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**Anesteesia- ja hingamisaparatuur.
Koonilised konnektorid. Osa 1: Koonused ja
pesad (ISO 5356-1:2004)**

Anaesthetic and respiratory equipment - Conical
connectors - Part 1: Cones and sockets

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 5356-1:2004 sisaldab Euroopa standardi EN ISO 5356-1:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.09.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 5356-1:2004 consists of the English text of the European standard EN ISO 5356-1:2004.</p> <p>This document is endorsed on 23.09.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This part of ISO 5356 specifies dimensional and gauging requirements for cones and sockets intended for connecting anaesthetic and respiratory equipment, e.g. in breathing systems, anaesthetic-gas scavenging systems and vaporizers.</p>	<p>Scope: This part of ISO 5356 specifies dimensional and gauging requirements for cones and sockets intended for connecting anaesthetic and respiratory equipment, e.g. in breathing systems, anaesthetic-gas scavenging systems and vaporizers.</p>
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Võtmesõnad:

English version

Anaesthetic and respiratory equipment

Conical connectors

Part 1: Cones and sockets

(ISO 5356-1 : 2004)

Matériel d'anesthésie et de réanimation respiratoire – Raccords coniques – Partie 1: Raccords mâles et femelles (ISO 5356-1 : 2004)

Anästhesie- und Beatmungsgeräte – Konische Konnektoren – Teil 1: Männliche und weibliche Konen (ISO 5356-1 : 2004)

This European Standard was approved by CEN on 2004-04-01.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

International Standard

ISO 5356-1 : 2004 Anaesthetic and respiratory equipment – Conical connectors – Part 1: Cones and sockets, which was prepared by ISO/TC 121 ‘Anaesthetic and respiratory equipment’ of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 215 ‘Respiratory and anaesthetic equipment’, the Secretariat of which is held by BSI, as a European Standard.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports essential requirements of the relevant EU Directive.

For relationship with this directive, see Annex ZA.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by November 2004 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 5356-1 : 2004 was approved by CEN as a European Standard without any modification.

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Introduction

In clinical practice, several breathing attachments used in anaesthetic and respiratory equipment may have to be joined together to provide a suitable breathing system. Items of medical equipment, such as a humidifier or a spirometer, are often incorporated into the breathing system which may also be connected to an anaesthetic-gas scavenging system. Connections for these purposes are usually cone and socket joints, and a lack of standardization of these connections has given rise to problems of interchangeability when connecting equipment made by different manufacturers. This part of ISO 5356 specifies the requirements and dimensions for conical connectors used in anaesthetic and respiratory equipment.

An important consideration is that conical connections need to be secure but nevertheless disconnectable by the operator. The use of connectors meeting the requirements of this part of ISO 5356 will not necessarily prevent them being disconnected accidentally. To minimize the risk of 22 mm connectors being accidentally disconnected, latching connectors can be used.

Annex A includes a figure and a table detailing plug and ring test gauges that are used to check conical connectors made of materials other than metal. Annexes B, C and D provide test methods for latching connectors, Annex E includes a figure and table detailing plug and ring test gauges that may be used to check metal conical connectors, and Annex F contains recommendations for testing security of latching connectors.

Figure 1, detailing the dimensions and tolerances of metal conical connectors, has been prepared in accordance with ISO 3040.

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1 Scope

This part of ISO 5356 specifies dimensional and gauging requirements for cones and sockets intended for connecting anaesthetic and respiratory equipment, e.g. in breathing systems, anaesthetic-gas scavenging systems and vaporizers.

This part of ISO 5356 gives requirements for the following conical connectors:

- 8,5 mm size intended for use in paediatric breathing systems;
- 15 mm and 22 mm sizes intended for general use in breathing systems;
- 22 mm latching connectors (including performance requirements);
- 23 mm size intended for use with vaporizers, but not for use in breathing systems;
- 30 mm size intended for the connection of a breathing system to an anaesthetic gas scavenging system.

This part of ISO 5356 does not specify the medical devices and accessories on which these connections are to be provided.

Requirements for the application of conical connectors are not included in this part of ISO 5356, but are or will be given in the relevant International Standards for specific medical devices and accessories.

NOTE Requirements for screw-threaded weight-bearing conical connectors are specified in ISO 5356-2.

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 4135, *Anaesthetic and respiratory equipment — Vocabulary*

ISO 5367, *Breathing tubes intended for use with anaesthetic apparatus and ventilators*

IEC 60601-1:1988, *Medical electrical equipment — Part 1: General requirements for safety*, including Amendment 1:1991 and Amendment 2:1995