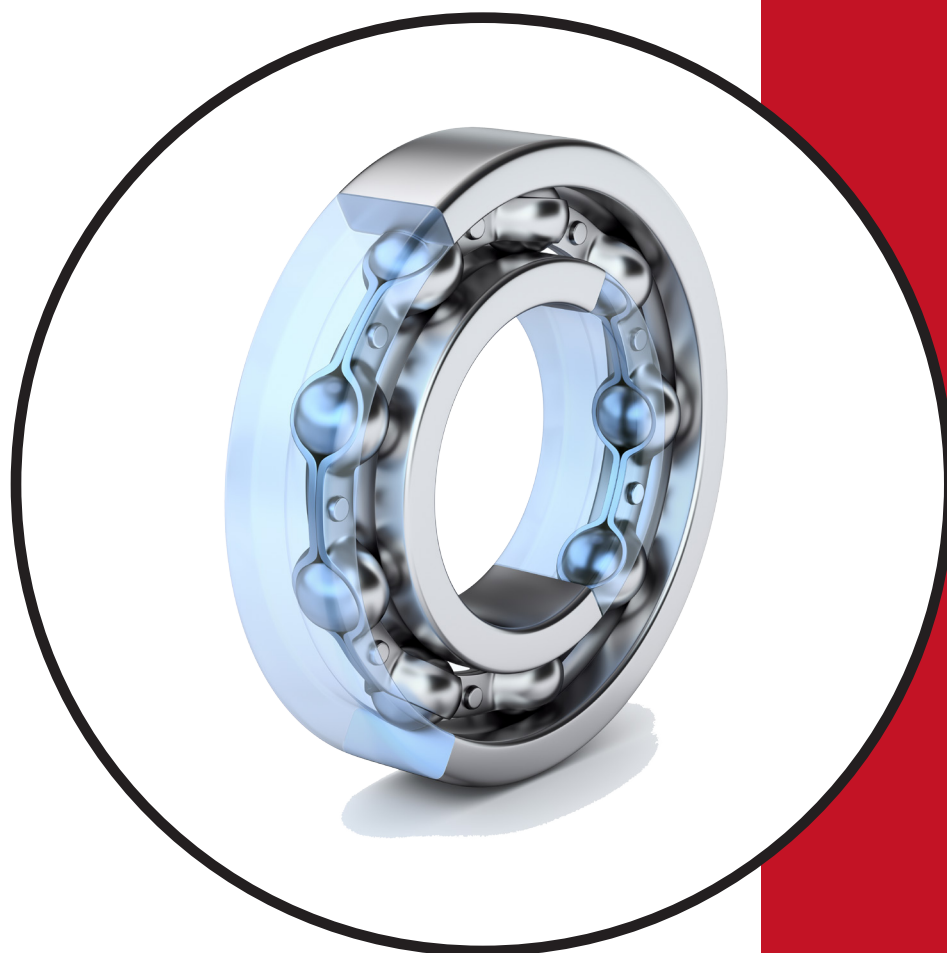


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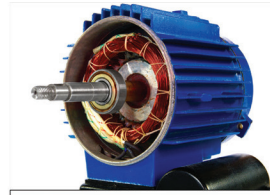
INDUSTRIAL

DEEP GROOVE BALL BEARINGS



MOVING THE WHEELS OF THE INDUSTRY

DEEP GROOVE BALL BEARINGS



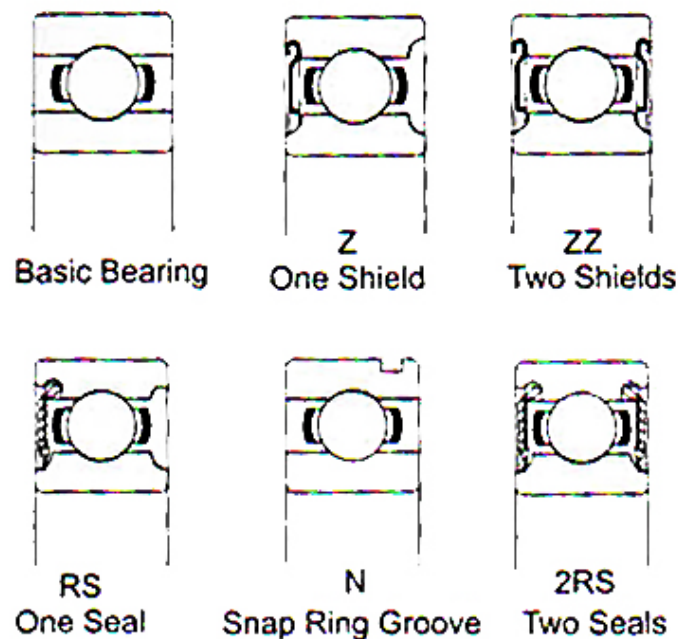
Today's applications demand continuous operations at high speeds. To avoid expensive downtime, manufacturers prefer to use reliable products that are robust in operation and require less maintenance. Deep groove ball bearings are the most versatile and are used in a variety of applications.

Deep groove ball bearings are used in a vast array of applications. These bearings have uninterrupted raceway grooves. These grooves have close osculation with the balls, enabling these bearings to accommodate both radial and axial loads in both directions. Since these bearings are non-separable, they are easier to handle and can be mounted in either way; fixed or floating.

NIBL offers its range of deep groove ball bearings. Manufactured in a state-of-the-art facility in Aurangabad and thoroughly tested, the bearings come in the range of the 60, 62 and 63 series.

NIBL offers customized engineered solutions as well; our bearings can be manufactured in a variety of sizes and applications.

DEEP GROOVE BALL BEARINGS



Different types of basic bearing

SUFFIXES

C2	Radial internal clearance less than normal - marked C2
CN	Normal grade of radial internal clearance - not marked
C3	Radial internal clearance greater than normal- marked C3
C4	Radial internal clearance greater than C3 - marked C4
C5	Radial internal clearance greater than C4-marked C5
N	Snap ring groove on the outer ring outside diameter
NR	Snap ring groove with snap ring
RS	One synthetic rubber seal
2RS	Two synthetic rubber seals
Z	One metal shield
ZZ	Two metal shields

DEEP GROOVE BALL BEARINGS

TOLERANCES

NIBL standard metric bearings are manufactured in accordance with normal tolerance class of ISO 492.

RADIAL INTERNAL CLEARANCE (RIC)

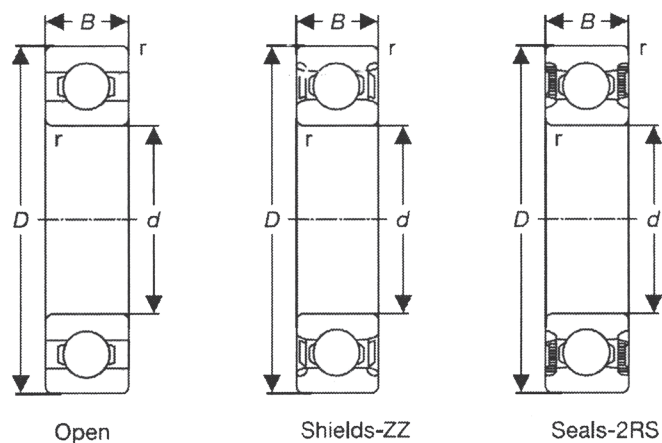
NIBL bearings are generally available in normal radial internal clearances. Bearings in normal radial internal clearances. Bearings in other radial internal clearance groups can be supplied on request. The following table gives the RIC values for standard bearings.

RADIAL INTERNAL CLEARANCE VALUES FOR RADIAL CONTACT GROOVE BALL BEARINGS WITH CYLINDRICAL BORE

Bore dia m m		Radial internal clearance groups									
		C2		CN		C3		C4		C5	
over	incl	min	max	min	max	min	max	min	max	min	max
2.5	6	0	7	2	13	8	23				
6	10	0	7	2	13	8	23	14	29	20	37
10	18	0	9	3	18	11	25	18	33	25	45
18	24	0	10	5	20	13	28	20	36	28	48
24	30	1	11	5	20	13	28	23	41	30	53
30	40	1	11	6	20	15	33	28	46	40	64
40	50	1	11	6	23	18	36	30	51	45	73
50	65	1	15	8	28	23	43	38	61	55	90
65	80	1	15	10	30	25	51	46	71	65	105
80	100	1	18	12	36	30	58	53	84	75	120
100	120	2	20	15	41	36	66	61	97	90	140
120	140	2	23	18	48	41	81	71	114	105	160

DEEP GROOVE BALL BEARINGS

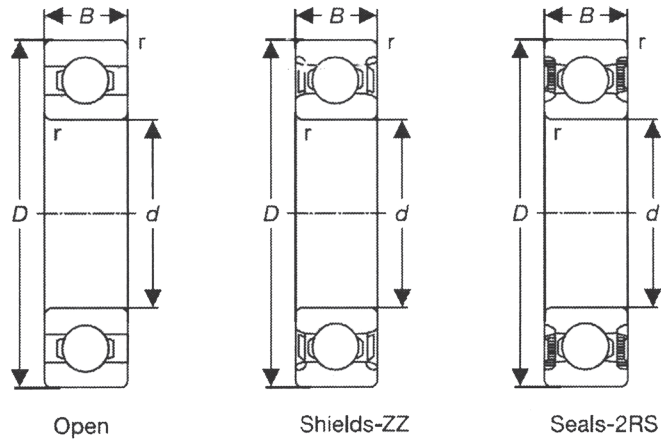
60 Series



Inner bore d mm	Bearing number			Principal Dimensions			Basic Load Rating (kN)		Limiting Speed (r/min)		Weight kg
	Open	With Shields	With Seals	D	B	r	Dynamic C	Static Co	Grease	Oil	
				mm							
10	6000	6000 ZZ	6000 2RS	26 26	8 8	0,3 0,3	4.55 4.55	1.97 1.97	24,000 15,000	28,800 -	0.019 0.019
12	6001	6001 ZZ	6001 2RS	28 28	8 8	0,3 0,3	5.10 5.10	2.40 2.40	20,800 13,600	25,000 -	0.022 0.022
15	6002	6002 ZZ	6002 2RS	32 32	9 9	0,3 0,3	5.60 5.60	2.84 2.84	17,600 11,200	22,400 -	0.030 0.030
17	6003	6003 ZZ	6003 2RS	35 35	10 10	0,3 0,3	6.00 6.00	3.25 3.25	15,200 10,400	19,200 -	0.039 0.039
20	6004	6004 ZZ	6004 2RS	42 42	12 12	0,6 0,6	9.40 9.40	5.00 5.00	13,600 8,800	16,000 -	0.069 0.069
25	6005	6005 ZZ	6005 2RS	47 47	12 12	0,6 0,6	10.10 10.10	5.85 5.85	12,000 7,600	14,400 -	0.080 0.080
30	6006	6006 ZZ	6006 2RS	55 55	13 13	1,0 1,0	13.20 13.20	8.30 8.30	9,600 6,400	12,000 -	0.120 0.120
35	6007	6007 ZZ	6007 2RS	62 62	14 14	1,0 1,0	16.00 16.00	10.30 10.30	8,000 5,600	10,400 -	0.160 0.160
40	6008	6008 ZZ	6008 2RS	68 68	15 15	1,0 1,0	16.80 16.80	11.50 11.50	7,600 5,040	9,600 -	0.190 0.190
45	6009	6009 ZZ	6009 2RS	75 75	16 16	1,0 1,0	21.00 21.00	15.20 15.20	7,200 4,480	8,800 -	0.250 0.250
50	6010	6010 ZZ	6010 2RS	80 80	16 16	1,0 1,0	21.80 21.80	16.60 16.60	6,800 4,000	8,000 -	0.260 0.260
55	6011	6011 ZZ	6011 2RS	90 90	18 18	1,1 1,1	28.30 28.30	21.30 21.30	6,000 3,440	7,200 -	0.390 0.390
60	6012	6012 ZZ	6012 2RS	95 95	18 18	1,1 1,1	29.50 29.50	23.20 23.20	5,360 3,440	6,400 -	0.420 0.420
65	6013	6013 ZZ	6013 2RS	100 100	18 18	1,1 1,1	30.70 30.70	25.00 25.00	5,040 3,200	6,000 -	0.440 0.440

DEEP GROOVE BALL BEARINGS

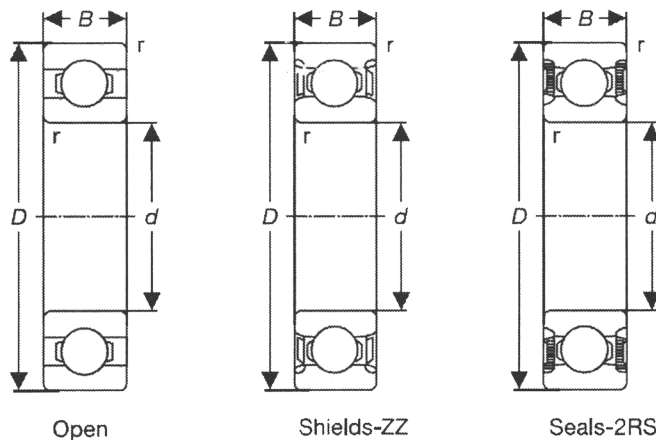
62 Series



Inner bore d mm	Bearing number			Principal Dimensions			Basic Load Rating (kN)		Limiting Speed (r/min)		Weight kg
	Open	With Shields	With Seals	D	B	r	Dynamic C	Static Co	Grease	Oil	
				mm							
10	6200	6200 ZZ	6200 2RS	30	9	0,60	5.10	2.40	19,200	24,000	0.032
				30	9	0,60	5.10	2.40	13,600	-	0.032
12	6201	6201 ZZ	6201 2RS	32	10	0,60	6.80	3.05	17,600	22,400	0.037
				32	10	0,60	6.80	3.05	12,000	-	0.037
15	6202	6202 ZZ	6202 2RS	35	11	0,60	7.65	3.70	15,200	19,200	0.045
				35	11	0,60	7.65	3.70	10,400	-	0.045
17	6203	6203 ZZ	6203 2RS	40	12	0,60	9.55	4.80	13,600	16,000	0.065
				40	12	0,60	9.55	4.80	9,600	-	0.065
20	6204	6204 ZZ	6204 2RS	47	14	1,00	12.80	6.60	12,000	14,400	0.110
				47	14	1,00	12.80	6.60	8,000	-	0.110
25	6205	6205 ZZ	6205 2RS	52	15	1,00	14.00	7.90	9,600	12,000	0.130
				52	15	1,00	14.00	7.90	6,800	-	0.130
30	6206	6206 ZZ	6206 2RS	62	16	1,00	19.50	11.30	8,000	10,400	0.200
				62	16	1,00	19.50	11.30	6,000	-	0.200
35	6207	6207 ZZ	6207 2RS	72	17	1,10	25.70	15.30	7,200	8,800	0.290
				72	17	1,10	25.70	15.30	5,040	-	0.290
40	6208	6208 ZZ	6208 2RS	80	18	1,10	29.10	17.90	6,800	8,000	0.370
				80	18	1,10	29.10	17.90	4,480	-	0.370
45	6209	6209 ZZ	6209 2RS	85	19	1,10	32.50	20.50	6,000	7,200	0.410
				85	19	1,10	32.50	20.50	4,000	-	0.410
50	6210	6210 ZZ	6210 2RS	90	20	1,10	35.00	23.20	5,600	6,800	0.460
				90	20	1,10	35.00	23.20	3,840	-	0.460
55	6211	6211 ZZ	6211 2RS	100	21	1,50	43.30	29.40	5,040	6,000	0.610
				100	21	1,50	43.30	29.40	3,440	-	0.610
60	6212	6212 ZZ	6212 2RS	110	22	1,50	52.50	36.00	4,800	5,600	0.780
				110	22	1,50	52.50	36.00	3,200	5,600	0.780
65	6213	6213 ZZ	6213 2RS	120	23	1,50	57.20	40.00	4,240	5,240	0.990
				120	23	1,50	57.20	40.00	2,880	-	0.990

DEEP GROOVE BALL BEARINGS

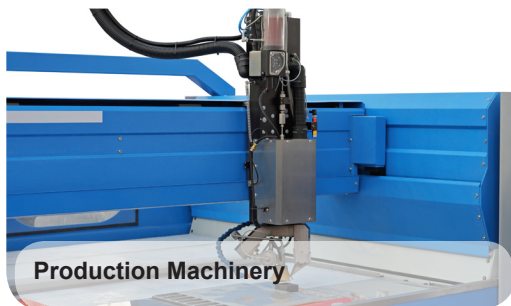
63 Series



Inner bore d mm	Bearing number			Principal Dimensions			Basic Load Rating (kN)		Limiting Speed (r/min)		Weight kg
	Open	With Shields	With Seals	D	B	r	Dynamic C	Static Co	Grease	Oil	
				mm							
10	6300	6300 ZZ	6300 2RS	35	11	0,6	8.10	3.45	24,000	27,200	0.053
				35	11	0,6	8.10	3.45	14,400	-	0.053
12	6301	6301 ZZ	6301 2RS	37	12	1,0	9.80	4.25	19,200	24,000	0.060
				37	12	1,0	9.80	4.25	13,600	-	0.060
15	6302	6302 ZZ	6302 2RS	42	13	1,0	11.40	5.40	15,200	19,200	0.082
				42	13	1,0	11.40	5.40	10,400	-	0.082
17	6303	6303 ZZ	6303 2RS	47	14	1,0	13.60	6.55	13,600	16,000	0.112
				47	14	1.0	13.60	6.55	9,600	-	0.112
20	6304	6304 ZZ	6304 2RS	52	15	1,1	15.90	7.90	12,000	14,400	0.144
				52	15	1,1	15.90	7.90	8,000	-	0.144
25	6305	6305 ZZ	6305 2RS	62	17	1,1	22.20	11.50	9,600	12,000	0.227
				62	17	1,1	22.20	11.50	6,800	-	0.227
30	6306	6306 ZZ	6306 2RS	72	19	1,1	26.70	15.00	8,000	10,400	0.352
				72	19	1,1	26.70	15.00	6,000	-	0.352
35	6307	6307 ZZ	6307 2RS	80	21	1,5	33.50	19.10	7,200	8,800	0.458
				80	21	1,5	33.50	19.10	5,040	-	0.458
40	6308	6308 ZZ	6308 2RS	90	23	1,5	40.50	24.10	6,800	8,000	0.630
				90	23	1,5	40.50	24.10	4,480	-	0.630
45	6309	6309 ZZ	6309 2RS	100	25	1,5	53.00	32.00	6,000	7,200	0.841
				100	25	1,5	53.00	32.00	3,840	-	0.841
50	6310	6310 ZZ	6310 2RS	110	27	2,0	62.00	38.10	5,600	6,800	1.080
				110	27	2,0	62.00	38.10	3,840	-	1.080
55	6311	6311 ZZ	6311 2RS	130	29	2,0	71.00	45.00	5,040	6,000	1.375
				130	29	2,0	71.00	45.00	3,440	-	1.375
60	6312	6312 ZZ	6312 2RS	130	31	2,0	82.00	52.20	4,800	5,600	1.720
				130	31	2,0	82.00	52.20	3,200	5,600	1.720

APPLICATIONS

NIBL's product range has the ability to reach across different applications and industries. Our products are designed to ensure maximum productivity. From light applications like machine tools and food and beverage to heavy machinery, our products are designed to withstand varied temperatures, operating conditions, speeds and loads.



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