

Plastics piping systems — Plastics components — Determination of dimensions

The European Standard EN ISO 3126:2005 has the status of a British Standard

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National foreword

This British Standard is the official English language version of EN ISO 3126:2005. It is identical with ISO 3126:2005. It supersedes BS 2782-11 Method 1101A:1981 which is withdrawn.

The UK participation in its preparation was entrusted by Technical Committee PRI/88, Plastic piping systems, to Subcommittee PRI/88/4, Method of tests for plastic piping systems and components, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

Cross-references

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Summary of pages

This document comprises a front cover, an inside front cover, the EN ISO title page, the EN ISO foreword page, the ISO title page, pages ii to iv, pages 1 to 19 and a back cover.

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Kunststoff-Rohrleitungssysteme - Rohrleitungsteile aus Kunststoffen - Bestimmung der Maße (ISO 3126:2005)

This European Standard was approved by CEN on 21 February 2003.

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.

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Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

This document (EN ISO 3126:2005) has been prepared by Technical Committee CEN /TC 155, "Plastics piping systems and ducting systems", the secretariat of which is held by NEN in collaboration with Technical Committee ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids".

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 September 2005, and conflicting national standards shall be withdrawn at the latest by September 2005.

This document is one of a series of standards on test methods, which support system standards for plastics piping systems and ducting systems.

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

INTERNATIONAL STANDARD

**ISO
3126**

Second edition
2005-03-01

Plastics piping systems — Plastics components — Determination of dimensions

*Systèmes de canalisations en plastiques — Composants en
plastiques — Détermination des dimensions*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 3126 was prepared by the European Committee for Standardization (CEN) in collaboration with Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 5, *General properties of pipes, fittings and valves of plastic materials and their accessories — Test methods and basic specifications*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Throughout the text of this document, read “...this European Standard...” to mean “...this International Standard...”.

This second edition cancels and replaces the first edition (ISO 3126:1974), which has been technically revised.

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1 Scope

This document specifies methods for measurement and/or determination of the dimensions of plastics pipes and fittings and the accuracy of the measurement.

It specifies procedures for measuring angles, diameters, lengths, squareness and wall thicknesses for the purposes of checking conformity to geometric limits.

NOTE This document is using metric units. However the procedures and tolerances are applicable to other units by using appropriate conversion factors.

2 Normative references

The following referenced documents are indispensable for the application 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/R 463, *Dial gauges reading in 0,01 mm, 0,001 in and 0,0001 in.*

ISO 3599, *Vernier callipers reading to 0,1 and 0,05 mm.*

ISO 3611, *Micrometer callipers for external measurement.*

ISO 6507-1, *Metallic materials — Vickers hardness test — Part 1: Test method.*

3 Terms, definitions and symbols

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1.1

accuracy

closeness of agreement between a test result and the accepted reference value

NOTE The term "accuracy", when applied to a set of test results, involves a combination of random components and a common systematic error or bias component (ISO 3534-1).

3.1.2

calibration

set of operations that establish, under specified conditions, the relationship between values of quantities indicated by a measuring instrument or measuring system, or values represented by a material measure or a reference material, and the corresponding values realised by standards

3.1.3

reference standard

internationally accepted definition of a given unit of measurement

3.2 Symbols

b_1 : distance between the edge of a flange bolt hole and its bore

b_2 : distance between the edge of a flange bolt hole and its outside diameter

b_3 : distance between the centre of a flange bolt hole and its bore

b_4 : distance between the centre of a flange bolt hole and its outside diameter

c_1 : distance between the edges of two adjacent flange bolt holes

c_2 : distance between the centres of two adjacent flange bolt holes