

**Transporditavad gaasiballoonid.
Ballooni ventiilid. Toote kirjeldus ja
tüübikatsetamine**

Transportable gas cylinders - Cylinder valves -
Specification and type testing

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 10297:2006 sisaldab Euroopa standardi EN ISO 10297:2006 ingliskeelset teksti. Käesolev dokument on jõustatud 27.02.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 10297:2006 consists of the English text of the European standard EN ISO 10297:2006. This document is endorsed on 27.02.2006 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
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Käsitlusala: Käesolev standard määrab kindlaks nõuded gaasiballoonide ventiilidele ja nende ventiilide katsetamise meetodid tüübikinnituse saamiseks. Käesolev standard on kohaldatav ventiilidele, mis on paigaldatud gaasiballoonidele, mis on vee mahutavusega kuni 150 l ja on ette nähtud kokkusurutud, veeldatud või lahustatud gaaside transportimiseks. Käesolev standard on kehtiv ainult ventiilidele, mida käsitletakse vastava käepideme või võtme abil. Käesolev standard ei ole kehtiv hingamisaparaatide, tulekustutite, krüogeensete seadmete või vedelgaasi ventiilidele.	Scope: This International Standard specifies valve design, production and marking requirements, and type test methods for valves intended to be fitted to gas cylinders which convey compressed, liquefied or dissolved gases.
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ICS 23.020.30, 23.060.40

Võtmesõnad: gaasimahutid, gaasiventilid, konstruktsioon, lahustunud gaasid, märgistus, surugaasid, töomaduste hindamine, vastavustestid, vedelgaasid

EUROPEAN STANDARD

EN ISO 10297

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English Version

Transportable gas cylinders - Cylinder valves - Specification and type testing (ISO 10297:2006)

Bouteilles à gaz transportables - Robinets de bouteilles -
Spécifications et essais de type (ISO 10297:2006)

Ortsbewegliche Gasflaschen - Flaschenventile -
Spezifikation und Typprüfung (ISO 10297:2006)

This European Standard was approved by CEN on 19 October 2005.

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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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This document (EN ISO 10297:2006) has been prepared by Technical Committee ISO/TC 58 "Gas cylinders" in collaboration with Technical Committee CEN/TC 23 "Transportable gas cylinders", the secretariat of which is held by BSI.

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 July 2006, and conflicting national standards shall be withdrawn at the latest by July 2006.

This document supersedes EN 849:1996.

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

Endorsement notice

The text of ISO 10297:2006 has been approved by CEN as EN ISO 10297:2006 without any modifications.

**Transportable gas cylinders — Cylinder
valves — Specification and type testing**

*Bouteilles à gaz transportables — Robinets de bouteilles —
Spécifications et essais de type*



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Contents

Page

Foreword.....	iv
Introduction.....	v
1 Scope	1
2 Normative references	1
3 Terms, definitions and symbols.....	2
4 Valve design requirements	4
4.1 General.....	4
4.2 Description	4
4.3 Materials	4
4.4 Dimensions.....	5
4.5 Valve connections	5
4.6 Mechanical strength	6
4.7 Valve operating mechanism	7
4.8 Leakage.....	7
4.9 Resistance to ignition.....	8
5 Production requirements	8
5.1 Manufacturing	8
5.2 Cleaning.....	8
6 Type test methods	8
6.1 General.....	8
6.2 Documentation	9
6.3 Number of test samples	9
6.4 Test report	9
6.5 Ambient conditions	9
6.6 Valve test pressure	10
6.7 Test gas	10
6.8 Test sequence	10
6.9 Hydraulic pressure test.....	11
6.10 Excessive torque tests	11
6.11 Leak tightness tests	11
6.12 Endurance test	13
6.13 Flame impingement test.....	13
6.14 Oxygen pressure surge test	13
6.15 Acetylene flashback test.....	16
7 Marking	18
Annex A (normative) Valve impact test.....	19
Annex B (informative) Example of test sequence	21
Annex C (normative) Endurance test	22
Bibliography	26

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 10297 was prepared by Technical Committee ISO/TC 58, *Gas cylinders*, Subcommittee SC 2, *Cylinder fittings*.

This second edition cancels and replaces the first edition (ISO 10297:1999), which has been technically revised.

Introduction

Cylinder valves are fitted on gas cylinders used in, for example, industrial, medical and breathing applications. Such valves have to perform safely and reliably for at least the cylinder test period, often in hazardous situations.

Valves complying with this International Standard can be expected to perform satisfactorily under normal services conditions.

This International Standard pays particular attention to:

- suitability of materials;
- dimensions of inlet connections;
- dimensions of outlet connections;
- safety (mechanical strength, endurance, resistance to ignition);
- leakage;
- cleanliness;
- testing;
- identification.

NOTE For satisfactory service, valves are manufactured and batch tested to ISO 14246.

Transportable gas cylinders — Cylinder valves — Specification and type testing

1 Scope

This International Standard specifies valve design, production and marking requirements, and type test methods for valves intended to be fitted to gas cylinders which convey compressed, liquefied or dissolved gases.

This International Standard does not apply to valves for cryogenic equipment, for fire extinguishers or for liquefied petroleum gas (LPG).

Additional specific requirements for valves fitted with pressure-reducing devices (see ISO 22435 and EN 738-3), residual pressure-retaining devices and non-return devices (see ISO 15996), and bursting discs and pressure-relief devices (see ISO 4126 and prEN 14513) are not covered by this International Standard.

NOTE Requirements for valves for liquefied petroleum gas (LPG) are specified in ISO 14245 and EN 13152, and in ISO 15995 and EN 13153. Requirements for valves for cryogenic vessels are specified in ISO 21011. Further specific requirements for valves for breathing apparatus are specified in EN 144-1, EN 144-2 and EN 144-3.

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 407, *Small medical gas cylinders — Pin-index yoke-type valve connections*

ISO 5145, *Cylinder valve outlets for gases and gas mixtures — Selection and dimensioning*

ISO 8573-1, *Compressed air — Part 1: Contaminants and purity classes*

ISO 10156, *Gases and gas mixtures — Determination of fire potential and oxidizing ability for the selection of cylinder valve outlets*

ISO 10286, *Gas cylinders — Terminology*

ISO 10692-1, *Gas cylinders — Gas cylinder valve connections for use in the microelectronics industry — Part 1: Outlet connections*

ISO 15001, *Anaesthetic and respiratory equipment — Compatibility with oxygen*