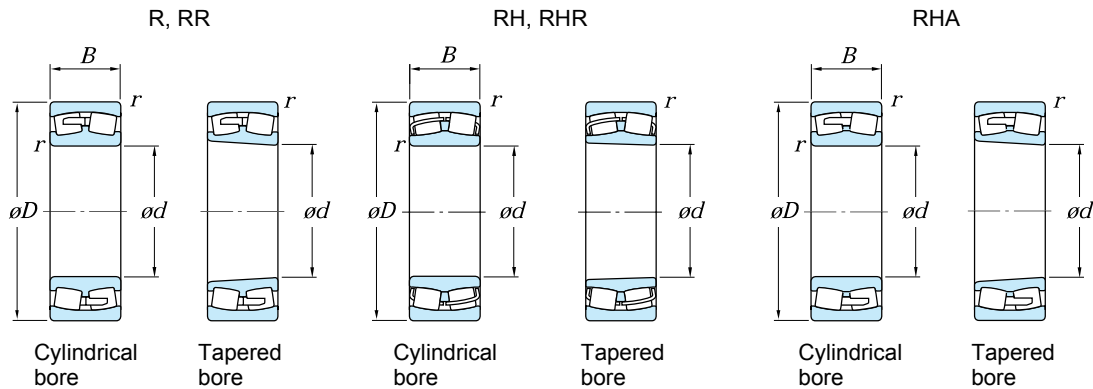


Spherical roller bearings

d 25 – 80 mm



Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (min ⁻¹)		Bearing No.		(Refer.) Mass (kg)	
d	D	B	r _{min.}	C _r	C _{0r}	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore	Cylindrical bore	Tapered bore
25	52	18	1	45.4	48.1	7 000	9 300	22205RHR	22205RHRK	0.220	0.215
30	62	20	1	61.2	65.9	5 900	7 900	22206RHR	22206RHRK	0.360	0.350
	72	19	1.1	59.3	62.7	5 200	7 000	21306RH	21306RHK	0.380	0.370
35	72	23	1.1	80.3	88.7	5 000	6 700	22207RHR	22207RHRK	0.550	0.540
	80	21	1.5	69.6	75.3	4 500	6 000	21307RH	21307RHK	0.510	0.500
40	80	23	1.1	90.9	102	4 500	6 000	22208RHR	22208RHRK	0.660	0.650
	90	23	1.5	85.7	95.5	4 100	5 500	21308RH	21308RHK	0.710	0.700
	90	33	1.5	136	152	4 100	5 500	22308RHR	22308RHRK	1.25	1.23
45	85	23	1.1	95.6	110	4 200	5 600	22209RHR	22209RHRK	0.720	0.710
	100	25	1.5	108	124	3 600	4 900	21309RH	21309RHK	0.950	0.940
	100	36	1.5	166	183	3 700	4 900	22309RHR	22309RHRK	1.62	1.59
50	90	23	1.1	103	122	3 900	5 200	22210RHR	22210RHRK	0.780	0.770
	110	27	2	128	151	3 300	4 400	21310RH	21310RHK	1.20	1.18
	110	40	2	204	237	3 300	4 500	22310RHR	22310RHRK	2.21	2.18
55	100	25	1.5	124	144	3 400	4 600	22211RHR	22211RHRK	1.05	1.04
	120	29	2	144	165	3 000	4 100	21311RH	21311RHK	1.60	1.58
	120	43	2	236	264	3 000	4 000	22311RHR	22311RHRK	2.72	2.67
60	110	28	1.5	153	181	3 100	4 200	22212RHR	22212RHRK	1.45	1.43
	130	31	2.1	168	193	2 800	3 700	21312RH	21312RHK	1.95	1.92
	130	46	2.1	283	334	2 800	3 700	22312RHR	22312RHRK	3.43	3.37
65	120	31	1.5	178	211	2 900	3 800	22213RHR	22213RHRK	1.84	1.81
	140	33	2.1	194	232	2 600	3 400	21313RH	21313RHK	2.45	2.41
	140	48	2.1	305	360	2 600	3 400	22313RHR	22313RHRK	4.15	4.07
70	125	31	1.5	187	222	2 700	3 600	22214RHR	22214RHRK	1.94	1.91
	150	35	2.1	215	260	2 400	3 200	21314RH	21314RHK	3.00	2.95
	150	51	2.1	348	413	2 400	3 200	22314RHR	22314RHRK	5.01	4.92
75	130	31	1.5	193	236	2 600	3 400	22215RHR	22215RHRK	2.05	2.01
	160	37	2.1	246	298	2 200	3 000	21315RH	21315RHK	3.55	3.50
	160	55	2.1	393	473	2 200	3 000	22315RHR	22315RHRK	6.13	6.02
80	140	33	2	217	271	2 400	3 200	22216RHR	22216RHRK	2.61	2.57
	170	39	2.1	275	339	2 100	2 800	21316RH	21316RHK	4.20	4.14
	170	58	2.1	431	521	2 100	2 800	22316RHR	22316RHRK	7.18	7.04

Remark) Standard cage types used for the above bearings are shown in Table 5 earlier in this section.

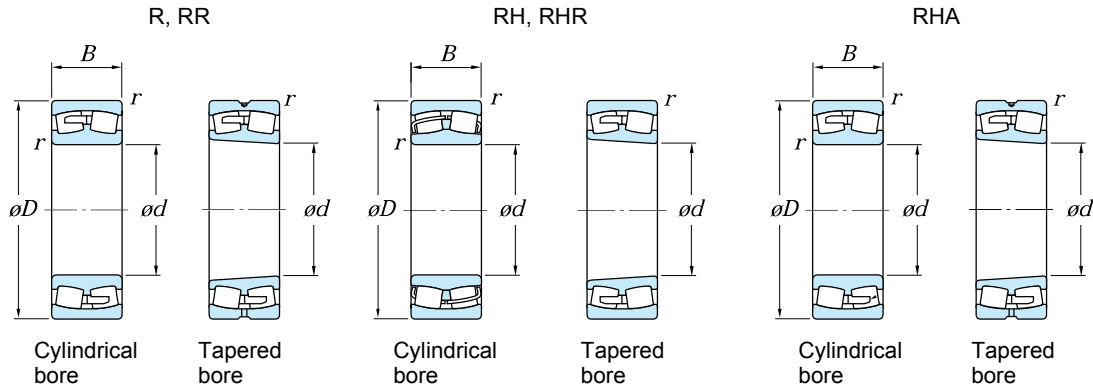
d 85 – (150) mm

Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (min ⁻¹)		Bearing No.		(Refer.) Mass (kg)	
<i>d</i>	<i>D</i>	<i>B</i>	<i>r</i> min.	<i>C_r</i>	<i>C_{0r}</i>	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore	Cylindrical bore	Tapered bore
85	150	36	2	258	324	2 200	3 000	22217RHR	22217RHRK	3.23	3.16
	180	41	3	300	372	2 000	2 600	21317RH	21317RHK	5.00	4.93
	180	60	3	481	586	2 000	2 600	22317RHR	22317RHRK	8.41	8.26
90	160	40	2	298	381	2 100	2 800	22218RHR	22218RHRK	4.01	3.94
	160	52.4	2	336	482	2 100	2 800	23218RH	23218RHK	4.60	4.47
	190	43	3	330	416	1 900	2 500	21318RH	21318RHK	5.80	5.71
	190	64	3	538	662	1 900	2 500	22318RHR	22318RHRK	9.87	9.68
95	170	43	2.1	334	422	2 000	2 600	22219RHR	22219RHRK	4.90	4.80
	200	45	3	362	461	1 800	2 300	21319RH	21319RHK	7.15	7.05
	200	67	3	586	726	1 800	2 300	22319RHR	22319RHRK	11.6	11.38
100	150	37	1.5	208	332	2 100	2 800	23020RH	—————	2.80	—
	180	46	2.1	377	481	1 900	2 500	22220RHR	22220RHRK	5.82	5.72
	180	60.3	2.1	425	629	1 900	2 500	23220RH	23220RHK	6.70	6.51
	215	47	3	416	524	1 600	2 200	21320RH	21320RHK	8.80	8.68
	215	73	3	700	877	1 600	2 200	22320RHR	22320RHRK	14.7	14.4
110	170	45	2	300	486	1 900	2 500	23022RH	23022RHK	4.50	4.38
	180	56	2	385	605	1 800	2 400	23122RH	23122RHK	5.55	5.37
	180	69	2	469	778	1 800	2 400	24122RH	24122RHK30	6.53	6.44
	200	53	2.1	491	642	1 700	2 200	22222RHR	22222RHRK	8.37	8.22
	200	69.8	2.1	537	792	1 700	2 200	23222RH	23222RHK	9.70	9.40
	240	50	3	484	616	1 400	1 900	21322RH	21322RHK	12.0	11.8
	240	80	3	828	1 040	1 400	1 900	22322RHR	22322RHRK	20.2	19.8
120	180	46	2	314	524	1 700	2 300	23024RH	23024RHK	4.90	4.77
	180	60	2	397	709	1 700	2 300	24024RH	24024RHK30	5.04	4.96
	200	62	2	454	714	1 600	2 200	23124RH	23124RHK	7.80	7.56
	200	80	2	605	1 020	1 600	2 200	24124RH	24124RHK30	9.64	9.54
	215	58	2.1	565	764	1 500	2 000	22224RHR	22224RHRK	10.6	10.4
	215	76	2.1	616	956	1 500	2 100	23224RH	23224RHK	12.0	11.6
130	260	86	3	896	1 130	1 300	1 800	22324RHR	22324RHRK	24.1	23.6
	200	52	2	404	674	1 600	2 100	23026RH	23026RHK	7.30	7.12
	200	69	2	512	914	1 600	2 100	24026RH	24026RHK30	7.43	7.33
	210	64	2	494	799	1 500	2 000	23126RH	23126RHK	8.55	8.27
	210	80	2	620	1 080	1 500	2 000	24126RH	24126RHK30	10.3	10.1
	230	64	3	658	914	1 400	1 900	22226RHR	22226RHRK	13.3	13.0
	230	80	3	702	1 090	1 400	1 900	23226RH	23226RHK	14.0	13.5
140	280	93	4	1 040	1 340	1 200	1 600	22326RHR	22326RHRK	30.3	29.7
	210	53	2	422	723	1 500	2 000	23028RH	23028RHK	7.80	7.60
	210	69	2	524	957	1 500	2 000	24028RH	24028RHK30	7.88	7.74
	225	68	2.1	565	940	1 400	1 900	23128RH	23128RHK	10.5	10.2
	225	85	2.1	702	1 220	1 400	1 900	24128RH	24128RHK30	12.3	12.1
	250	68	3	759	1 030	1 300	1 700	22228RHR	22228RHRK	16.4	16.1
	250	88	3	811	1 290	1 300	1 700	23228RH	23228RHK	18.5	17.9
	300	102	4	1 100	1 410	1 300	1 700	22328R	22328RK	36.2	35.5
300	102	4	1 170	1 570	1 100	1 500	22328RH	22328RHK	35.7	34.9	
150	210	45	2	334	622	1 600	2 100	23930R	23930RK	4.97	4.81

Remark) Standard cage types used for the above bearings are shown in Table 5 earlier in this section.

Spherical roller bearings

d (150) – (180) mm



Boundary dimensions (mm)	Basic load ratings (kN)		Limiting speeds (min ⁻¹)	Bearing No.		(Refer.) Mass (kg)						
	C_r	C_{0r}		Cylindrical bore	Tapered bore	Cylindrical bore	Tapered bore					
d D B $r_{min.}$			Grease lub.	Oil lub.								
150	225	56	2.1	461	797	1 400	1 800	23030RH	23030RHK	9.50	9.26	
	225	75	2.1	593	1 100	1 400	1 800	24030RH	24030RHK30	9.81	9.64	
	250	80	2.1	717	1 230	1 300	1 700	23130RH	23130RHK	16.0	15.5	
	250	100	2.1	915	1 590	1 300	1 700	24130RH	24130RHK30	18.4	18.1	
	270	73	3	865	1 200	1 200	1 600	22230RHR	22230RHRK	20.6	20.2	
	270	96	3	959	1 540	1 200	1 600	23230RH	23230RHK	24.0	23.3	
	320	108	4	1 230	1 600	1 200	1 500	22330R	22330RK	43.6	42.7	
	320	108	4	1 290	1 740	1 200	1 500	22330RHA	22330RHAK	40.3	39.4	
	160	220	45	2	341	649	1 500	2 000	23932R	23932RK	5.25	5.08
		240	60	2.1	531	924	1 300	1 700	23032RH	23032RHK	11.3	11.0
240		80	2.1	679	1 270	1 300	1 700	24032RH	24032RHK30	12.0	11.8	
270		86	2.1	848	1 430	1 200	1 600	23132RH	23132RHK	20.5	19.9	
270		109	2.1	1 070	1 890	1 200	1 600	24132RH	24132RHK30	24.0	23.7	
290		80	3	885	1 270	1 200	1 600	22232R	22232RK	23.4	22.9	
290		80	3	897	1 320	1 200	1 600	22232RHA	22232RHAK	21.9	21.4	
290		104	3	1 030	1 650	1 200	1 600	23232R	23232RK	31.0	30.1	
290		104	3	1 100	1 780	1 200	1 600	23232RHA	23232RHAK	29.4	28.5	
340		114	4	1 380	1 790	1 100	1 400	22332R	22332RK	51.9	51.0	
340	114	4	1 420	1 940	1 100	1 400	22332RHA	22332RHAK	48.0	47.1		
170	230	45	2	353	691	1 400	1 900	23934R	23934RK	5.53	5.35	
	260	67	2.1	632	1 090	1 200	1 600	23034RH	23034RHK	15.9	15.5	
	260	90	2.1	828	1 540	1 200	1 600	24034RH	24034RHK30	16.3	16.0	
	280	88	2.1	916	1 550	1 100	1 500	23134RH	23134RHK	21.5	20.8	
	280	109	2.1	1 090	1 940	1 100	1 500	24134RH	24134RHK30	25.4	25.0	
	310	86	4	952	1 390	1 100	1 500	22234R	22234RK	29.0	28.4	
	310	86	4	1 010	1 490	1 100	1 500	22234RHA	22234RHAK	27.1	26.5	
	310	110	4	1 150	1 870	1 100	1 500	23234R	23234RK	37.5	36.5	
	310	110	4	1 210	1 940	1 100	1 500	23234RHA	23234RHAK	35.6	34.6	
	360	120	4	1 460	1 920	1 000	1 300	22334R	22334RK	62.0	60.8	
360	120	4	1 590	2 200	1 000	1 300	22334RHA	22334RHAK	57.3	56.1		
180	250	52	2	479	939	1 300	1 700	23936R	23936RK	8.00	7.80	
	280	74	2.1	768	1 330	1 100	1 400	23036RH	23036RHK	20.2	19.7	
	280	100	2.1	984	1 830	1 100	1 400	24036RH	24036RHK30	21.4	21.0	

Remark) Standard cage types used for the above bearings are shown in Table 5 earlier in this section.

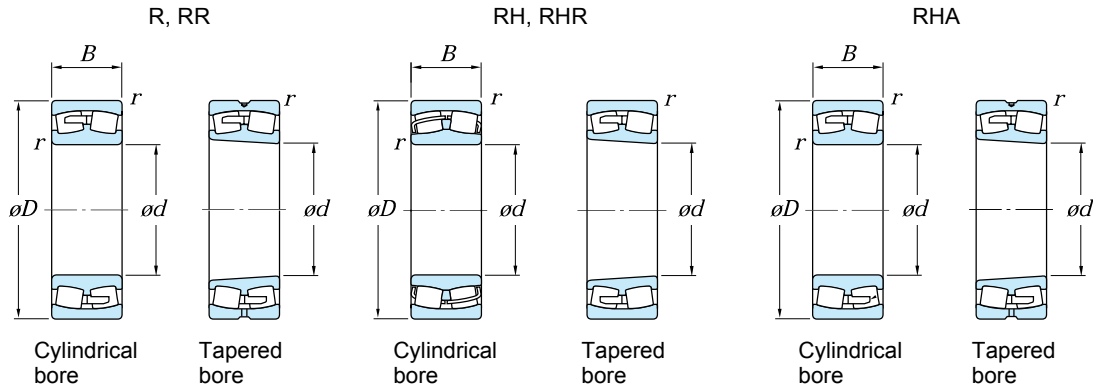
d (180) – (220) mm

	Boundary dimensions (mm)			Basic load ratings (kN)		Limiting speeds (min ⁻¹)		Bearing No.		(Refer.) Mass (kg)			
	<i>d</i>	<i>D</i>	<i>B</i>	<i>r</i> _{min.}	<i>C_r</i>	<i>C_{0r}</i>	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore	Cylindrical bore	Tapered bore	
180	300	96	3		1 000	1 800	1 100	1 500	23136R	23136RK	28.4	27.5	
	300	96	3		1 060	1 790	1 100	1 500	23136RHA	23136RHAK	26.5	25.6	
	300	118	3		1 160	2 010	1 000	1 400	24136R	24136RK30	33.3	32.7	
	300	118	3		1 250	2 240	1 100	1 500	24136RHA	24136RHAK30	31.8	31.2	
	320	86	4		978	1 450	1 100	1 400	22236R	22236RK	30.5	29.8	
	320	86	4		1 060	1 610	1 100	1 400	22236RHA	22236RHAK	28.5	27.8	
	320	112	4		1 190	1 980	1 100	1 400	23236R	23236RK	39.8	38.6	
	320	112	4		1 320	2 170	1 100	1 400	23236RHA	23236RHAK	37.7	36.5	
	380	126	4		1 740	2 360	920	1 200	22336R	22336RK	71.4	69.9	
	380	126	4		1 740	2 410	930	1 200	22336RHA	22336RHAK	66.0	64.5	
	190	260	52	2		486	969	1 200	1 600	23938R	23938RK	8.40	8.10
		290	75	2.1		736	1 370	1 100	1 500	23038R	23038RK	18.8	18.2
290		75	2.1		789	1 430	1 100	1 500	23038RHA	23038RHAK	17.2	16.6	
290		100	2.1		906	1 640	1 000	1 400	24038R	24038RK30	24.0	23.6	
290		100	2.1		1 010	1 920	1 100	1 500	24038RHA	24038RHAK30	22.4	22.0	
320		104	3		1 090	2 000	1 000	1 400	23138R	23138RK	35.5	34.4	
320		104	3		1 210	2 080	1 000	1 400	23138RHA	23138RHAK	33.2	32.1	
320		128	3		1 340	2 320	950	1 300	24138R	24138RK30	42.0	41.4	
320		128	3		1 460	2 630	1 000	1 400	24138RHA	24138RHAK30	40.1	39.5	
340		92	4		1 110	1 730	1 000	1 300	22238R	22238RK	37.4	36.6	
340		92	4		1 150	1 770	1 000	1 300	22238RHA	22238RHAK	34.9	34.1	
340		120	4		1 410	2 210	1 000	1 300	23238R	23238RK	47.4	46.0	
340		120	4		1 490	2 470	990	1 300	23238RHA	23238RHAK	44.9	43.5	
400		132	5		1 900	2 610	880	1 200	22338R	22338RK	84.1	82.4	
400		132	5		1 940	2 810	870	1 200	22338RHA	22338RHAK	77.7	76.0	
200		280	60	2.1		601	1 190	1 100	1 500	23940R	23940RK	12.0	11.6
		310	82	2.1		890	1 670	1 000	1 400	23040R	23040RK	24.1	23.4
		310	82	2.1		940	1 680	1 100	1 400	23040RHA	23040RHAK	22.0	21.3
	310	109	2.1		1 030	1 900	950	1 300	24040R	24040RK30	30.5	30.0	
	310	109	2.1		1 180	2 230	1 100	1 400	24040RHA	24040RHAK30	28.5	28.0	
	340	112	3		1 240	2 250	980	1 300	23140R	23140RK	43.7	42.4	
	340	112	3		1 380	2 340	970	1 300	23140RHA	23140RHAK	40.8	39.5	
	340	140	3		1 450	2 490	890	1 200	24140R	24140RK30	51.9	51.1	
	340	140	3		1 660	2 970	990	1 300	24140RHA	24140RHAK30	49.5	48.7	
	360	98	4		1 230	1 930	930	1 200	22240R	22240RK	45.0	44.0	
	360	98	4		1 310	2 030	940	1 300	22240RHA	22240RHAK	42.0	41.0	
	360	128	4		1 550	2 610	940	1 300	23240R	23240RK	58.1	56.4	
	360	128	4		1 660	2 780	930	1 200	23240RHA	23240RHAK	55.1	53.4	
	420	138	5		2 010	2 750	830	1 100	22340R	22340RK	95.4	93.5	
	420	138	5		2 060	2 920	820	1 100	22340RHA	22340RHAK	88.1	86.2	
220	300	60	2.1		634	1 300	1 000	1 400	23944R	23944RK	13.0	12.6	
	340	90	3		984	1 890	940	1 300	23044R	23044RK	31.5	30.6	
	340	90	3		1 090	1 950	940	1 200	23044RHA	23044RHAK	28.8	27.9	
	340	118	3		1 240	2 300	850	1 100	24044R	24044RK30	39.6	39.0	
	340	118	3		1 380	2 630	950	1 300	24044RHA	24044RHAK30	37.0	36.4	
	370	120	4		1 440	2 700	880	1 200	23144R	23144RK	54.8	53.2	
	370	120	4		1 590	2 790	870	1 200	23144RHA	23144RHAK	51.2	49.6	
	370	150	4		1 680	2 900	800	1 100	24144R	24144RK30	65.0	64.0	

Remark) Standard cage types used for the above bearings are shown in Table 5 earlier in this section.

Spherical roller bearings

d (220) – (260) mm



Boundary dimensions (mm)	Basic load ratings (kN)		Limiting speeds (min ⁻¹)		Bearing No.		(Refer.) Mass (kg)					
					Cylindrical bore	Tapered bore	Cylindrical bore	Tapered bore				
<i>d</i> <i>D</i> <i>B</i> <i>r</i> _{min.}	<i>C_r</i>	<i>C_{0r}</i>	Grease lub.	Oil lub.								
220	370	150	4	1 920	3 550	880	1 200	24144RHA	24144RHAK30	62.0	61.0	
	400	108	4	1 560	2 400	820	1 100	22244R	22244RK	63.0	61.7	
	400	108	4	1 590	2 440	820	1 100	22244RHA	22244RHAK	58.8	57.5	
	400	144	4	1 880	3 200	830	1 100	23244R	23244RK	81.6	79.2	
	400	144	4	2 020	3 350	810	1 100	23244RHA	23244RHAK	77.4	75.0	
	460	145	5	2 380	3 380	720	960	22344R	22344RK	124	122	
	460	145	5	2 370	3 470	730	970	22344RHA	22344RHAK	115	113	
	240	320	60	2.1	651	1 380	940	1 300	23948R	23948RK	14.0	13.5
		360	92	3	1 100	2 170	860	1 100	23048R	23048RK	34.9	33.8
		360	92	3	1 170	2 180	860	1 100	23048RHA	23048RHAK	31.9	30.9
360		118	3	1 310	2 530	780	1 000	24048R	24048RK30	42.4	41.8	
360		118	3	1 430	2 840	870	1 200	24048RHA	24048RHAK30	39.6	39.0	
400		128	4	1 630	3 080	790	1 100	23148R	23148RK	67.6	65.6	
400		128	4	1 810	3 200	790	1 000	23148RHA	23148RHAK	63.1	61.1	
400		160	4	1 970	3 500	720	960	24148R	24148RK30	80.3	79.0	
400		160	4	2 200	4 130	800	1 100	24148RHA	24148RHAK30	76.6	75.3	
440		120	4	1 920	2 940	730	970	22248R	22248RK	85.0	83.2	
440	120	4	1 920	2 990	730	970	22248RHA	22248RHAK	79.4	77.6		
440	160	4	2 340	3 990	730	970	23248R	23248RK	110	107		
440	160	4	2 460	4 130	730	970	23248RHA	23248RHAK	104	101		
500	155	5	2 610	4 020	650	870	22348R	22348RK	157	154		
500	155	5	2 720	3 990	650	870	22348RHA	22348RHAK	145	142		
260	360	75	2.1	914	1 880	820	1 100	23952R	23952RK	24.0	23.3	
	400	104	4	1 330	2 570	760	1 000	23052R	23052RK	50.7	49.3	
	400	104	4	1 470	2 720	760	1 000	23052RHA	23052RHAK	46.3	44.9	
	400	140	4	1 690	3 240	690	920	24052R	24052RK30	64.6	63.7	
	400	140	4	1 860	3 670	770	1 000	24052RHA	24052RHAK30	60.3	59.4	
	440	144	4	2 100	3 860	710	940	23152R	23152RK	93.6	90.8	
	440	144	4	2 220	4 000	700	930	23152RHA	23152RHAK	87.4	84.6	
	440	180	4	2 360	4 170	640	860	24152R	24152RK30	111	110	
	440	180	4	2 650	4 950	720	950	24152RHA	24152RHAK30	106	105	
	480	130	5	2 240	3 460	650	870	22252R	22252RK	110	108	
480	130	5	2 230	3 430	650	870	22252RHA	22252RHAK	103	101		
480	174	5	2 750	4 640	640	860	23252R	23252RK	144	140		

Remark) Standard cage types used for the above bearings are shown in Table 5 earlier in this section.

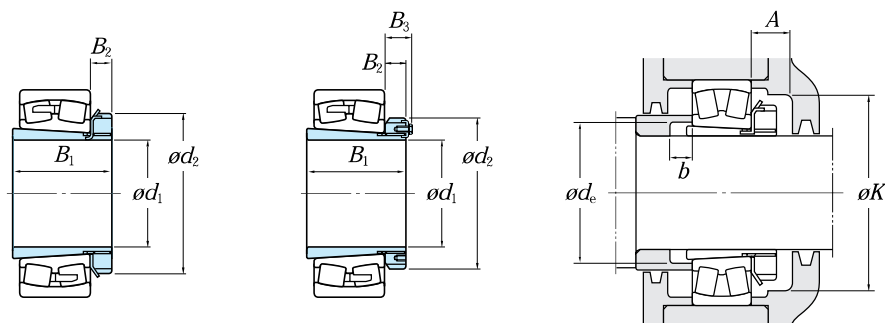
d (260) – 300 mm

Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (min ⁻¹)		Bearing No.		(Refer.) Mass (kg)	
<i>d</i>	<i>D</i>	<i>B</i>	<i>r</i> min.	<i>C_r</i>	<i>C_{0r}</i>	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore	Cylindrical bore	Tapered bore
260	480	174	5	2 870	4 900	650	860	23252RHA	23252RHAK	137	133
	540	165	6	2 830	4 380	590	780	22352R	22352RK	196	192
	540	165	6	3 120	4 620	580	780	22352RHA	22352RHAK	181	177
280	380	75	2.1	928	1 960	760	1 000	23956R	23956RK	26.0	25.2
	420	106	4	1 430	2 860	710	950	23056R	23056RK	54.5	52.9
	420	106	4	1 550	2 950	700	940	23056RHA	23056RHAK	49.8	48.2
	420	140	4	1 740	3 420	640	850	24056R	24056RK30	68.5	67.4
	420	140	4	1 960	4 000	710	950	24056RHA	24056RHAK30	64.0	62.9
	460	146	5	2 140	4 280	660	880	23156R	23156RK	100	96.9
	460	146	5	2 340	4 290	650	870	23156RHA	23156RHAK	93.4	90.3
	460	180	5	2 440	4 440	600	790	24156R	24156RK30	118	116
	460	180	5	2 740	5 240	660	880	24156RHA	24156RHAK30	113	112
	500	130	5	2 100	3 380	610	810	22256R	22256RK	114	112
	500	130	5	2 320	3 670	610	810	22256RHA	22256RHAK	106	104
	500	176	5	2 690	4 910	610	820	23256R	23256RK	153	149
	500	176	5	3 010	5 300	600	800	23256RHA	23256RHAK	145	141
	580	175	6	3 150	4 910	530	710	22356R	22356RK	229	225
	580	175	6	3 510	5 260	530	700	22356RHA	22356RHAK	212	208
300	420	90	3	1 280	2 610	680	910	23960R	23960RK	40.0	38.8
	460	118	4	1 750	3 480	630	840	23060R	23060RK	75.8	73.7
	460	118	4	1 940	3 700	630	840	23060RHA	23060RHAK	68.9	66.8
	460	160	4	2 240	4 370	570	760	24060R	24060RK30	97.1	95.5
	460	160	4	2 420	4 910	640	850	24060RHA	24060RHAK30	90.7	89.1
	500	160	5	2 490	4 850	590	790	23160R	23160RK	132	128
	500	160	5	2 730	4 970	580	780	23160RHA	23160RHAK	123	119
	500	200	5	2 990	5 520	530	710	24160R	24160RK30	157	155
	500	200	5	3 320	6 420	590	790	24160RHA	24160RHAK30	150	148
	540	140	5	2 690	4 330	550	740	22260R	22260RK	145	142
	540	140	5	2 650	4 360	550	740	22260RHA	22260RHAK	135	132
	540	192	5	3 430	5 910	540	720	23260R	23260RK	197	192
	540	192	5	3 530	6 280	540	720	23260RHA	23260RHAK	187	182
	620	185	7.5	3 910	5 430	470	630	22360R	22360RK	289	284

Remark) Standard cage types used for the above bearings are shown in Table 5 earlier in this section.

Adapter assemblies for spherical roller bearings

d_1 20 – (80) mm



$d_1 \leq 180$ mm

$d_1 \geq 200$ mm

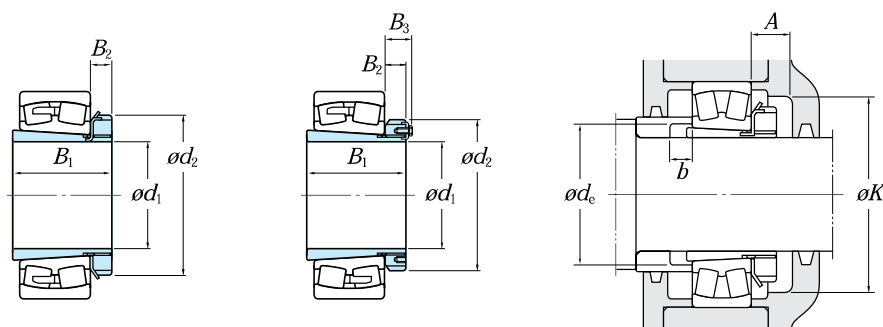
Boundary dimensions (mm)					Brg. bore (mm) d	Designations Bearing + adapter ass'y	Mounting dimensions (mm)				Mass Brg. + adapter ass'y (kg)	(Refer.)	
d_1	B_1	d_2	B_2	B_3			A min.	K min.	d_e min.	b min.		Adapter sleeve No.	Locknut No.
20	29	38	8	–	25	22205RHRK + H305X	15	45	29	5	0.290	A305X	AN05
25	31	45	8	–	30	22206RHRK + H306X	15	50	34	5	0.459	A306X	AN06
	31	45	8	–	30	21306RHK + H306X	15	50	34	6	0.479	A306X	AN06
30	35	52	9	–	35	22207RHRK + H307X	17	58	39	5	0.682	A307X	AN07
	35	52	9	–	35	21307RHK + H307X	17	58	39	7	0.642	A307X	AN07
35	36	58	10	–	40	22208RHRK + H308X	17	65	44	5	0.839	A308X	AN08
	36	58	10	–	40	21308RHK + H308X	17	65	44	5	0.888	A308X	AN08
	46	58	10	–	40	22308RHRK + H2308X	17	65	45	5	1.46	A2308X	AN08
40	39	65	11	–	45	22209RHRK + H309X	17	72	49	8	0.958	A309X	AN09
	39	65	11	–	45	21309RHK + H309X	17	72	49	5	1.19	A309X	AN09
	50	65	11	–	45	22309RHRK + H2309X	17	72	50	5	1.87	A2309X	AN09
45	42	70	12	–	50	22210RHRK + H310X	19	76	54	10	1.07	A310X	AN10
	42	70	12	–	50	21310RHK + H310X	19	76	54	5	1.48	A310X	AN10
	55	70	12	–	50	22310RHRK + H2310X	19	76	56	5	2.54	A2310X	AN10
50	45	75	12	–	55	22211RHRK + H311X	19	85	60	11	1.39	A311X	AN11
	45	75	12	–	55	21311RHK + H311X	19	85	60	6	1.93	A311X	AN11
	59	75	12	–	55	22311RHRK + H2311X	19	85	61	6	3.09	A2311X	AN11
55	47	80	13	–	60	22212RHRK + H312X	20	90	65	9	1.82	A312X	AN12
	47	80	13	–	60	21312RHK + H312X	20	90	65	5	2.31	A312X	AN12
	62	80	13	–	60	22312RHRK + H2312X	20	90	66	5	3.82	A2312X	AN12
60	50	85	14	–	65	22213RHRK + H313X	21	96	70	8	2.27	A313X	AN13
	50	85	14	–	65	21313RHK + H313X	21	96	70	5	2.87	A313X	AN13
	65	85	14	–	65	22313RHRK + H2313X	21	96	72	5	4.63	A2313X	AN13
65	55	98	15	–	75	22215RHRK + H315X	23	110	80	12	2.84	A315X	AN15
	55	98	15	–	75	21315RHK + H315X	23	110	80	5	4.33	A315X	AN15
	73	98	15	–	75	22315RHRK + H2315X	23	110	82	5	7.07	A2315X	AN15
70	59	105	17	–	80	22216RHRK + H316X	25	120	86	12	3.60	A316X	AN16
	59	105	17	–	80	21316RHK + H316X	25	120	86	5	5.17	A316X	AN16
	78	105	17	–	80	22316RHRK + H2316X	25	120	87	5	8.32	A2316X	AN16
75	63	110	18	–	85	22217RHRK + H317X	27	128	91	12	4.34	A317X	AN17
	63	110	18	–	85	21317RHK + H317X	27	128	91	6	6.11	A317X	AN17
	82	110	18	–	85	22317RHRK + H2317X	27	128	94	6	9.71	A2317X	AN17
80	65	120	18	–	90	22218RHRK + H318X	28	139	96	10	5.31	A318X	AN18

d₁ (80) – (150) mm

	Boundary dimensions (mm)					Brg. bore (mm) <i>d</i>	Designations Bearing + adapter ass'y	Mounting dimensions (mm)				Mass Brg. + adapter ass'y (kg)	(Refer.)	
	<i>d</i> ₁	<i>B</i> ₁	<i>d</i> ₂	<i>B</i> ₂	<i>B</i> ₃			<i>A</i> min.	<i>K</i> min.	<i>d</i> _e min.	<i>b</i> min.		Adapter sleeve No.	Locknut No.
80	86	120	18	–	90	23218RHK + H2318X	28	139	99	18	6.16	A2318X	AN18	
	65	120	18	–	90	21318RHK + H318X	28	139	96	6	7.08	A318X	AN18	
	86	120	18	–	90	22318RHRK + H2318X	28	139	99	6	11.37	A2318X	AN18	
85	68	125	19	–	95	22219RHRK + H319X	29	145	102	9	6.36	A319X	AN19	
	68	125	19	–	95	21319RHK + H319X	29	145	102	7	8.61	A319X	AN19	
	90	125	19	–	95	22319RHRK + H2319X	29	145	105	7	13.3	A2319X	AN19	
90	71	130	20	–	100	22220RHRK + H320X	30	150	107	8	7.41	A320X	AN20	
	97	130	20	–	100	23220RHK + H2320X	30	150	110	19	8.66	A2320X	AN20	
	71	130	20	–	100	21320RHK + H320X	30	150	107	7	10.4	A320X	AN20	
	97	130	20	–	100	22320RHRK + H2320X	30	150	110	7	16.6	A2320X	AN20	
100	81	145	21	–	110	23122RHK + H3122X	32	170	117	7	7.62	A3122X	AN22	
	77	145	21	–	110	22222RHRK + H322X	32	170	117	6	10.4	A322X	AN22	
	105	145	21	–	110	23222RHK + H2322X	32	170	121	17	12.1	A2322X	AN22	
	77	145	21	–	110	21322RHK + H322X	32	170	117	9	14.0	A322X	AN22	
	105	145	21	–	110	22322RHRK + H2322X	32	170	121	7	22.5	A2322X	AN22	
110	72	145	22	–	120	23024RHK + H3024	33	180	127	7	6.70	A3024	ANL24	
	88	155	22	–	120	23124RHK + H3124	33	180	128	7	10.2	A3124	AN24	
	88	155	22	–	120	22224RHRK + H3124	33	180	128	11	13.0	A3124	AN24	
	112	155	22	–	120	23224RHK + H2324	33	180	131	17	14.8	A2324	AN24	
	112	155	22	–	120	22324RHRK + H2324	33	180	131	7	26.8	A2324	AN24	
115	80	155	23	–	130	23026RHK + H3026	34	190	137	8	9.97	A3026	ANL26	
	92	165	23	–	130	23126RHK + H3126	34	190	138	8	11.9	A3126	AN26	
	92	165	23	–	130	22226RHRK + H3126	34	190	138	8	16.7	A3126	AN26	
	121	165	23	–	130	23226RHK + H2326	34	190	142	21	18.1	A2326	AN26	
	121	165	23	–	130	22326RHRK + H2326	34	190	142	8	34.3	A2326	AN26	
125	82	165	24	–	140	23028RHK + H3028	36	205	147	8	10.76	A3028	ANL28	
	97	180	24	–	140	23128RHK + H3128	36	205	149	8	14.5	A3128	AN28	
	97	180	24	–	140	22228RHRK + H3128	36	205	149	8	20.4	A3128	AN28	
	131	180	24	–	140	23228RHK + H2328	36	205	152	22	23.5	A2328	AN28	
	131	180	24	–	140	22328RK + H2328	36	205	152	8	41.1	A2328	AN28	
	131	180	24	–	140	22328RHK + H2328	36	205	152	8	38.3	A2328	AN28	
135	87	180	26	–	150	23030RHK + H3030	37	220	158	8	13.15	A3030	ANL30	
	111	195	26	–	150	23130RHK + H3130	37	220	160	8	21.0	A3130	AN30	
	111	195	26	–	150	22230RHRK + H3130	37	220	160	15	25.7	A3130	AN30	
	139	195	26	–	150	23230RHK + H2330	37	220	163	20	29.9	A2330	AN30	
	139	195	26	–	150	22330RK + H2330	37	220	163	8	49.3	A2330	AN30	
	139	195	26	–	150	22330RHAK + H2330	37	220	163	8	46.0	A2330	AN30	
140	93	190	28	–	160	23032RHK + H3032	39	230	168	8	16.2	A3032	ANL32	
	119	210	28	–	160	23132RHK + H3132	39	230	170	8	27.6	A3132	AN32	
	119	210	28	–	160	22232RK + H3132	39	230	170	14	30.5	A3132	AN32	
	119	210	28	–	160	22232RHAK + H3132	39	230	170	14	29.1	A3132	AN32	
	147	210	28	–	160	23232RK + H2332	39	230	174	18	39.2	A2332	AN32	
	147	210	28	–	160	23232RHAK + H2332	39	230	174	18	37.6	A2332	AN32	
	147	210	28	–	160	22332RK + H2332	39	230	174	8	60.1	A2332	AN32	
	147	210	28	–	160	22332RHAK + H2332	39	230	174	8	56.2	A2332	AN32	
150	101	200	29	–	170	23034RHK + H3034	40	250	179	8	21.5	A3034	ANL34	
	122	220	29	–	170	23134RHK + H3134	40	250	180	8	29.2	A3134	AN34	
	122	220	29	–	170	22234RK + H3134	40	250	180	10	36.8	A3134	AN34	

Adapter assemblies for spherical roller bearings

d_1 (150) – 180 mm



$d_1 \leq 180$ mm

$d_1 \geq 200$ mm

	Boundary dimensions (mm)					Brg. bore (mm) d	Designations Bearing + adapter ass'y	Mounting dimensions (mm)				Mass Brg. + adapter ass'y (kg)	(Refer.)		
	d_1	B_1	d_2	B_2	B_3			A min.	K min.	d_e min.	b min.		Adapter sleeve No.	Locknut No.	
150	122	220	29	–	–	170	22234RHAK + H3134	40	250	180	10	34.9	A3134	AN34	
	154	220	29	–	–	170	23234RK + H2334	40	250	185	18	46.7	A2334	AN34	
	154	220	29	–	–	170	23234RHAK + H2334	40	250	185	18	44.8	A2334	AN34	
	154	220	29	–	–	170	22334RK + H2334	40	250	185	8	71.0	A2334	AN34	
	154	220	29	–	–	170	22334RHAK + H2334	40	250	185	8	66.3	A2334	AN34	
	160	109	210	30	–	–	180	23036RHK + H3036	41	260	189	8	26.5	A3036	ANL36
131		230	30	–	–	180	23136RK + H3136	41	260	191	8	37.0	A3136	AN36	
131		230	30	–	–	180	23136RHAK + H3136	41	260	191	8	35.1	A3136	AN36	
131		230	30	–	–	180	22236RK + H3136	41	260	191	18	39.3	A3136	AN36	
131		230	30	–	–	180	22236RHAK + H3136	41	260	191	18	37.3	A3136	AN36	
161		230	30	–	–	180	23236RK + H2336	41	260	195	22	49.9	A2336	AN36	
161		230	30	–	–	180	23236RHAK + H2336	41	260	195	22	47.8	A2336	AN36	
161		230	30	–	–	180	22336RK + H2336	41	260	195	8	81.2	A2336	AN36	
161		230	30	–	–	180	22336RHAK + H2336	41	260	195	8	75.8	A2336	AN36	
170		112	220	31	–	–	190	23038RK + H3038	43	270	199	9	25.7	A3038	ANL38
	112	220	31	–	–	190	23038RHAK + H3038	43	270	199	9	24.1	A3038	ANL38	
	141	240	31	–	–	190	23138RK + H3138	43	270	202	9	45.2	A3138	AN38	
	141	240	31	–	–	190	23138RHAK + H3138	43	270	202	9	42.9	A3138	AN38	
	141	240	31	–	–	190	22238RK + H3138	43	270	202	21	47.4	A3138	AN38	
	141	240	31	–	–	190	22238RHAK + H3138	43	270	202	21	44.9	A3138	AN38	
	169	240	31	–	–	190	23238RK + H2338	43	270	206	21	58.6	A2338	AN38	
	169	240	31	–	–	190	23238RHAK + H2338	43	270	206	21	56.1	A2338	AN38	
	169	240	31	–	–	190	22338RK + H2338	43	270	206	9	95.0	A2338	AN38	
	169	240	31	–	–	190	22338RHAK + H2338	43	270	206	9	88.6	A2338	AN38	
	180	120	240	32	–	–	200	23040RK + H3040	46	280	210	10	32.6	A3040	ANL40
		120	240	32	–	–	200	23040RHAK + H3040	46	280	210	10	30.5	A3040	ANL40
150		250	32	–	–	200	23140RK + H3140	46	280	212	10	54.5	A3140	AN40	
150		250	32	–	–	200	23140RHAK + H3140	46	280	212	10	51.6	A3140	AN40	
150		250	32	–	–	200	22240RK + H3140	46	280	212	24	56.1	A3140	AN40	
150		250	32	–	–	200	22240RHAK + H3140	46	280	212	24	53.1	A3140	AN40	
176		250	32	–	–	200	23240RK + H2340	46	280	216	20	70.3	A2340	AN40	
176		250	32	–	–	200	23240RHAK + H2340	46	280	216	20	67.3	A2340	AN40	
176		250	32	–	–	200	22340RK + H2340	46	280	216	10	107	A2340	AN40	
176		250	32	–	–	200	22340RHAK + H2340	46	280	216	10	100	A2340	AN40	

d₁ 200 – 280 mm

	Boundary dimensions (mm)					Brg. bore (mm) <i>d</i>	Designations Bearing + adapter ass'y	Mounting dimensions (mm)				Mass Brg. + adapter ass'y (kg)	(Refer.)	
	<i>d</i> ₁	<i>B</i> ₁	<i>d</i> ₂	<i>B</i> ₂	<i>B</i> ₃			<i>A</i> min.	<i>K</i> min.	<i>d</i> _e min.	<i>b</i> min.		Adapter sleeve No.	Locknut No.
200	128	260	30	41	220	23044RK + H3044	–	–	231	12	40.9	A3044	ANL44	
	128	260	30	41	220	23044RHAK + H3044	–	–	231	12	38.2	A3044	ANL44	
	158	280	32	44	220	23144RK + H3144	–	–	233	10	67.9	A3144	AN44	
	158	280	32	44	220	23144RHAK + H3144	–	–	233	10	64.3	A3144	AN44	
	158	280	32	44	220	22244RK + H3144	–	–	233	22	76.4	A3144	AN44	
	158	280	32	44	220	22244RHAK + H3144	–	–	233	22	72.2	A3144	AN44	
	183	280	32	44	220	23244RK + H2344	–	–	236	11	95.9	A2344	AN44	
	183	280	32	44	220	23244RHAK + H2344	–	–	236	11	91.7	A2344	AN44	
	183	280	32	44	220	22344RK + H2344	–	–	236	10	139	A2344	AN44	
	183	280	32	44	220	22344RHAK + H2344	–	–	236	10	130	A2344	AN44	
	220	133	290	34	46	240	23048RK + H3048	–	–	251	11	47.0	A3048	ANL48
		133	290	34	46	240	23048RHAK + H3048	–	–	251	11	44.1	A3048	ANL48
169		300	34	46	240	23148RK + H3148	–	–	254	11	82.9	A3148	AN48	
169		300	34	46	240	23148RHAK + H3148	–	–	254	11	78.4	A3148	AN48	
169		300	34	46	240	22248RK + H3148	–	–	254	19	101	A3148	AN48	
169		300	34	46	240	22248RHAK + H3148	–	–	254	19	94.9	A3148	AN48	
196		300	34	46	240	23248RK + H2348	–	–	257	6	127	A2348	AN48	
196		300	34	46	240	23248RHAK + H2348	–	–	257	6	121	A2348	AN48	
196		300	34	46	240	22348RK + H2348	–	–	257	11	174	A2348	AN48	
196		300	34	46	240	22348RHAK + H2348	–	–	257	11	162	A2348	AN48	
240		147	310	34	46	260	23052RK + H3052	–	–	272	13	64.6	A3052	ANL52
		147	310	34	46	260	23052RHAK + H3052	–	–	272	13	60.2	A3052	ANL52
	187	330	36	49	260	23152RK + H3152	–	–	276	11	113	A3152	AN52	
	187	330	36	49	260	23152RHAK + H3152	–	–	276	11	107	A3152	AN52	
	187	330	36	49	260	22252RK + H3152	–	–	276	25	130	A3152	AN52	
	187	330	36	49	260	22252RHAK + H3152	–	–	276	25	123	A3152	AN52	
	208	330	36	49	260	23252RK + H2352	–	–	278	2	164	A2352	AN52	
	208	330	36	49	260	23252RHAK + H2352	–	–	278	2	157	A2352	AN52	
	208	330	36	49	260	22352RK + H2352	–	–	278	11	216	A2352	AN52	
	208	330	36	49	260	22352RHAK + H2352	–	–	278	11	201	A2352	AN52	
	260	152	330	38	50	280	23056RK + H3056	–	–	292	12	70.6	A3056	ANL56
		152	330	38	50	280	23056RHAK + H3056	–	–	292	12	65.9	A3056	ANL56
192		350	38	51	280	23156RK + H3156	–	–	296	12	121	A3156	AN56	
192		350	38	51	280	23156RHAK + H3156	–	–	296	12	115	A3156	AN56	
192		350	38	51	280	22256RK + H3156	–	–	296	28	137	A3156	AN56	
192		350	38	51	280	22256RHAK + H3156	–	–	296	28	129	A3156	AN56	
221		350	38	51	280	23256RK + H2356	–	–	299	11	177	A2356	AN56	
221		350	38	51	280	23256RHAK + H2356	–	–	299	11	169	A2356	AN56	
221		350	38	51	280	22356RK + H2356	–	–	299	12	253	A2356	AN56	
221		350	38	51	280	22356RHAK + H2356	–	–	299	12	236	A2356	AN56	
280		168	360	42	54	300	23060RK + H3060	–	–	313	12	96.5	A3060	ANL60
		168	360	42	54	300	23060RHAK + H3060	–	–	313	12	89.6	A3060	ANL60
	208	380	40	53	300	23160RK + H3160	–	–	317	12	158	A3160	AN60	
	208	380	40	53	300	23160RHAK + H3160	–	–	317	12	149	A3160	AN60	
	208	380	40	53	300	22260RK + H3160	–	–	317	32	172	A3160	AN60	
	208	380	40	53	300	22260RHAK + H3160	–	–	317	32	162	A3160	AN60	
	240	380	40	53	300	23260RK + H3260	–	–	321	12	226	A3260	AN60	
	240	380	40	53	300	23260RHAK + H3260	–	–	321	12	216	A3260	AN60	