

123

INTERNATIONAL STANDARD



4379

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Plain bearings — Solid copper alloy bushes — Dimensions and tolerances

Paliers lisses — Bagues massives en alliages de cuivre — Dimensions et tolérances

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Descriptors : bearings, plain bearings, bearing bushes, copper products, specifications, dimensions, dimensional tolerances.

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 4379 was developed by Technical Committee ISO/TC 123, *Plain bearings*, and was circulated to the member bodies in December 1976.

It has been approved by the member bodies of the following countries :

Australia	Italy	Spain
Bulgaria	Korea, Rep. of	Turkey
Chile	Mexico	United Kingdom
France	Netherlands	U.S.A.
Germany, F.R.	Philippines	U.S.S.R.
India	Romania	Yugoslavia
Ireland	South Africa, Rep. of	

The member body of the following country expressed disapproval of the document on technical grounds :

Sweden

Plain bearings — Solid copper alloy bushes — Dimensions and tolerances

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies dimensions and tolerances applicable to solid copper alloy bushes, cylindrical and flanged, in the range 6 to 200 mm inside diameters.

The inside diameters taken as the basic dimension for this type of bearing have been chosen to accord with known shaft sizes, and existing ISO International Standards.

Two series of outside diameters have been included in order to provide for the possibility of some of the sizes being adopted for plain bearings made from other materials, and to allow for the use of materials of differing strengths.

This International Standard applies to solid bushes for general uses; thicker bushes can always be specified for special applications.

2 REFERENCES

ISO/R 286, *ISO system of limits and fits — Part 1 : General, tolerances and deviations.*

ISO/R 468, *Surface roughness.*

ISO/R 775, *Cylindrical and 1/10 conical shaft ends.*

ISO 2340, *Clevis pins — Metric series.*

ISO 2341, *Clevis pins with heads — Metric series.*

ISO 2795, *Plain bearings made from sintered material — Dimensions and tolerances.*

ISO 3547, *Plain bearings — Wrapped bushes — Dimensions, tolerances and methods of checking.*

3 SYMBOLS

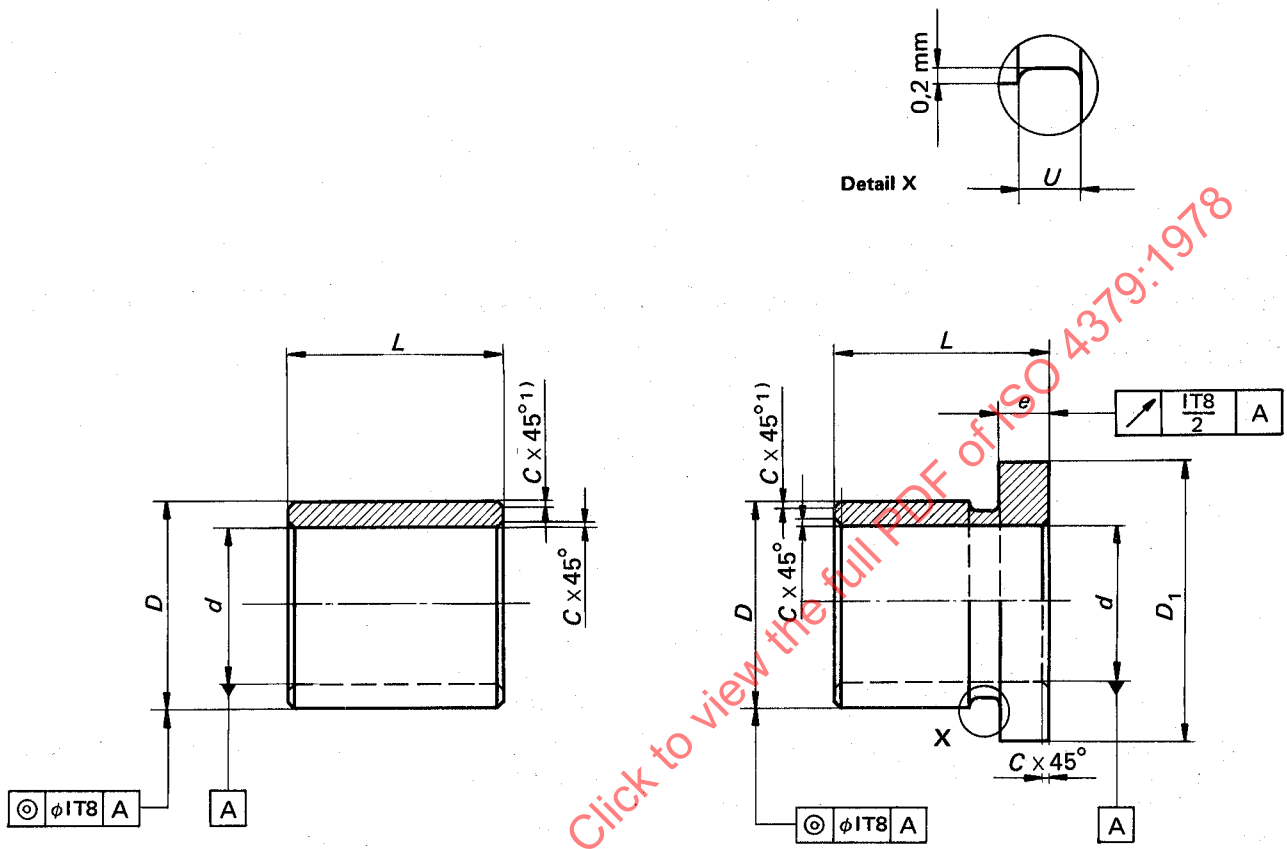


FIGURE 1 — Cylindrical bush

FIGURE 2 — Flanged bush

- D = bush outside diameter
- d = bush inside diameter
- L = bush width
- D_1 = flange diameter
- e = flange thickness
- C = chamfer width
- U = width of undercut

1) The chamfer on the outside surface shall be normally at 45° . Alternatively a chamfer of 15° may be provided, the details of which shall be subject to agreement between the user and the manufacturer.

4 DIMENSIONS

4.1 Cylindrical bushes

TABLE 1

Dimensions in millimetres

Inside diameter <i>d</i>	Outside diameter <i>D</i>		Widths <i>L</i>			Chamfer width <i>C</i>
	a	b				
6	10	12	6	10		0,3
8	12	14	6	10		0,3
10	14	16	6	10		0,3
12	16	18	10	15	20	0,5
14	18	20	10	15	20	0,5
15	19	21	10	15	20	0,5
16	20	22	12	15	20	0,5
18	22	24	12	20	30	0,5
20	24	26	15	20	30	0,5
22	26	28	15	20	30	0,5
24*	28	30	15	20	30	0,5
25	30	32	20	30	40	0,5
27*	32	34	20	30	40	0,5
28	34	36	20	30	40	0,5
30	36	38	20	30	40	0,5
32	38	40	20	30	40	0,8
33*	40	42	20	30	40	0,8
35	41	45	30	40	50	0,8
36*	42	46	30	40	50	0,8
38	45	48	30	40	50	0,8
40	48	50	30	40	60	0,8
42	50	52	30	40	60	0,8
45	53	55	30	40	60	0,8
48	56	58	40	50	60	0,8
50	58	60	40	50	60	0,8
55	63	65	40	50	70	0,8
60	70	75	40	60	80	0,8
65	75	80	50	60	80	1,0
70	80	85	50	70	90	1,0
75	85	90	50	70	90	1,0
80	90	95	60	80	100	1,0
85	95	100	60	80	100	1,0
90	105	110	60	80	120	1,0
95	110	115	60	100	120	1,0
100	115	120	80	100	120	1,0
105	120	125	80	100	120	1,0
110	125	130	80	100	120	1,0
120	135	140	100	120	150	1,0
130	145	150	100	120	150	2,0
140	155	160	100	150	180	2,0
150	165	170	120	150	180	2,0
160	180	185	120	150	180	2,0
170	190	195	120	180	200	2,0
180	200	210	150	180	250	2,0
190	210	220	150	180	250	2,0
200	220	230	180	200	250	2,0

* These diameters are especially intended for bushes for clevis pins.

NOTE — With some materials, especially cold-drawn material, it is possible to make bushes with thinner walls. It is also agreed to make bushes with thicker walls for justified special applications.

If required, dimensions may be selected from ISO 3547.

4.2 Flanged bushes

TABLE 2

Dimensions in millimetres

Inside diameter d	Outside diameter D	Flange diameter D_1	Widths L			Flange thickness e	Chamfer width C	Width of undercut U
6	12	14	6	10		3	0,3	1
8	14	18	6	10		3	0,3	1
10	16	20	6	10		3	0,3	1
12	18	22	10	15	20	3	0,5	1
14	20	25	10	15	20	3	0,5	1
15	21	27	10	15	20	3	0,5	1
16	22	28	12	15	20	3	0,5	1,5
18	24	30	12	20	30	3	0,5	1,5
20	26	32	15	20	30	3	0,5	1,5
22	28	34	15	20	30	3	0,5	1,5
24*	30	36	15	20	30	3	0,5	1,5
25	32	38	20	30	40	4	0,5	1,5
27*	34	40	20	30	40	4	0,5	1,5
28	36	42	20	30	40	4	0,5	1,5
30	38	44	20	30	40	4	0,5	2
32	40	46	20	30	40	4	0,8	2
33*	42	48	20	30	40	5	0,8	2
35	45	50	30	40	50	5	0,8	2
36*	46	52	30	40	50	5	0,8	2
38	48	54	30	40	50	5	0,8	2
40	50	58	30	40	60	5	0,8	2
42	52	60	30	40	60	5	0,8	2
45	55	63	30	40	60	5	0,8	2
48	58	66	40	50	60	5	0,8	2
50	60	68	40	50	60	5	0,8	2
55	65	73	40	50	70	5	0,8	2
60	75	83	40	60	80	7,5	0,8	2
65	80	88	50	60	80	7,5	1,0	2
70	85	95	50	70	90	7,5	1,0	2
75	90	100	50	70	90	7,5	1,0	3
80	95	105	60	80	100	7,5	1,0	3
85	100	110	60	80	100	7,5	1,0	3
90	110	120	60	80	120	10	1,0	3
95	115	125	60	100	120	10	1,0	3
100	120	130	80	100	120	10	1,0	3
105	125	135	80	100	120	10	1,0	3
110	130	140	80	100	120	10	1,0	3
120	140	150	100	120	150	10	1,0	3
130	150	160	100	120	150	10	2,0	4
140	160	170	100	150	180	10	2,0	4
150	170	180	120	150	180	10	2,0	4
160	185	200	120	150	180	12,5	2,0	4
170	195	210	120	180	200	12,5	2,0	4
180	210	220	150	180	250	15	2,0	4
190	220	230	150	180	250	15	2,0	4
200	230	240	180	200	250	15	2,0	4

* These diameters are especially intended for bushes for clevis pins.