
**Terminal units for medical gas pipeline
systems —**

Part 2:

**Terminal units for anaesthetic gas scavenging
systems**

Prises murales pour réseaux de distribution de gaz médicaux —

Partie 2: Prises murales pour systèmes d'évacuation des gaz d'anesthésie



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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 3.

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.

International Standard ISO 9170-2 was prepared by Technical Committee ISO/TC 121, *Anaesthetic and respiratory equipment*, Subcommittee SC 6, *Medical gas systems*.

This first edition, together with ISO 9170-1, cancels and replaces the first edition of ISO 9170 (ISO 9170:1994), which has been technically revised.

ISO 9170 consists of the following parts, under the general title *Terminal units for medical gas pipeline systems*:

- *Part 1: Terminal units for use with compressed medical gases and vacuum*
- *Part 2: Terminal units for anaesthetic gas scavenging systems*

Annex A of this part of ISO 9170 is for information only.

Introduction

Anaesthetic gas scavenging system (AGSS) terminal units are the points in an anaesthetic gas scavenging system where the operator makes connections and disconnections for the disposal of medical gases and anaesthetic vapours from anaesthetic machines or other items of medical equipment, and where a wrong connection may create a hazard to the patient. It is important that terminal units and their components are designed, manufactured, installed and maintained in such a way as to meet the basic requirements specified in this part of ISO 9170.

This part of ISO 9170 pays particular attention to

- suitability of materials;
- type-specificity;
- dimensions of probes and type-specific connection points;
- cleanliness;
- testing;
- identification;
- information supplied.

This part of ISO 9170 specifies the provision of information for the installation and subsequent testing of terminal units. 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 7396-2 has been completed.

Terminal units for medical gas pipeline systems —

Part 2: Terminal units for anaesthetic gas scavenging systems

1 Scope

This part of ISO 9170 specifies the requirements and dimensions for terminal units intended for use in anaesthetic gas scavenging disposal systems in accordance with ISO 7396-2.

It is intended especially to ensure the type specificity of terminal units and to prevent their interchange between different services.

This part of ISO 9170 specifies two types of terminal units according to whether the power device is upstream or downstream of the terminal unit.

This part of ISO 9170 also specifies requirements and dimensions for the mating counterpart (probe) of the type-specific connection point which is part of the terminal unit.

This part of ISO 9170 does not specify the ranges of nominal operating pressure for terminal units, which are defined in ISO 7396-2.

NOTE Throughout this part of ISO 9170, clauses for which a rationale is provided in annex A are indicated by a boldface capital **R**.

2 Normative references

The following normative document contains provisions which, through reference in this text, constitute provisions of this part of ISO 9170. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 9170 are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 6506, *Metallic materials — Hardness test — Brinell test*.

ISO 7396-2, *Medical gas pipeline systems — Part 2: Anaesthetic gas scavenging disposal systems*.

ISO 8835-3, *Inhalational anaesthesia systems — Part 3: Anaesthetic gas scavenging systems — Transfer and receiving systems*.

ISO 14971-1, *Medical devices — Risk management — Part 1: Application of risk analysis*.

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

3 Terms and definitions

For the purposes of this part of ISO 9170, the following terms and definitions apply.