
International Standard



3031

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

Needle roller bearings — Thrust needle roller and cage assemblies, thrust washers — Dimensions and tolerances

Roulements à aiguilles — Cages à aiguilles axiales et plaques de butée — Dimensions et tolérances

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Descriptors : bearings, rolling bearings, needle bearings, thrust bearings, dimensions, dimensional tolerances.

Foreword

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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 3031 was developed by Technical Committee ISO/TC 4, *Rolling bearings*, and was circulated to the member bodies in August 1978.

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

Australia	India	Spain
Austria	Italy	Sweden
Belgium	Korea, Dem. P. Rep. of	Switzerland
Canada	Mexico	United Kingdom
Chile	Netherlands	USA
Czechoslovakia	Poland	USSR
France	Romania	Yugoslavia
Hungary	South Africa, Rep. of	

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

Germany, F.R.

This second edition cancels and replaces the first edition (i.e. ISO 3031-1974).

Needle roller bearings — Thrust needle roller and cage assemblies, thrust washers — Dimensions and tolerances

1 Scope and field of application

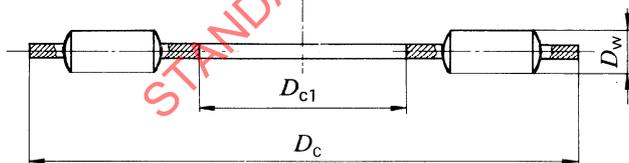
This International Standard lays down the boundary dimensions and tolerances for thrust needle roller and cage assemblies. Furthermore, it recommends dimensions and tolerances for thrust washers, i.e. raceway members, which can be used either as shaft or housing washers.

2 Reference

ISO 199, *Rolling bearings — Thrust ball bearings — Tolerances.*

3 Thrust needle roller and cage assemblies

3.1 Symbols



D_c = cage outside diameter, nominal

D_{c1} = cage bore diameter, nominal

D_w = needle roller diameter, nominal

3.2 Dimensions and tolerances

Table 1 — Dimensions and tolerances of thrust needle roller and cage assemblies

Dimensions in millimetres

D_{c1} E11	D_c c12	D_w
6	19	2
7	20	2
8	21	2
9	22	2
10	24	2
12	26	2
14	27	2
15	28	2
16	29	2
17	30	2
18	31	2
20	35	2
22	37	2
25	42	2
28	45	2
30	47	2
32	49	2
35	52	2
40	60	3
45	65	3
50	70	3
55	78	3
60	85	3
65	90	3
70	95	4
75	100	4
80	105	4
85	110	4
90	120	4
100	135	4
110	145	4
120	155	4
130	170	5
140	180	5
150	190	5
160	200	5