



NSAI
Standards

Irish Standard
I.S. EN IEC 63041-3:2020

Piezoelectric sensors - Part 3: Physical sensors

I.S. EN IEC 63041-3:2020

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN IEC 63041-3:2020 is the adopted Irish version of the European Document EN IEC 63041-3:2020, Piezoelectric sensors - Part 3: Physical sensors

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EUROPEAN STANDARD

EN IEC 63041-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2020

ICS 31.140

English Version

Piezoelectric sensors - Part 3: Physical sensors (IEC 63041-3:2020)

Capteurs piézoélectriques - Partie 3: Capteurs physiques
(IEC 63041-3:2020)

Piezoelektrische Sensoren - Teil 3: Physikalische Sensoren
(IEC 63041-3:2020)

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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 63041-3:2020 (E)**European foreword**

The text of document 49/1333/CDV, future edition 1 of IEC 63041-3, 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 63041-3:2020.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-06-16
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-09-16

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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 60444-9	NOTE	Harmonized as EN 60444-9
IEC 60679 (series)	NOTE	Harmonized as EN 60679 (series)
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 (series)
IEC 61837 (series)	NOTE	Harmonized as EN 61837 (series)
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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60027	series	Letters symbols to be used in electrical technology	-	-
IEC 60050-561	-	International Electrotechnical Vocabulary - Part 561: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection	-	-
IEC 60617-DB	2012	Graphical symbols for diagrams	-	-
IEC 63041-1	2017	Piezoelectric sensors - Part 1: Generic specifications	EN IEC 63041-1	2018
IEC 63041-2	-	Piezoelectric sensors - Part 2: Chemical and biochemical sensors	EN IEC 63041-2	-
ISO 80000-1	-	Quantities and units - Part 1: General	EN ISO 80000-1	-

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IEC 63041-3

Edition 1.0 2020-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Piezoelectric sensors –
Part 3: Physical sensors**

**Capteurs piézoélectriques –
Partie 3: Capteurs physiques**



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IEC 63041-3

Edition 1.0 2020-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Piezoelectric sensors –
Part 3: Physical sensors**

**Capteurs piézoélectriques –
Partie 3: Capteurs physiques**

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PIEZOELECTRIC SENSORS –**Part 3: Physical sensors**

FOREWORD

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

CDV	Report on voting
49/1333/CDV	49/1343/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all part in the IEC 63041 series, published under the general title *Piezoelectric sensors*, can be found on the IEC website.

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

PIEZOELECTRIC SENSORS –

Part 3: Physical sensors

1 Scope

This part of IEC 63041 is applicable to piezoelectric physical sensors mainly used in the field of process control, wireless monitoring, dynamics, thermodynamics, vacuum engineering, and environmental sciences. This document provides users with technical guidelines as well as basic knowledge of common physical sensors.

Piezoelectric sensors covered herein are those applied to the detection and measurement of physical quantities such as force, pressure, torque, viscosity, temperature, film thickness, acceleration, vibration, and tilt angle.

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 60027 (all parts), *Letter symbols to be used in electrical technology*

IEC 60050-561, *International electrotechnical vocabulary – Part 561: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection*

IEC 60617:2012, *Graphical symbols for diagrams* (database available at <http://std.iec.ch/iec60617>)

IEC 63041-1:2017, *Piezoelectric sensors – Part 1: Generic specifications*

IEC 63041-2, *Piezoelectric sensors – Part 2: Chemical and biochemical sensors*

ISO 80000-1, *Quantities and units – Part 1: General*

3 Terms, definitions, symbols and units

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60027 (all parts), IEC 60050-561, IEC 60617, IEC 63041-1, IEC 63041-2 and ISO 80000-1 and the following apply.

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