
INTERNATIONAL STANDARD



3547

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Plain bearings — Wrapped bushes — Dimensions, tolerances and methods of checking

Paliers lisses — Bagues roulées — Dimensions, tolérances et méthodes de contrôle

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Documents

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3547 was drawn up by Technical Committee ISO/TC 123, *Plain bearings*, and was circulated to the Member Bodies in November 1974.

It has been approved by the Member Bodies of the following countries :

Australia	India	South Africa, Rep. of
Austria	Italy	Spain
Bulgaria	Mexico	Sweden
Czechoslovakia	Netherlands	Turkey
Finland	New Zealand	United Kingdom
France	Poland	U.S.S.R.
Germany	Romania	Yugoslavia

The Member Body of the following country expressed disapproval of the document on technical grounds :

U.S.A.

Plain bearings — Wrapped bushes — Dimensions, tolerances and methods of checking

1 SCOPE AND FIELD OF APPLICATION

This International Standard lays down the main dimensions and tolerances of a range of wrapped bushes, with external diameters of between 6 and 150 mm, for plain bearings.

These limits are not the result of present manufacturing techniques but are intended to cover the most widely used sizes. Below 6 mm and above 150 mm, manufacture is generally still possible.

NOTE — All the dimensions and tolerances are expressed in millimetres, unless otherwise indicated.

Clause 2 defines and describes a wrapped bush, in order to avoid confusion with other parts of similar shape but for different use, such as, for example, split dowel pins, and to draw attention to certain peculiarities in the construction of wrapped bushes. However, work has not yet been completed on vocabulary and all terms in this International Standard must be considered as temporary only.

As certain dimensions and tolerances of wrapped bushes cannot, because of the very nature of these parts, be directly measured, it was considered necessary to specify

the methods for checking these dimensions and tolerances in clause 4.

2 DEFINITION AND DESCRIPTION

A wrapped bush is a cylindrical bearing, having a continuous split from one end to the other, manufactured from rolled material. This split may or may not be parallel to the axis of the cylinder. In its free state, the wrapped bush may not be perfectly cylindrical, and its split may be open. The split is closed when the wrapped bush is fitted in its housing.

In certain cases, wrapped bushes with the split closed by a suitable interlocking (clinched) joint may be produced.

Defects on the backs of bushes that have been caused by details made on the strip material before forming, such as holes, grooves or indentations, are permitted.

Wrapped bushes may, in general, be supplied with or without an allowance for machining in the bore. In the first case, they will be finished in a suitable way after they have been fitted in their housings.

TABLE 1 — Housing diameters, shaft diameters and bush wall thickness

Preferred ¹⁾ housing diameters	Non-preferred housing diameters	Shaft diameters for given wall thickness							
		0,75	1	1,5	2	2,5	3	3,5	4
6		4,5	4						
7		5,5	5						
8		6,5	6						
9		7,5	7						
10		8,5	8						
11		9,5	9						
12		10,5	10						
13		11,5	11						
14		12,5	12						
15			13	12					
16			14	13					
17			15	14					
18			16	15					
19			17	16					
20			18	17					
21			19	18					
22			20	19					
24	23		21	20					
25			22	21					
			23	22					
26				23	22				
28	27			24	23				
30				25	24				
32				27	26				
34				29	28				
36				31	30				
38				33	32				
	39			35	34				
40				36	35				
42				37	36				
	44			39	38				
				41	40				
45				42	41	40			
48				45	44	43			
50				47	46	45			
53				50	49	48			
56	55				51	50	49		
	57				52	51	50		
60					53	52	51		
63					56	55	54		
	65				59	58	57		
67					61	60	59		
	70				63	62	61		
71					66	65	64		
75					67	66	65		
80					71	70	69		
					76	75	74		
85						80	79	78	
90						85	84	83	
95						90	89	88	
100						95	94	93	
105						100	99	98	
110						105	104	103	
	115					110	109	108	
120						115	114	113	
125						120	119	118	
130							124	123	122
140							134	133	132
150							144	143	142

1) Based on the R' 40 series of preferred numbers (ISO 497).