EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 12529

September 1998

ICS 97.140

Descriptors: wheels, castors, furniture, seats, office equipment, office furniture, handling equipment, tests, long distance running test, dynamic test, static test, impact performance, conformity tests

English version

Castors and wheels — Castors for furniture — Castors for swivel chairs — Requirements

Roues et roulettes — Roulettes pour meubles — Roulettes pour sièges de bureau — Prescriptions

Räder und Rollen — Möbelrollen — Rollen für Drehstühle — Anforderungen

This European Standard was approved by CEN on 30th August 1998.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Page 2 EN 12529:1998

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 324, Castors and wheels, the Secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by March 1999, and conflicting national standards shall be withdrawn at the latest by March 1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Contents

	I	Page
Foreword		2
1	Scope	3
2	Normative references	3
3	Definitions	9
4	Dimensions and classification	9
4.1	Fixing system	9
4.2	Castor type	9
4.3	Dimensions	9
5	Requirements	4
5.1	Standard conditions	4
5.2	Impact performance	5
5.3	Electrical resistance test	5
5.4	Contact pressure	5
5.5	Stem retention	5
5.6	Static load performance	5
5.7	Brake performance of castors type U	6
5.8	Dynamic test	6
5.9	Long distance running	6
5.10	Rolling resistance	7
5.11	Swivel resistance	7
6	Conformity	7
7	Marking of the product	7
7.1	Product marking	7
7.2	Marking of electrically conductive or antistatic castor(s) or wheel(s)	· 7

1 Scope

This European Standard specifies the technical requirements, the appropriate dimensions and the requirements for testing.

This European Standard applies to castors with or without braking devices that will normally be used on swivel chairs.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply only to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

prEN 1335, Office furniture — office work chair. EN 12526:1998, Castors and wheels — Vocabulary, recommended symbols and multilingual dictionary. EN 12527:1998, Castors and wheels — Test methods and apparatus.

3 Definitions

For the purpose of this European Standard, definitions and recommended symbols of EN 12526:1998 apply.

4 Dimensions and classification

The characteristics of a castor are:

- fixing system;
- castor type;
- dimensions.

4.1 Fixing system

The fixing system includes stem and circlip, threaded stem and other fixing systems.

4.2 Castor type

Castors are classified into four types:

4.2.1 *Type H*

Castors with plain wheels are defined as type H, hard tread. The wheel shall be one colour over the entire surface.

NOTE These castors are suitable for carpeted floors.

4.2.2 Type W

Castors with resilient tyred wheels are defined as type W, soft tread. This shall be of a clearly different colour to the wheel centre.

 ${\tt NOTE}\$ These castors are suitable for hard stone, wooden or tiled floors or those featuring non-textiled covering.

4.2.3 *Type C*

Castors which are electrically conductive.

NOTE These castors shall have either type H or type W wheels. They may also conform to type U.

4.2.4 *Type U*

Castors for swivel chairs with a built-in braking mechanism.

NOTE 1 For certain applications castors for swivel chairs require a built-in braking mechanism, that is released when a person sits on the chair to which the castors are fitted, allowing ease of mobility in that position. This braking action is automatically re-applied as the person leaves the chair to prevent the chair rolling away unintentionally.

NOTE 2 The decision regarding the type of castors to be fitted to swivel chairs will be dependent on the chair design and the type of floors and covering in use. The castors shall have either type H or type W wheels. They may also conform to type C.

NOTE $3\,\,$ Castors with permanent braking systems are not acceptable.

4.3 Dimensions

The Figures 1 and 2 show typical castor designs; Table 1 shows the specified castor dimensions.

