# Anesteesia- ja hingamisaparatuur. Koonusliitmikud. Osa 2: Keermestatud kandvad tugiliitmikud

Anaesthetic and respiratory equipment - Conical connectors -

Part 2: Screw-threaded weight-bearing connectors (ISO 5356-2:1987, modified)



## EESTI STANDARDI EESSÕNA

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 1281-
2:1999 sisaldab Euroopa standardi EN
1281-2:1995 ingliskeelset teksti.

Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 1281-2:1999 consists of the English text of the European standard EN 1281-2:1995.

This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

### Käsitlusala:

Käesolev standard esitab nõuded keermestatud koonilistele kandvatele tugiliitmikele, mis on ette nähtud kasutamiseks koos inhalatsioonianesteesia aparaatide ja ventilaatoritega; sellised liitmikud on ette nähtud raskete lisaseadmete ühendamiseks.

## Scope:

**ICS** 11.040.10

**Võtmesõnad:** anesteesiaaparatuur, kruviühendused, liitmikud, meditsiiniaparatuur, mõõtmed, tehnilised andmed, toruliitmikud

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

FN 1281-2

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ICS 11.040.10

Descriptors: Anaesthetic equipment, respiratory equipment, connectors, medical devices.

### **English version**

# Anaesthetic and respiratory equipment

Conical connectors

Part 2: Screw-threaded weight-bearing connectors (ISO 5356-2:1987, modified)

Matériel respiratoire et d'anesthésie; raccords coniques. Partie 2: Raccords à vis pouvant supporter un certain poids (ISO 5356-2:1987, modifiée) Anästhesie- und Beatmungsgeräte; konische Konnektoren. Teil 2: Gewichtstragende konische Konnektoren mit Schraubgewinde (ISO 5356-2:1987, modifiziert)

This European Standard was approved by CEN on 1995-12-05 and is identical to the ISO Standard as referred to.

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.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

# CEN

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

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Page 2 EN 1281-2:1995

#### **Foreword**

International Standard

ISO 5356-2:1987, modified Anaesthetic and respiratory equipment; conical connectors; screw-threaded weight-bearing connectors.

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' as European Standard EN 1281-2.

This European Standard has been prepared under a Mandate given to CEN by the Commission of the European Communities and the European Free Trade Association and supports essential requirements of Directive 93/42/EEC.

For relationship with Directive 93/42/EEC, 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 June 1996 at the latest.

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

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

#### **Endorsement notice**

1987, v The text of the International Standard ISO 5356-2:1987, was approved by CEN as a European Standard with agreed common modifications.

#### 0 Introduction

0.1 ISO 5356 comprises the following two parts:

Part 1: Cones and sockets.

Part 2: Screw-threaded weight-bearing connectors.

0.2 While the conical connectors specified in ISO 5356-1 are satisfactory for lightweight breathing attachments, there is also a need for more substantial connectors to support heavy or fragile components. Factors governing the design of these connectors include robustness, simplicity, ease of sterilization, and ease of engagement and disengagement by hand. They should also be compatible with connectors meeting the requirements laid down in ISO 5356-1 and should, if possible, eliminate the likelihood of inadvertent misconnection, although it has to remain the responsibility of the user to check that any system in which they are used is correctly assembled before use.

Screw-threaded weight-bearing connectors specified in this part of ISO 5356 may be used for attachments within the breathing system and at the common gas outlet.

# 1 Scope and field of application

This part of ISO 5356 specifies requirements for screw-threaded weight-bearing conical connectors intended for use with inhalation anaesthesia apparatus and ventilators; such connectors are intended for mounting heavy accessories.

#### 2 References

ISO 262, ISO general purpose metric screw threads — Selected sizes for screws, bolts and nuts.

ISO 965-2, ISO general purpose metric screw threads — Tolerances — Part 2: Limits of sizes for general purpose bolt and nut threads — Medium quality.

ISO 5356-1, Anaesthetic and respiratory equipment — Conical connectors — Part 1: Cones and sockets.

prEN 1281-1, Anaesthetic and respiratory equipment – Conical connectors – Part 1: Cones and sockets

#### 3 Definitions

For the purposes of this part of ISO 5356, the following definitions apply.

NOTE - Definitions have been taken from ISO 4135.

- **3.1 inhalation anaesthesia apparatus**: Equipment intended for dispensing and delivering anaesthetic gases and vapours into a breathing system for delivery to the patient.
- **3.2** breathing attachments: Components intended to make up or complete a breathing system.
- **3.3** breathing system: Those gas pathways continuously or intermittently in communication with the patient's respiratory tract during any form of ventilation.

#### NOTES

- 1 In practice a breathing system usually extends from
  - a) the point of supply 1) of a controlled gas mixture, for example the common gas outlet of an anaesthetic machine, or
  - b) the fresh-gas inlet of a circle system, lung ventilator, T-piece, etc., or
  - c) the fresh-gas inlet of a manually-operated resuscitator.
- 2 It usually extends to the point at which gas mixture escapes to atmosphere or a gas scavenging system, for example from an APL valve, the open end of a T-piece, etc.
- 3 Gas pathways exclusively concerned with gas scavenging systems are not regarded as part of the breathing system.

#### 4 Materials

Materials used in the manufacture of screw-threaded weightbearing connectors shall be as specified in ISO 5356-1.

<sup>1)</sup> In some situations, particularly in lung ventilators, this point may be inside a piece of equipment and should not be confused with a connection port fitted elsewhere, for example on the casing of a ventilator.