



# SLOVENSKI STANDARD

## oSIST prEN 1888-3:2023

01-julij-2023

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**Izdelki za otroke - Otroški vozički - 3. del: Otroški vozički s sedežem za težje otroke, namenjeni športnim dejavnostim**

Child care articles - Wheeled child conveyances - Part 3: Pushchairs for heavier children intended for sport activities

Kindertransportmittel auf Rädern - Teil 3: Kinderwagen für schwerere Kinder, die für sportliche Aktivitäten bestimmt sind

Voitures d'enfant - Partie 3 : Poussettes pour enfants plus lourds, destinées à des activités sportives

**Ta slovenski standard je istoveten z: prEN 1888-3**

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**ICS:**

97.190      Otroška oprema      Equipment for children

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**prEN 1888-3**

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ICS 97.190

English Version

## Wheeled child conveyances - Part 3: Pushchairs for heavier children intended for sport activities

Voitures d'enfant - Partie 3 : Poussettes pour enfants plus lourds, destinées à des activités sportives

Kindertransportmittel auf Rädern - Teil 3: Kinderwagen für schwerere Kinder, die für sportliche Aktivitäten bestimmt sind

This draft European Standard is submitted to CEN members for second enquiry. It has been drawn up by the Technical Committee CEN/TC 252.

If this draft becomes a European Standard, 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.

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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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## European foreword

This document (prEN 1888-3:2023) has been prepared by Technical Committee CEN/TC 252 “Child care articles”, the secretariat of which is held by AFNOR.

This document is currently submitted to the second CEN Enquiry.

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**prEN 1888-3:2023 (E)****Introduction**

In November 2014 the European Working Group CEN/TC 252/WG 3 decided to split EN 1888 into different parts to clearly treat in a different way, new products or new functions of *wheeled child conveyances*.

prEN 1888-3 covers *pushchairs* intended for sport activities and is only applicable in conjunction with EN 1888-1:2018+A1:2022, which states general requirements for *pushchairs* and *prams*; and if applicable, with EN 1888-2:2018+A1:2022 which states requirements for *pushchairs* intended for children up to 22 kg.

Compliance with EN 1888-1:2018+A1:2022 is mandatory to comply with prEN 1888-3.

If the *pushchair* is intended for children up to 22 kg, compliance with EN 1888-2:2018+A1:2022 is mandatory to comply with prEN 1888-3.

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## 1 Scope

This document specifies the safety requirements of *pushchairs* when used for running/jogging or skating (excluding ice skating), intended for the transport of one or two children up to 15 or 22 kg each.

*Pushchairs* intended to transport the carer while pushing are excluded.

This document applies in conjunction with and in addition to the European standards EN 1888-1:2018+A1:2022 or EN 1888-2:2018+A1:2022 and it cannot be used separately.

If the product has several functions or can be converted into another function, the relevant European standards apply to it.

## 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.

EN 1888-1:2018+A1:2022, *Child care articles - Wheeled child conveyances - Part 1: Pushchairs and prams*

EN 1888-2:2018+A1:2022, *Child care articles - Wheeled child conveyances - Part 2: Pushchairs for children above 15 kg up to 22 kg*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1888-1:2018+A1:2022 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

### 3.1

#### **automatic emergency brake**

automatically engaging device that stops the vehicle

Note 1 to entry: An automatic emergency brake can be combined with, but not replace or be replaced by the *parking device* and/or *braking device*.

### 3.2

#### **tether strap**

safety strap attached between the vehicle and the carer

## 4 General requirements and test conditions

### 4.1 General requirement

The vehicle shall meet the requirements of EN 1888-1:2018+A1:2022 and, if applicable, also the requirements of EN 1888-2:2018+A1:2022.

The EN 1888-1:2018+A1:2022 shall be compliant except for the warning sentence given in 10.4.1: "WARNING This product is not suitable for jogging or skating".

To meet the requirements of this document, the vehicle shall be tested additionally in accordance with Annex A, A.5.

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### 4.2 Test conditions

The additional tests of this document shall be conducted together with the relevant Clauses of EN 1888-1:2018+A1:2022 and EN 1888-2:2018+A1:2022 if applicable.

All the test shall be conducted on the same sample.

## 5 Test equipment

### 5.1 Stop

A rigid square bar of (100 × 100) mm, with a radius of 3 mm. The length of the stop shall be of at least the width of the stroller.

### 5.2 Test platform

Test surface, capable of inclination at an angle of 9° (0/+0,5)°, 12° (0/+0,5)° or 45° (0/+0,5)° to the horizontal and covered with aluminium oxide paper of grade 80.

## 6 Mechanical hazards

### 6.1 Suitability for use (see A.2)

#### 6.1.1 Requirements

The vehicle shall be fitted with a foot rest.

There shall be no protruding rigid objects that are not padded or otherwise protected and that could come into contact with a child's head, between 270 mm and 550 mm measured on the backrest above the *junction line* of the seat (see A.2).

The front wheel (s) of vehicles intended for sport activities shall pass over the stop (5.1), when tested in accordance with 6.1.2.

#### 6.1.2 Test method

Adjust the vehicle in the configuration recommended by the manufacturer in the instruction for use, for sport use.

Adjust the backrest in the most upright position.

Place test mass B (EN 1888-1:2018+A1:2022, 5.1.3) centrally against the backrest in such a way that its bottom edge is in contact with the seat/back rest *junction line*. Restrain the test mass with the *restraint system* and any appropriate strap if needed.

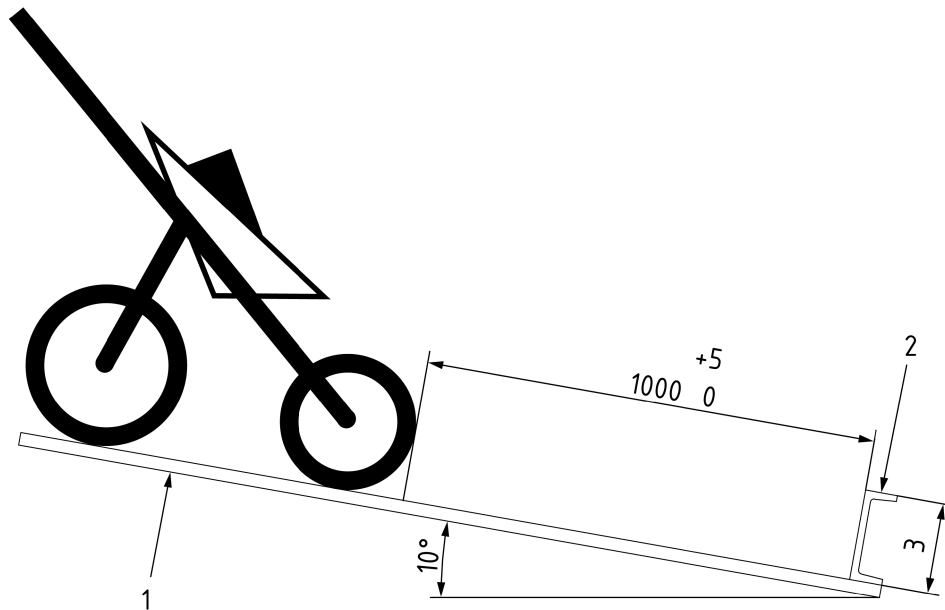
Repeat the test using test mass H (EN 1888-2:2018+A1:2022, Clause 5) if the product allows the usage for child up to 22 kg.

For the purpose of the test, the mass shall be properly attached to the *seat unit*, using the straps of the restrain system. To achieve this and for better reproducibility additional means of attachment can be used as well, this will not impair the result of the test.

Position the vehicle as shown in Figure 1.

Release the vehicle and allow it to run freely down the slope until it impacts the stop (5.1)



**Key**

- 1 slope
- 2 stop

**Figure 1 — Test of suitability for use**

## 6.2 Restraint system

### 6.2.1 Additional requirement (see A.3)

The *pushchair* shall be fitted with a five-points *restraint system*: the *restraint system* shall comprise at least a crotch strap, a waist strap and shoulder straps.

When tested in accordance with 6.2.2 the anchoring points of the *restraint system* (frame, belt buckle, etc.) shall not show any visible damage or be detached and shall function as intended.

When tested in accordance with 6.2.2 the original point D1 of test mass Dummy D shall not exceed the vertical projection line of the front of the front wheel during the test.

### 6.2.2 Test method

Place the vehicle on a horizontal flat and rigid surface; secure the movement of the vehicle such that the wheels are firmly attached to the horizontal surface preventing the vehicle from tipping over during the test.

Place test mass *D* against the backrest in the middle of the *seat unit* with the 225 mm axis against the back rest and attach the *restraint system* in accordance with the manufacturer's instructions with the *seat unit* in the most upright position. Fasten any waist restraint around the torso section of test mass *D* so that any slackness is removed, and the waist restraint is positioned above the leg stumps. If the *crotch restraint* is adjustable, adjust it so that any slackness is removed, and the waist restraint is still positioned above the leg stumps. Where the *restraint system* has shoulder straps that can be positioned on the back of the *seat unit* in a range of positions, the shoulder straps shall be placed in the highest position (to accommodate the oldest child). Place a 30 mm cuboid spacer block, made of a hard-smooth material on each shoulder of test mass *D*. Adjust each shoulder strap in accordance with manufacturer's instructions so that any slackness is removed. Remove the spacers.

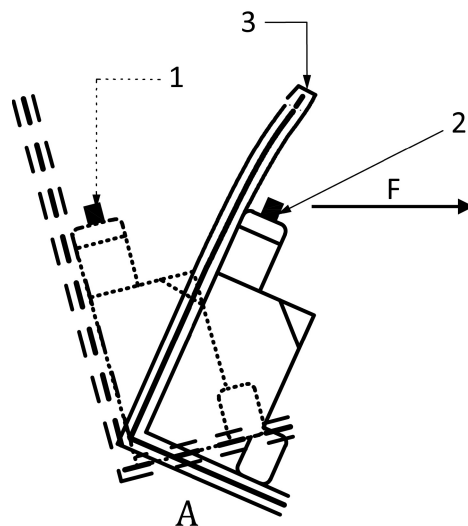
Record the origin measurement D1 on the centre top of the test mass *D*.

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Gradually apply a horizontal tensile force of 510 N from the centre top of test mass *D* (D1). Apply the force within 5 s then maintain the force for 1 min and check whether the point D1 passes beyond the vertical projection line of the front of the front wheel (See Figure 2).

For test purposes, a hook of negligible mass can be added at the top of the Dummy *D*.

NOTE It is not necessary that the tensile force remain horizontal throughout the test.

**Key**

- 1 origin of D1 point
- 2 application point of the force
- 3 location point D1 under force
- 4 seat unit
- 5 pulley
- 6 sensor

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**Figure 2 — Test method**

**6.3 Entanglement hazards**

The requirements of EN 1888-1:2018+A1:2022, 8.4, do not apply to any *tether strap* (3.2) if provided.

**6.4 Stability**

The vehicle shall not tip over when tested in accordance with EN 1888-1:2018+A1:2022, 8.9.1.2 and/or EN 1888-2:2018+A1:2022, 6.3; on the test platform inclined at 15° with wheels in locked and unlocked position.

Any *seat unit* attachment device shall not become detached during the test.

**6.5 Structural integrity****6.5.1 Irregular surface test****6.5.1.1 Requirement**

When tested in accordance with 6.5.1.2 there shall be no break or deformation of any part of the product that can impair the safety of the vehicle. Signs of wear shall not be regarded as a failure.

The vehicle shall not collapse; the *locking mechanisms* and attachment devices shall still function as intended.

The swivelling function shall not be impaired, and the locking of swivelling wheels shall still work as intended.

The devices used to connect the *seat unit* to the *chassis* shall not become disconnected, loosened or damaged during or after testing.

After testing in accordance with 6.5.1.2 the vehicle shall still comply with the following requirements of EN 1888-1:2018+A1:2022:

- 8.2 entrapment hazards;
- 8.3 hazards from moving parts;
- 8.8 *parking and braking device*; and
- prEN 1888-3:—, 6.4 stability.

### 6.5.1.2 Test

The vehicle shall be tested in accordance with EN 1888-1:2018+A1:2022, 8.10.3.2, and EN 1888-2:2018+A1:2022, 6.4.2, if the *pushchair* is intended for children up to 22 kg and subsequently, 36,000 times with a speed of  $(8 \pm 0,1)$  km/h.

The additional 36,000 cycles are carried out with the front wheel(s) in locked position.

If there is a dead man's break it shall be deactivated and maintained deactivated for the entire irregular surface test.

The number of cycles and test masses shall be determined as shown in the Table 1 below:

<https://standards.iso.org/obp/ui/#iso:std:prEN:1888-3:2023> **Table 1 — Determination of cycles for the irregular surface test**

Step	Stroller intended for children up to 15 kg (EN 1888-1:2018+A1:2022 and prEN 1888-3)			Stroller intended for children up to 22 kg (EN 1888-2:2018+A1:2022 and prEN 1888-3)		
	Test mass(es)	Cycles	Speed	Test mass(es)	Cycles	Speed
1	Test mass B (15 kg)	72,000	5 km/h	Test mass B (15 kg)	72,000	5 km/h
2	Test mass B (15 kg)	36,000	8 km/h	Test mass H (22 kg)	24,000	5 km/h
3				Test mass H (22 kg)	36,000	8 km/h

### 6.5.2 Wheels

#### 6.5.2.1 Requirements

These requirements replace the requirements of EN 1888-1:2018+A1:2022, 8.10.5.

Any swivelling function of the wheels shall be lockable or the wheels shall not be swivelling.