

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 355

PART VII
ROLLING BEARINGS
TAPERED ROLLER BEARINGS
BOUNDARY DIMENSIONS

SUB-UNITS
METRIC SERIES
DIMENSION SERIES 30, 31 AND 32

1st EDITION
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BRIEF HISTORY

The ISO Recommendation R 355/VII, *Rolling bearings – Tapered roller bearings – Boundary dimensions – Sub-units – Metric series – Dimension series 30, 31 and 32*, 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 led to the adoption of Draft ISO Recommendation No. 1645, which was circulated to all the ISO Member Bodies for enquiry in November 1968. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Australia	Hungary	South Africa, Rep. of
Austria	India	Spain
Belgium	Israel	Sweden
Canada	Italy	Switzerland
Chile	Korea, Rep. of	Turkey
Czechoslovakia	Netherlands	U.A.R.
France	Peru	United Kingdom
Germany	Poland	U.S.A.
Greece	Romania	U.S.S.R.

No Member Body opposed the approval of the Draft.

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

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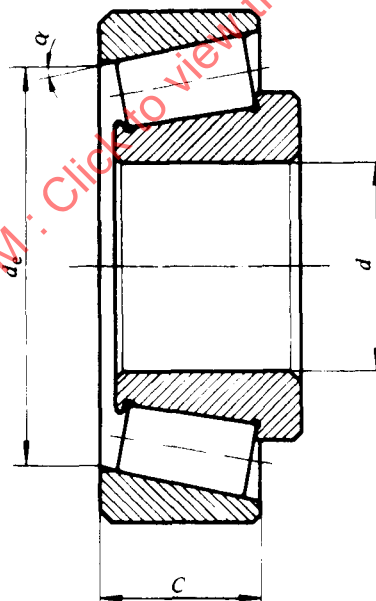
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1. SCOPE

The sub-units of tapered roller bearings consist of outer ring (cup unit) and inner ring, roller and cage assembly (cone unit). The boundary dimensions and tolerances of the complete bearings are given in relevant ISO Recommendations.

In this ISO Recommendation only the additional sub-unit boundary dimensions are given with reference to the bearing bore diameter and dimension series

2. SYMBOLS AND ABBREVIATIONS



- d = bearing bore diameter
- α = bearing angle of contact
- d_e = small inside diameter of outer ring
- C = outer ring width

The dimension series numbers refer to ISO Recommendation R 355, *Rolling bearings – Tapered roller bearings – Boundary dimensions*, Parts III and VI.

Bearing type symbols are given in accordance with ISO Recommendation R 300, *ISO Identification code for rolling bearings*. In addition, the manufacturers' usual series numbers are indicated.

3. BOUNDARY DIMENSIONS

TABLE 1 — Bearing type code symbol KB
Dimension series 30 (Manufacturers' series 330)

Dimensions in millimetres

Bore diameter d	Dimension series 30		
	α	d_e	C
25	10° 55'	38.278	14
30	11°	45.283	16
35	11° 30'	51.320	17
40	10° 40'	57.290	18
45	11° 5'	63.116	19
50	11° 55'	67.775	19
55	11° 45'	76.656	21
60	12° 20'	80.422	21
65	13° 5'	85.257	21
70	10° 45'	95.021	25.5
75	11° 15'	99.400	25.5
80	10° 30'	107.750	29.5
85	11°	112.838	29.5
90	10° 10'	122.363	32.5
95	10° 30'	126.346	32.5
100	10° 50'	130.323	32.5
105	10° 40'	139.304	34
110	10° 50'	146.265	37
120	11° 30'	154.777	38
130	12° 50'	172.017	43
140	13° 30'	180.353	44
150	13° 40'	194.260	46