

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 1123

ROLLING BEARINGS
TAPERED ROLLER BEARINGS
INCH SERIES
CHAMFER DIMENSION LIMITS

1st EDITION
September 1969

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Printed in Switzerland

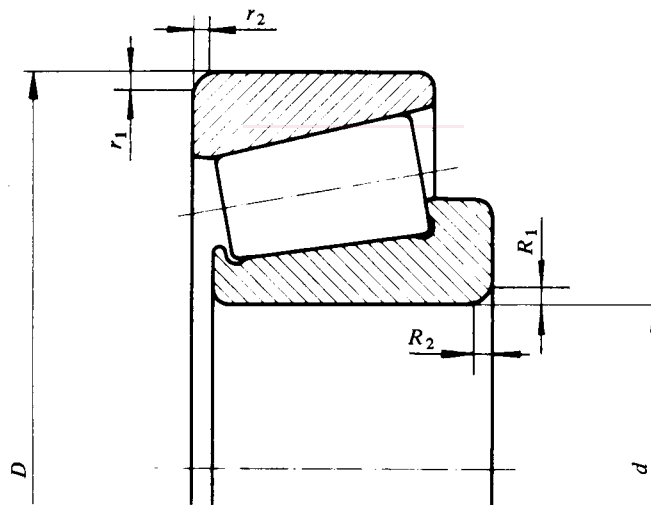
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CHAMFER DIMENSION LIMITS

1. SCOPE

This ISO Recommendation comprises the maximum chamfer dimension limits for the chamfers, for which minimum values R_{\min} and r_{\min} are given in ISO Recommendation R 355, Part I, *Rolling bearings - Tapered roller bearings - Boundary dimensions*.

2. SYMBOLS



- d = inner ring bore diameter
- D = outer ring outside diameter
- R = nominal dimension of inner ring backface chamfer
- R_1 = height of inner ring backface chamfer
- R_2 = width of inner ring backface chamfer
- r = nominal dimension of outer ring backface chamfer
- r_1 = height of outer ring backface chamfer
- r_2 = width of outer ring backface chamfer

3. CHAMFER DIMENSION LIMITS

TABLE 1 - Inner ring

Bore diameter <i>d</i> nominal		Chamfer height		Chamfer width	
		<i>R</i> ₁		<i>R</i> ₂	
Over	Incl.	Min.	Max.	Min.	Max.
Values in inches					
-	2	<i>R</i>	<i>R</i> + 0.015	<i>R</i>	<i>R</i> + 0.035
(2)	4	<i>R</i>	<i>R</i> + 0.020	<i>R</i>	<i>R</i> + 0.050
(4)	10	<i>R</i>	<i>R</i> + 0.025	<i>R</i>	<i>R</i> + 0.070
Values in millimetres					
-	50.8	<i>R</i>	<i>R</i> + 0.38	<i>R</i>	<i>R</i> + 0.89
(50.8)	101.6	<i>R</i>	<i>R</i> + 0.51	<i>R</i>	<i>R</i> + 1.27
(101.6)	254	<i>R</i>	<i>R</i> + 0.64	<i>R</i>	<i>R</i> + 1.78

The value of *R* is identical with that of *R*_{min} in ISO Recommendation R 355, Part I.

TABLE 2 - Outer ring

Outside diameter <i>D</i> nominal		Chamfer height		Chamfer width	
		<i>r</i> ₁		<i>r</i> ₂	
Over	Incl.	Min.	Max.	Min.	Max.
Values in inches					
-	4	<i>r</i>	<i>r</i> + 0.023	<i>r</i>	<i>r</i> + 0.042
(4)	6.625	<i>r</i>	<i>r</i> + 0.025	<i>r</i>	<i>r</i> + 0.046
(6.625)	14	<i>r</i>	<i>r</i> + 0.033	<i>r</i>	<i>r</i> + 0.053
Values in millimetres					
-	101.6	<i>r</i>	<i>r</i> + 0.58	<i>r</i>	<i>r</i> + 1.07
(101.6)	168.275	<i>r</i>	<i>r</i> + 0.64	<i>r</i>	<i>r</i> + 1.17
(168.275)	355.6	<i>r</i>	<i>r</i> + 0.84	<i>r</i>	<i>r</i> + 1.35

The value of *r* is identical with that of *r*_{min} in ISO Recommendation R 355, Part I.