



SLOVENSKI STANDARD SIST EN ISO 9170-1:2020

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Nadomešča:

SIST EN ISO 9170-1:2008

Končni deli napeljav za medicinske pline - 1. del: Končni deli za stisnjene medicinske pline in podtlak (ISO 9170-1:2017)

Terminal units for medical gas pipeline systems - Part 1: Terminal units for use with compressed medical gases and vacuum (ISO 9170-1:2017)

Entnahmestellen für Rohrleitungssysteme für medizinische Gase - Teil 1: Entnahmestellen für medizinische Druckgase und Vakuum (ISO 9170-1:2017)

Prises murales pour systèmes de distribution de gaz médicaux - Partie 1: Prises murales pour les gaz médicaux comprimés et le vide (ISO 9170-1:2017)

Ta slovenski standard je istoveten z: EN ISO 9170-1:2020

ICS:

11.040.10	Anestezijska, respiratorna in reanimacijska oprema	Anaesthetic, respiratory and reanimation equipment
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EUROPEAN STANDARD
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English Version

**Terminal units for medical gas pipeline systems - Part 1:
Terminal units for use with compressed medical gases and
vacuum (ISO 9170-1:2017)**

Prises murales pour systèmes de distribution de gaz médicaux - Partie 1: Prises murales pour les gaz médicaux comprimés et le vide (ISO 9170-1:2017)

Entnahmestellen für Rohrleitungssysteme für medizinische Gase - Teil 1: Entnahmestellen für medizinische Druckgase und Vakuum (ISO 9170-1:2017)

This European Standard was approved by CEN on 15 April 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.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

Contents	Page
European foreword.....	3

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[SIST EN ISO 9170-1:2020](https://standards.iteh.ai/catalog/standards/sist/e83fc90-50c0-48c0-96dc-441460724c93/sist-en-iso-9170-1-2020)
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European foreword

This document (EN ISO 9170-1:2020) has been prepared by Technical Committee ISO/TC 121 "Anaesthetic and respiratory equipment" in collaboration with Technical Committee CEN/TC 215 "Respiratory and anaesthetic equipment" 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 December 2020, and conflicting national standards shall be withdrawn at the latest by June 2023.

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.

This document supersedes EN ISO 9170-1:2008.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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.

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The text of ISO 9170-1:2017 has been approved by CEN as EN ISO 9170-1:2020 without any modification.

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INTERNATIONAL
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ISO
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Third edition
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**Terminal units for medical gas
pipeline systems —**

Part 1:

**Terminal units for use with
compressed medical gases and vacuum**

iTeh STANDARD PREVIEW
Prises murales pour systèmes de distribution de gaz médicaux —
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Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
2 *Normative references	2
3 Terms and definitions	2
4 General requirements	7
4.1 Safety.....	7
4.2 *Alternative construction.....	7
4.3 Materials.....	7
5 Design requirements	8
5.1 Medical gas supply.....	8
5.2 Terminal units for different pressures.....	9
5.3 Retention of gas specificity.....	9
5.4 Gas-specific connection point.....	9
5.5 Terminal unit check valve.....	9
5.6 Terminal unit maintenance valve.....	9
5.7 Connection of terminal units to the pipeline (see also 9.2).....	10
5.8 Socket.....	10
5.9 Compliance.....	10
5.10 Endurance (connection/release).....	10
5.10.1 Socket.....	10
5.10.2 Probe.....	10
5.11 *Pressure drop.....	10
5.12 Connection force and torque.....	11
5.13 Disconnection force and torque.....	11
5.14 Mechanical strength.....	11
5.15 Leakage.....	12
5.16 Gas specificity.....	12
5.17 Effective connection of probes.....	12
5.18 Electrical requirements.....	12
6 Constructional requirements	12
6.1 Cleaning.....	12
6.2 Lubricants.....	12
7 Test methods	12
7.1 General.....	12
7.2 Test for endurance.....	13
7.3 Test for pressure drop.....	13
7.4 Test for connection force and torque.....	15
7.5 Test for disconnection force and torque.....	15
7.6 Test for mechanical strength.....	16
7.7 Test for leakage.....	16
7.8 Test for gas specificity.....	17
7.9 Test for effective connection of probe.....	17
7.10 Test for durability of markings and colour coding.....	17
8 Marking, colour coding and packaging	17
8.1 Marking.....	17
8.2 Colour coding.....	17
8.3 Packaging.....	18
9 Information to be supplied by the manufacturer	18
9.1 Technical description.....	18
9.2 Instructions.....	18

ISO 9170-1:2017(E)

Annex A (informative) Rationale	19
Annex B (informative) Environmental aspects	20
Annex C (informative) Special national and regional conditions for electrical installations	22
Bibliography	24

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(standards.iteh.ai)

SIST EN ISO 9170-1:2020

<https://standards.iteh.ai/catalog/standards/sist/e83fc90-50c0-48c0-96dc-441460724c93/sist-en-iso-9170-1-2020>

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 121, *Anaesthetic and respiratory equipment*, Subcommittee SC6, *Medical gas systems*.

This third edition cancels and replaces the second edition (ISO 9170-1:2008), which has been technically revised.

This edition includes the following significant changes with respect to the previous edition:

- a) oxygen 93, detailing marking and colour coding, was introduced;
- b) figures for test conditions were clarified.

A list of all parts in the ISO 9170 series can be found on the ISO website.

ISO 9170-1:2017(E)

Introduction

Terminal units are the points on a medical gas pipeline system where the operator makes connections and disconnections for the supply of specified medical gases to anaesthetic machines, lung ventilators or other items of medical equipment. Terminal units are also used for vacuum pipeline systems. A wrong connection can create a hazard to the patient or operator. It is important that terminal units and their components be designed, manufactured, installed and maintained in such a way as to meet the requirements specified in this document.

This document pays particular attention to

- suitability of materials,
- gas-specificity,
- cleanliness,
- testing,
- identification, and
- information supplied.

This document contains information for the installation and testing of terminal units prior to use. Testing of terminal units prior to use is critical to patient safety, and it is essential that terminal units are not used until full testing in accordance with ISO 7396-1 has been completed.

[Annex A](#) contains rationale statements for some of the requirements of this document. The clauses and subclauses marked with an asterisk (*) after their number have corresponding rationale contained in [Annex A](#), included to provide additional insight into the reasoning that led to the requirements and recommendations that have been incorporated in this document. It is considered that knowledge of the reasons for the requirements will not only facilitate the proper application of this document, but will also expedite any subsequent revisions.

[Annex B](#) contains environmental aspects that should be considered.