

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 465

ROLLING BEARINGS

iTeh STANDARD PREVIEW
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DOUBLE ROW SELF-ALIGNING ROLLER BEARINGS

RADIAL INTERNAL CLEARANCE

<https://standards.iteh.ai/catalog/standards/sist/acc095ca-1bec-4c94-8ea4-441a7e9ebcb2/iso-r-465-1965>

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BRIEF HISTORY

The ISO Recommendation R 465, *Rolling Bearings — Double Row Self-aligning Roller Bearings—Radial Internal Clearance*, 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 1959 and led, in 1961, to the adoption of a Draft ISO Recommendation.

In March 1963, this Draft ISO Recommendation (No. 470) was circulated to all the ISO Member Bodies for enquiry. It was approved by the following Member Bodies :

Australia	Greece	Romania
Austria	Hungary	Spain
Belgium	India	Sweden
Canada	Israel	Switzerland
Chile	Italy	United Kingdom
Czechoslovakia	Japan	U.S.A.
France	Netherlands	U.S.S.R.
Germany	Poland	Yugoslavia

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No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council which decided, in December 1965, to accept it as an ISO RECOMMENDATION.

ROLLING BEARINGS
DOUBLE ROW
SELF-ALIGNING ROLLER BEARINGS
RADIAL INTERNAL CLEARANCE

Values of the radial internal clearance, as defined in ISO Recommendation R 200,* are given
for cylindrical bore bearings in Table 1 and
for tapered bore bearings in Table 2.

TABLE 1. — Radial clearance in bearings with cylindrical bore

Values in microns

Bearing bore diameter d in millimetres		Group 2		Normal group		Group 3		Group 4	
over	incl.	limits		limits		limits		limits	
		low	high	low	high	low	high	low	high
(14)	18	10	20	20	35	35	45	45	60
(18)	24	10	20	20	35	35	45	45	60
(24)	30	15	25	25	40	40	55	55	75
(30)	40	15	30	30	45	45	60	60	80
(40)	50	20	35	35	55	55	75	75	100
(50)	65	20	40	40	65	65	90	90	120
(65)	80	30	50	50	80	80	110	110	145
(80)	100	35	60	60	100	100	135	135	180
(100)	120	40	75	75	120	120	160	160	210
(120)	140	50	95	95	145	145	190	190	240
(140)	160	60	110	110	170	170	220	220	280
(160)	180	65	120	120	180	180	240	240	310
(180)	200	70	130	130	200	200	260	260	340
(200)	225	80	140	140	220	220	290	290	380
(225)	250	90	150	150	240	240	320	320	420
(250)	280	100	170	170	260	260	350	350	460
(280)	315	110	190	190	280	280	370	370	500
(315)	355	120	200	200	310	310	410	410	550
(355)	400	130	220	220	340	340	450	450	600
(400)	450	140	240	240	370	370	500	500	660
(450)	500	140	260	260	410	410	550	550	720
(500)	560	150	280	280	440	440	600	600	780
(560)	630	170	310	310	480	480	650	650	850
(630)	710	190	350	350	530	530	700	700	920
(710)	800	210	390	390	580	580	770	770	1010
(800)	900	230	430	430	650	650	860	860	1120
(900)	1000	260	480	480	710	710	930	930	1220

* ISO Recommendation R 200, *Rolling Bearings — Internal Clearance in Unloaded Bearings — Definitions.*

TABLE 2. — Radial clearance in bearings with tapered bore

Values in microns

Bearing bore diameter d in millimetres		Group 2		Normal group		Group 3		Group 4	
over	incl.	limits		limits		limits		limits	
		low	high	low	high	low	high	low	high
(18)	24	15	25	25	35	35	45	45	60
(24)	30	20	30	30	40	40	55	55	75
(30)	40	25	35	35	50	50	65	65	85
(40)	50	30	45	45	60	60	80	80	100
(50)	65	40	55	55	75	75	95	95	120
(65)	80	50	70	70	95	95	120	120	150
(80)	100	55	80	80	110	110	140	140	180
(100)	120	65	100	100	135	135	170	170	220
(120)	140	80	120	120	160	160	200	200	260
(140)	160	90	130	130	180	180	230	230	300
(160)	180	100	140	140	200	200	260	260	340
(180)	200	110	160	160	220	220	290	290	370
(200)	225	120	180	180	250	250	320	320	410
(225)	250	140	200	200	270	270	350	350	450
(250)	280	150	220	220	300	300	390	390	490
(280)	315	170	240	240	330	330	430	430	540
(315)	355	190	270	270	360	360	470	470	590
(355)	400	210	300	300	400	400	520	520	650
(400)	450	230	330	330	440	440	570	570	720
(450)	500	260	370	370	490	490	630	630	790
(500)	560	290	410	410	540	540	680	680	870
(560)	630	320	460	460	600	600	760	760	980
(630)	710	350	510	510	670	670	850	850	1090
(710)	800	390	570	570	750	750	960	960	1220
(800)	900	440	640	640	840	840	1070	1070	1370
(900)	1000	490	710	710	930	930	1190	1190	1520