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Multi-channel radio-frequency connectors - Part 2: Sectional specification for MQ4 series circular connectors

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/24

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EN IEC 63138-2

December 2023

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Supersedes EN IEC 63138-2:2021

English Version

**Multi-channel radio-frequency connectors - Part 2: Sectional
specification for MQ4 series circular connectors
(IEC 63138-2:2023)**

Connecteurs radiofréquences multicanaux - Partie 2:
Spécification intermédiaire pour les connecteurs circulaires
de série MQ4
(IEC 63138-2:2023)

Mehrkanalige Hochfrequenz-Steckverbinder - Teil 2:
Rahmenspezifikation für Rundsteckverbinder der MQ4-
Serie
(IEC 63138-2:2023)

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EN IEC 63138-2:2023 (E)**European foreword**

The text of document 46F/644/FDIS, future edition 2 of IEC 63138-2, 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 63138-2:2023.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 63138-1	2019	Multi-channel radio frequency connectors - EN IEC 63138-1 Part 1: Generic specification - General requirements and test methods		2019



IEC 63138-2

Edition 2.0 2023-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Multi-channel radio-frequency connectors –
Part 2: Sectional specification for MQ4 series circular connectors**

**Connecteurs radiofréquences multicanaux –
Partie 2: Spécification intermédiaire pour les connecteurs circulaires de
série MQ4**

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Edition 2.0 2023-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Multi-channel radio-frequency connectors – Part 2: Sectional specification for MQ4 series circular connectors

Connecteurs radiofréquences multicanaux – Partie 2: Spécification intermédiaire pour les connecteurs circulaires de série MQ4

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MULTI-CHANNEL RADIO-FREQUENCY CONNECTORS –**Part 2: Sectional specification for MQ4 series circular connectors**

FOREWORD

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IEC 63138-2 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 second edition cancels and replaces the first edition published in 2020. This edition constitutes a technical revision.

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

- a) change the supplementary key and groove position degree from 0,1 to 0,05 in Figure 1, Figure 2, Figure 3, Figure 7 and Figure 8;
- b) change dimension q from min.1,60 to min.1,65 in Table 1;
- c) add an electrical reference plane in Figure 4;

- d) add dimensions in Table 1;
- e) change dimension n from max.1,55 to max.1,50 in Table 2, Table 3 and Table 7;
- f) update some dimensions in Figure 4 and Table 4;
- g) change dimension a from min.7,50 to min.7,52, and max.7,60 to max. 7,58 in Table 7;
- h) update some dimensions in Figure 8 and Table 8;
- i) change mechanical compatibility from 50 N to 60 N in 4.2.3 and 4.2.4.

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

Draft	Report on voting
46F/644/FDIS	46F/651/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 IEC are described in greater detail at www.iec.ch/publications.

This document is to be read with IEC 63138-1:2019.

A list of all parts in the IEC 63138 series, published under the general title *Multichannel radio-frequency connectors*, can be found on the IEC website.

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 in the data related to the specific document. At this date, the document will be

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

MULTI-CHANNEL RADIO-FREQUENCY CONNECTORS –

Part 2: Sectional specification for MQ4 series circular connectors

1 Scope

This part of IEC 63138, which is a sectional specification (SS), provides information and rules for the preparation of detail specifications (DS) for MQ4 series circular connectors with four RF channels, as well as a detailed specification of the blank format.

An MQ4 series circular connector with 50 Ω nominal impedance has four RF channels which can be engaged and disengaged at the same time. There are two versions of plug connectors, one is a quick-lock version, and the other is a threaded version. The socket connector provides two coupling mechanisms, a quick-lock and a threaded coupling.

MQ4 series circular connectors can be used in mobile communication systems and in other communication equipment.

This document also specifies the mating face dimensions and gauging information of MQ4 series circular connectors, and tests selected from IEC 63138-1, applicable to all detail specifications relating to MQ4 series circular connectors.

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 63138-1:2019, *Multi-channel radio frequency connectors – Part 1: Generic specification – General requirements and test methods*

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