

# ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

## ISO RECOMMENDATION

### R 355

PART V

ROLLING BEARINGS

TAPERED ROLLER BEARINGS

BOUNDARY DIMENSIONS

SUB-UNITS

METRIC SERIES

1st EDITION

September 1969

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## BRIEF HISTORY

The ISO Recommendation R 355, Part V, *Rolling bearings – Tapered roller bearings – Boundary dimensions – Sub-units – Metric series*, 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 a Draft ISO Recommendation.

In May 1968, this Draft ISO Recommendation (No. 944) 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	Iran	Switzerland
Belgium	Israel	Turkey
Czechoslovakia	Italy	U.A.R.
Canada	Netherlands	United Kingdom
France	Poland	U.S.A.
Germany	Romania	Yugoslavia
Hungary	Spain	
India	Sweden	

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 September 1969, to accept it as an ISO RECOMMENDATION.

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ROLLING BEARINGS  
TAPERED ROLLER BEARINGS  
BOUNDARY DIMENSIONS

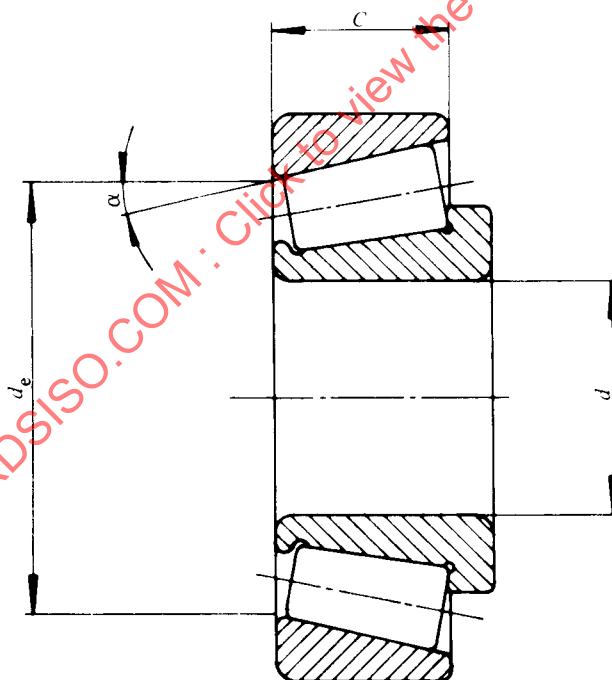
PART V  
SUB-UNITS  
METRIC SERIES

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
- $\alpha$  = bearing angle of contact
- $d_e$  = small inside diameter of outer ring
- $C$  = outer ring width

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 20 (Manufacturers' series 320X)

Dimensions in millimetres

Bore diameter $d$	Dimension series 20		
	$\alpha$	$d_e$	$C$
20	14°	32.781	12
22	14° 50'	34.708	11.5
25	16°	37.393	11.5
28	16°	41.991	12
30	16°	44.438	13
32	16° 50'	46.708	13
35	16° 50'	50.510	14
40	14° 10'	56.897	14.5
45	14° 40'	63.248	15.5
50	15° 45'	67.841	15.5
55	15° 10'	76.505	17.5
60	16°	80.634	17.5
65	17°	85.567	17.5
70	16° 10'	93.633	19
75	17°	98.358	19
80	15° 45'	107.334	22
85	16° 25'	111.788	22
90	15° 45'	119.948	24
95	16° 25'	124.927	24
100	17°	129.269	24
105	16° 30'	137.685	26
110	16°	146.290	29
120	17°	155.239	29
130	16° 10'	172.043	34
140	17°	180.720	34
150	17°	193.674	36