September 2017

DIN EN ISO 1101

ICS 17.040.40

Supersedes
DIN EN ISO 1101:2014-04

Geometrical product specifications (GPS) – Geometrical tolerancing – Tolerances of form, orientation, location and run-out (ISO 1101:2017); English version EN ISO 1101:2017, English translation of DIN EN ISO 1101:2017-09

Geometrische Produktspezifikation (GPS) –
Geometrische Tolerierung –
Tolerierung von Form, Richtung, Ort und Lauf (ISO 1101:2017);
Englische Fassung EN ISO 1101:2017,
Englische Übersetzung von DIN EN ISO 1101:2017-09

Spécification géométrique des produits (GPS) –
Tolérancement géométrique –
Tolérancement de forme, orientation, position et battement (ISO 1101:2017);
Version anglaise EN ISO 1101:2017,
Traduction anglaise de DIN EN ISO 1101:2017-09

Document comprises 159 pages

Translation by DIN-Sprachendienst.

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

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A comma is used as the decimal marker.

National foreword

This document (EN ISO 1101:2017) has been prepared by Technical Committee ISO/TC 213 "Dimensional and geometrical product specifications and verification" in collaboration with Technical Committee CEN/TC 290 "Dimensional and geometrical product specification and verification" (Secretariat: AFNOR, France).

The responsible German body involved in its preparation was *DIN-Normenausschuss Technische Grundlagen* (DIN Standards Committee Technical Fundamentals), Working Committee NA 152-03-02 AA "CEN/ISO Geometrical product specifications and verification".

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

ISO 128-24:1999	DIN ISO 128-24:1999-12
ISO 1660	DIN ISO 1660
ISO 2692:2014	DIN EN ISO 2692:2015-12
ISO 3040:1990	DIN EN ISO 3040:2016-12
ISO 3098-1	DIN EN ISO 3098-1
ISO 3098-2:2000	DIN EN ISO 3098-2:2000-11
ISO 3098-5	DIN EN ISO 3098-5
ISO 5458	DIN EN ISO 5458
ISO 5459	DIN EN ISO 5459
ISO 7083:1983	DIN ISO 7083:1984-06
ISO 8015:2011	DIN EN ISO 8015:2011-09
ISO 10579:2010	DIN EN ISO 10579:2013-11
ISO 13715	DIN ISO 13715
ISO 14253-1	DIN EN ISO 14253-1
ISO 14638	DIN EN ISO 14638
ISO 16610 (all parts)	DIN EN ISO 16610 (all parts)
ISO 17450-1:2011	DIN EN ISO 17450-1:2012-04
ISO 17450-2	DIN EN ISO 17450-2
ISO 17450-3	DIN EN ISO 17450-3
ISO 22432	DIN EN ISO 22432
ISO 25378:2011	DIN EN ISO 25378:2011-12
ISO 81714-1	DIN EN ISO 81714-1

Amendments

This standard differs from DIN EN ISO 1101:2014-04 as follows:

a) tools have been included to specify the filtering of the toleranced feature;

b) tools have been included to tolerance associated features;

c) tools have been included to tolerance form characteristics by specifying the reference feature association and the toleranced parameter;

d) tools have been included to specify the constraints to the tolerance zone;

e) the rules for specifications using “all around” or “all over” modifiers have been clarified;

f) the direction of the tolerance zone in the case of roundness tolerances for revolute surfaces that are neither cylindrical nor spherical, e.g. cones, shall now always be indicated to avoid an exception to the general rule that specifications for integral features apply perpendicular to the surface;

g) the “from-to” symbol has been withdrawn and replaced by the “between” symbol.

Previous editions

DIN 7182-4: 1959-03
DIN 7184-1: 1972-05
DIN 7184-1 Supplement 1: 1973-02
DIN ISO 1101: 1985-03, 2006-02
DIN EN ISO 1101: 2008-08, 2014-04
DIN EN ISO 1101 Corrigendum 1: 2011-10

National Annex NA
(informative)

Bibliography

DIN ISO 128-24:1999-12, *Technical drawings — General principles of presentation — Part 24: Lines on mechanical engineering drawings (ISO 128-24:1999)*

DIN ISO 1660, *Technical drawings — Dimensioning and tolerancing of profiles*

DIN EN ISO 2692:2015-12, *Geometrical product specifications (GPS) — Geometrical tolerancing — Maximum material requirement (MMR), least material requirement (LMR) and reciprocity requirement (RPR) (ISO 2692:2014)*

DIN EN ISO 3040:2016-12, *Geometrical product specifications (GPS) — Dimensioning and tolerancing — Cones (ISO 3040:2016)*

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

DIN EN ISO 3098-2:2000-11, *Technical product documentation — Lettering — Part 2: Latin alphabet, numerals and marks (ISO 3098-2:2000)*

DIN EN ISO 3098-5, *Technical product documentation — Lettering — Part 5: CAD-Lettering of the Latin alphabet, numerals and marks*

DIN EN ISO 5458, *Geometrical product specifications (GPS) — Geometrical tolerancing — Positional tolerancing*

DIN EN ISO 5459, *Geometrical product specifications (GPS) — Geometrical tolerancing — Datums and datum systems*

DIN ISO 7083:1984-06, *Technical drawings — Symbols for geometrical tolerancing — Proportions and dimensions (ISO 7083:1983)*

DIN EN ISO 8015:2011-09, *Geometrical product specifications (GPS) — Fundamentals — Concepts, principles and rules (ISO 8015:2011)*

DIN EN ISO 10579:2013-11, *Geometrical product specifications (GPS) — Dimensioning and tolerancing — Non-rigid parts (ISO 10579:2010 including Cor 1:2011)*

DIN ISO EN 13715, *Technical drawings — Edges of undefined shape — Vocabulary and indication on drawings*

DIN EN ISO 14253-1, *Geometrical product specifications (GPS) — Inspection by measurement of workpieces and measuring equipment — Part 1: Decision rules for proving conformity or nonconformity with specifications*

DIN EN ISO 14638, *Geometrical Product Specifications (GPS) — Matrix model*

DIN EN ISO 16610 (all parts), *Geometrical product specifications (GPS) — Filtration*

DIN EN ISO 17450-1:2012-04, *Geometrical product specifications (GPS) — General concepts — Part 1: Model for geometrical specification and verification (ISO 17450-1:2011)*

DIN EN ISO 17450-2, *Geometrical product specifications (GPS) — General concepts — Part 2: Basic tenets, specifications, operators, uncertainties and ambiguities*

DIN EN ISO 17450-3, *Geometrical product specifications (GPS) — General concepts — Part 3: Toleranced features*

DIN EN ISO 22432, *Geometrical product specifications (GPS) — Features utilized in specification and verification*

DIN EN ISO 25378:2011-04, *Geometrical product specifications (GPS) — Characteristics and conditions — Definitions (ISO 25378:2011)*

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

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 1101

February 2017

ICS 17.040.40

Supersedes EN ISO 1101:2013

English Version

Geometrical product specifications (GPS) - Geometrical tolerancing - Tolerances of form, orientation, location and run-out (ISO 1101:2017)

Spécification géométrique des produits (GPS) - Tolérancement géométrique - Tolérancement de forme, orientation, position et battement (ISO 1101:2017)

Geometrische Produktspezifikation (GPS) - Geometrische Tolerierung - Tolerierung von Form, Richtung, Ort und Lauf (ISO 1101:2017)

This European Standard was approved by CEN on 14 December 2016.

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European foreword

This document (EN ISO 1101-1:2017) has been prepared by Technical Committee ISO/TC 213 “Dimensional and geometrical product specifications and verification” in collaboration with Technical Committee CEN/TC 290 “Dimensional and geometrical product specification and verification” the secretariat of which is held by AFNOR.

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 August 2017 and conflicting national standards shall be withdrawn at the latest by August 2017.

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Endorsement notice

The text of ISO 1101:2017 has been approved by CEN as EN ISO 1101:2017 without any modification.