO 6185-3	ISO 6185-4
Buoyancy (kN)	Types I, II, III and IV	Types V and VI	Types VII and VIII	Types IX and X
12		For > 12 kN reinforced materials	Reinforced materials only	Reinforced materials only $L_H \geq 8$ m
1,8	Reinforced or unsupported materials	For < 12 kN reinforced or unsupported materials		
	< 1800 N excluded from ISO 6185			
Motor power rating (kW):	4,5	15	75 (Type X only)	

**Figure 1 — Illustration of how ISO 6185 is subdivided**

This part of ISO 6185 enables the boat to be assigned to a design category appropriate to its design and maximum load. The categories used align with those in the Recreational Craft Directive of the European Union, EU Directive 94/25/EC as amended by Directive 2003/44/EC.

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## Inflatable boats —

### Part 4:

## Boats with a hull length of between 8 m and 24 m with a motor power rating of 15 kW and greater

**WARNING** — Attention is drawn to the completion process whereby structural items, for example steering consoles, seats and superstructures, are installed by parties other than the manufacturer of the boat. These items should be installed to comply with the relevant clauses of this part of ISO 6185 so it can be ensured that any such installations do not invalidate the original assessment.

### 1 Scope

This part of ISO 6185 specifies the minimum safety characteristics required for the design, materials, manufacture and testing of rigid inflatable boats (RIBs) with a hull length of between 8 m and 24 m and with a motor power rating of 15 kW and greater.

This part of ISO 6185 is applicable to Type IX and Type X RIBs intended for use within the operating temperatures of  $-20\text{ °C}$  to  $+60\text{ °C}$ .

- Type IX: Powered boats, fitted with a buoyancy tube covering at least 85 % of the port and starboard sides, suitable for navigation in inshore and sheltered waters, up to and including wind force 6 Beaufort and significant wave heights up to 2 m (design categories C and D), with a hull length of between 8 m and 24 m and with a motor power rating of 15 kW and greater.
- Type X: Powered boats, fitted with a buoyancy tube covering at least 85 % of the port and starboard sides, suitable for navigation in waters, up to wind force 8 Beaufort and significant wave heights up to 4 m (design category B), with a hull length of between 8 m and 24 m and with a motor power rating of 75 kW and greater.

NOTE 1 General arrangements of typical boats of Types IX and X are given in [Annexes A](#) and [B](#), respectively.

NOTE 2 For boats with power ratings of 4,5 kW and less, refer to ISO 6185-1. For boats with power ratings of 4,5 kW to 15 kW inclusive, refer to ISO 6185-2. For boats with a hull length of less than 8 m and power rating of 15 kW and greater, refer to ISO 6185-3.

Boats outside these types or outside of Type IX and Type X, as defined, are outside of the scope of ISO 6185.

NOTE 3 For inflatable boats with a hull length greater than 8 m, it is suggested to use the requirements of ISO 6185-3.

### 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 1817, *Rubber, vulcanized — Determination of the effect of liquids*

ISO 2411, *Rubber- or plastics-coated fabrics — Determination of coating adhesion*

ISO 3011, *Rubber- or plastics-coated fabrics — Determination of resistance to ozone cracking under static conditions*