



# SLOVENSKI STANDARD

**SIST EN 2241:2010**

**01-maj-2010**

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**Aeronautika - Vznožki sijalk - Mere**

Aerospace series - Lamp caps - Dimensions

Luft- und Raumfahrt - Lampensockel - Maße

Série aérospatiale - Culots de lampes - Dimensions

**EN STANDARD PREVIEW**

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**Ta slovenski standard je istoveten z:** EN 2241:2010

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**ICS:**

|        |  |  |
|--------|--|--|
| 49.060 | Letalska in vesoljska električna oprema in sistemi | Aerospace electric equipment and systems |
|--------|--|--|

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

EN 2241

March 2010

ICS 49.060

English Version

## Aerospace series - Lamp caps - Dimensions

Série aérospatiale - Culots de lampes - Dimensions

Luft- und Raumfahrt - Lampensockel - Maße

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**TECHNICAL STANDARD PREVIEW**  
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COMITÉ EUROPÉEN DE NORMALISATION  
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## Foreword

This document (EN 2241:2010) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2010, and conflicting national standards shall be withdrawn at the latest by September 2010.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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## 1 Scope

This standard specifies the dimensions of caps for incandescent lamps used on board aircraft respectively the characteristics and tests of which are defined in EN 2240-001 and EN 2756.

## 2 Normative references

The following referenced documents are indispensable for the application 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.

EN 2241-001, *Aerospace series — Incandescent lamps — Part 001: Technical specification*

EN 2756, *Aerospace series — Lamps, incandescent — Test methods*

EN 9133, *Aerospace series — Quality management systems — Qualification procedure for aerospace standard parts*

EN 60061-1:1993, *Lamp caps and holders together with gauges for the control of interchangeability and safety — Part 1: Lamp caps (IEC 60061-1:1969 + supplements A:1970 to N:1992, modified)*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### cap

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part of a lamp which holds it in a lampholder and provides connection to the electric supply  
<https://standards.iteh.ai/catalog/standards/sist/ed2e6253-6389-4308-b86c-93c774bcbbe3/sist-en-2241-2010>

## 4 Caps dimensions

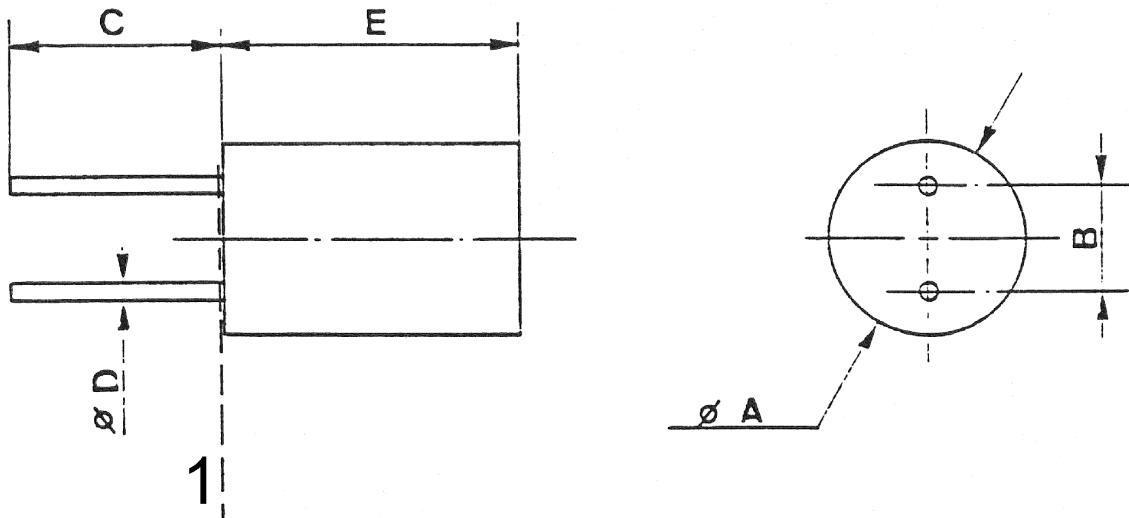
### 4.1 General

See 4.2 to 4.14.

Dimensions and tolerances are in millimetres.

## 4.2 Dimensions of bi-pin cap

See Figure 1 and Table 1.



### Key

- 1 Level of dimension  $B$ . Dimension  $B$  is specified flush with the base.

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### SIST EN Table 10

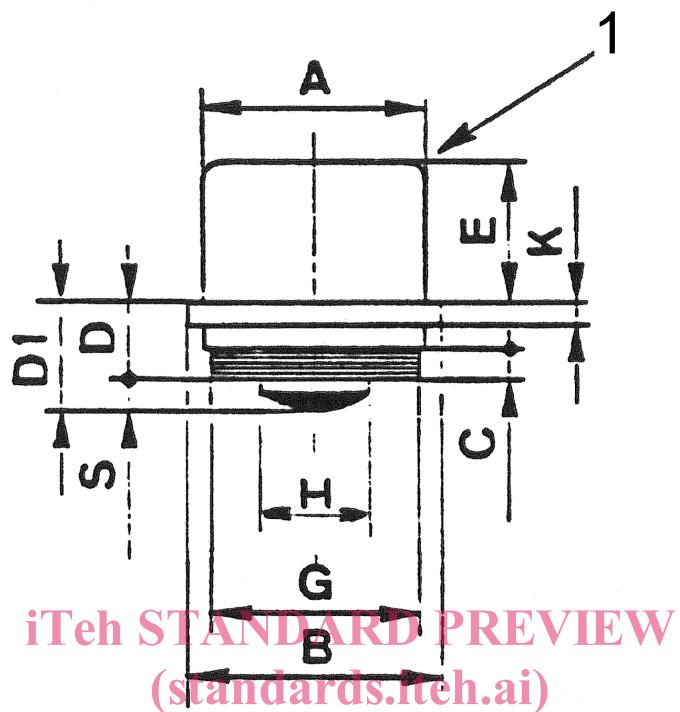
[https://standards.iteh.ai/catalog/standards/sist/ed2e6253-6389-4308-b86c-93e774bcbbe3/sist\\_en\\_2241\\_2010](https://standards.iteh.ai/catalog/standards/sist/ed2e6253-6389-4308-b86c-93e774bcbbe3/sist_en_2241_2010) Dimensions in millimetres

| Dimensions |      | Bi-Pin reference |        |         |        |         |
|------------|------|------------------|--------|---------|--------|---------|
|            |      | G 3,17           | G 2,54 | GX 2,54 | G 1,27 | GX 1,27 |
|            |      | Type             |        |         |        |         |
| A          | min. | 5,70             | 4,60   | 3,70    | 3,70   | 3,20    |
|            | max. | 5,90             | 4,80   | 3,90    | 3,90   | 3,40    |
| B          | min. | 3,07             | 2,44   | 2,44    | 1,17   | 1,17    |
|            | max. | 3,27             | 2,64   | 2,64    | 1,37   | 1,37    |
| C          | min. | 5,85             | 5,85   | 5,85    | 5,85   | 5,85    |
|            | max. | 6,85             | 6,85   | 6,85    | 6,85   | 6,85    |
| D          | min. | 0,45             | 0,45   | 0,45    | 0,45   | 0,45    |
|            | max. | 0,55             | 0,55   | 0,55    | 0,55   | 0,55    |
| E          | min. | 8,50             | 7,20   | 5,20    | 5,20   | 3,00    |
|            | max. | 9,00             | 7,70   | 5,70    | 5,70   | 3,40    |

The location of the pins, their relative position and their position relative to the cap barrel shall be checked by means of a gauge (under study).

#### 4.3 Dimensions of SX4s/4 cap

See Figure 2 and Table 2.



#### Key

1 Bulbed edge or chamfer

[SIST EN 2241:2010](https://standards.iteh.ai/catalog/standards/sist/en-2241-2010)  
<https://standards.iteh.ai/catalog/standards/sist/ed2e6253-6389-4308-b86c-93c774bcbbe3/sist-en-2241-2010>

Figure 2

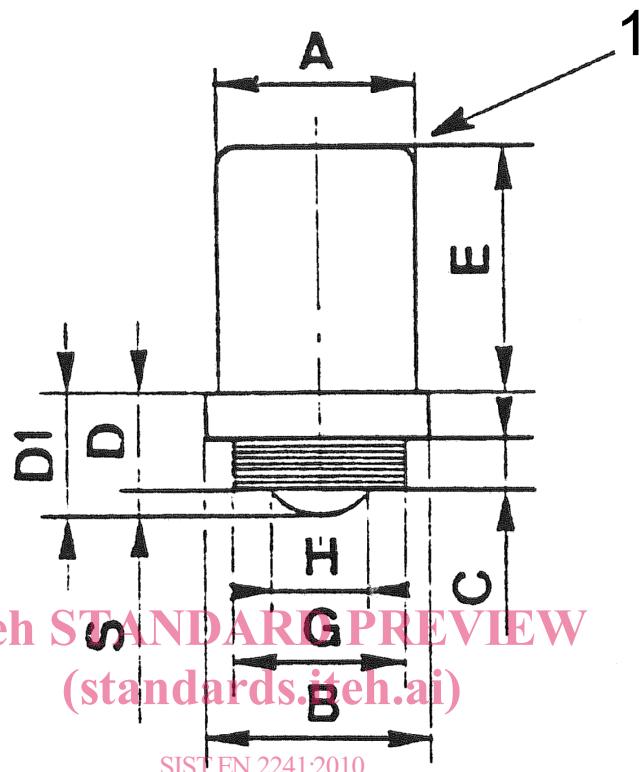
Table 2

Dimensions in millimetres

| Dimensions     | min.          | max. |
|----------------|---------------|------|
| A              | 3,89          | 4,04 |
| B              | 4,47          | 4,72 |
| C              | 0,43          | 0,58 |
| D              | 1,35          | —    |
| D <sub>1</sub> | 1,65          | 2,16 |
| E              | 2,57          | 2,72 |
| G              | 3,71          | 3,91 |
| H              | To be defined |      |
| K              | 0,33          | 0,43 |
| S              | 0,30          | —    |

#### 4.4 Dimensions of SY4s/7 cap

See Figure 3 and Table 3.



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#### Key

- 1 Bulbed edge or chamfer

Figure 3

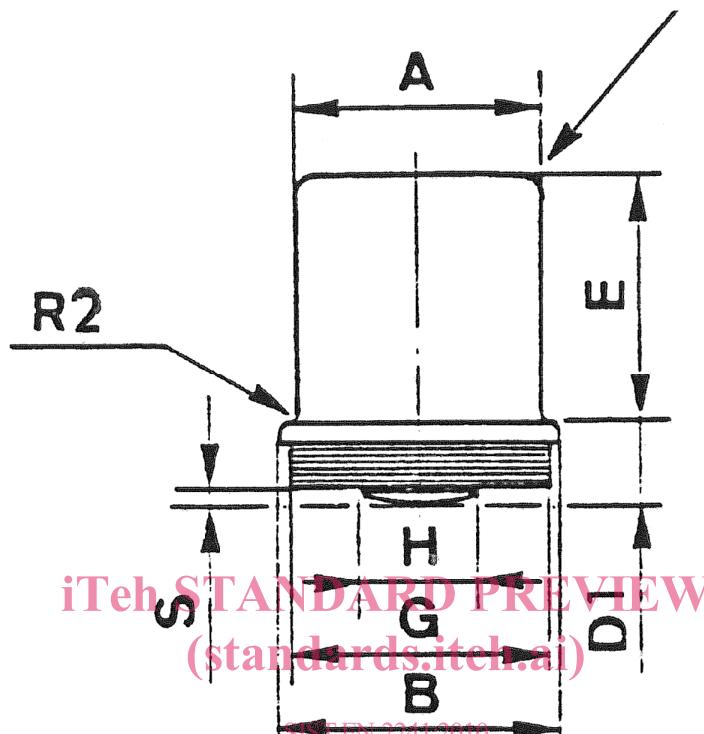
Table 3

Dimensions in millimetres

| Dimensions            | min. | max. |
|-----------------------|------|------|
| <i>A</i>              | 3,90 | 3,95 |
| <i>B</i>              | 4,50 | 4,60 |
| <i>C</i>              | 1,00 | —    |
| <i>D</i>              | 1,90 | —    |
| <i>D</i> <sub>1</sub> | 2,25 | 2,75 |
| <i>E</i>              | 4,80 | 5,20 |
| <i>G</i>              | 3,40 | 3,60 |
| <i>H</i>              | 1,80 | 2,20 |
| <i>S</i>              | 0,30 | —    |

#### 4.5 Dimensions of SX6s cap

See Figure 4 and Table 4.



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#### Key

- 1 Bulbed edge or chamfer

Figure 4

Table 4

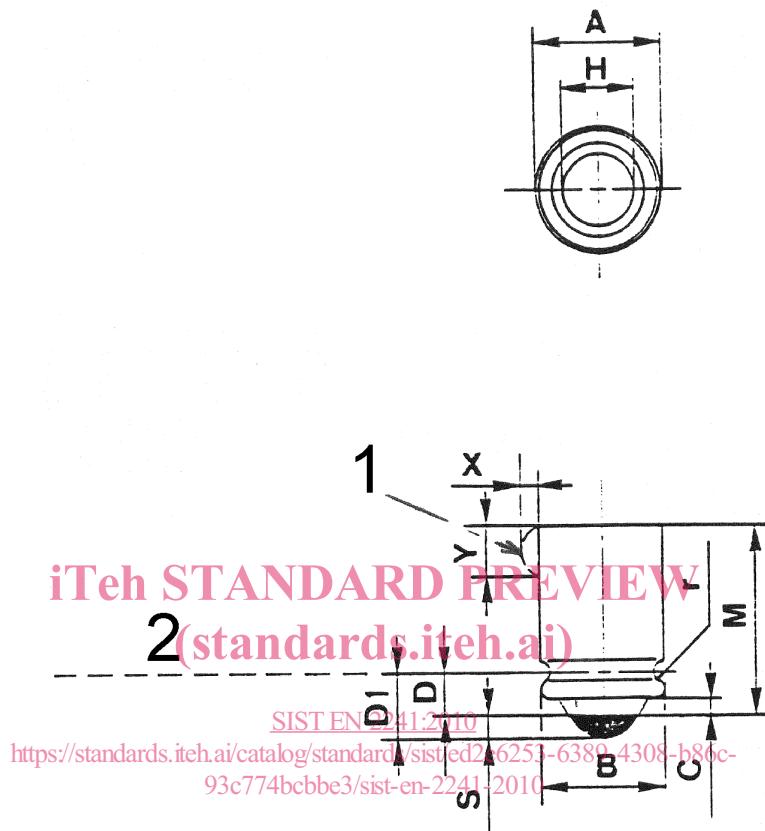
Dimensions in millimetres

| Dimensions     | min. | max. |
|----------------|------|------|
| A              | 6,10 | 6,35 |
| B              | 7,11 | 7,37 |
| D <sub>1</sub> | 1,70 | 2,80 |
| E              | 6,35 | 6,85 |
| G              | 6,22 | 6,98 |
| H              | 2,54 | 3,30 |
| R <sub>2</sub> | —    | 0,20 |
| S              | 0,38 | —    |

#### 4.6 Dimensions of S5,7s/8

In conformity with EN 60061-1:1993 sheet 7004-62-1

See Figure 5 and Table 5.



#### Key

- 1 Solder on finished lamp
- 2 Datum line: Bottom of groove

**Figure 5**

**Table 5**

Dimensions in millimetres

| Dimensions            | min. | max. | Dimensions            | min. | max. |
|-----------------------|------|------|-----------------------|------|------|
| <i>A</i>              | 5,56 | 5,82 | <i>M</i> <sup>a</sup> | 8,10 | 8,65 |
| <i>B</i>              | 5,51 | 5,72 | <i>r</i> <sup>a</sup> | 0,38 | 0,51 |
| <i>C</i>              | 0,80 | —    | <i>S</i>              | 0,40 | —    |
| <i>D</i> <sup>a</sup> | 1,70 | 2,70 | <i>X</i>              | —    | 0,76 |
| <i>D</i> <sub>1</sub> | 2,40 | 3,30 | <i>Y</i>              | —    | 2,30 |
| <i>H</i>              | —    | 3,20 | —                     | —    | —    |

<sup>a</sup> Measured on non-assembled base.