

Small medical gas cylinders - Pin-index yoke-type valve connections (ISO 407:2023)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 407:2023 sisaldab Euroopa standardi EN ISO 407:2023 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 407:2023 consists of the English text of the European standard EN ISO 407:2023.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
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English Version

Small medical gas cylinders - Pin-index yoke-type valve connections (ISO 407:2023)

Petites bouteilles à gaz médicaux - Raccords de robinets du type étrier avec ergots de sécurité (ISO 407:2023)

Kleine Gasflaschen für die medizinische Anwendung - Ventilseitenstutzen mit Anschlussbügel nach dem PIN-Index-System (ISO 407:2023)

This European Standard was approved by CEN on 1 July 2023.

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European foreword

This document (EN ISO 407:2023) 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of an identical text or by endorsement, at the latest by February 2024, and conflicting national standards shall be withdrawn at the latest by February 2024.

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 407:2021.

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Endorsement notice

The text of ISO 407:2023 has been approved by CEN as EN ISO 407:2023 without any modification.

Contents

Page

Foreword.....	iv
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Valve.....	1
5 Yoke.....	2
6 Basic dimensions.....	2
6.1 General.....	2
6.2 Pin-index yoke-type valve body.....	3
6.3 Single-pin yoke-type valve connection system.....	4
6.4 Two-pin yoke-type valve connection system with the pins in a single row.....	4
6.5 Two-pin yoke-type valve connection system with the pins in a double row.....	5
6.6 Basic dimensions.....	5
7 Requirements for alternative designs of yoke-type valve connections.....	6
7.1 Requirements for the design of the connecting yoke.....	6
7.2 Examples of alternative construction for the connecting yoke.....	6
8 Dimensions and positions of the holes and pins for yoke-type valve connections.....	9
8.1 General.....	9
8.2 Outlet connection with single-pin system.....	9
8.3 Outlet connections with two-pin/single-row system.....	10
8.3.1 Outlet connection for oxygen.....	10
8.3.2 Outlet connection for oxygen/carbon dioxide mixture ($\text{CO}_2 \leq 7\%$).....	11
8.3.3 Outlet connection for oxygen/helium mixture ($\text{He} \leq 80\%$).....	11
8.3.4 Outlet connection for ethylene.....	12
8.3.5 Outlet connection for nitrous oxide (with or without liquid draw-off).....	12
8.3.6 Outlet connection for cyclopropane.....	13
8.3.7 Outlet connection for helium and for helium/oxygen mixture ($\text{O}_2 < 20\%$).....	13
8.3.8 Outlet connection for carbon dioxide (with or without liquid draw-off) and for carbon dioxide/oxygen mixture ($\text{CO}_2 > 7\%$).....	14
8.3.9 Outlet connection for medical air.....	14
8.3.10 Outlet connection for nitrogen.....	15
8.4 Outlet connection with two-pin/double-row system.....	15

Foreword

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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).

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This document was prepared by Technical Committee ISO/TC 58, *Gas cylinders*, Subcommittee SC 2, *Cylinders fittings*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 23, *Transportable gas cylinders*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fifth edition cancels and replaces the fourth edition (ISO 407:2021) of which it constitutes a minor revision.

The main changes are as follows:

- correction of [Figure 1](#).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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

1 Scope

This document is applicable to pin-index yoke-type valve connections for medical gas cylinders, with a working pressure up to a maximum of 200 bar or test pressure up to a maximum of 300 bar, or both.

NOTE 1 This type of connection is primarily used for small cylinders (5 l or below).

NOTE 2 In this document the unit bar is used, due to its universal use in the field of technical gases. It should, however, be noted that bar is not an SI unit, and that the corresponding SI unit for pressure is Pa (1 bar = 10^5 Pa = 10^5 N/m²).

This document specifies:

- basic dimensions;
- requirements for alternative designs of the yoke-type valve connections;
- dimensions and positions for the holes and pins for the outlet connections.

It also specifies the dimensions and positions for the holes and pins for the outlet connections for gases and gas mixtures.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 32, *Gas cylinders for medical use — Marking for identification of content*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Valve

Each small medical gas cylinder can be fitted with a yoke valve (see [Clause 6](#)). The yoke valve shall have location holes of the dimensions and in the positions indicated in [Clause 8](#) for the appropriate gas or gas mixture (see [Table 1](#)).

The name or chemical symbol of the gas or gas mixture shall be clearly and indelibly stamped on the valve.