

## DIN EN ISO 128-3



ICS 01.100.01

Supersedes: see below

**Technical product documentation (TPD) –  
General principles of representation –  
Part 3: Views, sections and cuts (ISO 128-3:2020);  
English version EN ISO 128-3:2020,  
English translation of DIN EN ISO 128-3:2022-02**

Technische Produktdokumentation (TPD) –  
Allgemeine Grundlagen der Darstellung –  
Teil 3: Ansichten, Schnitte und Schnittansichten (ISO 128-3:2020);  
Englische Fassung EN ISO 128-3:2020,  
Englische Übersetzung von DIN EN ISO 128-3:2022-02

Documentation technique de produits (TPD) –  
Principes généraux de représentation –  
Partie 3: Vues, sections et coupes (ISO 128-3:2020);  
Version anglaise EN ISO 128-3:2020,  
Traduction anglaise de DIN EN ISO 128-3:2022-02

Supersedes DIN ISO 128-30:2002-05, DIN ISO 128-34:2002-05, DIN ISO 128-40:2002-05,  
DIN ISO 128-44:2002-05 and DIN ISO 128-50:2002-05

Document comprises 57 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

*A comma is used as the decimal marker.*

## **National foreword**

This document (EN ISO 128-3:2020) has been prepared by Technical Committee ISO/TC 10 “Technical product documentation” in collaboration with Technical Committee CEN/SS F01 “Technical drawings” (Secretariat: CCMC).

The responsible German body involved in its preparation was *DIN-Normenausschuss Technische Grundlagen* (DIN Standards Committee Technical Fundamentals), Working Committee NA 152-06-05 AA “Technical product documentation”.

It is pointed out that the reference version (EN ISO 128-3:2020) contains errors, for the correction of which a “Minor Revision” has been initiated in the meantime by ISO/TC 10 “Technical product documentation”. In this document, the relevant facts are corrected in National footnotes. It is planned to completely replace this part of the DIN EN ISO 128 series of standards as soon as its “Minor Revision” has been published.

The DIN documents corresponding to the documents referred to in this document are as follows:

ISO 129-1	DIN EN ISO 129-1
ISO 3098-1	DIN EN ISO 3098-1
ISO 5456-2	DIN ISO 5456-2
ISO 5457	DIN EN ISO 5457
ISO 6428	DIN ISO 6428
ISO 10209:2012	DIN EN ISO 10209:2012-11
ISO 81714-1	DIN EN ISO 81714-1

For current information on this document, please go to DIN’s website ([www.din.de](http://www.din.de)) and search for the document number in question.

## **Amendments**

This standard differs from DIN ISO 128-30:2002-05, DIN ISO 128-34:2002-05, DIN ISO 128-40:2002-05, DIN ISO 128-44:2002-05 and DIN ISO 128-50:2002-05 as follows:

- a) the associated parts of the DIN ISO standard have been combined into a new standard;
- b) the standard has been editorially revised.

## **Previous editions**

DIN 36: 1922-10  
DIN 6: 1922x-11, 1956-10, 1968-03  
DIN 6-1: 1986-12  
DIN 6-2: 1986-12  
DIN ISO 4069: 1984-08  
DIN 201: 1990-05  
DIN ISO 128-30: 2002-05  
DIN ISO 128-34: 2002-05  
DIN ISO 128-40: 2002-05  
DIN ISO 128-44: 2002-05  
DIN ISO 128-50: 2002-05

## **National Annex NA** (informative)

### **Bibliography**

DIN EN ISO 129-1, *Technical product documentation (TPD) — Presentation of dimensions and tolerances — Part 1: Fundamentals (ISO 129-1:2018)*

DIN EN ISO 3098-1, *Technical product documentation — Lettering — Part 1: Basic rules*

DIN EN ISO 5457, *Technical product documentation — Sizes and layout of drawing sheets*

DIN EN ISO 10209:2012-11, *Technical product documentation — Vocabulary — Terms relating to technical drawings, product definition and related documentation (ISO 10209:2012)*

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

DIN ISO 5456-2, *Technical drawings — Projection methods — Part 2: Orthographic representations*

DIN ISO 6428, *Technical drawings — Requirements for microcopying*

— This page is intentionally blank —

English Version

Technical product documentation (TPD) -  
General principles of representation -  
Part 3: Views, sections and cuts  
(ISO 128-3:2020)

Documentation technique de produits (TPD) -  
Principes généraux de représentation -  
Partie 3: Vues, sections et coupes  
(ISO 128-3:2020)

Technische Produktdokumentation (TPD) -  
Allgemeine Grundlagen der Darstellung -  
Teil 3: Ansichten, Schnitte und Schnittansichten  
(ISO 128-3:2020)

This European Standard was approved by CEN on 12 June 2020.

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.

CEN members are the national standards bodies of 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 United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## Contents

Page

<b>European foreword</b>	<b>3</b>
<b>Foreword</b>	<b>4</b>
<b>Introduction</b>	<b>5</b>
<b>1 Scope</b>	<b>6</b>
<b>2 Normative references</b>	<b>6</b>
<b>3 Terms and definitions</b>	<b>6</b>
<b>4 Basic conventions for views</b>	<b>7</b>
4.1 General information on views	7
4.2 Choice of views	8
4.3 Partial views	8
4.4 Simplified view of symmetrical parts	9
4.5 First angle projection method	9
4.6 First angle projection method views	9
4.7 First angle projection graphical symbol	10
4.8 Third angle projection method	10
4.9 Third angle projection method views	10
4.10 Third angle projection graphical symbol	11
4.11 Other projection methods	11
4.12 Enlarged features	11
<b>5 Reference indication for views and enlarged features</b>	<b>12</b>
5.1 General	12
5.2 Details of the reference indication	12
5.3 Examples of indication	13
<b>6 General information on cuts and sections</b>	<b>14</b>
6.1 General	14
6.2 Indication of cuts and sections	14
6.2.1 Cutting plane	14
6.2.2 Identification of the cutting plane	14
6.2.3 Identification of the cuts and sections	14
6.2.4 Reference indication for cuts and sections	15
6.3 Sections revolved in the relevant view	16
6.4 Cuts/sections of symmetrical parts	17
6.5 Local cuts/sections	17
<b>7 Basic conventions for representing areas on cuts and sections</b>	<b>18</b>
7.1 General information on cuts and sections	18
7.2 Hatching	18
7.3 Shading or toning	19
7.4 Extra-wide continuous outlines	20
7.5 Thin sections	20
7.6 Thin adjacent sections	20
7.7 Specific materials	21
<b>Annex A (normative) Graphical symbols</b>	<b>22</b>
<b>Annex B (informative) Former practices</b>	<b>25</b>
<b>Annex C (normative) Views on mechanical engineering technical drawings</b>	<b>27</b>
<b>Annex D (normative) Sections on mechanical engineering technical drawings</b>	<b>39</b>
<b>Annex E (normative) Projection methods in building technical drawings</b>	<b>44</b>
<b>Annex F (normative) Representation of views, sections and cuts on construction drawings</b>	<b>46</b>
<b>Bibliography</b>	<b>53</b>

## **European foreword**

This document (EN ISO 128-3:2020) has been prepared by Technical Committee ISO/TC 10 "Technical product documentation" in collaboration with Technical Committee CEN/SS F01 "Technical drawings" the secretariat of which is held 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 January 2021, and conflicting national standards shall be withdrawn at the latest by January 2021.

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 128-3:2020 has been approved by CEN as EN ISO 128-3:2020 without any modification.