



**SLOVENSKI STANDARD**  
**SIST EN 12528:2000**  
**01-december-2000**

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**Castors and wheels - Castors for furniture - Requirements**

Castors and wheels - Castors for furniture - Requirements

Räder und Rollen-Möbelrollen - Anforderungen

Roues et roulettes - Roulettes pour meubles - Prescriptions

**Ta slovenski standard je istoveten z: EN 12528:1998**

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EUROPEAN STANDARD

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Descriptors: furniture, wheels, castors, characteristics, dimensions, product-requirements, classification, tests, conformity tests, marking

English version

## Castors and wheels - Castors for furniture - Requirements

Roues et roulettes - Roulettes pour meubles - Prescriptions

Räder und Rollen- Möbelrollen - Anforderungen

This European Standard was approved by CEN on 30 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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
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## 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of an identical text or by endorsement, at the latest by March 1999, and conflicting national standards shall be withdrawn at the latest by March 1999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.

## 1 Scope

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

This European Standard applies to castors for general furniture applications, but specifically excludes those for swivel chairs and other specialised applications.

## 2 Normative references

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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.

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
- performance level

### 4.1 Fixing system

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

Fixings shall be chosen with reference to the application of the castor.

### 4.2 Castor type

Castors are classified into four types (H, W, C and S). These all apply to the castor designs illustrated in figures 1, 2 and 3.

#### 4.2.1 Type H:

Castors with plain wheels are defined as Type H, hard tread.

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.

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. Type C castors may have a hard or soft tread.

NOTE: These castors shall have either modified type H or type W wheels.

#### 4.2.4 Type S:

Inclined axle castor

### 4.3 Dimensions

The figures 1, 2 and 3 show typical castor designs; table 1 shows the specified dimensions.

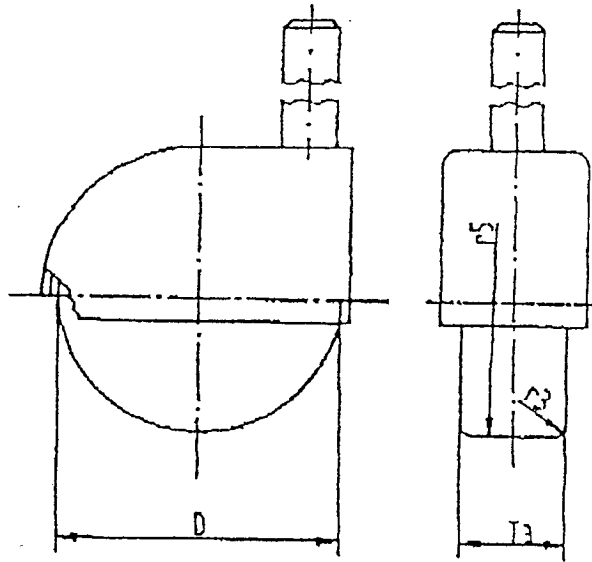


Figure 1: Single-wheel swivel castor

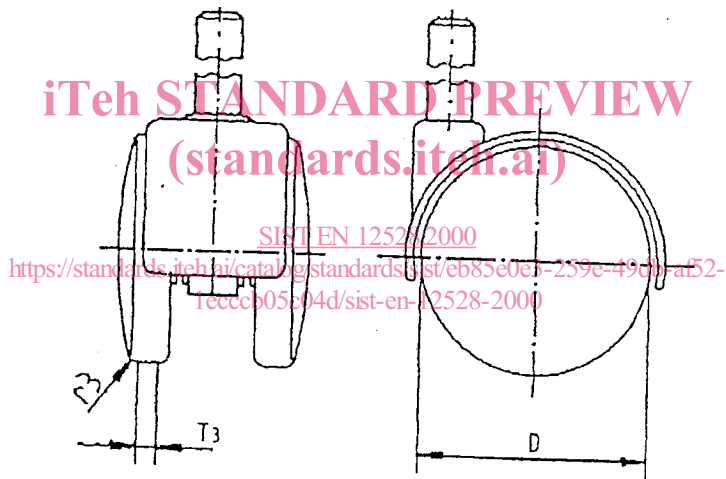


Figure 2: Twin wheel swivel castor

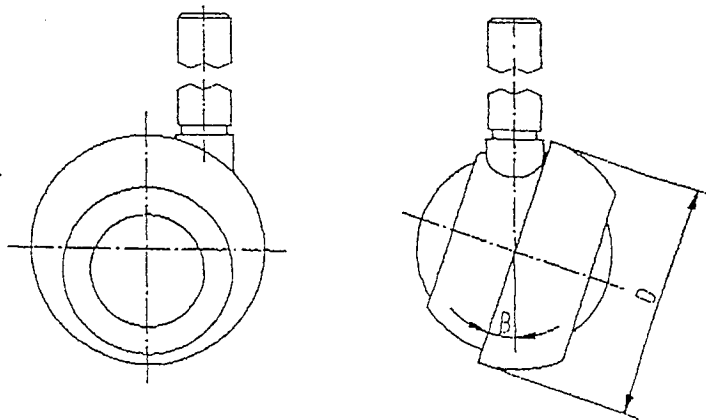


Figure 3: Inclined axle castor

The wheel(s) of a fixed castor shall conform to the dimensions shown in figures 1, 2 and 3 (as appropriate).

**Table 1: Specified dimensions**

dimensions in millimetres and angles in degrees

Description	Castor designs	Symbol	Dimension
Wheel diameter	All	D	min. 20
Tread width	single wheel castors	T <sub>3</sub>	min. 7,5
	twin wheel castors		min. 2 x 5
External corner radius	All	r <sub>3</sub>	min. 1,5
Tread curvature	single wheel castors	r <sub>5</sub>	min. 110
Angle of inclination	Inclined axle castors	β	max. 25

#### 4.4 Performance level

The requirements for castors will vary dependent on the environment in which they are intended to be used. The levels are shown in table 2.

**Table 2: Levels of performance**  
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Level	Load capacity L <sub>1</sub> N
1	100
2	200
3	300
4	400

## 5 Requirements

Testing requirements for castors and wheels are listed below. Test apparatus and procedures are defined in EN 12527 : 1998.

### 5.1 Standard Conditions

#### 5.1.1 Environmental conditions

Tests shall be carried out at a temperature between 17<sup>o</sup> C and 23<sup>o</sup> C. During the 24 h prior to the test the sample(s) shall remain at the above temperature, in an environment with a relative humidity between 40 % and 70 %.

Sample(s) shall not be artificially cooled during testing.