SLOVENSKI STANDARD
oSIST prEN IEC 60153-2:2025

01-marec-2025

Votli kovinski valovodi - 2. del: Ustrezne specifikacije za navadne pravokotne valovode

Hollow metallic waveguides - Part 2: Relevant specifications for ordinary rectangular waveguides

Metallische Hohlleiter - Teil 2: Einzelbestimmungen für normale Rechteckhohlleiter

Guides d'ondes métalliques creux - Partie 2: Spécifications applicables relatives aux guides d'ondes rectangulaires ordinaires

Ta slovenski standard je istoveten z: **prEN IEC 60153-2:2024**

ICS:

33.120.10 Koaksialni kabli. Valovodi Coaxial cables. Waveguides

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46F/686/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: **IEC 60153-2 ED4**	
DATE OF CIRCULATION: **2024-12-27**	CLOSING DATE FOR VOTING: **2025-03-21**
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IEC SC 46F : RF AND MICROWAVE PASSIVE COMPONENTS	
SECRETARIAT: United States of America	SECRETARY: Mr John Morelli
OF INTEREST TO THE FOLLOWING COMMITTEES:	HORIZONTAL FUNCTION(S):
ASPECTS CONCERNED:	
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TITLE:

Hollow metallic waveguides – Part 2: Relevant specifications for ordinary rectangular waveguides

PROPOSED STABILITY DATE: 2026

NOTE FROM TC/SC OFFICERS:

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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HOLLOW METALLIC WAVEGUIDES –

Part 2: Relevant specifications for ordinary rectangular waveguides

FOREWORD

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IEC 60153-2 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.

This fourth edition cancels and replaces the third edition published in 2016. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) addition of a cross-sectional view of the waveguide;
b) addition of informative content on the theoretical background of the standard;
c) use of a lower case “k” in the waveguide designation, where appropriate;
d) revision of main specification table (now Table 1):
   - two waveguides moved to the end of the table (R 35, R 41);
   - correction of a waveguide designation (now R 26k);
   - correction of a waveguide outside width (R 18);
   - relaxation of tolerances of waveguide outside dimensions (R 14 to R 70);
   - removed attenuation values of waveguides made of gold, aluminium, and stainless steel;
   - implementation of attenuation values for an idealised copper waveguide;
e) relaxation of tolerances of waveguide outside dimensions for R 14 to R 70 in the table now referred to as Table 4;
f) clarification of the electrical tests:
   - use of standard annealed copper as the reference material;
   - addition of an equation for calculating the theoretical attenuation of waveguides made of any material;
g) addition of an informative cross-reference for waveguide type designations (Annex A).

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

Draft	Report on voting
46F/XXX/FDIS	46F/XXX/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. The main document types developed by the IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts of the IEC 60153 series, published under the general title *Hollow metallic waveguides*, can be found on the IEC website at webstore.iec.ch.

This International Standard is to be read in conjunction with IEC 60153-1.

The committee has decided that the contents of this document will remain unchanged until the stability date – indicated on the IEC website at webstore.iec.ch in the data related to the respective document – is reached. At this date, the document will be either:

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