

### SLOVENSKI STANDARD SIST EN 16230-1:2014/kFprA1:2014

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#### Gokarti za prosti čas - 1. del: Varnostne zahteve in preskusne metode za gokarte

Leisure karts - Part 1: Safety requirements and test methods for karts

Freizeitkarts - Teil 1: Sicherheitstechnische Anforderungen und Prüfverfahren für Karts

Karts de loisir - Partie 1: Exigences de sécurité et méthodes d'essais relatives aux karts

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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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**English Version** 

# Leisure karts - Part 1: Safety requirements and test methods for karts

Karts de loisir - Partie 1: Exigences de sécurité et méthodes d'essais relatives aux karts Freizeitkarts - Teil 1: Sicherheitstechnische Anforderungen und Prüfverfahren für Karts

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 354.

This draft amendment A1, if approved, will modify the European Standard EN 16230-1:2013. 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.

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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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#### SIST EN 16230-1:2014/kFprA1:2014

#### EN 16230-1:2013/FprA1:2014 (E)

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#### Foreword

This document (EN 16230-1:2013/FprA1:2014) has been prepared by Technical Committee CEN/TC 354 "Non-type approved light motorized vehicles for the transportation of persons and goods and related facilities", the secretariat of which is held by AFNOR.

This document is currently submitted to the Unique Acceptance Procedure.

#### EN 16230-1:2013/FprA1:2014 (E)

#### 1 Modification to Table 1 - Type of kart - Manufacturers design parameters

Delete Table 1 and replace it with the following one:

Kart type	Slow track kart <sup>a</sup> Maximum speed	Fast track kart <sup>a</sup> Maximum speed	Reference height of driver (ergonomy minimum size ranges for given type)	Driver weight range	Maximum power at the crankshaft	Reference dummy <sup>e</sup>
	km/h	km/h	mm	kg	kW <sup>d</sup>	
Kart type A1 (baby <sup>f</sup> )	30	30	1 150 (- 100 / + 100) <sup>b</sup>	22 (- 5 / + 10) <sup>b</sup>	3,5	-
Kart type A2 (mini)	45	65	1 350 (- 150 / + 150) <sup>b</sup>	32 (- 10 / + 18) <sup>b</sup>	5,15	5 <sup>th</sup> percentile female
Kart type B (adult)	70	80	1 700 (- 250 / + 250) <sup>b</sup>	78 (- 38 / + 23 <sup>c</sup> ) <sup>b</sup>	10,3	95 <sup>th</sup> percentile male
Kart type C1 (adult)	70	90	1 700 (- 250 / + 250) <sup>b</sup>	78 (- 38 / + 23 <sup>c</sup> ) <sup>b</sup>	16,9	95 <sup>th</sup> percentile male
Kart type C2 (adult)	70	110	1 700 (- 250 / + 250) <sup>b</sup>	78 (- 38 / + 23 <sup>c</sup> ) <sup>b</sup>	22,1	95 <sup>th</sup> percentile male
			at karts are used in cc ay apply regarding age			

"Table 1 — Type of	kart - Manufacturers	s design parameters
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<sup>c</sup> Upper tolerance specified according to the 95<sup>th</sup> percentile male dummy.

Range specified according to the relevant 50<sup>th</sup> percentile dummy.

<sup>d</sup> Measured according to a generally acknowledged standardised method, e.g. ISO 15550, SAE J1349.

<sup>e</sup> Hybrid III type dummies used for the crash test as described in B.3.

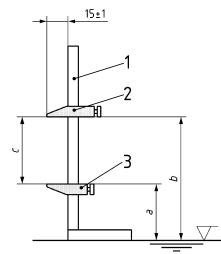
f smallest category of a kart.

b

## 2 Modification to 7.4.1.2 "Additional requirements for all-around protection having a shaped surface"

Replace the existing text in 7.4.1.2 with the following:

"When the vertical surface of the protection is shaped, the dimensions a, b and c shall be measured using the tool described in Figure 3. The tool shall be applied until the vertical component of the tool (1) makes contact with the outermost point of the all-around protection before adjusting the two measuring arms (3) and (2) until they make contact with the protection; the values of a, b and c shall be determined with the two measuring arms (3) and (2) in these positions in accordance with Figure 3.



#### Key

- a bottom edge of the all-around protection (see Table 4)
- b upper edge height of the all-around protection (see Table 4)
- c depth of the all-around protection (see Table 4)
- 1 vertical component of the tool
- 2 upper measuring arm
- 3 bottom measuring arm

#### Figure 3 — Tool for measuring the all-around protection"

#### 3 Modification to 7.5.1.2 "Mechanical components of the brake system"

Delete the third paragraph and replace it with the following:

"In the case of a hydraulic system, the activation linkage between the brake pedal and the master cylinder shall have a secondary safety device that ensures brake activation should the primary system fail."

#### EN 16230-1:2013/FprA1:2014 (E)

#### 4 Modification to 9.2 "User manual"

Add the following text at the end of 9.2.1:

"a) safety instructions;

- 1) general safety instructions about the conditions of use (track, buildings, personnel, karts);
- 2) general safety instructions for the drivers;
  - age and size restrictions;
  - things prohibited to the drivers;
  - clothes-protections of the drivers including recommending neck brace for drivers of karts types A1 and A2;
- the kart shall not be driven by a driver who has not received an appropriate briefing by the kart track operator or his representative;
- b) recap of safety warnings contained in the manual;
- c) instructions for kart commissioning;
- d) instruction for kart first start;
- e) instructions for checks prior to each session;
- f) instructions about adjustment and maintenance operations on the kart;
- g) instructions about trouble shooting;
- h) instructions about maintenance plans;
- i) warning that changing the gear ratio, that altering the speed of the kart and the engine rpm;
- j) information about noise emissions especially for karts used on indoor tracks;
- k) information about vibration levels;
- I) warning about hazards due to gas emissions;
- m) warning about the necessity to assess the compatibility of karts protection if karts of different protection systems are used together;
- n) warning about safe refuelling : "If the engine has been running, allow it to cool first. Never refuel the engine where gasoline fumes may reach flames or sparks.";
- o) warning that appropriate seats or inserts shall be used;
- p) warning that the driver shall fit the kart correctly;
- q) information about the permitted tyres dimensions, range of tyres and their associated pressure;
- r) warning about the hazards due to excessive pressures of the tyres;
- s) address of manufacturer or local representative.

NOTE Additional information may be required by specific national or European regulations or standards on the subject."

#### 5 Modification to 9.4 "Signs (pictogram), written warnings"

Add the following figures at the end of 9.4:



Figure 9 — long hair outside the helmet is forbidden

## 6 Modification to A.3.2 "Test method for the distance between the ground and lower edge of the protection (a value – Figure 2)"

forbidden

Replace the text with the following:

forbidden

— Position the tool of Figure 3 in front of measuring point 1.

- Lower the bottom measuring arm (3), to bring it close to the ground.
- Put the vertical component of the tool (1) in contact with the all-around protection.
- Raise the bottom measuring arm (3) until it touches the all-around protection.
- Determine the distance between the upper edge of the measuring arm (3) and the ground (a) according to Figure 2 and Figure 3.
- Repeat the measurement for all points 2 to 12.

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