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Elektrisch aangedreven rolstoelen, scooters en bijbehorende laadapparaten - Eisen en beproevingsmethoden

Fauteuils roulants électriques, scooters et leurs chargeurs - Exigences et méthodes d'essai

Electrically powered wheelchairs, scooters and their chargers - Requirements and test methods

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Fauteuils roulants électriques, scooters et leurs chargeurs -
Exigences et méthodes d'essai

Elektrorollstühle und -mobile und zugehörige Ladegeräte -
Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 27 August 2009.

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Contents

Page

Foreword.....	5
Introduction	6
1 Scope	7
2 Normative references	7
3 Terms and definitions	9
4 Test apparatus	9
5 Type classes.....	10
6 General requirements.....	10
7 Design requirements	11
7.1 Foot supports, lower leg supports and arm supports	11
7.2 Pneumatic tyres	11
7.3 Fitting an anterior pelvic support.....	11
7.4 Wheelchairs for use as seats in motor vehicles.....	11
7.5 Braking systems	12
7.6 Freewheel device	12
7.7 Component mass.....	12
7.8 Battery enclosures and containers.....	12
7.9 Operations intended to be carried out by the occupant and/or assistant.....	13
7.10 Controls intended for operation by the occupant	13
7.11 Assistant control unit, push handles and handgrips.....	14
7.12 Charging connector.....	14
8 Performance requirements	14
8.1 General.....	14
8.2 Foot supports, lower leg support assemblies and arm supports	14
8.2.1 Requirements	14
8.2.2 Tests.....	15
8.3 Static, impact and fatigue strength.....	15
8.3.1 Requirements	15
8.3.2 Test.....	15
8.4 Braking system	16
8.4.1 General requirements.....	16
8.4.2 Tests.....	17
8.5 Operating forces	18
8.5.1 Requirements	18
8.5.2 Test.....	19
8.6 Assistant control unit, push handles and handgrips.....	19
8.6.1 Requirements	19
8.6.2 Test.....	20
8.7 Charging connector.....	20
8.7.1 Requirements	20
8.7.2 Test.....	20
8.8 Performance of driving characteristics	20
8.8.1 General.....	20
8.8.2 Ability to climb maximum safe slope	20
8.8.3 Ground unevenness	21
8.8.4 Maximum downhill speed	21
8.8.5 Dynamic stability	22

8.8.6	Obstacle climbing.....	22
8.8.7	Static stability	23
8.8.8	Maximum speed.....	23
8.8.9	Distance range	23
8.9	Surface temperature.....	23
8.10	Resistance to ignition	24
8.10.1	Upholstered composite parts.....	24
8.10.2	Foam materials	24
8.10.3	Other parts	24
8.11	Climatic test	24
8.12	Seating adjustments for tilt and recline systems	24
8.12.1	Requirements.....	24
8.12.2	Test method	24
9	Electrical requirements.....	25
9.1	General requirements	25
9.2	Requirement for controller on/off switch.....	25
9.3	Requirement for power indicator.....	25
9.4	Requirements for circuit protection	25
9.5	Requirements for battery chargers	25
9.6	Charge level indicator	26
10	Requirements for information supplied by the manufacturer	26
10.1	General	26
10.2	Pre-sale information	26
10.3	User information.....	27
10.4	Service information	28
10.5	Labels	28
11	Test report.....	28
12	Tables	30
13	Figures.....	32
Annex A	(informative) Recommendations for test dummies of mass greater than 100 kg.....	36
A.1	General	36
A.2	Construction	36
A.3	Accelerometer mounting	36
A.4	Design aims	37
Annex B	(informative) Recommendations for dimensions and manoeuvring space of electrically powered wheelchairs	45
B.1	Specific dimensions.....	45
B.1.1	Dimensions when ready for use	45
B.1.2	Push handle height	45
B.1.3	Ground clearance	45
B.2	Manoeuvring space	45
B.2.1	Turning diameter	45
B.2.2	Reversing width.....	45
B.3	Speed settings	45
Annex C	(informative) Recommended design features	47
C.1	Introduction.....	47
C.2	General recommendations	47
C.2.1	Anti-tip devices	47
C.2.2	Component mass	47
C.2.3	Fittings and tools.....	47
C.2.4	Tyres	47

EN 12184:2009 (E)

C.2.5	Means to inflate tyres	47
C.2.6	Surface temperature	47
C.2.7	Occupant transfer into or out of the wheelchair	48
C.2.8	Resistance to contamination from urine incontinence	48
C.2.9	Indication for maximum safe slope.....	48
C.2.10	Mirrors.....	48
C.2.11	Head support.....	48
C.2.12	Accidental release of parking brakes and freewheel devices.....	48
C.3	Recommendations for performance characteristics	49
C.3.1	Indication of electrical faults	49
C.3.2	Batteries and their containers	49
C.3.3	Lighting.....	49
C.3.4	Control mechanism feedback.....	49
C.3.5	Freewheel alarm.....	49
C.3.6	Maximum speed	49
Annex D (informative) Recommended seating design		50
Annex E (informative) Manoeuvring forces		51
E.1	Recommendations.....	51
E.1.1	Push handle force.....	51
E.1.2	Handrim force.....	51
E.2	Manoeuvring test for handrim-activated power-assisted wheelchairs.....	51
Annex F (informative) Technical changes from previous editions of EN 12184.....		52
F.1	Technical changes between the first (1999) and second (2006) editions	52
F.2	Technical changes from the second (2006) edition	53
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of Council Directive 93/42/EEC of 14 June 1993 concerning medical devices.....		55
Bibliography.....		59

Foreword

This document (EN 12184:2009) has been prepared by Technical Committee CEN/TC 293 “Assistive products for persons with disability”, the secretariat of which is held by SIS.

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 March 2010, and conflicting national standards shall be withdrawn at the latest by March 2010.

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 supersedes EN 12184:2006.

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 Council Directive 93/42/EEC of 14 June 1993 concerning medical devices, as amended by Directive 2007/47/EC.

For relationship(s) with the applicable EU Directive(s), see informative Annex ZA, which is an integral part of this document.

Informative Annex F provides details of significant technical changes between this European Standard and the previous editions of 1999 and 2006.

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, 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.

Introduction

This is the third edition of this European Standard which was originally issued in 1999. The second edition was published in 2006 but was withdrawn in 2007.

Where this European Standard does not apply to particular wheelchairs, contracting parties should consider whether appropriate parts of this European Standard can be used. Manufacturers might also wish to consider whether appropriate parts of this European Standard can be used to assess the performance of their products against the Essential Requirements of the Council Directive concerning medical devices 93/42/EEC of 14 June 1993, as amended by Directive 2007/47/EC.

This European Standard contains requirements for ergonomic design related to the ease of wheelchair operation. They are intended to be applicable to at least 80 % of adult occupants and are based upon:

- the body size of occupants within the range 5th percentile adult female to 95th percentile adult male,
- the abilities and restrictions of a 65-year-old 50th percentile female, and
- the wheelchair being equipped with operating devices which are not custom-made for individual occupants.

1 Scope

This European Standard specifies requirements and test methods for electrically powered wheelchairs with a maximum speed not exceeding 15 km/h intended to carry one person of mass not greater than 100 kg, which includes:

- manual wheelchairs with add-on power kits used for propulsion,
- electrically powered wheelchairs, and
- electrically powered scooters with three or more wheels.

It also specifies requirements and test methods for battery chargers for wheelchairs and scooters.

This European Standard does not apply in total to:

- wheelchairs intended for special purposes, such as sports,
- custom-made wheelchairs,
- handrim activated power assisted wheelchairs and
- powered office chairs.

NOTE 1 The application of this standard is limited to wheelchairs with a maximum occupant mass of 100 kg because the maximum mass of dummy specified in ISO 7176-11:1992 is 100 kg. Annex A (informative) provides guidance for construction of dummies of mass 125 kg and 150 kg. At the time of publication, a new edition of ISO 7176-11 was under development, including test dummies with masses above 100 kg.

NOTE 2 Requirements for manually propelled wheelchairs are specified in EN 12183.

2 Normative references

The following referenced documents are indispensable for the application 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 1021-1:2006, *Furniture — Assessment of the ignitability of upholstered furniture — Part 1: Ignition source smouldering cigarette*

EN 1021-2:2006, *Furniture — Assessment of the ignitability of upholstered furniture — Part 2: Ignition source match flame equivalent*

EN 12182, *Technical aids for disabled persons — General requirements and test methods*

EN 50272-3:2002, *Safety requirements for secondary batteries and battery installations — Part 3: Traction batteries*

EN 60335-1:2002, *Household and similar electrical appliances — Safety — Part 1: General requirements (IEC 60335-1:2001, modified)*

EN 60529:1991, *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)*