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**INTERNATIONAL STANDARD**



**3145**

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**Rolling bearings — Bearings with spherical outside surface and extended inner ring width — Eccentric locking collars**

*Roulements — Roulements à surface extérieure sphérique et à bague intérieure large — Bague de blocage excentrique*

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## 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 3145 was drawn up by Technical Committee ISO/TC 4, *Rolling bearings*, and circulated to the Member Bodies in February 1973.

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

Australia	India	Sweden
Austria	Italy	Switzerland
Belgium	Japan	Thailand
Bulgaria	Mexico	Turkey
Canada	Netherlands	United Kingdom
France	Poland	U.S.A.
Germany	Romania	
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This International Standard has also been approved by the International Union of Railways (UIC).

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

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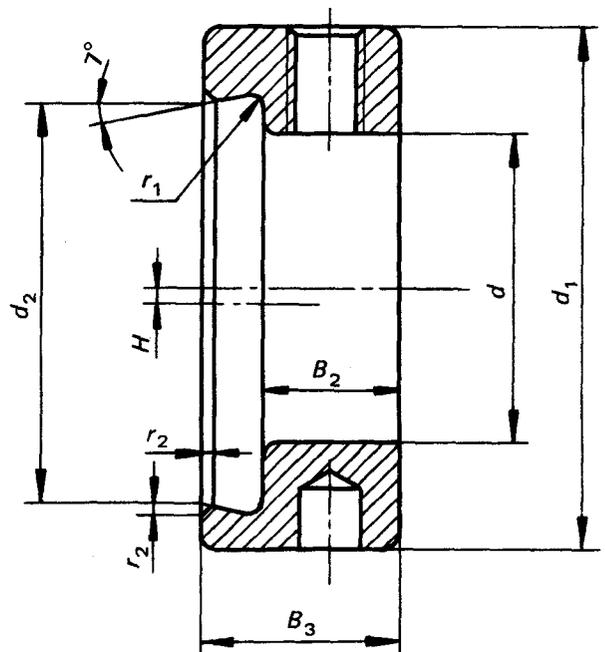
# Rolling bearings — Bearings with spherical outside surface and extended inner ring width — Eccentric locking collars

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies boundary dimensions and tolerances for eccentric locking collars used with rolling bearings with spherical outside surface and extended inner ring width, for which boundary dimensions are given in ISO 2264, *Rolling bearings — Bearings with spherical outside surface and extended inner ring width*, tables 1 and 3.

## 2 SYMBOLS

- $d$  = collar bore diameter, nominal
- $d_1$  = collar outside diameter, nominal
- $d_2$  = small diameter of eccentric surface (at theoretical sharp corners at face of collar), nominal
- $B_2$  = collar bore width, nominal
- $B_3$  = collar width, nominal
- $H$  = eccentricity, nominal
- $\Delta_{ds}$  = collar bore diameter deviation
- $\Delta_{d2s}$  = deviation of small diameter of eccentric surface
- $\Delta_{Hs}$  = eccentricity deviation
- $r_1$  = fillet radius of eccentric surface, nominal
- $r_{1s\max}$  = the largest single fillet radius of eccentric surface
- $r_2$  = chamfer dimension of eccentric surface, nominal
- $r_{2s\min}$  = the smallest single chamfer dimension of eccentric surface



## 3 BOUNDARY DIMENSIONS

TABLE 1 — Eccentric locking collars for bearings with spherical outside surface and extended inner ring width — Diameter Series 2 — Wide and narrow overall width

Collar bore diameter		Eccentric locking collar													
$d$		$d_1$ max		$d_2$		$B_2$		$B_3$		$H$		$r_{2s}$ min		$r_{1s}$ max	
mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
12,700	1/2														
14,288	9/16														
15,875	5/8	28,6	1.13	21,6	0.850	9,5	0.374	13,5	0.531	0,8	0.031	0,8	0.031	0,4	0.016
17															
17,462	11/16														
19,050	3/4	33,3	1.31	26,6	1.047	9,5	0.374	13,5	0.531	0,8	0.031	0,8	0.031	0,4	0.016
20															
20,638	13/16														
22,225	7/8														
23,812	15/16	38,1	1.50	31,6	1.244	9,5	0.374	13,5	0.531	0,8	0.031	0,8	0.031	0,4	0.016
25															
25,400	1														
26,988	1 1/16														
28,575	1 1/8														
30		44,5	1.75	37,9	1.492	11,9	0.469	15,9	0.626	0,8	0.031	0,8	0.031	0,4	0.016
30,162	1 3/16														
31,750	1 1/4														
31,750	1 1/4														
33,338	1 5/16														
34,925	1 3/8	55,6	2.19	44,7	1.760	13,5	0.531	17,5	0.689	0,8	0.031	0,8	0.031	0,4	0.016
35															
36,512	1 7/16														
38,100	1 1/2														
39,688	1 9/16	60,3	2.37	49,4	1.945	13,5	0.531	18,3	0.720	1,6	0.063	1,2	0.047	0,4	0.016
40															
41,275	1 5/8														
42,862	1 11/16														
44,450	1 3/4	63,5	2.50	54,4	2.142	13,5	0.531	18,3	0.720	1,6	0.063	1,2	0.047	0,4	0.016
45															
46,038	1 13/16														
47,625	1 7/8														
49,212	1 15/16	69,9	2.75	60,0	2.362	13,5	0.531	18,3	0.720	1,6	0.063	1,2	0.047	0,4	0.016
50															
50,800	2														
50,800	2														
52,388	2 1/16														
53,975	2 1/8	76,2	3.00	66,9	2.634	15,9	0.626	20,7	0.815	1,6	0.063	1,2	0.047	0,4	0.016
55															
55,562	2 3/16														
57,150	2 1/4														
58,738	2 5/16														
60		84,2	3.31	73,5	2.894	15,9	0.626	22,3	0.878	1,6	0.063	1,6	0.063	0,4	0.016
60,325	2 3/8														
61,912	2 7/16														