



**SLOVENSKI STANDARD  
SIST EN IEC 63295:2022**

**01-junij-2022**

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**Specifikacija za steklene perlice serije WB z impedanco 50Ω za konektorje RF (IEC 63295:2022)**

Specification for WB series glass beads with 50Ω impedance for RF connectors (IEC 63295:2022)

Spezifikation für Glasperlen der Serie WB mit 50Ω Impedanz für HF-Steckverbinder (IEC 63295:2022)

Spécification pour perles en verre de série WB à impédance de 50 Ω pour connecteurs RF (IEC 63295:2022)

**Ta slovenski standard je istoveten z: EN IEC 63295:2022**

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**ICS:**

33.120.30      Radiofrekvenčni konektorji      RF connectors  
(RF)

**SIST EN IEC 63295:2022**

**en**

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EUROPEAN STANDARD

EN IEC 63295

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2022

ICS 33.120.30

English Version

Specification for WB series glass beads with 50 Ω impedance for  
RF connectors  
(IEC 63295:2022)

Spécification pour perles en verre de série WB à  
impédance de 50 Ω pour connecteurs RF  
(IEC 63295:2022)

Spezifikation für Glasperlen der Serie WB mit 50Ω  
Impedanz für HF-Steckverbinder  
(IEC 63295:2022)

This European Standard was approved by CENELEC on 2022-03-31. CENELEC 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.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

**EN IEC 63295:2022 (E)****European foreword**

The text of document 46F/597/FDIS, future edition 1 of IEC 63295, prepared by SC 46F "RF and microwave passive components" of IEC/TC 46 "Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63295:2022.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-12-31 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2025-03-31 document have to be withdrawn

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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61169-1	2013	Radio frequency connectors - Part 1: Generic specification - General requirements and measuring methods	EN 61169-1	2013
IEC 62153-4-7	-	Metallic cables and other passive components test methods - Part 4-7: Electromagnetic compatibility (EMC) - Test method for measuring of transfer impedance $Z_T$ and screening attenuation $a_S$ or coupling attenuation $a_C$ of connectors and assemblies - Triaxial tube in tube method	EN IEC 62153-4-7	-

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IEC 63295

Edition 1.0 2022-02

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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iTeh STANDARD

Specification for WB series glass beads with 50  $\Omega$  impedance for RF connectors

PREVIEW

Spécification pour perles en verre de série WB à impédance de 50  $\Omega$  pour connecteurs RF

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## SPECIFICATION FOR WB SERIES GLASS BEADS WITH 50 $\Omega$ IMPEDANCE FOR RF CONNECTORS

### FOREWORD

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IEC 63295 has been prepared by subcommittee 46F: RF and microwave passive components, of IEC technical committee 46: Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
46F/597/FDIS	46F/611/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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## SPECIFICATION FOR WB SERIES GLASS BEADS WITH 50 $\Omega$ IMPEDANCE FOR RF CONNECTORS

### 1 Scope

This document provides the requirements for WB series glass beads with 50  $\Omega$  impedance for RF connectors, including, among other, the structure dimensions, IEC type designation, rating and characteristics, and quality assessment.

These glass beads are used for the adaption of coaxial systems to microstrip circuits used extensively in microwave communication systems such as TR modules, power modules, integrated circuits where hermetic seal is required. They can serve as a part of an RF coaxial connector, multi-channel RF connector or hybrid connector, or can be applied directly in various communication module systems as an independent product. They provide a 50  $\Omega$  normative impedance with an operating frequency limit up to 65 GHz.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

IEC 61169-1:2013, *Radio frequency connectors – Part 1: Generic specification – General requirements and measuring methods*

IEC 62153-4-7, *Metallic communication cable test methods – Part 4-7: Electromagnetic compatibility (EMC) – Test method for measuring of transfer impedance  $Z_T$  and screening attenuation  $a_S$  or coupling attenuation  $a_C$  of connectors and assemblies up to and above 3 GHz – Triaxial tube in tube method*

### 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### 4 Structure dimensions and IEC type designation

The structure of WB series glass beads is shown in Figure 1 and the dimensions are shown in Table 1.