



**SLOVENSKI STANDARD**  
**SIST ISO 3547-3:2020**

**01-oktober-2020**

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**Drсни ležaji - Zvite puše - 3. del: Mazalne luknje, utori in žepki**

Plain bearings - Wrapped bushes - Part 3: Lubrication holes, grooves and indentations

Paliers lisses - Bagues roulées

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**Ta slovenski standard je istoveten z: ISO 3547-3:2017**

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**ICS:**

21.100.10	Drсни ležaji	Plain bearings
21.260	Mazalni sistemi	Lubrication systems

**SIST ISO 3547-3:2020**

**en,fr,de**

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INTERNATIONAL  
STANDARD

ISO  
3547-3

Third edition  
2017-02

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**Plain bearings — Wrapped bushes —  
Part 3:  
Lubrication holes, grooves and  
indentations**

*Paliers lisses — Bagues roulées —*

*Partie 3: Trous de graissage, rainures de graissage et creux de graissage*

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Reference number  
ISO 3547-3:2017(E)

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## ISO 3547-3:2017(E)

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 123, *Plain bearings*, Subcommittee SC 3, *Dimensions, tolerances and construction details*.

This third edition cancels and replaces the second edition (ISO 3547-3:2006), which has been technically revised.

A list of all the parts in the ISO 3547 series can be found on the ISO website.

# Plain bearings — Wrapped bushes —

## Part 3: Lubrication holes, grooves and indentations

### 1 Scope

This document specifies dimensions of lubrication holes, grooves and bore indentations on wrapped bushes made of mono and multi-layer bearing material for plain bearing applications.

NOTE Wrapped bushes with lubrication holes, grooves or bore indentations in accordance with this document can be ordered with dimensions in accordance with ISO 3547-1 and made from materials in accordance with ISO 3547-4.

### 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.

ISO 3547-1, *Plain bearings — Wrapped bushes — Part 1: Dimensions*

ISO 4378-1, *Plain bearings — Terms, definitions, classification and symbols — Part 1: Design, bearing materials and their properties*

ISO 4378-4, *Plain bearings — Terms, definitions, classification and symbols — Part 4: Basic symbols*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4378-1 and ISO 4378-4 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 4 Symbols and units

See [Table 1](#).

**Table 1 — Symbols and units**

Symbol	Description	Unit
$B$	Width of the bush	mm
$c$	Edge length of the diamond-shaped lubrication indentation	mm
$D_i$	Inside diameter of the bush	mm
$d_b$	Diameter of the lubrication indentation	mm
$d_L$	Diameter of the lubrication hole	mm
$D_o$	Outside diameter of the bush	mm
$e$	Distance between the lubrication grooves	mm

**Table 1** (continued)

Symbol	Description	Unit
$n_1, n_2$	Width of lubrication groove	mm
$R$	Radius	mm
$s_3$	Wall thickness	mm
$s_4$	Residual wall thickness	mm
$t$	Depth of the lubrication indentation	mm
$\alpha$	Layout of the lubrication indentation	°

## 5 General

Lubrication holes, grooves and bore indentations may be carried out in the flat strip prior to forming. Dimensional changes due to forming of the strip are permissible. Marks of lubrication grooves and bore indentations produced by stamping may appear on the back of the bush. Small cracks in the bearing material in lubrication grooves and bore indentations are permissible, provided that no pieces become detached.

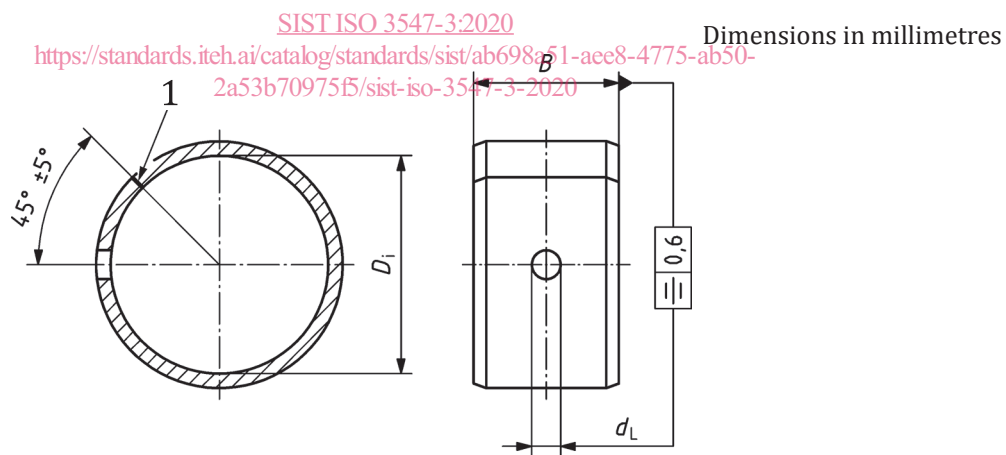
Untoleranced and unspecified dimensions may be specified differently subject to agreement between the user and supplier.

## 6 Lubrication holes

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See [Figures 1](#) and [2](#).

For the nominal dimensions, see [Table 2](#).

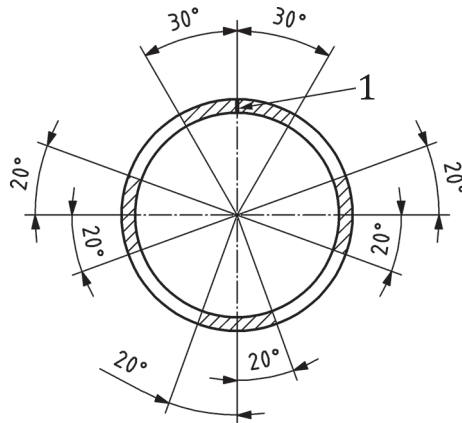


### Key

1 butt joint

**Figure 1** — Lubrication holes (Type L) — Dimensions (see [Table 2](#))





### Key

1 butt joint

Lubrication holes in the hatched areas should be avoided as far as possible.

**Figure 2 — Lubrication holes (Type L) — Areas of bush not recommended for holes**

**Table 2 — Nominal dimensions of lubrication holes**

Dimensions in millimetres

$D_i$	$d_L^a$	
>14	≤22	3
>22	≤40	4
>40	≤50	5
>50	≤100	6
>100		7

<sup>a</sup> Minimum dimension after forming.

## 7 Lubrication grooves

### 7.1 General

Lubrication grooves types M1 and M2 are used for lubrication. See [Figures 3 to 8](#) and [Tables 3 to 6](#).

Widening of the lubrication grooves in the area of the lubrication holes, at the butt joint and at the end faces of the bush, is permissible.

Lubrication grooves are normally represented on the developed shape of the bush before forming.

Distortions to the groove shape can occur during the outside diameter forming operations.

In order to facilitate measurement, the dimensions of the bush thickness remaining at the base of the groove may be specified on the drawing as the control dimension.

### 7.2 Type M1

#### 7.2.1 General

See [Figure 3](#) and [Table 3](#).