

Piezoelectric sensors - Part 1: Generic specifications

## EESTI STANDARDI EESSÕNA

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English Version

**Piezoelectric sensors - Part 1: Generic specifications  
(IEC 63041-1:2021)**

Capteurs piézoélectriques - Partie 1: Spécifications  
génériques  
(IEC 63041-1:2021)

Piezoelektrische Sensoren - Teil 1: Fachgrundspezifikation  
(IEC 63041-1:2021)

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Europäisches Komitee für Elektrotechnische Normung

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

## European foreword

The text of document 49/1357/CDV, future edition 2 of IEC 63041-1, prepared by IEC/TC 49 "Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63041-1:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-07-22 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-10-22 document have to be withdrawn

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60068 (series) NOTE Harmonized as EN 60068 (series)

IEC 60122-1 NOTE Harmonized as EN 60122-1

IEC 60444-1 NOTE Harmonized as EN 60444-1

IEC 60444-5 NOTE Harmonized as EN 60444-5

IEC 60679 (series) NOTE Harmonized as EN 60679 (series)

IEC 60689 NOTE Harmonized as EN 60689

IEC 60758:2016 NOTE Harmonized as EN 60758:2016 (not modified)

IEC 60862-1 NOTE Harmonized as EN 60862-1

IEC 61019-1 NOTE Harmonized as EN 61019-1

IEC 61240:2016 NOTE Harmonized as EN 61240:2017 (not modified)

IEC 61760 (series) NOTE Harmonized as EN 61760-4:2015/A1 (series)

IEC 61837 (series) NOTE Harmonized as EN 61837 (series)

IEC 63041-2 NOTE Harmonized as EN IEC 63041-2

ISO 80000 (series) NOTE Harmonized as EN ISO 80000 (series)

## 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 60027	series	Letter symbols to be used in electrical technology	EN 60027	series
IEC 60050-561	-	International Electrotechnical Vocabulary - Part 561: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection	-	-
IEC 60122-2-1	-	Quartz crystal units for frequency control and selection - Part 2: Guide to the use of quartz crystal units for frequency control and selection - Section One: Quartz crystal units for microprocessor clock supply	-	-
IEC 60444-9	-	Measurement of quartz crystal unit parameters - Part 9: Measurement of spurious resonances of piezoelectric crystal units	EN 60444-9	-
IEC 60617	-	Graphical symbols for diagrams	-	-
IEC 63041-3	2020	Piezoelectric sensors - Part 3: Physical sensors	EN IEC 63041-3	2020
ISO 2859-1	1999	Sampling procedures for inspection by attributes - Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection	-	-
ISO 80000-1	-	Quantities and units - Part 1: General	EN ISO 80000-1	-

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Piezoelectric sensors –  
Part 1: Generic specifications**

**Capteurs piézoélectriques –  
Partie 1: Spécifications génériques**



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# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Piezoelectric sensors –  
Part 1: Generic specifications**

**Capteurs piézoélectriques –  
Partie 1: Spécifications génériques**

INTERNATIONAL  
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**PIEZOELECTRIC SENSORS –****Part 1: Generic specifications****FOREWORD**

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IEC 63041-1 has been prepared by IEC technical committee 49: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection. It is an International Standard.

This second edition cancels and replaces the first edition published in 2017. This edition constitutes a technical revision.

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

- a) the new terms "piezoelectric sensor system" and "wireless SAW sensor system" and their definitions have been added;
- b) new types of sensor modules and sensor system have been added;
- c) some symbols of sensor elements are added in Clause 4;
- d) a new Figure B.3 has been added in Annex B;
- e) Annex C has been added.

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

Draft	Report on voting
49/1357/CDV	49/1364/RVC

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).

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