

# SVENSK STANDARD

## SS-EN ISO 129-1:2019



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**Teknisk produktdokumentation (TPD) – Angivelse av mått och toleranser –**

**Del 1: Allmänna principer (ISO 129-1:2018)**

**Technical product documentation (TPD) – Presentation of dimensions and tolerances –**

**Part 1: General principles (ISO 129-1:2018)**

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Europastandarden EN ISO 129-1:2019 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN ISO 129-1:2019.

Denna standard ersätter SS-ISO 129-1:2018, utgåva 2

The European Standard EN ISO 129-1:2019 has the status of a Swedish Standard. This document contains the official version of EN ISO 129-1:2019.

This standard supersedes the SS-ISO 129-1:2018, edition 2

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EUROPEAN STANDARD

EN ISO 129-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2019

ICS 01.100.01

English Version

Technical product documentation (TPD) - Presentation  
of dimensions and tolerances - Part 1: General principles  
(ISO 129-1:2018)

Documentation technique de produits -  
Représentation des dimensions et tolérances -  
Partie 1: Principes généraux (ISO 129-1:2018)

Technische Produktdokumentation (TPD)  
- Angabe von Maßen und Toleranzen - Teil  
1: Grundlagen (ISO 129-1:2018)

This European Standard was approved by CEN on 5 August 2019.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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## European foreword

The text of ISO 129-1:2018 has been prepared by Technical Committee ISO/TC 10 "Technical product documentation" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 129-1:2019 by CCMC.

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 April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO 129-1:2018 has been approved by CEN as EN ISO 129-1:2019 without any modification.



## Introduction

This document is intended for all fields of application. See other parts of ISO 129 for information pertaining to specific application areas.

The principles of tolerancing and the interpretation of tolerance presentations are given in the ISO 14405 series.

Figures in this document illustrate the rules and are not intended to show complete representations. It should be understood that third-angle projection could equally well have been used without prejudice to the principles established.



# Technical product documentation (TPD) — Presentation of dimensions and tolerances —

## Part 1: General principles

### 1 Scope

This document establishes the general principles for presentation of dimensions and associated tolerances that apply to 2D technical drawings in all disciplines and trades but which can also be applied to 3D applications.

This document does not cover the application of dimensional tolerances and their meaning. See ISO 14405-1 for tolerancing principles. This document can only be used to describe the nominal model of a drawing, not the non-ideal surface model (skin model) used for tolerancing purposes (for more information on tolerancing specifications, see the list of GPS standards listed as normative reference or as bibliography)

Considering the ISO 14405 series, the presentation of tolerance indication is unambiguous when it is applied to a dimension which is a size and ambiguous when the dimension is not a size.

All rules presented in this document are available for any type of drawing (see ISO 29845).

In addition, this document introduces the concept of property indicators, developed length, between, surface indicators, flag notes and textual instructions.

NOTE 1 All figures are shown in 2D views only.

NOTE 2 Additional information and details for construction engineering are given in ISO 6284.

### 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.

ISO 128-20, *Technical drawings — General principles of presentation — Part 20: Basic conventions for lines*

ISO 128-22, *Technical drawings — General principles of presentation — Part 22: Basic conventions and applications for leader lines and reference lines*

ISO 128-24:2014, *Technical drawings — General principles of presentation — Part 24: Lines on mechanical engineering drawings*

ISO 3098 (all parts), *Technical product documentation — Lettering*

ISO 10209, *Technical product documentation — Vocabulary — Terms relating to technical drawings, product definition and related documentation*

ISO 14405 (all parts), *Geometrical product specifications (GPS) — Dimensional tolerancing*

ISO 81714-1, *Design of graphical symbols for use in the technical documentation of products — Part 1: Basic rules*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 10209 and the following apply.