



SLOVENSKI STANDARD

SIST EN 15649-1:2010+A1:2012/oprA2:2012

01-november-2012

**Plavajoči pripomočki za prosti čas, ki se uporabljajo na vodi in v njej - 1. del:
Razvrstitev, materiali, splošne zahteve in preskusne metode**

Floating leisure articles for use on and in the water - Part 1: Classification, materials, general requirements and test methods

Schwimmende Freizeitartikel zum Gebrauch auf und im Wasser - Teil 1: Klassifikation, Werkstoffe, allgemeine Anforderungen und Prüfverfahren

Articles de loisirs flottants à utiliser sur ou dans l'eau - Partie 1: Classification, matériaux, exigences et méthodes d'essai générales

Ta slovenski standard je istoveten z: EN 15649-1:2009+A1:2012/prA2

ICS:

97.220.40	Oprema za športe na prostem in vodne športe	Outdoor and water sports equipment
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SIST EN 15649-1:2010+A1:2012/oprA2:2012	en,fr,de
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
EN 15649-1:2009+A1:2012
prA2

September 2012

ICS 97.220.40

English Version

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Schwimmende Freizeitartikel zum Gebrauch auf und im
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This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 136.

This draft amendment A2, if approved, will modify the European Standard EN 15649-1:2009+A1:2012. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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EN 15649-1:2009+A1:2012/prA2:2012 (E)

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Foreword

This document (EN 15649-1:2009+A1:2012/prA2:2012) has been prepared by Technical Committee CEN/TC 136 "Sports, playground and other recreational facilities and equipment", the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

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 Directive(s).

EN 15649-1:2009+A1:2012/prA2:2012 (E)

1 Modification to clause 5.2 to 5.4

Delete the subclauses 5.2 to 5.4 and replace them by the following and modify the numbering accordingly:

"5.2 Body entrapment**5.2.1 General**

Floating leisure articles shall not have accessible design features that may cause body entrapment. This requirement is deemed to be met if the following requirements are met and the specified test procedures prove that body entrapment does not occur.

Design features i.e. gaps, openings, slots etc. are categorised in design types A to E as shown in informative annexe A. They include features providing fixed interior spaces and such with flexible interior components/spaces and thus variable dimensions. Design features likely to cause entrapment may be arranged in the plane but also in 3-dimensional structures providing considerable height as e.g. ladder structures, labyrinths or body enclosing structures. Testing has to be accordingly.

5.2.1.1 Accessibility

Design features accessible to the test person in any stable floating position the product can take on the water.

5.2.1.2 Product categorisation regarding age group and body weight of user/test persons/torso templates

Products shall be labelled with regard to their intended user groups according to EN 15649-2. With regard to body entrapment floating leisure articles are to be distinguished in two sizes only: child use and adult use: Child use includes age group 3 to 10 years of age/body weight 18 to 45 kg respectively.

Products for combined child /adult use or adult use only include all others. According to these user groups the relevant foot and torso probes or the test persons shall be applied for testing.

5.2.1.3 Probes**5.2.1.3.1 Foot probe, child**

Test probe (see Figure 1), 3 years 5. percentile (smallest foot dimension).

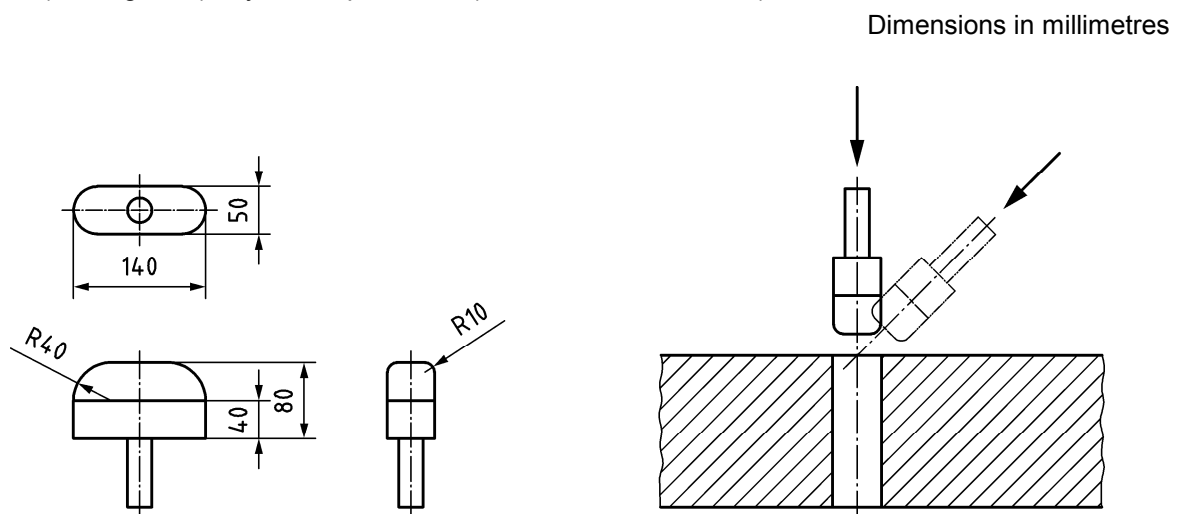
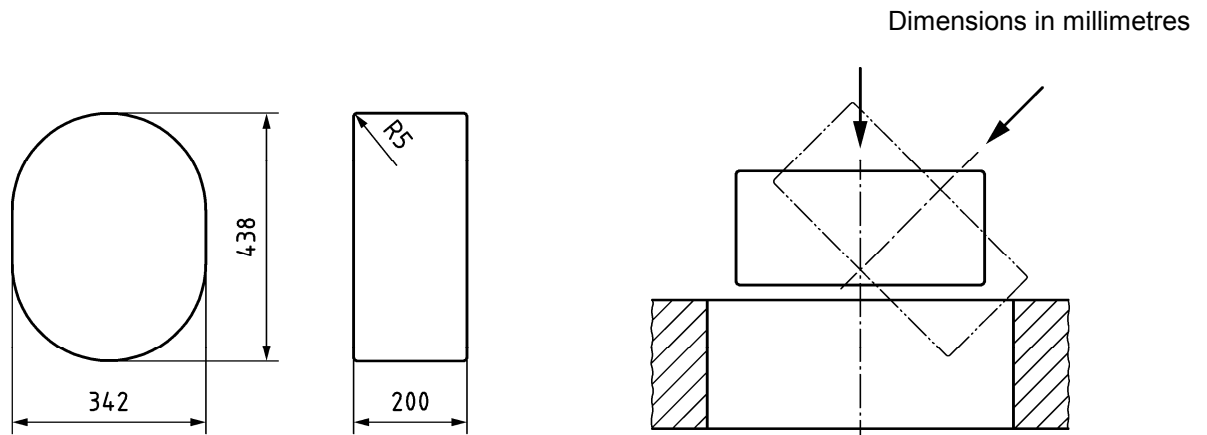


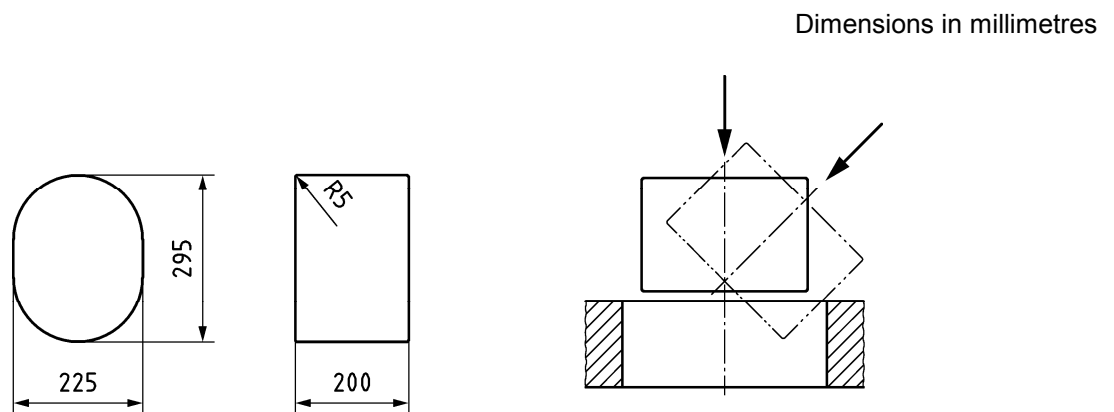
Figure 1 — Foot probe

5.2.1.3.2 Torso probes, adult and child



NOTE Material wood or similar.

Figure 2 — Adult torso probe



NOTE Material wood or similar.

Figure 3 — Child torso probe, 10 years of age

5.2.1.3.4 Test subjects

Test subject representing the child of 10 years of age: test subject No. 4 according to Table 2.

Test subject representing the adult: test subject No. 1 according to Table 2.

5.2.2 Requirements on body entrapment

When tested in accordance with 5.2.3 all design features of a floating leisure article as e.g. gaps, openings, slots etc. which allow the initial ingress of the foot probe according to 5.2.1.3.1 shall prove that they subsequently allow the free passage of the either the appropriate (see 5.2.1.2) test probe (adult / child) according to 5.2.1.3.2 or the relevant test subject according to 5.2.1.3.3.

For design feature likely to cause body entrapment see categorisation of types of openings in annex B.

EN 15649-1:2009+A1:2012/prA2:2012 (E)**5.2.3 Test procedure**

In general testing shall be performed with the probes (child /adult) as specified in 5.2.1.3 which is In cases where the design features likely to cause entrapment allow a simple dimensional check i.e. a pass or not-pass assessment of the template(s). The appropriate test probe shall be applied vertically and pushed into the gaps openings etc. with a force of 100 N.

In special cases where body entrapment depends on the flexibility of body enclosing components or where the arrangement of such hazardous design features is too complicated for a simple dimensional check testing shall be done by the appropriate test subject. The procedure shall be an in-water test and shall include access to the hazardous feature in any stable floating position the product can take. Subject tests shall include the following sub sequences:

- a) appropriate test person is intentionally getting access into the potential entrapment design feature with the intent to pass through;
- b) head first access, feet first access;
- c) it shall be checked whether the process of intentionally and actively accessing the feature of entrapment turns itself into a passive release of the test person's body from the device.

5.2.4 Depths of gaps and openings

Openings, gaps, slots etc. are considered as not causing body entrapment if they have a restriction in depth which prevents the user from getting too deep into it. This depth shall not allow an entry of the foot probe according to 5.2.1.3.1 of more than 30 cm for products intended for adult use only and not more as 20 cm for products intended for child use or combined adult and child use.

5.2.5 Method of measuring

- a) the foot probe is put into the potential entrapment design feature in any direction but not more than at an angle from vertical to 45°. The force applied to the foot probe is max.100 N.
- b) When the probe is blocked the depth of entry from the first contact point to the depth, which is reached after the application of 100 N shall be measured along the virtual line of entry.

5.3 Torso entrapment on safety line with regard to children**5.3.1 Requirements**

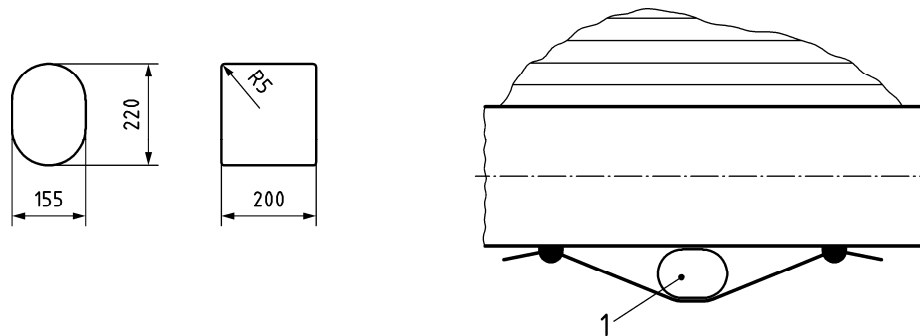
The child torso probe as shown in Figure 4 shall pass through the opening between safety line and the hull of the device at any position under the force of its own weight.

5.3.2 Test method

Put probe for torso entrapment horizontally into the gap between safety line and hull of the inflated structure. Check whether the probe becomes trapped.

Test probe, 3 years 95. percentile (biggest torso dimension, material: pine wood or similar).

Dimensions in millimetres

**Key**

- 1 child's torso probe, 3 years of age

Figure 4 — Child torso probe**2 Modification to 5.5 "Accessible protruding parts causing entanglement"**

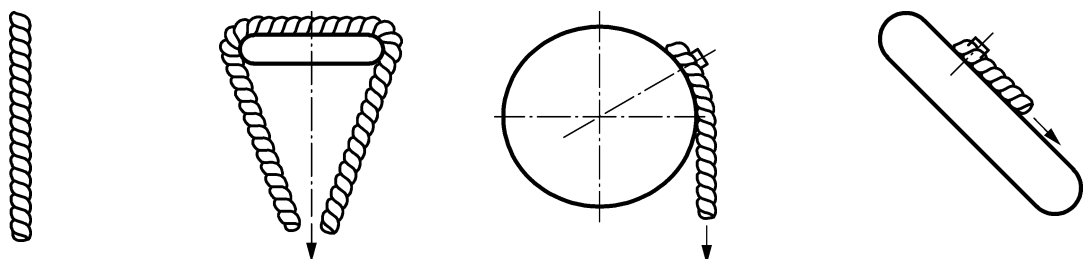
Delete this subclause and replace it by the following:

"5.4 Accessible protruding parts causing entanglement"**5.4.1 Requirements**

To prevent the user from entanglement when unintentionally sliding out or from a device, there shall be no hazardous protrusions. The test rope shall slip off from any part of the device protruding above the surrounding surface.

5.4.2 Test method

A loop of the test rope of 8 mm diameter plaited polyester rope as shown in Figure 5 shall be put around the protruding part. The pulling direction in relation to the protruding part shall be vertically to the centre line of this part. With the product in the position to simulate its intended use, apply a pulling force of 180 N either vertically downwards or in a downward direction most likely to cause failure. It shall be checked whether the test rope disengages under any circumstances, such as capsize, slip off, protruding part breakage, etc.



a) Test rope: plaited polyester rope, 8 mm diameter, min 600 mm in length

b) Test rope put around objects (top view)

c) Test rope put around objects (side view), vertical pulling

d) Test rope applied on objects hindering vertical pulling. Pulling direction most likely to cause failure (side view)

Figure 5 — Test rope and its application