

# SLOVENSKI STANDARD

## SIST EN 186240:1999

01-julij-1999

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### Sectional Specification: Connector sets for optical fibres and cables - Type MT

Sectional Specification: Connector sets for optical fibres and cables - Type MT

Rahmenspezifikation: Steckverbindersätze für Lichtwellenleiter und Lichtwellenleiterkabel - Bauart MT

Spécification intermédiaire: Jeux de connecteurs pour fibres et câbles optiques - Type MT

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Ta slovenski standard je istoveten z: **EN 186240:1999**

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#### **ICS:**

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 186 240**

October 1994

UDC

Descriptors: Quality, electronic components, connector sets, optical fibres and cables

English Version

**Sectional Specification:**  
**Connector Sets for Optical Fibres and Cables**  
**Type MT**

Spécification intermédiaire:

Rahmenspezifikation:

Jeux de connecteurs pour fibres et  
câbles optiques  
Type MT

Steckverbindersätze für Lichtwellen-  
leiter und Lichtwellenleiterkabel  
Bauart MT

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This European Standard was approved by the CENELEC Electronic Components Committee (CECC) on 7 February 1994. CENELEC members are bound to comply with 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 General Secretariat of the CECC or to any CENELEC 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 CENELEC member into its own language and notified to the CECC General Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and United Kingdom. The membership of the CECC is identical, with the exception of the national electrotechnical committees of Greece, Iceland and Luxembourg.

**CECC**

CENELEC Electronic Components Committee  
Comité des Composants Electroniques du CENELEC  
CENELEC- Komitee für Bauelemente der Elektronik  
**General Secretariat: Gartenstr. 179, D- 60596 Frankfurt/Main**

## FOREWORD

The CENELEC Electronic Components Committee (CECC) is composed of those member countries of the European Committee for Electrotechnical Standardization (CENELEC) who wish to take part in a harmonized System for electronic components of assessed quality.

The object of the System is to facilitate international trade by the harmonization of the specifications and quality assessment procedures for electronic components, and by the grant of an internationally recognized Mark, or Certificate, of Conformity. The components produced under the System are thereby acceptable in all member countries without further testing.

This European Standard was prepared by CECC WG 26, Fibre Optic Connectors.

The text of the draft based on document CECC(Sec)3244 was submitted to the formal vote; together with the voting report, circulated as document CECC(Sec)3483 it was approved by CECC as EN 186 240 on 7 February 1994.

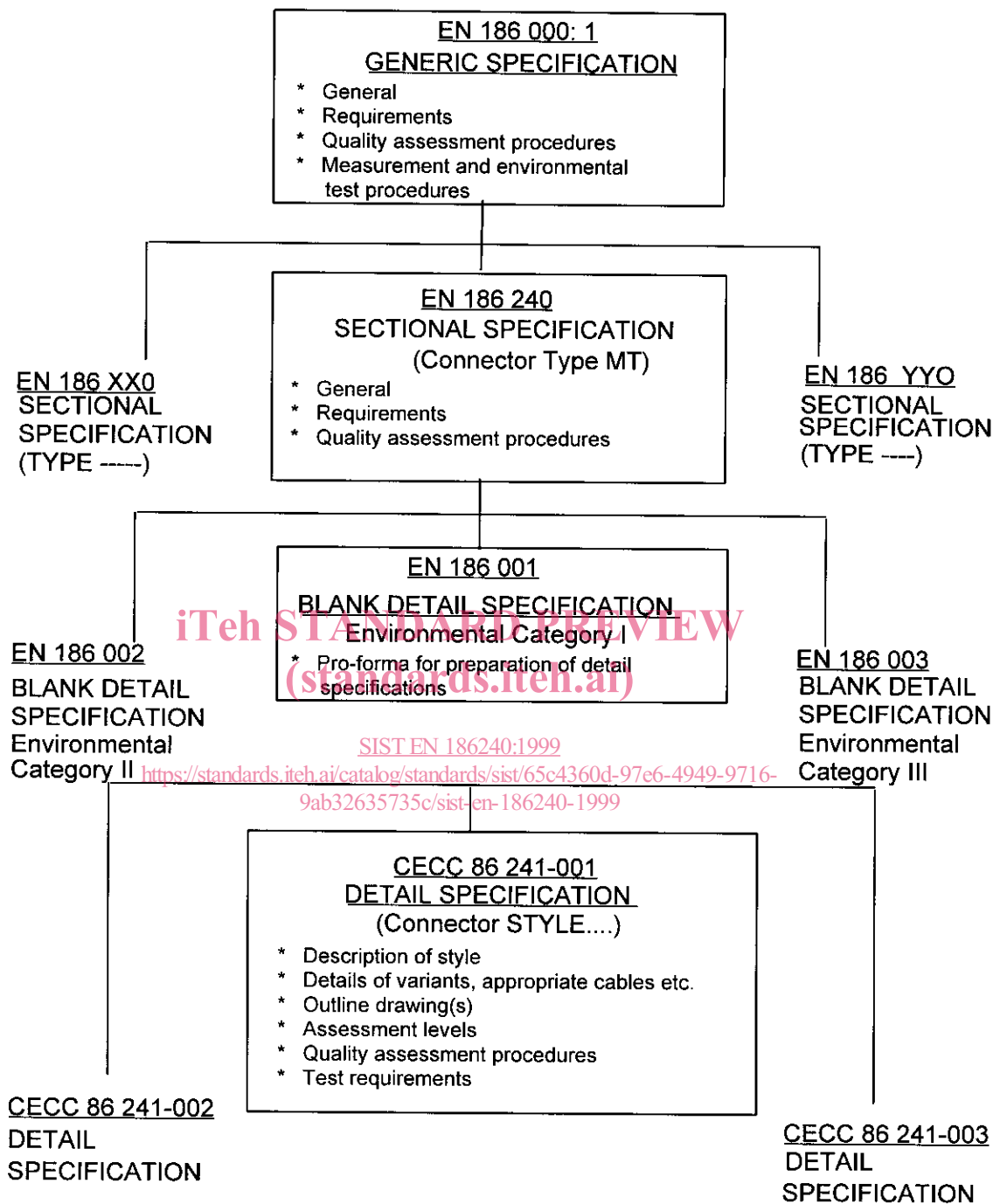
The following dates were fixed:

- latest date of announcement of the (doa) 1993-08-08  
EN at national level
- latest date of publication of an (dop) 1994-02-08  
identical national standard\*
- latest date of withdrawal of (dow) 1995-02-08  
conflicting national standards\*
- \* National Standard (excluding National implementation of IECQ Specifications)  
<https://standards.iteh.ai/catalog/standards/sist/65c4360d-97e6-4949-9716-9ab32635735c/sist-en-186240-1999>

Document numbering for fibre optic connector specifications follows 2.2(1) of CECC 00 700: Section IV, in order to permit the issue of more than nine sectional specifications. The approved numbering system applicable to fibre optic connector specifications is illustrated in the following diagram:

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**SECTION ONE - GENERAL****1. General****1.1 Scope**

This specification covers Type MT fibre optic connector sets. Type MT defines a multiway connector characterised by a clamp spring coupling mechanism and a rectangular plug nominally 6,4 mm x 2,5 mm which utilises two pins of 0,7 mm diameter as its alignment technology . It is applicable to a joint of multiple fibres by arranging them between two pin-positioning holes in the plug.

The specification contains the requirements for Type MT connector sets.

Detail specifications shall be prepared using the following proforma general blank detail specifications associated with the generic specification. For example:-

Environmental  
Category II  
**EN 186 002**

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When completed, the detail specifications (DSs) applicable to this sectional specification (SS) shall be re-numbered in accordance with CECC 00 700 (Section IV) Issue 1, clause 4.2, as follows:-

**CECC 86 242-XXX**  
Type MT  
Environmental  
Category II

**1.2 Related documents**

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed below.

References made to a specific clause or sub-clause of a standard include all sub-clauses to the reference unless otherwise specified.

**EN 186 000:1** Generic Specification for Connector Sets for Optical Fibres and Cables.

**IEC 825:** Radiation safety of laser products, equipment classification, requirements and users' guide.

### 1.3 Definitions

All necessary definitions are given in EN 186 000-1.

### 1.4 Safety

- 1.4.1 Optical fibre connectors, when used as part of an optical fibre system, may emit/produce potentially hazardous radiation. The manufacturers of connectors are not obliged to mark them as such; but sufficient information should be made available in the manufacturer's literature to enable the system designer to assess the degree of hazard.

This information shall be given prominence in the detail specification (DS).

- 1.4.2 The assembly instructions, included in the connector package, shall give a prominent warning to the assembler, of the necessary safe work practices.
- 1.4.3 The responsibility for the safe application of the connector lies with the system design engineer, who should refer to IEC 825. As there is no safety guide for light emitting diodes (LEDs), IEC 825 shall apply to systems using these also.

- 1.4.4 DSs should give the following information in a prominent position:-

#### **WARNING**

"Care should be taken when handling small diameter optical fibre, to prevent it puncturing the skin especially in the eye area.

Direct viewing of the end of an optical fibre or a terminated optical fibre, while it is propagating energy is not recommended unless prior assurance has been obtained as to the safe energy of the output level."

### 1.5 Marking

See 2.6 of EN 186 000-1.



## SECTION TWO - REQUIREMENTS

### 2 Requirements

The requirements specified in Section 2 and Section 3 of EN 186 000-1 apply.

The requirements for connector set components covered by this specification are as specified herein and in the relevant DS.

#### 2.1 Classification

The connector sets covered by this specification are classified as:-

Type

- Type MT
- Alignment mechanism: pin
- Coupling mechanism: clamp spring
- Configurations: plug-plug

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Arrangements  
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- Kit
- Pigtail [SIST EN 186240:1999](https://standards.iteh.ai/catalog/standards/sist/65c4360d-97e6-4949-9716-9ab32635735c/sist-en-186240-1999)
- Patch cord <https://standards.iteh.ai/catalog/standards/sist/65c4360d-97e6-4949-9716-9ab32635735c/sist-en-186240-1999>

Environmental categories

The DS written shall select the appropriate BDS for the chosen environmental category.

Assessment levels

- Level A
- Level B
- Level C

The mating face limit dimensions for each connector set configuration are given in Figures 1, 2, 3 and 4.

The applicable configuration, arrangement, style, variants, climatic category, environmental category, and assessment level shall be specified in the DS.