



**SLOVENSKI STANDARD**  
**SIST EN 60086-3:2002**  
**01-maj-2002**

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**Primary batteries - Part 3: Watch batteries**

Primary batteries -- Part 3: Watch batteries

Primärbatterien -- Teil 3: Uhrenbatterien

Piles électriques -- Partie 3: Piles pour montres

**Ta slovenski standard je istoveten z: EN 60086-3:1996**

[SIST EN 60086-3:2002](https://standards.iteh.ai/catalog/standards/sist/1b1efe02-ac5b-480d-bba2-1999b23cac97/sist-en-60086-3-2002)

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**ICS:**

29.220.10 Úřadové články a baterie Primary cells and batteries

**SIST EN 60086-3:2002**

**en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60086-3**

January 1996

ICS 29.220.10

Descriptors: Primary batteries, watches, dimensions, mechanical properties, electrical properties, designation, marking, tests, acceptability

English version

**Primary batteries**  
**Part 3: Watch batteries**  
(IEC/ISO 86-3:1995)

Piles électriques  
Partie 3: Piles pour montres  
(CEI/ISO 86-3:1995)

Primärbatterien  
Teil 3: Uhrenbatterien  
(IEC/ISO 86-3:1995)

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This European Standard was approved by CENELEC on 1995-07-04. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

### Foreword

The text of document 35/569/DIS, future edition 1 of IEC/ISO 86-3, prepared by IEC TC 35, Primary cells and batteries and ISO TC 114, Horology, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60086-3 on 1995-07-04.

The following dates were fixed:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 1996-08-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 1996-08-01

Annexes designated "normative" are part of the body of the standard.  
Annexes designated "informative" are given for information only.  
In this standard, annex ZA is normative and annex A informative.  
Annex ZA has been added by CENELEC.

### Endorsement notice

The text of the International Standard IEC/ISO 86-3:1995 was approved by CENELEC as a European Standard without any modification.

In the official version, for annex A, Bibliography, the following note has to be added for the standard indicated:

IEC 68-2-3 NOTE: Harmonized, together with its amendment 1:1984, as HD 323.2.3 S2:1987 (not modified).



**Annex ZA (normative)****Normative references to international publications  
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 86-1	1993	Primary batteries Part 1: General	EN 60086-1 <sup>1)</sup>	1995
A1	1994		-	-
IEC 86-2	1994	Part 2: Specification sheets	-	-
ISO 2859	1974	Sampling procedures and tables for inspection by attributes	-	-

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1) EN 60086-1 includes the corrigendum December 1993 to IEC 86-1.

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NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD

IEC/ISO  
86-3

Première édition  
First edition  
1995-11

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**Piles électriques –**

**Partie 3:  
Piles pour montres**

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Primary batteries –**

**Part 3:** <https://standards.iteh.ai/catalog/standards/sist/1b1efc02-ae5b-480d-bba2-1999625cac97/sist-en-60086-3-2002>  
**Watch batteries**

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## CONTENTS

	Page
FOREWORD .....	5
Clause	
1 Scope .....	7
2 Normative references .....	7
3 Definitions .....	7
4 Mechanical requirements .....	7
5 Electrical requirements .....	17
6 Designation .....	19
7 Marking .....	19
8 Test methods .....	21
9 Visual examination and acceptance conditions .....	37
Annex A – Bibliography .....	41

SIST EN 60086-3:2002  
<https://standards.iteh.ai/catalog/standards/sist/1b1efe02-ac5b-480d-bba2-1999b23cac97/sist-en-60086-3-2002>



## INTERNATIONAL ELECTROTECHNICAL COMMISSION

PRIMARY BATTERIES  
Part 3: Watch batteries

## FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

ISO (the International Organization for Standardization) is a worldwide federation of national standard bodies (ISO member bodies).

To this end and in addition to other activities, the ISO and IEC publish international Standards. Their preparation is entrusted to technical committees: any ISO member body or IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the ISO or IEC also participate in this preparation. The ISO and IEC collaborate closely in accordance with conditions determined by agreement between the two organizations.

- 2) The formal decisions or agreements of the IEC on technical matters, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, ISO member bodies and IEC National Committees undertake to apply ISO/IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the ISO/IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

International Standard IEC 86-3 has been prepared by IEC technical committee 35: Primary cells and batteries, and ISO technical committee 114: Horology.

The text of this standard is based on the following documents:

DIS	Report on voting
IEC 35/569/DIS ISO TC 114/14682	IEC 35/946/RVD ISO TC 114/...

Full information on the voting for the approval of this standard can be found in the reports on voting indicated in the above table.

IEC 86 consists of the following parts, under the general title: *Primary batteries*.

- Part 1: General
- Part 2: Specification sheets
- Part 3: Watch batteries

## 1 Scope

This part of IEC 86 specifies dimensions, designation, methods of tests and requirements for primary batteries for watches. In several cases, a menu of test methods is given. When presenting battery electrical characteristics and/or performance data, the manufacturer specifies which test method was used.

## 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 86. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 86 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 86-1 : 1993, *Primary batteries – Part 1 : General*  
1994, *Amendment 1*

IEC 86-2 : 1994, *Primary batteries – Part 2 : Specification sheets*

ISO 2859 : 1974, *Sampling procedures and tables for inspection by attributes*

NOTE – Further references are given in annex A.

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## 3 Definitions

SIST EN 60086-3:2002

<https://standards.iteh.ai/catalog/standards/sist/1b1ef02-ae5b-480d-bba2-199723ca9781/iec-60086-3-2002>

For the purpose of this part of IEC 86, the definitions given in IEC 86-1 apply.

## 4 Mechanical requirements

### 4.1 Dimensions and size codes

Dimensions and tolerances of batteries for watches shall be in accordance with figure 1, table 1 A and table 1 B. The dimensions of the batteries shall be tested in accordance with 8.2.

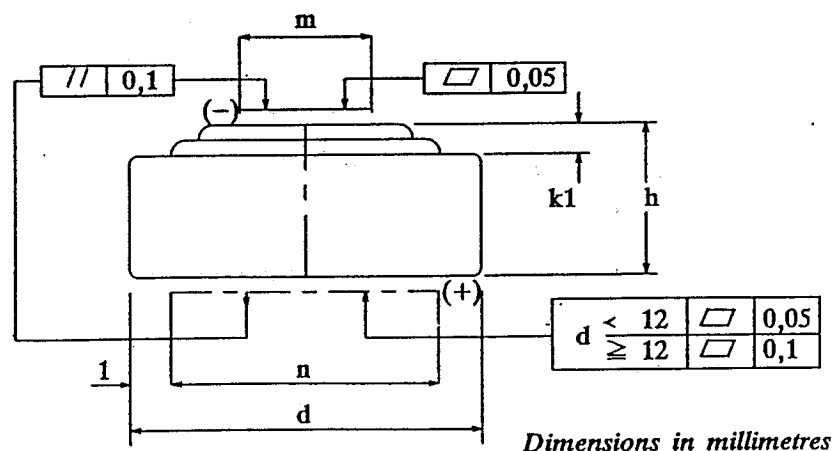


Figure 1 – Dimensional characteristics

Table 1 A – Dimensions and size codes

Code 1)	Diameter d	m min	Height h														
			Code 1)														
			10	12	14	16	20	21	25	26	27	30	31	32	36	42	54
	Tol.		0 -0,10	0 -0,15	0 -0,15	0 -0,18	0 -0,20	0 -0,20	0 -0,20	0 -0,20	0 -0,20	0 -0,20	0 -0,25	0 -0,25	0 -0,25	0 -0,25	0 -0,25
4	4,8					1,65		2,15									
5	5,8	2,6	1,05	1,25	1,45	1,65		2,15					2,70				
6	6,8	3,0	1,05	1,25	1,45	1,65		2,15									
7	7,9	3,5	1,05	1,25	1,45	1,65		2,10							3,10		3,60
9	9,5	4,5	1,05	1,25	1,45	1,65							2,70				3,60
11	11,6	6,0	1,05	1,25	1,45	1,65							2,60				3,60
12	12,5	4,0		1,20		1,60				2,50							3,60
1) See clause 6.																	
NOTE – Open boxes in the above matrix are not necessarily available for standardization due to the concept of overlapping tolerances.																	