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Third edition
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Rolling bearings — Plummer block housings — Boundary dimensions

Roulements — Paliers — Dimensions d'encombrement

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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 113 was prepared by Technical Committee ISO/TC 4, *Rolling bearings*.

This third edition cancels and replaces the second edition (ISO 113:1999), of which it constitutes a minor revision, incorporating updated references and terminology, as well as the addition of an (informative) annex giving additional boundary dimensions.

Rolling bearings — Plummer block housings — Boundary dimensions

1 Scope

This International Standard specifies boundary dimensions for two-bolt plummer block housings primarily intended for rolling bearings in diameter series 0, 1, 2 and 3, as specified in ISO 15, and for four-bolt plummer block housings primarily intended for rolling bearings in diameter series 0, 1 and 2.

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.

ISO 15, *Rolling bearings — Radial bearings — Boundary dimensions, general plan*

ISO 5593, *Rolling bearings — Vocabulary*

ISO 15241, *Rolling bearings — Symbols for quantities*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5593 and the following apply.

3.1
two-bolt plummer block housing
housing with two cap bolts and two bolt holes in the base

See Figure 1.

3.2
four-bolt plummer block housing
housing with four cap bolts and four bolt holes in the base

See Figure 2.

4 Symbols

For the purposes of this document, the symbols given in ISO 15241 and the following apply.

The symbols shown in Figures 1 and 2 and the values given in Tables 1 and 2 denote nominal dimensions unless specified otherwise.

A overall width

A_1 width of base

D_a seating diameter

H distance from mounting face to centreline of seating diameter

H_1 height of feet

J centre distance between bolt holes (length)

J_1 centre distance between bolt holes (width)

L length of base

N width of bolt hole

N_1 length of bolt hole

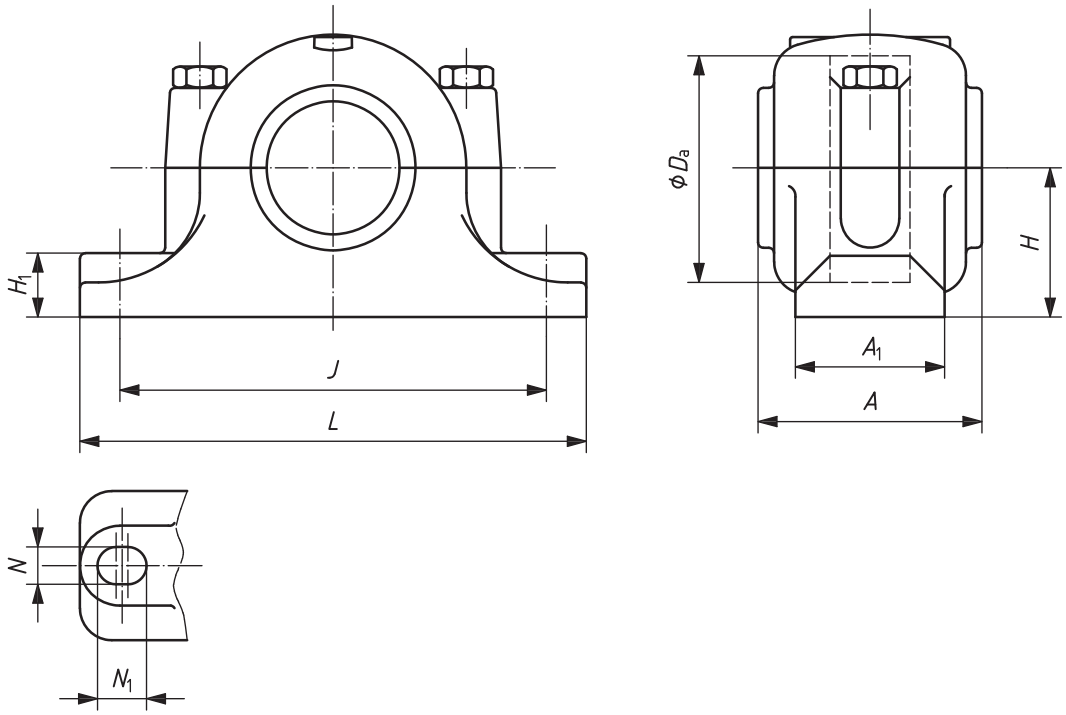

Figure 1 — Two-bolt plummer block housing

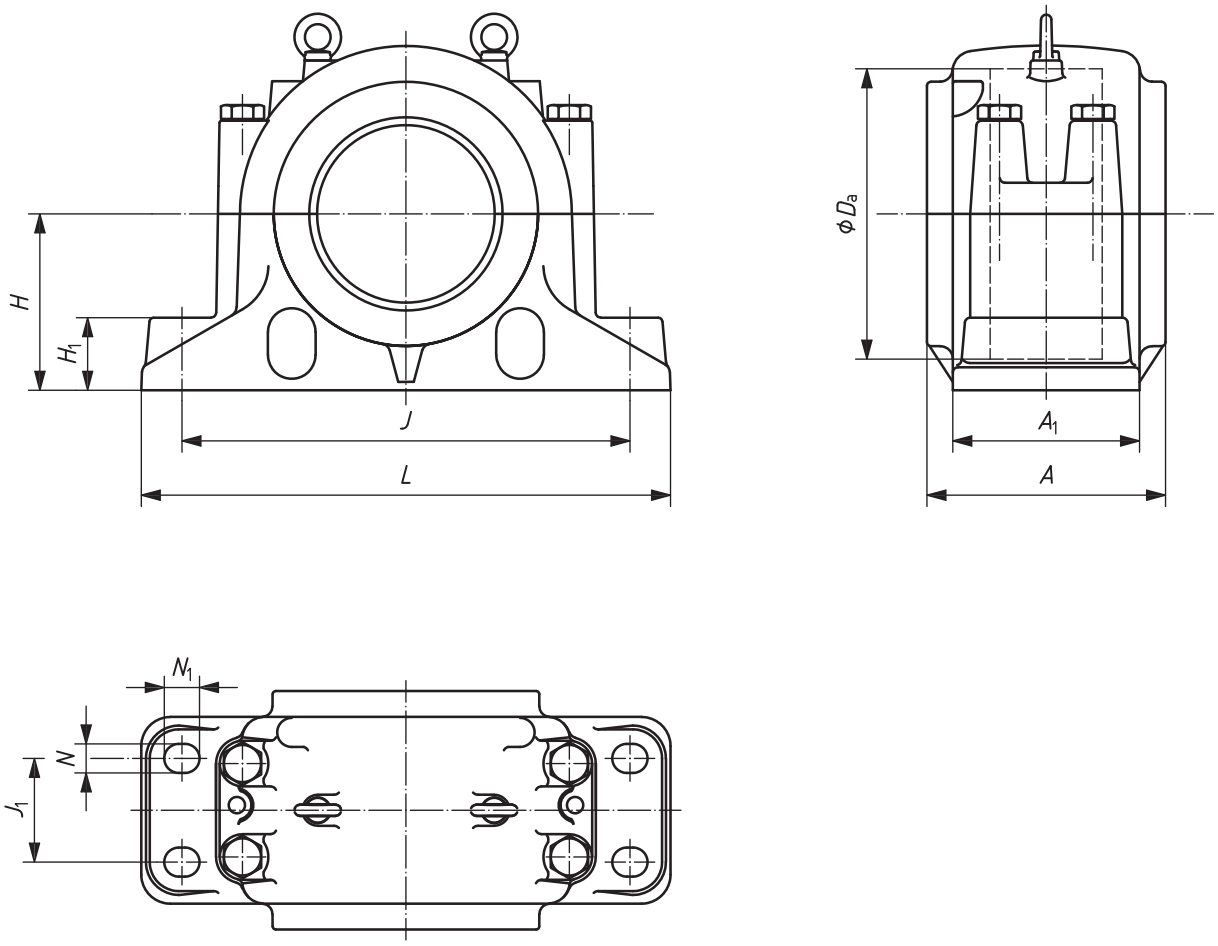

Figure 2 — Four-bolt plummer block housing

5 Boundary dimensions

Boundary dimensions of two-bolt plummer block housings and four-bolt plummer block housings shall be as given in Tables 1 and 2, respectively.

NOTE For additional boundary dimensions of two-bolt plummer block housings and four-bolt plummer block housings, which are also commonly used, see Annex A.

Where “max.” is shown in Tables 1 and 2, this indicates that the value is both the nominal and the largest actual value permitted. Where “min.” is shown in Tables 1 and 2, this indicates that the value is both the nominal and the smallest actual value permitted.

Table 1 — Two-bolt plummer block housings

Dimensions in millimetres

D_a	H	J	N	N_1 min.	A max.	L max.	A_1	H_1 max.
52	40	130	15	15	72	170	46	22
62	50	150	15	15	82	190	52	22
72	50	150	15	15	85	190	52	22
80	60	170	15	15	92	210	60	25
85	60	170	15	15	92	210	60	25
90	60	170	15	15	100	210	60	25
100	70	210	18	18	105	270	70	28
110	70	210	18	18	115	270	70	30
120	80	230	18	18	120	290	80	30
125	80	230	18	18	120	290	80	30
130	80	230	18	18	125	290	80	30
140	95	260	22	22	135	330	90	32
150	95	260	22	22	140	330	90	32
160	100	290	22	22	145	360	100	35
170	112	290	22	22	150	360	100	35
180	112	320	26	26	165	400	110	40
190	112	320	26	26	165	405	110	40
200	125	350	26	26	177	420	120	45
210	140	350	26	26	177	425	120	45
215	140	350	26	26	187	420	120	45
225	150	380	28	28	187	465	130	50
230	150	380	28	28	192	450	130	50
240	150	390	28	28	195	475	130	50
250	150	420	35	35	207	510	150	50
260	160	450	35	35	210	545	160	60
270	160	450	35	35	224	540	160	60
280	170	470	35	35	225	565	160	60
290	170	470	35	35	237	560	160	60
300	180	520	35	35	237	630	170	70
310	180	515	35	35	240	620	170	60
320	190	560	35	35	245	680	180	70
340	200	580	42	42	260	710	190	70
360	210	610	42	42	270	725	200	75
400	240	680	48	48	290	825	220	80
420	250	720	48	48	300	865	230	80

Table 2 — Four-bolt plummer block housings

Dimensions in millimetres

D_a	H	J	J_1	N	N_1 min.	A max.	L max.	A_1	H_1 max.
280	170	430	100	28	28	235	515	180	70
290	170	430	100	28	28	235	515	180	70
300	180	450	110	28	28	245	535	190	75
310	190	480	120	28	28	265	565	210	80
320	190	480	120	28	28	265	565	210	80
340	210	510	130	35	35	285	615	230	85
360	220	540	140	35	35	295	645	240	90
370	220	540	140	35	35	295	645	240	90
400	240	600	150	35	35	315	705	260	95
420	260	650	160	42	42	325	775	280	100
440	260	650	160	42	42	325	775	280	100
460	280	670	160	42	42	325	795	280	105
480	300	710	190	42	42	355	835	310	110
500	300	710	190	42	42	355	835	310	110
520	320	750	200	42	42	375	885	330	115
540	320	750	200	42	42	375	885	330	115

Annex A
(informative)

Additional boundary dimensions of plummer block housings

Additional boundary dimensions of two-bolt plummer block housings and four-bolt plummer block housings, which are also commonly used, are given in Tables A.1 and A.2 respectively.

Table A.1 — Two-bolt plummer block housings

Dimensions in millimetres

D_a	H	J	N	N_1 min.	A max.	L max.	A_1	H_1 max.
250	150	420	33	33	207	510	150	50
260	160	450	33	33	205	540	160	60
270	160	450	33	33	224	540	160	60
280	170	470	33	33	220	560	160	60
290	170	470	33	33	237	560	160	60
320	190	560	33	33	240	650	180	70

Table A.2 — Four-bolt plummer block housings

Dimensions in millimetres

D_a	H	J	J_1	N	N_1 min.	A max.	L max.	A_1	H_1 max.
260	160	450	110	35	35	230	540	200	50
280	170	470	120	35	35	250	560	220	50
290	170	470	120	35	35	250	560	220	50
300	180	520	140	35	35	270	630	250	55
310	180	510	140	35	35	270	620	250	60
320	190	540	150	35	35	280	650	270	60
320	190	560	140	35	35	310	680	270	55
340	200	570	160	35	35	310	700	280	65
360	210	610	170	35	35	300	740	290	65
370	225	640	180	40	40	320	780	310	70
400	240	680	190	40	40	340	820	320	70
420	250	710	200	42	42	350	860	340	85
440	260	740	200	42	42	360	880	350	85
460	280	770	210	42	42	360	920	350	85
480	280	790	210	42	42	380	940	360	85
500	300	830	230	50	50	390	990	380	100
520	310	860	230	50	50	400	1 020	370	106
540	325	890	250	50	50	430	1 060	400	100

Bibliography

[1] ISO 8062-3, *Geometrical product specifications (GPS) — Dimensional and geometrical tolerances for moulded parts — Part 3: General dimensional and geometrical tolerances and machining allowances for castings*

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