



# SLOVENSKI STANDARD SIST EN ISO 7231:2010

01-september-2010

Nadomešča:  
SIST EN ISO 7231:1999

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**Polimerni materiali - Penjeni polimeri - Mehke pene - Določanje vrednosti zračnega pretoka pri konstantni razliki tlakov (ISO 7231:2010)**

Polymeric materials, cellular, flexible - Determination of air flow value at constant pressure-drop (ISO 7231:2010)

Weich-elastische Polymerschaumstoffe - Bestimmung der Luftdurchlässigkeit bei konstantem Druck (ISO 7231:2010)

Matériaux polymères alvéolaires souples - Détermination de l'indice d'écoulement d'air à chute de pression constante (ISO 7231:2010)

**Ta slovenski standard je istoveten z: EN ISO 7231:2010**

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**ICS:**

83.100 Penjeni polimeri Cellular materials

**SIST EN ISO 7231:2010 en,fr**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 7231**

July 2010

ICS 83.100

Supersedes EN ISO 7231:1997

English Version

## Polymeric materials, cellular, flexible - Determination of air flow value at constant pressure-drop (ISO 7231:2010)

Matériaux polymères alvéolaires souples - Détermination de l'indice d'écoulement d'air à chute de pression constant (ISO 7231:2010)

Weich-elastische Polymerschäume - Bestimmung der Luftdurchlässigkeit bei konstantem Druck (ISO 7231:2010)

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## Foreword

This document (EN ISO 7231:2010) has been prepared by Technical Committee ISO/TC 45 “Rubber and rubber products” in collaboration with Technical Committee CEN/TC 249 “Plastics” the secretariat of which is held by NBN.

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of an identical text or by endorsement, at the latest by January 2011, and conflicting national standards shall be withdrawn at the latest by January 2011.

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

This document supersedes EN ISO 7231:1997.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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# INTERNATIONAL STANDARD

# ISO 7231

Second edition  
2010-07-01

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## Polymeric materials, cellular, flexible — Determination of air flow value at constant pressure-drop

*Matériaux polymères alvéolaires souples — Détermination de l'indice  
d'écoulement d'air à chute de pression constante*

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**ISO 7231:2010(E)****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 7231 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 4, *Products (other than hoses)*.

This second edition cancels and replaces the first edition (ISO 7231:1984), which has been technically revised.

Major modifications in this revision are:

- a) the inclusion of a warning statement; [SIST EN ISO 7231:2010](https://standards.iteh.ai/catalog/standards/sist/69bbd91f-21d1-4dce-ae2-c43874637179/sist-en-iso-7231-2010)
- b) the inclusion of a new method (method B) particularly suitable for materials with a low permeability to air; <https://standards.iteh.ai/catalog/standards/sist/69bbd91f-21d1-4dce-ae2-c43874637179/sist-en-iso-7231-2010>
- c) the inclusion of precision data for method B;
- d) the inclusion of an example showing how a computer-controlled apparatus could be used to carry out method B.

# Polymeric materials, cellular, flexible — Determination of air flow value at constant pressure-drop

**WARNING — Persons using this International Standard should be familiar with normal laboratory practice. This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.**

## 1 Scope

This International Standard specifies two methods for determining the air flow value of flexible cellular polymeric materials:

- method A, for conventional types of flexible cellular polymeric material;
- method B, for all types of flexible cellular polymeric material, but especially for materials with a low permeability to air.

NOTE 1 Air flow values can be used to give an indication of the effects of formulation and production variables on the cellular structure.

NOTE 2 In this International Standard, the expression “conventional type of flexible cellular polymeric material” means types which are unsuitable for sealing purposes.

## 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/TR 9272, *Rubber and rubber products — Determination of precision for test method standards*

## 3 Terms and definitions

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

### 3.1

#### air flow value

volume flow rate required to maintain a constant pressure differential across a flexible foam test piece

## 4 Principle

A specified constant air pressure differential is created across a standard flexible foam specimen. The rate of flow of air required to maintain this pressure differential is the air flow value.