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ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION
R 355

PART III

ROLLING BEARINGS

TAPERED ROLLER BEARINGS BOUNDARY DIMENSIONS

METRIC SERIES: DIAMETER SERIES 9 AND 0

1st EDITION

April 1967

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BRIEF HISTORY

The ISO Recommendation R 355, *Part III, Rolling bearings — Tapered roller bearings — Boundary dimensions — Metric series: Diameter series 9 and 0*, was drawn up by Technical Committee ISO/TC 4, *Rolling bearings*, the Secretariat of which is held by the Sveriges Standardiseringskommission (SIS).

Work on this question by the Technical Committee began in 1953 and led, in 1963, to the adoption of a Draft ISO Recommendation.

In July 1964, this Draft ISO Recommendation (No. 594) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

Austria	Hungary	Romania
Brazil	India	Spain
Canada	Israel	Sweden
Chile	Italy	Switzerland
Czechoslovakia	Netherlands	U.A.R.
France	Poland	United Kingdom
Germany	Portugal	Yugoslavia

Two Member Bodies opposed the approval of the Draft:

Japan
U.S.S.R.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in April 1967, to accept it as an ISO RECOMMENDATION.

ISO Recommendation R 355 April 1967

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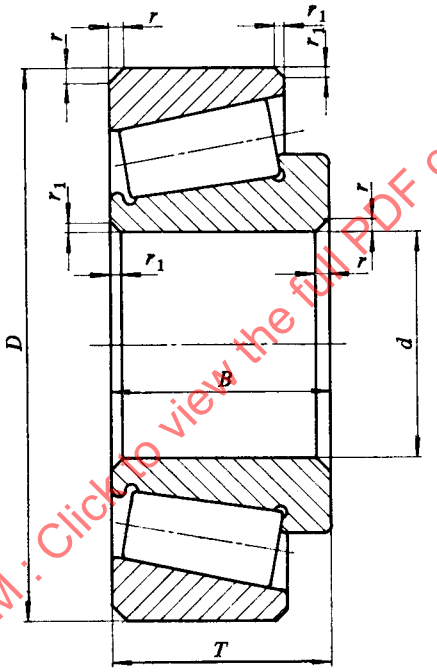
METRIC SERIES: DIAMETER SERIES 9 AND 0



d = bearing bore diameter

D = bearing outside diameter

B = inner ring width

T = bearing width * (width over bearing rings)

r = chamfer dimension ** (height and width) on inner and outer ring back faces

r_1 = chamfer dimension ** (height and width) on inner and outer ring front faces

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* Attention is called to the fact that the cage may project beyond the bearing width.

** Nominal chamfer dimensions do not control the shape of the bearing corner.

1. DIAMETER SERIES 9

1.1 Dimensions in millimetres

Bore diameter d	Outside diameter D	Dimension series 29 Width $B = T$	Dimension series 39 Width $B = T$	Chamfer r nominal	Chamfer r_1 nominal
20	37	12	14	0.5	0.2
25	42	12	14	0.5	0.2
30	47	12	14	0.5	0.2
35	55	14	16	1	0.3
40	62	15	17	1	0.3
45	68	15	17	1	0.3
50	72	15	17	1	0.3
55	80	17	20	1.5	0.5
60	85	17	20	1.5	0.5
65	90	17	20	1.5	0.5
70	100	20	24	1.5	0.5
75	105	20	24	1.5	0.5
80	110	20	24	1.5	0.5
85	120	23	27	2	0.8
90	125	23	27	2	0.8
95	130	23	27	2	0.8
100	140	25	31	2	0.8
105	145	25	31	2	0.8
110	150	25	31	2	0.8
120	165	29	36	2	0.8
130	180	32	39	2.5	0.8
140	190	32	39	2.5	0.8
150	210	38	47	3	1
160	220	38	—	3	1
170	230	38	—	3	1
180	250	45	—	3	1
190	260	45	—	3	1
200	280	51	—	3.5	1.2
220	300	51	—	3.5	1.2
240	320	51	—	3.5	1.2
260	360	63.5	—	3.5	1.2
280	380	63.5	—	3.5	1.2
300	420	76	—	4	1.5
320	440	76	—	4	1.5
340	460	76	—	4	1.5
360	480	76	—	4	1.5

1.2 Dimensions in inches

Bore diameter d	Outside diameter D	Dimension series 29 Width $B = T$	Dimension series 39 Width $B = T$	Chamfer r nominal	Chamfer r_1 nominal
0.78740	1.45669	0.4724	0.5512	0.020	0.008
0.98425	1.65354	0.4724	0.5512	0.020	0.008
1.18110	1.85039	0.4724	0.5512	0.020	0.008
1.37795	2.16535	0.5512	0.6299	0.039	0.012
1.57480	2.44094	0.5906	0.6693	0.039	0.012
1.77165	2.67717	0.5906	0.6693	0.039	0.012
1.96850	2.83465	0.5906	0.6693	0.039	0.012
2.16535	3.14961	0.6693	0.7874	0.059	0.020
2.36220	3.34646	0.6693	0.7874	0.059	0.020
2.55906	3.54331	0.6693	0.7874	0.059	0.020
2.75591	3.93701	0.7874	0.9449	0.059	0.020
2.95276	4.13386	0.7874	0.9449	0.059	0.020
3.14961	4.33071	0.7874	0.9449	0.059	0.020
3.34646	4.72441	0.9055	1.0630	0.079	0.031
3.54331	4.92126	0.9055	1.0630	0.079	0.031
3.74016	5.11811	0.9055	1.0630	0.079	0.031
3.93701	5.51181	0.9843	1.2205	0.079	0.031
4.13386	5.70866	0.9843	1.2205	0.079	0.031
4.33071	5.90551	0.9843	1.2205	0.079	0.031
4.72441	6.49606	1.1417	1.4173	0.079	0.031
5.11811	7.08661	1.2598	1.5354	0.098	0.031
5.51181	7.48031	1.2598	1.5354	0.098	0.031
5.90551	8.26772	1.4961	1.8504	0.118	0.039
6.29921	8.66142	1.4961	—	0.118	0.039
6.69291	9.05512	1.4961	—	0.118	0.039
7.08661	9.84252	1.7717	—	0.118	0.039
7.48031	10.23622	1.7717	—	0.118	0.039
7.87402	11.02362	2.0079	—	0.138	0.047
8.66142	11.81102	2.0079	—	0.138	0.047
9.44882	12.59843	2.0079	—	0.138	0.047
10.23622	14.17323	2.5000	—	0.138	0.047
11.02362	14.96063	2.5000	—	0.138	0.047
11.81102	16.53543	2.9921	—	0.157	0.059
12.59843	17.32283	2.9921	—	0.157	0.059
13.38583	18.11024	2.9921	—	0.157	0.059
14.17323	18.89764	2.9921	—	0.157	0.059

2. DIAMETER SERIES 0

2.1 Dimensions in millimetres

Bore diameter d	Outside diameter D	Dimension series 20 Width $B = T$	Dimension series 30 Width $B = T$	Chamfer r nominal	Chamfer r_1 nominal
12	28	11	13	0.5	0.2
15	32	12	14	0.5	0.2
17	35	13	15	0.5	0.2
20	42	15	17	1	0.3
22	44	15	—	1	0.3
25	47	15	17	1	0.3
28	52	16	—	1.5	0.5
30	55	17	20	1.5	0.5
32	58	17	—	1.5	0.5
35	62	18	21	1.5	0.5
40	68	19	22	1.5	0.5
45	75	20	24	1.5	0.5
50	80	20	24	1.5	0.5
55	90	23	27	2	0.8
60	95	23	27	2	0.8
65	100	23	27	2	0.8
70	110	25	31	2	0.8
75	115	25	31	2	0.8
80	125	29	36	2	0.8
85	130	29	36	2	0.8
90	140	32	39	2.5	0.8
95	145	32	39	2.5	0.8
100	150	32	39	2.5	0.8
105	160	35	43	3	1
110	170	38	47	3	1
120	180	38	48	3	1
130	200	45	55	3	1
140	210	45	56	3	1
150	225	48	59	3.5	1.2
160	240	51	—	3.5	1.2
170	260	57	—	3.5	1.2
180	280	64	—	3.5	1.2
190	290	64	—	3.5	1.2
200	310	70	—	3.5	1.2
220	340	76	—	4	1.5
240	360	76	—	4	1.5
260	400	87	—	5	2
280	420	87	—	5	2
300	460	100	—	5	2
320	480	100	—	5	2