

Dentistry - Coupling dimensions for handpiece
connectors (ISO 3964:2016)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 3964:2016 sisaldab Euroopa standardi EN ISO 3964:2016 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 3964:2016 consists of the English text of the European standard EN ISO 3964:2016.
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.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 30.11.2016.	Date of Availability of the European standard is 30.11.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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English Version

Dentistry - Coupling dimensions for handpiece connectors
(ISO 3964:2016)

Médecine bucco-dentaire - Dimensions d'accouplement
pour pièces à main dentaires (ISO 3964:2016)

Zahnheilkunde - Kupplungsmaße für
Handstückverbindungen (ISO 3964:2016)

This European Standard was approved by CEN on 7 August 2016.

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European foreword

This document (EN ISO 3964:2016) has been prepared by Technical Committee ISO/TC 106 “Dentistry” in collaboration with Technical Committee CEN/TC 55 “Dentistry” the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by May 2017, and conflicting national standards shall be withdrawn at the latest by May 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 23964:1989.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 3964:2016 has been approved by CEN as EN ISO 3964:2016 without any modification.

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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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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#).

The committee responsible for this document is ISO/TC 106 *Dentistry*, Subcommittee SC 4 *Dental instruments*.

This third edition cancels and replaces the second edition (ISO 3964:1982), which has been technically revised with the following changes:

- a) addition of definitions for “coupling dimension” and “coupling systems”;
- b) addition of four types for “classification”;
- c) additional types of coupling systems:
 - with and without light supply;
 - with internal and external supply of air and water (spray);
- d) improved technical drawings.

Dentistry — Coupling dimensions for handpiece connectors

1 Scope

This International Standard specifies the coupling between handpieces and motors connected to dental units.

This International Standard specifies the nominal dimensions, tolerances and the extraction force of coupling systems for use between handpiece and motor which supply the handpiece with water, air and light and rotation energy.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1942, *Dentistry — Vocabulary*

ISO 2768-1, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

ISO 2768-2, *General tolerances — Part 2: Geometrical tolerances for features without individual tolerance indications*

ISO 14457, *Dentistry — Handpieces and motors*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1942, ISO 14457 and the following apply.

3.1

coupling dimension

description of the dimensions of connectors between air- and electrical motors and straight and angled handpieces, used to connect and supply the handpiece system

3.2

coupling system

combination of connector parts between air- and electrical motors and straight and angled handpieces, used to connect and supply the handpiece system

4 Classification

For the purpose of this International Standard, coupling systems are classified into the following types:

- Type 1: coupling system for straight and angle handpieces and motors without internal spray supply and without light supply;
- Type 2: coupling system for straight and angle handpieces and motors with internal spray supply and without light supply;