

HGB-RKB

BEARING INDUSTRIES

a member of RKB Group

BEARINGS CATALOGUE



No. BCMS2013-A

HGB-RKB is the company of the **RKB** Group dedicated to manufacturing miniature and small size precision ball bearings up to **35** mm bore diameter. The leading-edge technology of the production machines installed in **RKB** MS Plant allows to meet the most demanding requirements of today's industry. The main technical features of the **HGB-RKB** premium-class bearings are low noise, high speed, and long life. They are specifically manufactured for electric and brushless motors, air conditioners, home appliances, automation and control systems, gearboxes, car servo systems, etc. With a worldwide distribution network and exports to more than **50** countries, **RKB** is globally recognized as *"The Alternative Power"* in the bearing industry.

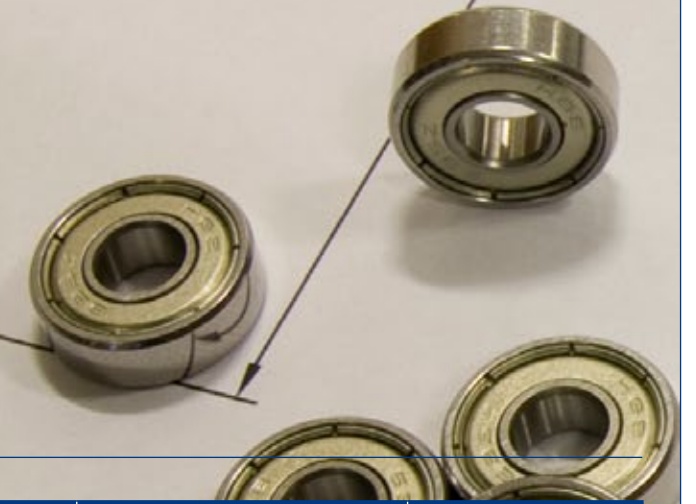
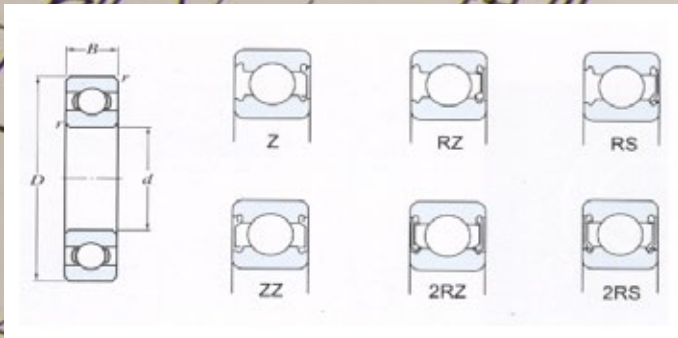


Bearings Catalogue No. BCMS2013-A

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Single row deep groove ball bearings



Metric

d	Main dimensions (mm)				Basic load ratings (N)		Limiting speed (rpm)		Designation
	D	B	B ₁	r _{min}	C _r	C _{0r}	Grease	Oil	
2	5	1.5	2.3	0.08	169	50	85000	100000	682
	5	2	2.5	0.1	187	58	85000	100000	MR52B
	6	2.3	3	0.15	330	98	75000	90000	692
	6	2.5	2.5	0.15	330	98	75000	90000	MR62
	7	2.5	3	0.15	385	127	63000	75000	MR72
	7	2.8	3.5	0.15	385	127	63000	75000	602
2.5	6	1.8	2.6	0.08	208	74	71000	80000	682X
	7	2.5	3.5	0.15	385	127	63000	75000	692X
	8	2.5	-	0.2	560	179	60000	67000	MR82X
	8	2.8	4	0.15	550	175	60000	71000	602X
	6	2	2.5	0.1	208	74	71000	80000	MR63
	7	2	3	0.1	390	130	63000	75000	683A
3	8	2.5	-	0.15	560	179	60000	67000	MR83
	8	3	4	0.15	553	176	60000	67000	693
	9	2.5	4	0.2	570	187	56000	67000	MR93
	9	3	5	0.15	634	219	56000	67000	603
	10	4	4	0.15	641	226	50000	60000	623
4	13	5	5	0.2	1300	485	40000	48000	633
	7	2	-	0.1	310	115	60000	67000	MR74
	7	-	2.5	0.1	255	107	60000	71000	-
	8	2	3	0.15	395	139	56000	67000	MR84
	9	2.5	4	0.15	640	225	53000	63000	684A
	10	3	4	0.2	710	270	50000	60000	MR104B
	11	4	4	0.15	714	276	48000	56000	694
	12	4	4	0.2	959	347	48000	56000	604
	13	5	5	0.2	1306	487	40000	48000	624
16	5	5	0.3	1735	671	36000	43000	634	

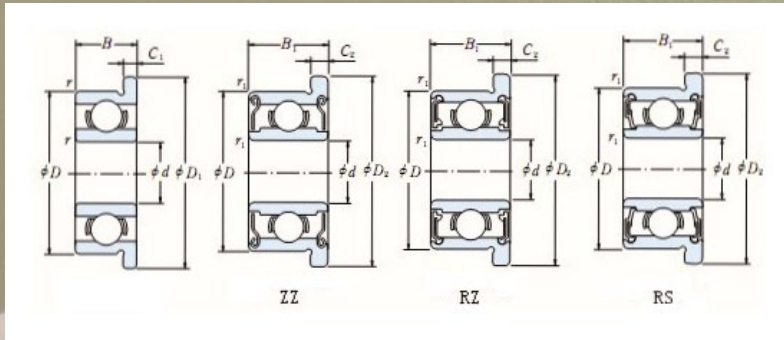
d	Main dimensions (mm)				Basic load ratings (N)		Limiting speed (rpm)		Designation
	D	B	B ₁	r _{min}	C _r	C _{0r}	Grease	Oil	
5	8	2	-	0.1	310	120	53000	63000	MR85
	8	-	2.5	-	278	131	53000	63000	-
	9	2.5	3	0.15	430	168	50000	60000	MR95
	10	3	4	0.15	430	168	50000	60000	MR105
	11	-	4	-	715	276	48000	56000	-
	11	3	5	0.15	714	276	45000	53000	685
	13	4	4	0.2	1074	422	43000	50000	695
	14	5	5	0.2	1329	508	40000	50000	605
	16	5	5	0.3	1735	671	36000	43000	625
19	6	6	0.3	2614	1053	32000	40000	635	
6	10	2.5	3	0.15	495	218	45000	53000	MR106
	12	3	4	0.20	715	292	43000	50000	MR126
	13	3.5	5	0.15	1083	438	40000	50000	686
	15	5	5	0.2	1735	671	40000	45000	696
	17	6	6	0.3	2265	839	38000	45000	606
	19	6	6	0.3	2240	912	32000	40000	626
	22	7	7	0.3	3300	1370	30000	36000	636
7	11	2.5	3	0.15	455	201	43000	50000	MR117
	13	3	4	0.20	540	276	40000	48000	MR137
	14	3.5	5	0.15	1175	511	40000	45000	687
	17	5	5	0.3	1610	710	36000	43000	697
	19	6	6	0.3	2240	912	36000	43000	607
	22	7	7	0.3	3297	1368	30000	36000	627
	26	9	9	0.3	4550	1970	28000	34000	637
8	12	2.5	3.5	0.15	545	274	40000	48000	MR128
	14	3.5	4	0.20	820	385	38000	45000	MR148
	16	4	5	0.2	1606	712	36000	43000	688
	19	6	6	0.3	2614	1053	36000	43000	698
	22	7	7	0.3	3297	1368	34000	40000	608
	24	8	8	0.3	3350	1430	28000	34000	628
	28	9	9	0.3	4550	1970	28000	34000	638
9	17	4	5	0.2	1330	665	36000	43000	689
	20	6	6	0.3	1720	840	34000	40000	699
	24	7	7	0.3	3350	1430	32000	38000	609
	26	8	8	0.6	4578	1970	28000	34000	629
	30	10	10	0.6	5100	2390	24000	30000	639
10	19	5	5	0.3	2123	985	34000	40000	6800
	22	6	6	0.3	2697	1273	32000	38000	6900
	26	8	8	0.3	4578	1970	30000	36000	6000
	30	9	9	0.6	5100	2390	24000	30000	6200
	35	11	11	0.6	8100	3450	22000	26000	6300
12	21	5	5	0.3	1920	1040	32000	38000	6801
	24	6	6	0.3	2890	1460	30000	36000	6901
	28	8	8	0.3	5100	2370	28000	32000	6001
	32	10	10	0.6	6800	3050	22000	28000	6201
	37	12	12	1	9700	4200	20000	24000	6301

d	Main dimensions (mm)				Basic load ratings (N)		Limiting speed (rpm)		Designation
	D	B	B _f	r _{min}	C _r	C _{0r}	Grease	Oil	
15	24	5	5	0.3	2070	1260	28000	34000	6802
	28	7	7	0.3	4350	2260	26000	30000	6902
	32	9	9	0.3	5600	2830	24000	28000	6002
	35	11	11	0.6	7650	3750	20000	24000	6202
	42	13	13	1	11400	5450	17000	20000	6302
17	26	5	5	0.3	2630	1570	26000	30000	6803
	30	7	7	0.3	4600	2550	24000	28000	6903
	35	10	10	0.3	6000	3250	22000	26000	6003
	40	12	12	0.6	9550	4800	17000	20000	6203
	47	14	14	1	13600	6650	15000	18000	6303
20	32	7	7	0.3	4000	2470	22000	26000	6804
	37	9	9	0.3	6400	3700	19000	22000	6904
	42	12	12	0.6	9400	5000	18000	20000	6004
	47	14	14	1	12800	6600	15000	18000	6204
	52	15	15	1.1	15900	7900	14000	17000	6304
22	44	12	12	0.6	9400	5050	17000	20000	60/22
	50	14	14	1	12900	6800	14000	16000	62/22
	56	16	16	1.1	18400	9250	13000	16000	63/22
25	37	7	7	0.3	4500	3150	18000	22000	6805
	42	9	9	0.3	7050	4550	16000	19000	6905
	47	12	12	0.6	10100	5850	15000	18000	6005
	52	15	15	1	14000	7850	13000	15000	6205
	62	17	17	1.1	20600	11200	11000	13000	6305
28	52	12	12	0.6	12500	7400	14000	16000	60/28
	58	16	16	1	16600	9500	12000	14000	62/28
	68	18	18	1.1	26700	14000	10000	13000	63/28
30	42	7	7	0.3	4700	3650	15000	18000	6806
	47	9	9	0.3	7250	5000	14000	17000	6906
	55	13	13	1	13200	8300	13000	15000	6006
	62	16	16	1	19500	11300	11000	13000	6206
	72	19	19	1.1	26700	15000	9500	12000	6306
32	58	13	13	1	15100	9150	12000	14000	60/32
	65	17	17	1	20700	11600	10000	12000	62/32
	75	20	20	1.1	29900	17000	9000	11000	63/32
35	47	7	7	0.3	4900	4100	14000	16000	6807
	55	10	10	0.6	10600	7250	12000	15000	6907
	62	14	14	1	16000	10300	11000	13000	6007
	72	17	17	1.1	25700	15300	9500	11000	6207
	80	21	21	1.5	33500	19200	8500	10000	6307

Inch

d	Main dimensions (mm)				Basic load ratings (N)		Limiting speed (rpm)		Designation
	D	B	B ₁	r _{min}	C _r	C _{0r}	Grease	Oil	
3.175	6.35	2.380	2.779	0.1	283	95	67000	80000	R144
	7.938	2.779	3.571	0.1	560	179	60000	67000	R2-5
	9.525	2.779	3.571	0.15	640	225	53000	63000	R2-6
	9.525	3.967	3.967	0.3	630	218	56000	67000	R2
	12.700	4.366	4.366	0.3	640	225	53000	63000	R2A
3.969	7.938	2.779	3.175	0.1	360	149	53000	63000	R155
4.762	7.938	2.779	3.175	0.1	360	149	53000	63000	R156
	9.525	3.175	3.175	0.1	710	270	50000	60000	R166
	12.700	3.967	4.978	0.3	1300	485	43000	53000	R3
6.350	9.525	3.175	3.175	0.1	420	204	48000	56000	R168B
	12.700	3.175	4.762	0.15	1080	440	40000	50000	R188
	15.875	4.978	4.978	0.3	1610	660	38000	45000	R4B
	19.050	5.558	7.142	0.4	2340	885	36000	43000	R4A
7.938	12.700	3.967	3.967	0.15	540	276	40000	48000	R1810
9.525	22.225	5.558	7.142	0.4	3350	1410	32000	38000	R6

Flanged bearings



Metric

d	Main dimensions (mm)								Basic load ratings (N)		Limiting speed (rpm)		Designation
	D	D ₁	D ₂	B	B ₁	C ₁	C ₂	r _{min}	C _r	C _{0r}	Grease	Oil	
3	6	7.2	7.2	2	2.5	0.6	0.6	0.1	208	74	71000	80000	MF63
	7	8.1	8.1	2	3	0.5	0.8	0.1	390	130	63000	75000	F683A
	8	9.2	-	2.5	-	0.6	-	-	560	179	60000	67000	MF83
	8	9.5	9.5	3	4	0.7	0.9	0.15	560	179	60000	67000	F693
	9	10.2	10.6	2.5	4	0.6	0.8	0.15	570	187	56000	67000	MF93
	9	10.5	10.5	3	5	0.7	1	0.15	570	187	56000	67000	F603
	10	11.5	11.5	4	4	1	1	0.15	630	218	50000	60000	F623
	13	15	15	5	5	1	1	0.2	1300	485	40000	48000	F633
4	7	8.2	-	2	-	0.6	-	-	310	115	60000	67000	MF74
	7	-	8.2	-	2.5	-	0.6	0.1	255	107	60000	71000	-
	8	9.2	9.2	2	3	0.6	0.6	0.1	395	139	56000	67000	MF84
	9	10.3	10.3	2.5	4	0.6	1	0.15	640	225	53000	63000	F684
	10	11.2	11.6	3	4	0.6	0.8	0.15	710	270	50000	60000	MF104B
	11	12.5	12.5	4	4	1	1	0.15	960	345	48000	56000	F694
	12	13.5	13.5	4	4	1	1	0.2	960	345	48000	56000	F604
	13	15	15	5	5	1	1	0.2	1300	485	40000	48000	F624
	16	18	18	5	5	1	1	0.3	1730	670	36000	43000	F634



d	Main dimensions (mm)								Basic load ratings (N)		Limiting speed (rpm)		Designation
	D	D ₁	D ₂	B	B ₁	C ₁	C ₂	r _{min}	C _r	C _{0r}	Grease	Oil	
5	8	9.2	-	2	-	0.6	-	-	310	120	53000	63000	MF85
	8	-	9.2	-	2.5	-	0.6	0.1	278	131	53000	63000	-
	9	10.2	10.2	2.5	3	0.6	0.6	0.15	430	168	50000	60000	MF95
	10	11.2	11.6	3	4	0.6	0.8	0.15	430	168	50000	60000	MF105
	11	12.5	12.5	3	5	0.8	1	0.15	715	281	45000	53000	F685
	13	15	15	4	4	1	1	0.2	1080	430	43000	50000	F695
	14	16	16	5	5	1	1	0.2	1330	505	40000	50000	F605
	16	18	18	5	5	1	1	0.3	1730	670	36000	43000	F625
	19	22	22	6	6	1.5	1.5	0.3	2340	885	32000	40000	F635
6	10	11.2	11.2	2.5	3	0.6	0.6	0.10	495	218	45000	53000	MF106
	12	13.2	13.6	3	4	0.6	0.8	0.15	715	292	43000	50000	MF126
	13	15	15	3.5	5	1	1.1	0.15	1080	440	40000	50000	F686A
	15	17	17	5	5	1.2	1.2	0.2	1730	670	40000	45000	F696
	17	19	19	6	6	1.2	1.2	0.3	2260	835	38000	45000	F606
	19	22	22	6	6	1.5	1.5	0.3	2340	885	32000	40000	F626
	22	25	25	7	7	1.5	1.5	0.3	3300	1370	30000	36000	F636
7	11	12.2	12.2	2.5	3	0.6	0.6	0.10	455	201	43000	50000	MF117
	13	14.2	14.6	3	4	0.6	0.8	0.15	540	276	40000	48000	MF137
	14	16	16	3.5	5	1	1.1	0.15	1170	510	40000	45000	F687
	17	19	19	5	5	1.2	1.2	0.3	1610	710	36000	43000	F697
	19	22	22	6	6	1.5	1.5	0.3	2340	885	36000	43000	F607
	22	25	25	7	7	1.5	1.5	0.3	3300	1370	30000	36000	F627
8	12	13.2	13.6	2.5	3.5	0.6	0.8	0.10	545	274	40000	48000	MF128
	14	15.6	15.6	3.5	4	0.8	0.8	0.15	820	385	38000	45000	MF148
	16	18	18	4	5	1	1.1	0.2	1610	710	36000	43000	F688A
	19	22	22	6	6	1.5	1.5	0.3	2240	910	36000	43000	F698
	22	25	25	7	7	1.5	1.5	0.3	3300	1370	34000	40000	F608
9	17	19	19	4	5	1	1.1	0.2	1330	665	36000	43000	F689
	20	23	23	6	6	1.5	1.5	0.3	1720	840	34000	40000	F699

Inch

d	Main dimensions (mm)							Basic load ratings (N)		Limiting speed (rpm)		Designation
	D	D ₁	B	B ₁	C ₁	C ₂	r _{min}	C _r	C _{0r}	Grease	Oil	
3.175	6.350	7.518	2.380	2.779	0.580	0.790	0.10	283	95	67000	80000	FR144
	7.938	9.119	2.779	3.571	0.580	0.790	0.10	560	179	60000	67000	FR2-5
	9.525	10.719	2.779	3.571	0.580	0.790	0.15	640	225	53000	63000	FR2-6
	9.525	11.176	3.967	3.967	0.760	0.760	0.30	630	218	56000	67000	FR2
3.967	7.938	9.119	2.779	3.175	0.580	0.910	0.10	360	149	53000	63000	FR155
4.762	7.938	9.119	2.779	3.175	0.580	0.910	0.10	360	149	53000	63000	FR156
	9.525	10.179	3.175	3.175	0.580	0.790	0.10	710	270	50000	60000	FR166
	12.700	14.351	4.978	4.978	1.070	1.070	0.30	1300	485	43000	53000	FR3
6.350	9.525	10.719	3.175	3.175	0.580	0.910	0.10	420	204	48000	56000	FR168B
	12.700	13.894	3.175	4.762	0.580	1.140	0.15	1080	440	40000	50000	FR188
	15.875	17.526	4.978	4.978	1.070	1.070	0.30	1610	660	38000	45000	FR4B
7.938	12.700	13.894	3.967	3.967	0.790	0.790	0.15	540	276	40000	48000	FR1810
9.525	22.225	24.613	7.142	7.142	1.570	1.570	0.40	3350	1410	32000	38000	FR6



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