



SLOVENSKI STANDARD

SIST EN 181104:1999

01-maj-1999

Blank Detail Specification: Fibre optic branching devices - Type: Wavelength selective transmissive star for telecommunication application

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Vordruck für Bauartspezifikation: Lichtwellenleiter-Verzweiger- Bauart: Wellenlängenselektiver Sternübertrager für Anwendungen bei Nachrichtenübertragung

Spécification particulière cadre: Dispositifs de couplage à fibres optiques - Type: Sélectif en longueur d'onde, transmission en étoile

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Ta slovenski standard je istoveten z: EN 181104:1997

ICS:

33.180.20	Povezovalne naprave za optična vlakna	Fibre optic interconnecting devices
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en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 181104

December 1997

ICS 33.180.20

English version

**Blank Detail Specification:
Fibre optic branching devices
Type: Wavelength selective transmissive star
for telecommunication application**

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

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CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

This European Standard was prepared by the Technical Committee CENELEC/TC CECC/SC 86BXB, Fibre optic passive components.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 181104 on 1997-10-01.

The following dates were fixed:

- latest date by which the EN has to be implemented (dop) 1998-09-01
at national level by publication of an identical
national standard or by endorsement
- latest date by which the national standards conflicting (dow) 1998-09-01
with the EN have to be withdrawn

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GUIDANCE FOR THE PREPARATION OF DETAIL SPECIFICATIONS

1 INTRODUCTION

This specification is a BDS for Fibre Optic Branching Devices of the "Wavelength selective transmissive star" type.

This includes instructions for preparing a DS.

2 QUALIFICATION APPROVAL

2.1 PROCEDURE

The DS shall state the qualification approval procedure to be used in accordance with clause 3.3 of EN 181000.

2.2 TEST SCHEDULE AND PERFORMANCE REQUIREMENTS

The test schedule for qualification by the fixed sample procedure shall be given in table 1 of the DS (see clauses 2.2, 4.5 and 4.6 of EN 181000).

3 QUALITY CONFORMANCE INSPECTION

3.1 LOT-BY-LOT INSPECTION

The test schedule for lot-by-lot inspection (groups A and B) shall be given in table 2 of the DS (see clauses 2.2, 4.5 and 4.6 of EN 181000).

3.2 PERIODIC INSPECTION

The test schedule for periodic inspection (groups C and D) shall be given in table 3 of the DS (see clauses 2.2, 4.5 and 4.6 of EN 181000).

4 PREPARATION OF DETAIL SPECIFICATIONS (DS)

Each BDS is published separately as a pro format document, with numbered spaces provided for entering the information necessary to create a DS. If the spaces provided are too small, then the information shall be provided on additional sheets forming part of the completed DS.

Instructions for filling in the numbered spaces in a BDS are given below:

- (1) The name of the ONH under whose authority the DS is published and, if applicable, the organization from whom the DS is available.
- (2) The CECC symbol and the number allotted to the DS by the CECC General Secretariat.
- (3) The number and issue number of the CECC GS; also the national reference(s), if different.

(4) If different from the CECC number, the national number of the DS, date of issue and any further information required by the national system, together with any amendment numbers.

(5) A brief description of the component or range of components.

(6) The level of quality assessment (A, B, C or X), sampling procedure (fixed quantity or lot-by-lot) and the climatic category.

For (5) and (6) the text to be given in the DS shall be suitable for an entry in CECC 00 200 (Register of Approvals) and CECC 00 300 (Register of National Documents).

(7) An outline drawing with main dimensions which are of importance for interchangeability, and/or reference to the appropriate national or international documents for outlines. Alternatively, this drawing may be given in an annex to the DS, but (7) shall always contain an illustration of the general outer appearance of the component.

If an existing drawing from an IEC publication, or similar source, is used in a CECC specification, then it can be either first or third angle projection, but the appropriate symbol shall be shown on the drawing:

1st angle projection  3rd angle projection 



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The symbol in the BDS may be converted to indicate either 1st or 3rd angle, by deleting the inappropriate part of the drawing. <https://standards.iteh.ai/catalog/standards/sist/6a50c1d0-6519-4852-8225-697442723a14/sist-en-181104-1999>

Alternative outline dimensions or tolerance limits of any variants shall be shown, and may be listed in the form of a table alongside the drawing.

(8) A list of variants and their identifying features covered by the DS. Enter the identification number. "AYY" for each variant of each component (see clause 2.7.1 of EN 181000). Assign a column in the table for each variant feature. For example, cable type, housing, orientation of ports, means of mounting etc.

Instruction:

- max. values in dB for insertion losses between conduction ports;
- min. values in dB for return losses;
- min. values in dB for insertion losses between isolated ports.

(9) *Supplementary information*

Enter the supplementary information with respect to marking of the component, marking and contents of package, ordering information, related documents, certified test records and structural similarity.

(10) Fixed sample qualification approval test schedule

Table 1 shall give the required measurements and tests for qualification by fixed-sample procedure. If qualification by lot-by-lot and periodic procedure is specified, insert "NOT APPLICABLE" in table 1.

If measurements or tests are specified for which no basic procedure is available, or which do not appear in the GS EN 181000, each procedure shall be clearly described in an individual annex to the DS.

The format and the minimum mandatory test sequence shall be the same as specified in the GS.

(11) Lot-by-lot inspection test schedule

When completed, table 2 shall give the required measurements and tests for qualification by lot-by-lot procedure. One or more assessment level(s) shall be given in table 2. When differing from the preferred levels of the GS (see clause 2.1.5 of EN 181000) the IL and AQL shall be entered and the assessment level(s) titled (X, Y...).

If measurements or tests are specified for which no basic procedure is available, or which do not appear in the GS, EN 181000, each procedure shall be clearly described in an individual annex to the DS. The format and the minimum mandatory test sequence shall be the same as specified in the GS.

(12) Periodic C and D testing procedure

Table 3 shall give the required measurements and tests for groups C and D periodic tests. One or more assessment level(s) shall be given in table 3. When differing from the preferred levels of the GS (see clause 2.1.5 of EN 181000) the IL, AQL, p, n, c and t shall be entered and the assessment level(s) titled (X, Y...).

(13) Details, measurements, and performance requirements

Table 4 shall list the details of each tests requirements. It shall be noted that the mandatory tests have been given as a minimum. Others tests shall be given in the same manner. To fill in the detail of the test the values shall be taken out from the relevant I - ETS document.

(1) Specification available from	(2) Page 1 of.....EN 181104-... ..
(3) ELECTRONIC COMPONENT OF ASSESSED QUALITY IN ACCORDANCE WITH GENERIC SPECIFICATION EN 181000 ISSUE 1 BLANK DETAIL SPECIFICATION EN 181104	(4) Issue

(5) DETAIL SPECIFICATION for

FIBRE OPTIC BRANCHING DEVICE OF ASSESSED QUALITY
Environmental category "Telecommunications"

Style:	Configuration :..... Fibre type(s) :..... Connector set :.....	Type: Splitter/combiner - Wavelength Selective - Uni- or Bidirectional - Transmissive star - NxM - Transfer matrix and numbering of ports: see page 2
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(6) Assessment Level:	Qualification Approval Procedure:	Climatic Category:
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(7)
Outline dimensions and mass



Panel piercing and mounting details:.....

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(7) Dimensions (mm)			
Ref.	Min	Max	Notes

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Figure

Mass (g)

Note: Additional drawing (if ncessary) see page ...

(8) Variants:

Variant N°	Operating wavelength range(s) (µm)	

Information about manufacturers who have components qualified to this detail specification is available isn the current CECC 00 200 Register of Approvals.

(8) Transfer matrix and numbering of ports:



		Receive Port						
		1	2	.	.	N + M		
Launch port	1	[$a_{11}(\lambda)$	$a_{12}(\lambda)$.	.	.	$a_{1N+M}(\lambda)$
	2		$a_{21}(\lambda)$					
	.		.					
	.		.	$a_{ij}(\lambda)$				
	N + M		$a_{N+M1}(\lambda)$					$a_{N+MN+M}(\lambda)$
]						

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Note 1: Values in dB **(standards.iteh.ai)**

Note 2: Create an additional transfer matrix for each previously specified operating wavelength range. standards.iteh.ai/catalog/standards/sist/8a56efd6-6319-4b32-8223-697442723a14/sist-en-181104-1999

(9) SUPPLEMENTARY INFORMATION

Marking of the component (add component marking requirements in accordance with 2.7.2 of EN 181000, as applicable) :

Marking and contents of package (add component package marking requirements in accordance with 2.7.3 of EN 181000, as applicable) :

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Ordering information (add ordering information, as applicable) :

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Related documents (add additional related documents if not included in EN 181000) :

Certified records of released lots (indicate whether a certificate is required) :

Structural similarity (add the boundary limits in accordance with 3.2 of EN 181000) :

(10) TABLE 1 FIXED SAMPLE QUALIFICATION APPROVAL TEST SCHEDULE			
Test sequence (Note)		EN 181000 Clause	Sample size
Group 0			
Group 1			
Group 2			
Group 3			
Further groups if applicable			

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Note: For details, measurements and performance requirements see table 4

(11) TABLE 2 LOT-BY-LOT INSPECTION TEST SCHEDULE (GROUPS A AND B)			
Test Sequence (Note 1)		EN 181000 Clause	Assessment Level (Note 2)
Group A			
Group B			

Note 1: For details, measurements and performance requirements see table 4

Note 2: See clause 2.1.5 of EN 181000.

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